

## **Annual report of the Peter Bent Brigham Hospital : 1913/14.**

### **Contributors**

Peter Bent Brigham Hospital.

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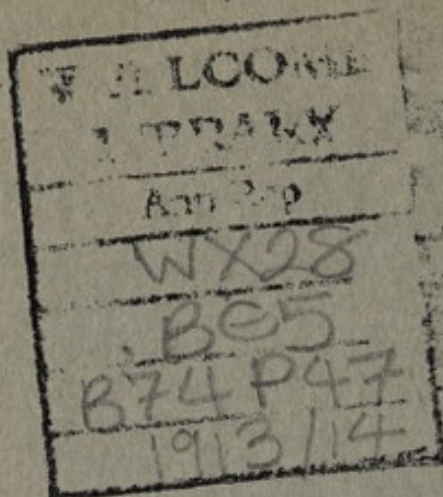
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PETER BENT BRIGHAM  
HOSPITAL ' ' BOSTON

FIRST  
ANNUAL REPORT

FOR THE YEARS  
1913 AND 1914

CAMBRIDGE  
THE UNIVERSITY PRESS  
1915



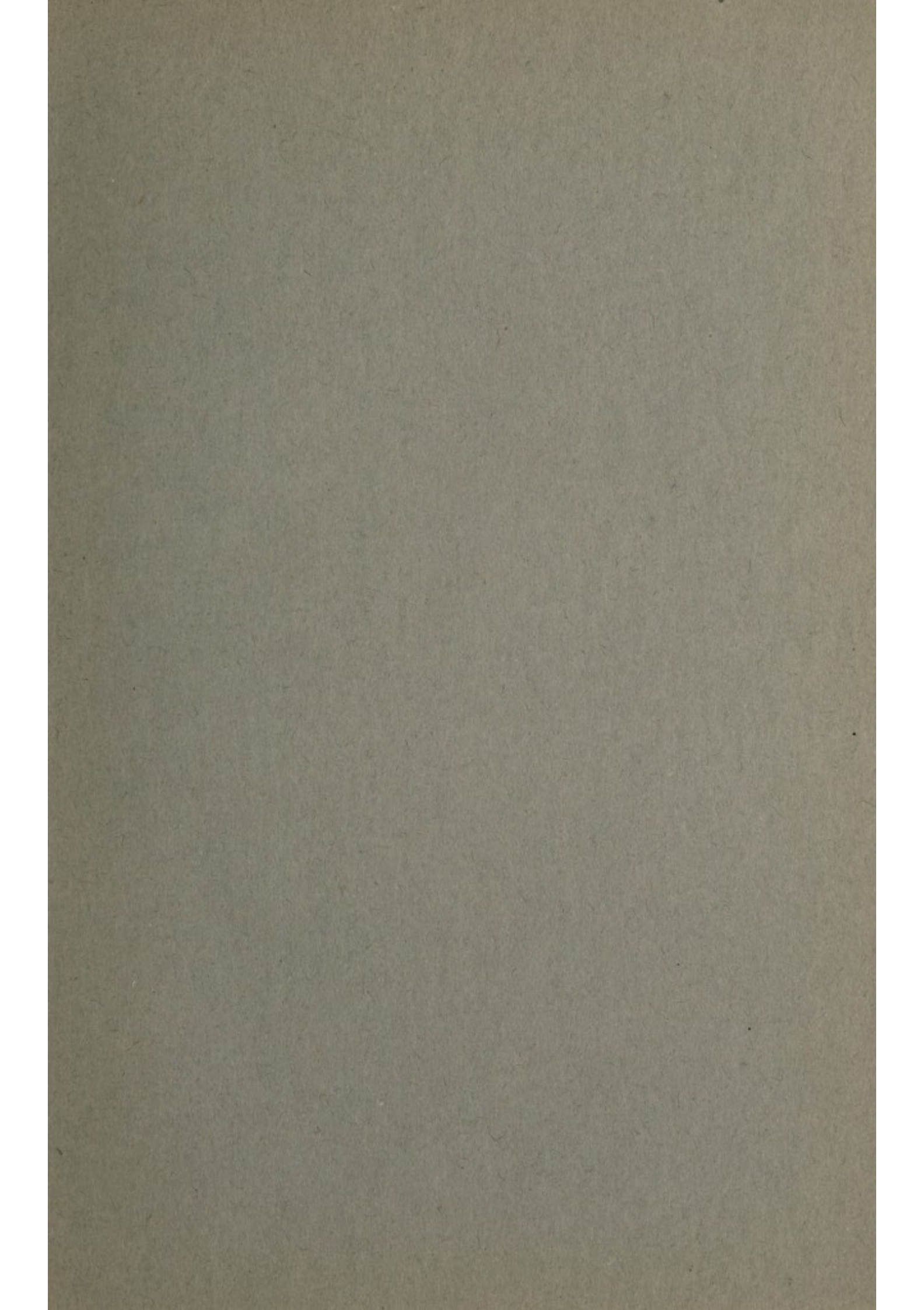


## FORM OF BEQUEST

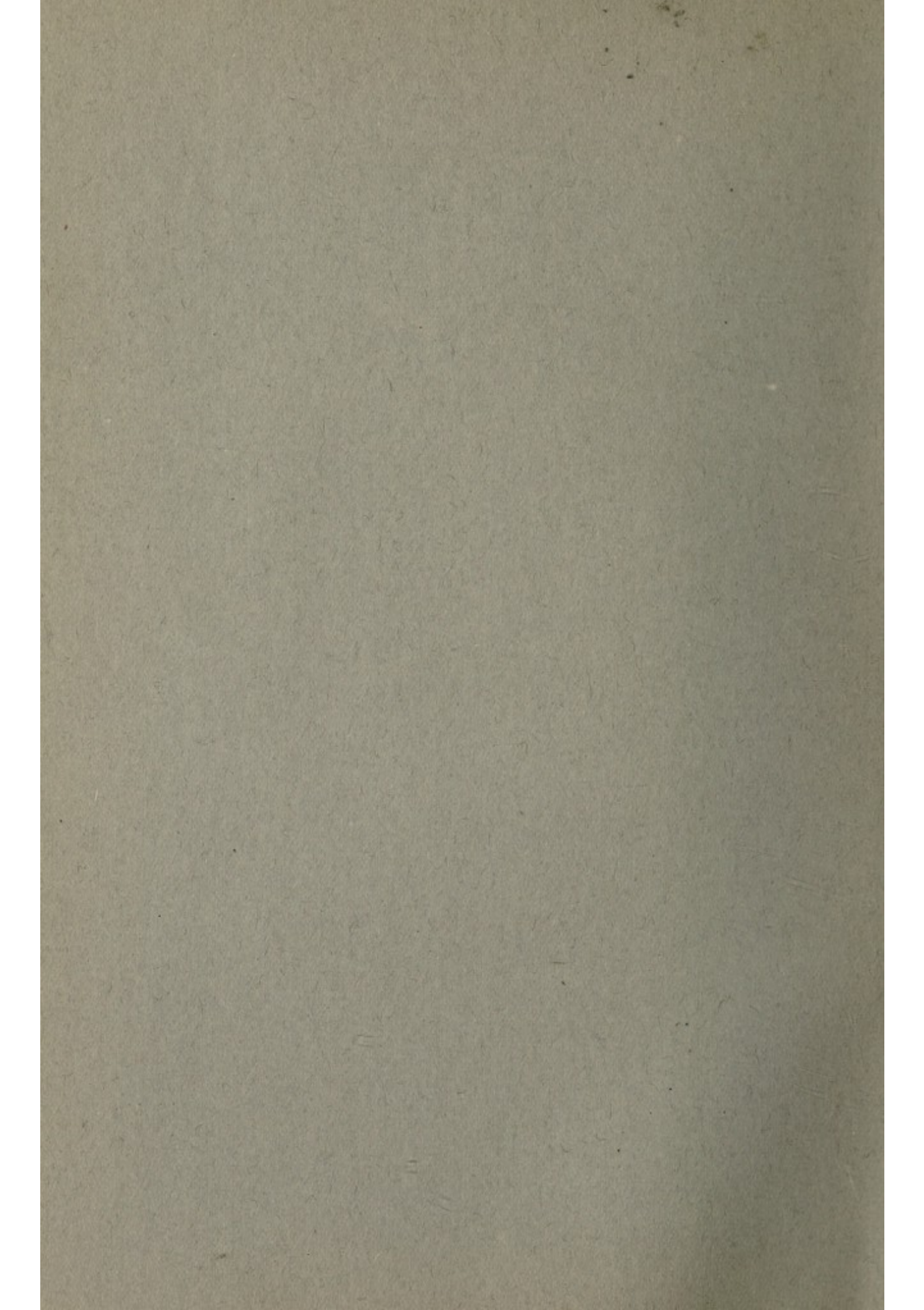
*I give and bequeath to the Peter Bent Brigham Hospital, a corporation established under the laws of the Commonwealth of Massachusetts, the sum of \_\_\_\_\_ dollars, the same to be used for the furtherance of its charitable work.*



22501043126







FIRST ANNUAL REPORT  
OF THE  
PETER BENT BRIGHAM  
HOSPITAL

FOR THE YEARS  
1913 AND 1914

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## Report of the President

As a matter not only of present interest but of future reference it may be well in this first report of the Peter Bent Brigham Hospital to state briefly a few facts concerning the source of its endowment, the establishment of its corporate existence, the construction of its buildings and the organization of its staff.

Its founder, Peter Bent Brigham, was born in Bakersfield, Vermont, February 4, 1807, died in Boston, Massachusetts, May 24, 1877, and the annual observance of Founder's Day by the Corporation has been established in memory and honor of his great benefaction. Under his will the residue of his property was left to accumulate for twenty-five years from his death in the hands of his executors Robert Codman and Joseph Healy, and at the end of that period to be used in the founding of a hospital "for the care of sick persons in indigent circumstances residing in the County of Suffolk." Both of the above-mentioned executors died before the expiration of the period named, and were succeeded by Edmund D. Codman and Laurence H. H. Johnson.

A Corporation was formed under the general laws and organized May 8, 1902, with the following gentlemen as members: Alexander Cochrane, Edmund D. Codman, Eben S. Draper, Henry S. Howe, Walter Hunnewell, Laurence H. H. Johnson, and William R. Trask. Later Augustus Hemenway was elected a member, and in 1909, under the provisions of an amendment to its charter, the Governor of the Commonwealth appointed John P. Reynolds and Irvin McD. Garfield as State members of the Corporation for three and six years respectively, these positions to be filled in the same way from time to time as the terms expired.



The Corporation was obliged to await the result of prolonged litigation in the Courts before its funds were free to be expended for the purpose named in Mr. Brigham's will. It became so evident toward the end of the litigation however, that the funds would be available, that the Members took upon themselves the responsibility of doing some preliminary work regarding a scheme of building before the litigation was entirely ended in March, 1911.

Dr. J. S. Billings of New York was engaged to give expert advice and to work out in connection with the site already conditionally purchased a ground plan for the Hospital buildings, having gained a large experience in this direction as Assistant Surgeon General in the United States Army and in the planning and construction of the Johns Hopkins and other large hospitals.

A guaranty fund was subscribed by friends of the Corporation to send Dr. Billings to Europe. He made an extended tour, visiting many of the chief hospitals there, and upon his return framed the ground plan that was finally used as the basis for an architectural competition. Six architects were invited to compete and presented plans which were submitted without names or means of identification to the following Committee of Experts: Dr. John Shaw Billings, Prof. F. W. Chandler, and Dr. H. B. Howard. This resulted in the acceptance by the Corporation of the plans submitted by Messrs. Codman & Despradelle.

Contracts for the construction of the Hospital buildings designed for the accommodation of two hundred patients were signed August 1, 1911, and the same were practically completed in July, 1913.

Dr. H. B. Howard, formerly of the Massachusetts General Hospital, had been appointed Superintendent, April 2, 1908, and spent the following summer in Europe, in the study of hospital construction and management.



The Members had been considering the matter of Staff appointments before and during the period of construction. The position of Surgeon-in-Chief was offered to Dr. Harvey Cushing, and the position of Physician-in-Chief to Dr. Henry A. Christian. Both these gentlemen accepted and began their duties in the summer of 1912.

Under a temporary arrangement entered into with Harvard University, the present Surgeon-in-Chief and the present Physician-in-Chief of the Hospital occupy respectively the chairs of Surgery and Medicine in the Harvard Medical School.

A part of the Hospital was opened and the first patient admitted January 27, 1913. At the close of the period covered by this report there were one hundred and nineteen patients in the institution, and the highest number up to that date at any one time had been one hundred and seventy-three patients.

There have been the usual problems and trials incident to organizing and getting under way an institution of such size and character. The Hospital is now however in complete order with every department working in an efficient manner, and it is hoped and believed that it will show in its particular field of endeavor results worthy of the reputation and the work of the men associated with it. Few things are perfect, but the Corporation will always look and strive for continued progress toward that end.

This is one of the earliest hospitals to introduce what has become known as "full-time" work, which means continuous service in the Hospital by members of the Staff instead of having changes several times a year. This is not the place perhaps for comparisons, but it may be said that thus far the "full-time" plan has worked to the entire satisfaction of those connected with the institution.

In addition to the work within the Hospital a large



out-door department has been established, and also an arrangement has been made with the Boston Dispensary by which it sends many of its cases to the wards of the Hospital, to the advantage of both institutions.

The Members constitute a Visiting Committee, and in rotation for one month each member visits the Hospital at least once in every week, often on the day of their visit lunching with the Executive Committee of the Staff. This provides a convenient medium of intercourse for suggestion and information, and brings the Members into more intimate touch with the work of the Hospital.

A Social Service Department has been established for the purpose of supplementing the usual hospital work.

The Corporation, while seemingly well endowed, finds its work always expanding, and the outlook for the future calls for ever-increasing expenditure. It is hoped and believed that this Hospital will receive hereafter financial aid from the citizens of Suffolk County commensurate with its work for good in the community. A form of bequest is given at the beginning of the report as one way of assisting the Hospital, and another is by the endowment of free beds. This, the youngest of the hospitals in the City, may well claim a share in the generosity of the people of Boston.

ALEXANDER COCHRANE,

*President.*

# Report of the 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, 1914, is as follows:

## INCOME

### Real Estate Receipts:

Rents . . . . .	\$136,642.32		
Taxes paid by tenants . . . . .	34,149.85		
Insurance paid by tenants . . . . .	1,243.91		
Refunds on insurance . . . . .	48.02		
Interest on delayed tax . . . . .	2.85	\$172,086.95	

### Interest on Investments:

On bonds . . . . .	\$42,965.00		
On mortgages . . . . .	8,580.91		
On notes . . . . .	6,776.21		

\$58,322.12

Dividends . . . . .	25,894.03		
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\$84,216.15

### Less accrued interest:

Bonds . . . . .	\$570.83		
Notes . . . . .	169.40	740.23	83,475.92

Bank interest . . . . .			1,040.27
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Total income . . . . .			\$256,603.14
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## EXPENDITURE

Taxes . . . . .	\$48,380.50		
Building repairs . . . . .	4,461.00		
Insurance . . . . .	3,248.96		
Broker's commission on renting . . . . .	32.06		

Total real estate expense . . . . .	\$56,122.52		
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# PETER BENT BRIGHAM HOSPITAL

Salaries . . . . .	\$7,810.00	
Legal expenses . . . . .	510.25	
Audit . . . . .	456.11	
Safe deposit box . . . . .	70.00	
Appraising securities . . . . .	25.00	
Typewriting . . . . .	6.38	
Cash book . . . . .	5.00	\$8,882.74
Total expenditure . . . . .	\$65,005.26	
Bond premiums amortized . . . . .	1,156.50	\$ 66,161.76
Net income available for operating expense . . . . .		\$190,441.38
Net payments for operating expense, as shown by the Superintendent's statement appended . . . . .		188,213.74
Balance carried to increase of principal		\$2,227.64

## INVESTMENTS

Land and buildings occupied for Hospital, including furniture and fixtures . . . . .	\$1,741,190.40
Mortgages . . . . .	194,733.05
Notes:	
New Boston & Maine R. R. Co., due Sept. 2, 1915, 6% . . . . .	30,000.00
Maine Railways Companies, due April 1, 1919, 5% . . . . .	18,000.00
R. L. Day & Co., on demand . . . . .	50,000.00
Land and buildings, 63 Blackstone Street . . . . .	59,437.53
Land and buildings, 60 Chatham Street . . . . .	28,000.00
Land and buildings, 166-210 Portland Street . . . . .	674,780.39
Land and buildings, 5-11 Tremont Row . . . . .	473,129.45
Land and buildings, 224-230 Congress Street . . . . .	99,859.55
Land and buildings, 108-114 Lincoln Street . . . . .	159,477.39
Land and buildings, 223-225 Washington Street . . . . .	220,000.00
Land and buildings, 91-95 Portland Street . . . . .	75,957.25
Land and buildings, 67-69 Commercial Street . . . . .	74,363.01
Land and buildings, 93-103 North Street . . . . .	95,083.68
Land and buildings, 1-3 Bowdoin Street . . . . .	54,569.50
Land and buildings, 148-150 Hanover Street . . . . .	60,787.78
Land and buildings, 1-7 Sudbury Street . . . . .	69,994.95
Amount carried forward . . . . .	\$4,179,363.93

# REPORT OF THE TREASURER

<i>Amount brought forward</i> . . . . .	\$4,179,363.93
Land and buildings, 88-92 Court Street . . . . .	171,417.80
Land and buildings, 94-98 Arch and 13-17 Otis Streets . . . . .	165,755.91
Vacant land, corner Albany and Dover Streets . . . . .	110,221.90
1000 Shares Fitchburg R. R. Co., preferred . . . . .	142,000.00
100 Shares Boston & Albany R. R. Co. . . . .	25,800.00
524 Shares Vermont & Mass. 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
200 Shares State Street Exchange . . . . .	21,760.00
400 Shares Boston Wharf Company . . . . .	37,585.25
50 Shares Boston Real Estate Trust . . . . .	58,514.25
30 Shares Constitution Wharf Trust . . . . .	3,330.00
150 Shares Hotel Trust (Touraine) . . . . .	15,900.00
100 Shares South Terminal Trust . . . . .	10,300.00
15 Shares National Union Bank . . . . .	2,700.00
100 Shares Newport & Fall River St. R'way Co. . . . .	13,278.33
1000 Shares Berkeley Hotel Trust . . . . .	65,000.00
1500 Shares New York, New Haven & Hartford R. R. Co. . . . .	225,545.33
200 Shares N. Y. Central & H. River R. R. Co. . . . .	21,131.25
100 Shares Chicago, Mil. & St. Paul R. R. Co. . . . .	14,764.39
220 Shares Pennsylvania R. R. Co. . . . .	11,731.88
\$150,000 American Tel. & Tel. Co. 4% bonds, 1929 . . . . .	139,887.50
25,000 Quincy Market Realty Co. 5% bonds, 1964 . . . . .	25,000.00
47,000 Portland & Ogdensburg R. R. 4½% bonds, 1928 . . . . .	48,530.84
5,000 Kansas City and Memphis Ry. & Bridge Co. 5% bonds, 1929 . . . . .	5,110.71
100,000 Chicago, Burl. & Quincy R. R., Ill. Div. 3½% bonds, 1949 . . . . .	89,077.50
20,000 Washington Water Power Co. 5% bonds, 1939 . . . . .	20,406.75
50,000 Boston & Maine Railroad 4½% bonds 1929 . . . . .	51,649.02
50,000 Burlington, Cedar Rapids & Northern 5% bonds, 1934 . . . . .	55,167.59
25,000 Baltimore & Ohio R. R. Co., So. West Div. 3½% bonds, 1925 . . . . .	22,125.00
<i>Amount carried forward</i> . . . . .	\$5,938,088.13



# PETER BENT BRIGHAM HOSPITAL

<i>Amount brought forward</i> . . . . .	\$5,938,088.13
25,000 New York Cent. & Hudson River R. R. Debs. 4% bonds, 1934 . . . . .	23,937.50
50,000 Cleveland, Lorain & Wheeling R. R. 5% bonds, 1933 . . . . .	54,710.79
25,000 New York Cent. & H. River R. R. Co. 1st mtge. 3½% bonds, 1997 . . . . .	21,875.00
25,000 Northern Pacific R. R. Co., Prior Lien 4% bonds, 1997 . . . . .	24,781.25
25,000 New York City 4% bonds, 1956 . . . . .	24,718.75
50,000 Old Colony St. Railway Co. 4% bonds, 1954 . . . . .	43,250.00
75,000 Chicago & North Western Railway Co. 4% bonds, 1926 . . . . .	72,750.00
28,000 General Electric Co. 3½% bonds, 1942 . . . . .	23,170.00
50,000 Chicago & West Michigan R. R. Co. 5% bonds, 1921 . . . . .	49,420.00
3,000 Pennsylvania R. R. 4% bonds, 1948 . . . . .	2,880.00
50,000 Atchison, Topeka & St. Fe R. R. Trans Continental Short Line 4% bonds, 1958 . . . . .	47,500.00
50,000 Illinois Steel Co. 4½% bonds, 1940 . . . . .	47,375.00
50,000 Boston & Albany R. R. Co. Equip. 4½% bonds, 1920 . . . . .	49,725.00
15,000 Boston & Albany R. R. Co. Equip. 4½% bonds, 1924 . . . . .	14,893.50
15,000 Boston & Albany R. R. Co. Equip. 4½% bonds, 1925 . . . . .	14,886.00
5,000 Boston & Albany R. R. Co. Equip. 4½% bonds, 1926 . . . . .	4,960.00
15,000 Boston & Albany R. R. Co. Equip. 4½% bonds, 1927 . . . . .	14,875.50
50,000 Interborough Rapid Transit Co. 5% bonds, 1966 . . . . .	49,500.00
50,000 Kansas City Stock Yards 5% bonds, 1920 . . . . .	50,000.00
Cash: Operating Expense Fund . . . \$20,000.00	
Superintendent's Fund . . . . .	2,500.00
Balance in bank . . . . .	8,540.37
	<hr/>
	\$6,604,336.79

EDMUND D. CODMAN,

*Treasurer.*



## Report of the Superintendent

ALTHOUGH this is the first annual report of the Peter Bent Brigham Hospital, it contains a report of the work from the opening of the Hospital up to January 1, 1915.

The first patient, a surgical case, was admitted, when only the main floor of Ward A could be opened for patients, on January 27, 1913. The first operation was done January 28, 1913. The ground floor of this building had been used for an office since December 6, 1912, and the second floor for the housing and feeding of the Staff since January 1, 1913.

The Superintendent's house had been used provisionally to train a class of nurses since November 5, 1912.

The first medical patient was admitted on March 31, 1913, to Ward F.

The Administration Building was gradually opened for business during the month of April, 1913.\*

During the year 1913, 681 medical cases and 689 surgical cases were admitted; in 1914, 1391 medical and

\* The other wards for the reception of patients were opened in the following order:

C main	April 19, 1913.
C second	April 21, 1913.
E main	July 1, 1913.
D main	July 16, 1913.
D second	October 6, 1913.
F second	October 6, 1913.
E second	October 11, 1913.

All of the wards were later closed, one or two at a time, for painting.

The various dining rooms were opened between March 22 and April 16, 1915.

The Surgical Building was first used April 29, 1913.

Work in the laundry began on March 5, 1913.

The Clinical Amphitheater was ready on May 15, 1913.

The ambulance went into service on October 29, 1913.

## PETER BENT BRIGHAM HOSPITAL

1452 surgical cases. The details of the medical and surgical work are spoken of at length in Dr. Christian's report, page 114, and Dr. Cushing's report, page 41.

An Out-Door Department had been conducted for some two years by the Harvard Medical School through the generosity of one of the citizens of Boston, but on the opening of the Hospital it was transferred to our Out-Door Building. Upon entering our new building on May 21, 1913, the doors were kept open for a continuous clinic from six in the morning until eight in the evening. The table showing the distribution of calls in 1913 and 1914 is on pages 15 and 16. It is interesting to notice that during the first six months more patients came in the afternoon than in the morning, but during the second year the morning hours had more than double the number of calls compared with the afternoon hours.

The running expenses for the opening year were \$190,510.41 (see page 29), and the running expenses for the year 1914 were \$257,464.97 (see page 29).

The public is now using the Hospital freely and with apparent satisfaction. Much of this satisfaction to the public comes from the arrangement of the wards, as there is ample room to do the work. This is also very apparent in the Administration Building. Although it has been the endeavor of the officers and the employees in all departments of the institution to be courteous to patients and visitors, they have been greatly aided in the good impression that they are producing upon the public by the generous quarters that the Trustees have furnished the Hospital for doing its work.

One department, not represented by any written report, is worthy of special mention. That is the Dietary Department. The Staff prescribe the units of nutrition that they wish administered to the patients. The Die-



## REPORT OF THE SUPERINTENDENT

titian works out the actual food that the patients have and reports back to the physician how she has accomplished the work. This leaves the Dietitian free to use whatever seems best to meet the ends that the physician wishes accomplished. This has led to very good work with a class of diabetics in the Out-Door Department. Lectures have been given to these diabetics, first by our Dietitian and later by a very satisfactory volunteer. This class has proven so successful that the Out-Door Department is now contemplating forming a class in kidney troubles and another in heart lesions. Careful observation and directions in most of these cases builds up their tolerance for food and work so that they once more become practical breadwinners in the community.

Our Mechanical Department has proven very satisfactory because the means are there to accomplish any ordinary mechanical problem in machinery or electricity, carpentry or painting. Many special instruments have been constructed according to the specifications of members of the Staff.

At the suggestion of the auditor a perpetual inventory has been established in the store during the year.

The custom of the Executive Committee of the Staff meeting at lunch every Tuesday is convenient and effective in bringing about the discussions that every institution needs in the solution of its basic problems.

The Thursday lunch in the main dining-room, to which all the consultants and advisory physicians of the hospital are invited, has proven very useful.

There are still two departments which are not established but are expected to be completed during the coming year. These are the Zander and Hydrotherapeutic Departments.

It is a fairly simple matter to prepare financial statistics. Financial statistics, while important, are not the



chief criterion by which a hospital should be judged. The work that is done for the patient is the real measure of the utility of a hospital.

An entirely satisfactory clinical — either medical or surgical — table of statistics has not yet been drawn up. Entirely omitting these tables avoids all criticism by begging the question, but gives us no help toward solving the problem. A report without these statistics may lay the hospital open rightly or wrongly to the charge of concealing unpleasant facts, and in reading it one feels that such a report is sadly lacking. A report in which only the important parts of the work are considered can give no one an idea of the full scope of the hospital work.

That such reports have had little interest in the past only shows that they were not properly drawn up.

One point rightfully emphasized by my colleagues in their reports is that there is no uniformity in the reports of various hospitals.

Our reports are offered not as models or solutions of the problems but as the best that we could do at the present time. We believe that any attempt to arrive at accuracy is well worth while. It is our hope that in the near future it will be possible to have the clinical reports of the Boston hospitals follow one scheme and that eventually all hospitals may follow some one general plan. This, of course, can be accomplished only by compromise on the part of all.

We have felt that it was wisest not to draw up any code of rules based on the experience of other hospitals. We wish to have the briefest possible code and to have no rules for which there is not a definite need. However, we believe the Hospital will soon be large enough and our experience in this institution wide enough to make the drawing up of such a set of rules advisable for the simplest and best administration of our affairs. We

## REPORT OF THE SUPERINTENDENT

believe that this will be a definite advantage for all departments.

I should like to call attention to the report of the Pathologist, page 39, the report of the Superintendent of Nurses, page 33, and the report of the Social Service Department, page 36.

I thank the Trustees for their tolerance of our shortcomings, and the clergymen in the vicinity for their constant care in visiting the patients.

Respectfully submitted,

HERBERT B. HOWARD,

*Superintendent.*



Table I  
Comparative Statement of Statistics

HOSPITAL WARDS AND SINGLE ROOMS

Patients in hospital first of year:	1914	1913
Medical . . . . .	58	0
Surgical . . . . .	61	0
Total . . . . .	<u>119</u>	<u>0</u>
Patients admitted during the year:		
Medical . . . . .	1,391	681
Surgical . . . . .	1,452	689
Total . . . . .	<u>2,843</u>	<u>1,370</u>
Patients treated in hospital wards and private rooms during the year:		
Medical . . . . .	1,449	681
Surgical . . . . .	1,513	689
Total . . . . .	<u>2,962</u>	<u>1,370</u>
Patients discharged during the year:		
Well . . . . .	887	424
Improved . . . . .	1,164	500
Unimproved . . . . .	304	125
Untreated . . . . .	290	122
Died . . . . .	172	80
Total . . . . .	<u>2,817</u>	<u>1,251</u>
Patients in hospital end of year:		
Medical . . . . .	59	58
Surgical . . . . .	86	61
Total . . . . .	<u>145</u>	<u>119</u>

# REPORT OF THE SUPERINTENDENT

Total patients days treatment:	1914	1913
Paying patients . . . . .	31,627	13,983
Free patients . . . . .	17,668	13,174
Total . . . . .	49,295	27,157
Percentage:		
Paying patients . . . . .	64+	52-
Free patients . . . . .	36-	48+
Total . . . . .	100	100
Average patients per day:		
Paying patients . . . . .	87-	41+
Free patients . . . . .	48+	39-
Total . . . . .	135+	80+
Average time per patient in hospital . .	17+ days	20- days
Daily average cost per patient . . . .	\$5.15+	\$7.02-
Daily cost per capita for provisions for all persons supported . . . . .	.35-	.53-
Patients were admitted as follows:		
Paying \$14.00 or more . . . . .	1,221	217
Paying less than \$14.00 . . . . .	722	561
Free . . . . .	900	592
	2,843	1,370

## OUT-DOOR DEPARTMENT

		(From July 16)
Number of cases treated (new cases) .	8,347	2,792
Medical . . . . .	4,322	1,405
Surgical . . . . .	4,025	1,387
Number of visits . . . . .	30,434	9,790
Medical . . . . .	13,416	3,668
Surgical . . . . .	17,018	6,122
Patients arrived:		
A. M. 6-8 . . . . .	....	1
8-10 . . . . .	7,784	1,309
10-12 . . . . .	7,472	1,289
P. M. 12-2 . . . . .	4,004	1,193



# PETER BENT BRIGHAM HOSPITAL

Patients arrived — <i>Continued</i> :		1914	1913
2-3 . . . . .		4,973	2,529
3-4 . . . . .		4,263	2,303
4-6 . . . . .		1,928	1,159
6-8 . . . . .		8	7
8-10 . . . . .		2	..
		<hr/>	<hr/>
		30,434	9,790
Cost of maintenance of Out-Door Department . . . . .		\$10,081.39	
Daily average cost per patient . . . . .		.33+	

## AMBULANCE

		(Nov. and Dec.)
Ambulance calls during the year . . . . .	533	68
Average calls per day . . . . .	1.46+	2.19+
Mileage for patients . . . . .	3,186	414
Other business . . . . .	1,603	...
		<hr/>
Total mileage . . . . .	4,789	

## X-RAY

	1914	1913	1914	1913
	(Aug. to Dec. 31)		(Aug. to Dec. 31)	
	No. of Patients		No. of Plates	
January . . . . .	214		474	
February . . . . .	240		465	
March . . . . .	287		577	
April . . . . .	267		583	
May . . . . .	279		679	
June . . . . .	266		556	
July . . . . .	332		703	
August . . . . .	398		644	
September . . . . .	302		613	
October . . . . .	273		591	
November . . . . .	339		788	
December . . . . .	374		746	
		<hr/>	<hr/>	<hr/>
Total . . . . .	3,571	981	7,419	1,656

Table II  
Residences

	1914	1913
Alabama . . . . .	5	2
California . . . . .	5	4
Colorado . . . . .	2	1
Connecticut . . . . .	14	7
District of Columbia . . . . .	1	1
Florida . . . . .	3	..
Georgia . . . . .	2	..
Idaho . . . . .	2	2
Indiana . . . . .	1	..
Illinois . . . . .	1	1
Iowa . . . . .	4	4
Kansas . . . . .	4	..
Kentucky . . . . .	3	1
Louisiana . . . . .	..	3
Maine . . . . .	30	15
Maryland . . . . .	1	..
Massachusetts (except Boston) . . . . .	706	259
Boston . . . . .	1,826	922
Michigan . . . . .	5	1
Minnesota . . . . .	2	5
Missouri . . . . .	3	4
Montana . . . . .	..	1
Nebraska . . . . .	3	..
New Hampshire . . . . .	39	21
New Jersey . . . . .	4	6
New York . . . . .	49	42
North Carolina . . . . .	5	..
Ohio . . . . .	14	9
Oklahoma . . . . .	4	2
Pennsylvania . . . . .	7	6
Rhode Island . . . . .	30	10
South Carolina . . . . .	5	3
Tennessee . . . . .	2	1
Texas . . . . .	13	3
<i>Carried forward</i> . . . . .	2795	1336



# PETER BENT BRIGHAM HOSPITAL

	1914	1913
<i>Brought forward</i> . . . . .	2795	1336
Utah . . . . .	..	2
Vermont . . . . .	9	2
Virginia . . . . .	1	4
Washington . . . . .	10	9
West Virginia . . . . .	5	2
Wisconsin . . . . .	4	1
Canada . . . . .	17	9
England . . . . .	..	1
Mexico . . . . .	..	1
Panama . . . . .	2	2
Scotland . . . . .	..	1
Total . . . . .	<u>2,843</u>	<u>1,370</u>

Table III  
Birthplaces

	1914	1913
Alabama . . . . .	5	2
Arizona . . . . .	..	1
Arkansas . . . . .	1	..
California . . . . .	11	6
Colorado . . . . .	..	1
Connecticut . . . . .	27	15
Cuba . . . . .	..	1
Delaware . . . . .	1	..
District of Columbia . . . . .	6	2
Florida . . . . .	3	..
Georgia . . . . .	4	1
Idaho . . . . .	3	..
Illinois . . . . .	16	5
Indiana . . . . .	2	2
Iowa . . . . .	13	8
Kansas . . . . .	6	1
Kentucky . . . . .	5	1
Louisiana . . . . .	4	..
Maine . . . . .	98	53
Maryland . . . . .	8	2
Massachusetts (except Boston) . . . . .	876	334
Boston . . . . .	165	139
Michigan . . . . .	4	1
Minnesota . . . . .	4	4
Mississippi . . . . .	..	4
Missouri . . . . .	3	6
Montana . . . . .	..	1
Nebraska . . . . .	4	1
New Hampshire . . . . .	56	29
New Jersey . . . . .	12	8
New York . . . . .	94	73
North Carolina . . . . .	17	4
Ohio . . . . .	21	7
Oklahoma . . . . .	2	..
<i>Carried forward</i> . . . . .	<u>1471</u>	<u>712</u>



# PETER BENT BRIGHAM HOSPITAL

	1914	1913
<i>Brought forward</i> . . . . .	1471	712
Oregon . . . . .	1	..
Pennsylvania . . . . .	15	20
Rhode Island . . . . .	13	14
South Carolina . . . . .	10	10
Tennessee . . . . .	6	2
Texas . . . . .	6	1
Utah . . . . .	1	1
Vermont . . . . .	41	16
Virginia . . . . .	24	5
West Virginia . . . . .	3	4
Wisconsin . . . . .	13	3
Wyoming . . . . .	1	..
Total Americans . . . . .	1,605	788
Africa . . . . .	1	..
Armenia . . . . .	..	3
Australia . . . . .	2	2
Austria . . . . .	26	7
Belgium . . . . .	6	1
Bulgaria . . . . .	1	..
Canada . . . . .	226	107
China . . . . .	1	1
Denmark . . . . .	6	4
East Indies . . . . .	1	..
England . . . . .	113	50
Finland . . . . .	..	3
France . . . . .	4	5
Germany . . . . .	52	24
Greece . . . . .	24	3
Holland . . . . .	3	..
India . . . . .	..	1
Ireland . . . . .	281	165
Italy . . . . .	100	37
Norway . . . . .	6	4
Panama . . . . .	1	..
Poland . . . . .	4	2
Portugal . . . . .	..	1
Roumania . . . . .	3	2
<i>Carried forward</i> . . . . .	861	422

# REPORT OF THE SUPERINTENDENT

	1914	1913
<i>Brought forward</i> . . . . .	861	422
Russia . . . . .	274	110
Scotland . . . . .	27	19
Spain . . . . .	1	1
Sweden . . . . .	29	15
Switzerland . . . . .	3	8
Syria . . . . .	..	1
Tasmania . . . . .	1	..
Turkey . . . . .	33	4
Venezuela . . . . .	1	..
Wales . . . . .	1	..
West Indies . . . . .	7	2
Total foreigners . . . . .	<u>1,238</u>	<u>582</u>



Table IV  
Occupations

MALES	1914	1913
Accountants . . . . .	6	..
Agents . . . . .	3	..
Architects . . . . .	1	2
Artists . . . . .	2	..
Attendants . . . . .	..	2
Auctioneer . . . . .	..	1
Bakers . . . . .	12	2
Bankers . . . . .	4	1
Barbers . . . . .	19	5
Bartenders . . . . .	2	..
Blacksmiths . . . . .	7	3
Boiler maker . . . . .	..	1
Bookbinders . . . . .	2	..
Bookkeepers . . . . .	2	1
Bootblacks . . . . .	3	..
Box makers . . . . .	4	..
Brass finisher . . . . .	..	1
Brass polisher . . . . .	..	1
Brewery employees . . . . .	3	..
Bricklayers . . . . .	4	4
Brokers . . . . .	18	10
Brush maker . . . . .	..	1
Butchers . . . . .	5	4
Butler . . . . .	1	..
Candy makers . . . . .	2	1
Canvassers . . . . .	..	2
Cap maker . . . . .	..	1
Caretaker . . . . .	..	1
Carpenters . . . . .	31	12
Carriage trimmers . . . . .	..	2
Cashier . . . . .	..	1
Chauffeurs . . . . .	13	6
Cigar dealers . . . . .	1	1
<i>Carried forward</i> . . . . .	<u>145</u>	<u>66</u>

# REPORT OF THE SUPERINTENDENT

MALES	1914	1913
<i>Brought forward</i> . . . . .	145	66
Cigar makers . . . . .	9	1
Civil Engineers . . . . .	..	2
Cleaners . . . . .	14	5
Clergymen . . . . .	6	..
Clerks . . . . .	66	30
Clothing dealer . . . . .	..	1
Coal dealers . . . . .	1	2
Cobblers . . . . .	2	2
Collectors . . . . .	..	2
Compositor . . . . .	..	1
Confectioner . . . . .	1	..
Contractors . . . . .	2	..
Cooks . . . . .	5	..
Coopers . . . . .	2	..
Coppersmith . . . . .	..	1
Dentists . . . . .	3	3
Domestics . . . . .	..	17
Draughtsmen . . . . .	1	1
Drivers . . . . .	8	8
Druggists . . . . .	1	8
Dyer . . . . .	1	..
Editor . . . . .	1	..
Electricians . . . . .	12	4
Engineers . . . . .	10	3
Expressmen . . . . .	..	2
Farmers . . . . .	26	13
Firemen . . . . .	14	6
Fishermen . . . . .	3	1
Florist . . . . .	1	..
Foremen . . . . .	10	1
Furniture dealer . . . . .	..	1
Furniture makers . . . . .	3	..
Furniture movers . . . . .	2	..
Furriers . . . . .	1	1
Gardeners . . . . .	7	5
Gas fitters . . . . .	3	..
Grocers . . . . .	5	5
Hardware dealer . . . . .	1	..
Harness makers . . . . .	6	1
<i>Carried forward</i> . . . . .	372	193



# PETER BENT BRIGHAM HOSPITAL

MALES	1914	1913
<i>Brought forward</i> . . . . .	372	193
Hostlers . . . . .	3	3
Hotel proprietors . . . . .	1	3
House painters and decorators . . . . .	..	8
Housemen . . . . .	20	..
Icemen . . . . .	2	..
Inspector of wires . . . . .	1	..
Insurance agents . . . . .	11	1
Interpreter . . . . .	1	..
Inventor . . . . .	1	..
Iron workers . . . . .	..	7
Janitors . . . . .	14	11
Jewelers . . . . .	1	2
Journalist . . . . .	1	..
Junk dealers . . . . .	3	1
Laboratory employees . . . . .	17	2
Laborers . . . . .	143	52
Laundrymen . . . . .	4	1
Lawyers . . . . .	13	6
Leather workers . . . . .	3	5
Letter carriers . . . . .	2	..
Liquor dealers . . . . .	2	..
Lodging-house keeper . . . . .	..	1
Longshoremen . . . . .	1	3
Lumber retailer . . . . .	..	1
Lumberman . . . . .	1	..
Machinists . . . . .	37	19
Mail clerk . . . . .	1	..
Managers . . . . .	19	8
Manufacturers . . . . .	7	4
Marketman . . . . .	1	..
Masons . . . . .	5	..
Meat cutters . . . . .	5	5
Mechanics . . . . .	7	1
Mechanical engineers . . . . .	2	..
Merchants . . . . .	20	7
Messengers . . . . .	18	2
Metal workers . . . . .	8	6
Milk dealers . . . . .	1	..
Mill hands . . . . .	12	5
<i>Carried forward</i> . . . . .	760	357

# REPORT OF THE SUPERINTENDENT

MALES	1914	1913
<i>Brought forward</i> . . . . .	760	357
Miners . . . . .	1	1
Minors . . . . .	48	11
Missionaries . . . . .	4	..
Musicians . . . . .	9	1
Naval officer . . . . .	1	..
Newsboys . . . . .	2	..
No occupation . . . . .	15	37
Nurse . . . . .	..	1
Office boys . . . . .	3	3
Orderlies . . . . .	4	2
Packer . . . . .	..	1
Painters . . . . .	36	14
Paper hangers . . . . .	3	..
Peddlers . . . . .	7	2
Photographers . . . . .	2	1
Physicians . . . . .	35	14
Plasterers . . . . .	1	4
Plumbers . . . . .	19	2
Police officers . . . . .	29	3
Porters . . . . .	7	1
Postmaster . . . . .	..	2
Printers . . . . .	11	2
Produce dealers . . . . .	2	..
Professors . . . . .	3	..
Proofreader . . . . .	..	1
Rabbis . . . . .	4	..
Railroad employees . . . . .	21	13
Ranchers . . . . .	2	1
Real estate . . . . .	7	2
Restaurant keepers . . . . .	2	2
Retired . . . . .	31	..
Roofer . . . . .	1	..
Rubber workers . . . . .	3	1
Salesmen . . . . .	62	22
Sawmill . . . . .	2	..
Seamen . . . . .	5	2
Shippers . . . . .	10	1
Shoemakers . . . . .	14	..
Shoe shop employees . . . . .	27	13
<i>Carried forward.</i> . . . .	1193	517



# PETER BENT BRIGHAM HOSPITAL

MALES	1914	1913
<i>Brought forward</i> . . . . .	1193	517
Silversmith . . . . .	1	..
Social workers . . . . .	11	..
Soldier . . . . .	..	1
Solicitor . . . . .	..	1
Speculator . . . . .	..	1
Stablemen . . . . .	..	2
Stationary engineers . . . . .	2	..
Steamfitter . . . . .	..	1
Stevedore . . . . .	1	..
Steward . . . . .	1	..
Stone cutter . . . . .	..	1
Stone masons . . . . .	2	..
Storekeepers . . . . .	2	8
Street railway employees . . . . .	15	6
Structural iron worker . . . . .	1	..
Students . . . . .	150	68
Superintendents . . . . .	19	15
Supervisor . . . . .	..	1
Tailors . . . . .	42	11
Teachers . . . . .	8	12
Tanner . . . . .	..	1
Teamsters . . . . .	35	9
Telegraph operators . . . . .	2	..
Telephone operator . . . . .	1	..
Time keeper . . . . .	1	..
Tinsmiths . . . . .	2	1
Treasurers . . . . .	..	3
Trustee . . . . .	1	..
Typist . . . . .	1	..
Undertaker . . . . .	1	..
Valets . . . . .	1	1
Veterinary surgeon . . . . .	1	..
Waiters . . . . .	17	..
Watchmaker . . . . .	1	..
Watchmen . . . . .	1	2
Woodworker . . . . .	1	..
Others . . . . .	91	51
Total males . . . . .	1,605	713

# REPORT OF THE SUPERINTENDENT

FEMALES	1914	1913
Authors . . . . .	3	..
Bookkeepers . . . . .	9	5
Box makers . . . . .	..	2
Bundle girl . . . . .	1	..
Candy makers . . . . .	2	2
Cashiers . . . . .	7	3
Cigar makers . . . . .	1	1
Cleaners . . . . .	7	2
Clerks . . . . .	8	19
Collector . . . . .	..	1
Compositor . . . . .	..	1
Cooks . . . . .	6	..
Demonstrators . . . . .	1	1
Designer . . . . .	1	..
Dietitian . . . . .	1	..
Domestics . . . . .	147	122
Dressmakers . . . . .	8	..
Hair dressers . . . . .	1	2
Home . . . . .	353	53
Housewives . . . . .	375	212
Laundry maids . . . . .	7	..
Librarians . . . . .	2	..
Matron . . . . .	..	1
Merchant . . . . .	..	1
Mill operatives . . . . .	12	4
Milliners . . . . .	2	2
Minors . . . . .	21	7
Missionaries . . . . .	3	3
Musicians . . . . .	1	3
Music teacher . . . . .	1	..
No occupation . . . . .	4	40
Nurses . . . . .	46	33
Office girl . . . . .	..	1
Physicians . . . . .	3	2
Proofreader . . . . .	1	..
Saleswomen . . . . .	10	14
Seamstresses . . . . .	14	17
Secretaries . . . . .	..	4
Shoe shop employees . . . . .	6	4
Social workers . . . . .	1	2
<i>Carried forward</i> . . . . .	1065	564



# PETER BENT BRIGHAM HOSPITAL

FEMALES	1914	1913
<i>Brought forward</i> . . . . .	1065	564
Soda fountain employees . . . . .	9	..
Solicitors . . . . .	2	..
Stenographers . . . . .	8	6
Storekeepers . . . . .	..	2
Students . . . . .	100	44
Superintendent . . . . .	..	1
Tailoresses . . . . .	2	1
Teachers . . . . .	24	17
Telephone operators . . . . .	2	1
Typist . . . . .	1	..
Waitresses . . . . .	14	..
Others . . . . .	11	21
Total females . . . . .	1,238	657

# Table V

## Expense and Revenue Statement

### ADMINISTRATION EXPENSES

	1914	1913
Salaries, officers and clerks . .	\$19,301.20	\$16,696.42
Office expenses . . . . .	.29	58.18
Stationery, printing, and post- age . . . . .	2,408.94	2,768.53
Telephone and telegraph . .	2,149.70	1,519.08
Liability insurance . . . . .	627.68	
Miscellaneous . . . . .	2,594.70	1,089.11
	<hr/>	<hr/>
Total administration expenses . . . . .	\$27,082.51	\$22,131.32

### PROFESSIONAL CARE OF PATIENTS

Salaries and wages:			
Physicians and surgeons . .	\$18,912.51	\$18,116.06	
Supt. of nurses and assistants	3,998.12	2,631.89	
Nurses . . . . .	12,145.02	11,970.57	
Special nurses . . . . .	7,793.97	7,379.90	
Orderlies . . . . .	5,099.59	3,158.82	
Druggists . . . . .	1,637.84	1,027.43	
Ward employees . . . . .	2,711.58	1,540.44	
Record clerks . . . . .	3,874.83	2,402.39	
	<hr/>	<hr/>	
	\$56,173.46	\$48,227.50	
Training school:			
Salaries of instructors . . .	\$ 2,182.50	\$ 1,908.00	
Supplies . . . . .	488.44	121.08	
	<hr/>	<hr/>	
	2,670.94	2,029.08	
Medical and surgical supplies:			
Apparatus and instruments .	\$ 1,728.04	\$ 918.89	
Medical and surgical supplies	12,852.79	11,781.26	
Alcohol, liquors and wines .	415.11	364.83	
	<hr/>	<hr/>	
	14,995.94	13,064.98	
Out-Door Department: . . .			
Labor . . . . .	\$ 2,637.85	\$ 769.31	
Supplies . . . . .	940.43	1,232.30	
	<hr/>	<hr/>	
	3,578.28	2,001.61	



# PETER BENT BRIGHAM HOSPITAL

	1914	1913
Photography and X-ray:		
Salaries and labor . . . . .	\$ 4,173.06	\$ 2,667.72
Supplies . . . . .	5,437.90	2,510.20
	<u>\$9,610.96</u>	<u>\$5,177.92</u>
Medical library . . . . .	771.17	381.11
Equipment for nurses . . . . .	38.36	19.17
Refunded on board . . . . .	339.95	634.12
	<u>                    </u>	<u>                    </u>
Total professional care of patients . . . . .	\$88,179.06	\$71,535.49

## DEPARTMENT EXPENSES

Ambulance:		
Labor . . . . .	\$ 871.11	\$ 141.46
Supplies . . . . .	358.39	219.34
	<u>\$ 1,229.50</u>	<u>\$ 360.80</u>
Laboratories:		
Labor . . . . .	\$ 6,399.88	\$ 4,251.72
Supplies . . . . .	2,529.65	587.18
	<u>8,929.53</u>	<u>4,838.90</u>
Housekeeping:		
Labor . . . . .	\$14,648.65	\$10,135.23
Supplies . . . . .	5,918.68	6,210.34
	<u>20,567.33</u>	<u>16,345.57</u>
Kitchen:		
Labor . . . . .	\$ 5,567.04	\$ 4,261.93
Supplies . . . . .	195.65	102.14
	<u>5,762.69</u>	<u>4,364.07</u>
Laundry:		
Labor . . . . .	\$ 4,663.50	\$ 3,197.78
Supplies . . . . .	762.32	1,306.84
	<u>5,425.82</u>	<u>4,504.62</u>
Steward's department:		
Labor . . . . .	\$ 1,241.55	\$ 811.63
Provisions:		
Bread . . . . .	1,944.61	1,343.73
Milk and cream . . . . .	9,632.51	4,851.51
Groceries . . . . .	7,225.03	7,626.89
Butter and eggs . . . . .	7,948.93	5,840.55
Fruit and vegetables . . . . .	5,047.67	4,437.63
Meat, poultry, and fish . . . . .	16,212.71	11,836.80
	<u>49,253.01</u>	<u>36,748.74</u>
Total department expenses	\$91,167.88	\$67,162.70

## REPORT OF THE SUPERINTENDENT

### GENERAL HOUSE AND PROPERTY EXPENSES

	1914	1913
Electrical department . . .	\$ 2,602.91	\$ 2,343.44
Heat, light, and power . . .	30,000.00	17,521.68
Gas . . . . .	2,065.64	1,291.01
Ice . . . . .	4.65	73.11
Water . . . . .	1,734.00	370.50
Maintenance real estate and buildings . . . . .	9,087.80	6,455.42
Maintenance machinery and tools . . . . .	86.25	108.94
Plumbing and steam fitting .	3,367.02	1,516.80
Insurance . . . . .	1,045.53	
<hr/>		
Total general house and property expenses . . . . .	\$49,993.80	\$29,680.90

### CORPORATION EXPENSES

Salaries, officers and clerks . .	
Stationery, printing, and postage . . . . .	
Legal expenses . . . . .	
Taxes . . . . .	
Medical adviser . . . . .	\$1,041.72
Miscellaneous . . . . .	
<hr/>	
Total corporation expenses	\$1,041.72

## SUMMARY

	EXPENSE	1914	1913
Total administration expenses . . . . .		\$ 27,082.51	\$ 22,131.32
Total professional care of patients expenses . .		88,179.06	71,535.49
Total department expenses . . . . .		91,167.88	67,162.70
Total general house and property expenses . . .		49,993.80	29,680.90
<hr/>			
TOTAL HOSPITAL EXPENSES . . . . .		\$256,423.25	\$190,510.41
Corporation expenses . . . . .		1,041.72	
<hr/>			
GRAND TOTAL . . . . .		\$257,464.97	\$190,510.41



# PETER BENT BRIGHAM HOSPITAL

	REVENUE	
	1914	1913
Administration receipts . . . . .	\$1,370.94	\$894.83
Professional care of patients receipts:		
Board of priv. rm. patients \$18,714.75	\$13,249.14	
Board of ward patients . 29,305.61	11,638.52	
Special nurses . . . . . 9,123.38	8,787.57	
Out-door department . . 3,761.59	234.25	
Photography and X-ray . 3,296.05	720.69	
Miscellaneous . . . . . 2,138.37	682.60	
	<hr/> \$ 66,339.75	<hr/> \$ 35,312.77
Department expenses:		
Ambulance . . . . . \$877.00	\$181.50	
Miscellaneous . . . . . 636.95	159.68	
	<hr/> 1,513.95	<hr/> 341.18
General house and property expenses .	26.59	22.80
	<hr/>	<hr/>
TOTAL HOSPITAL RECEIPTS . . . \$ 69,251.23		\$ 36,571.58
Cash from Treasurer . . . . .	155,498.81	136,438.83
Bills paid by Treasurer . . . . .	32,714.93	17,500.00
	<hr/>	<hr/>
GRAND TOTAL . . . . .	\$257,464.97	\$190,510.41

## STATEMENT OF STOCK ON HAND

	1914	1913
Administration supplies . . . . .	\$1,094.40	\$831.58
Professional care of patients' supplies .	6,292.45	5,191.00
Department supplies . . . . .	10,410.69	8,767.72
General house and property supplies .	1,841.48	2,342.59
	<hr/>	<hr/>
	\$19,639.02	\$17,132.89

## Report of the School of Nursing

THE School of Nursing was established on a small scale before the hospital was opened for the admission of patients.

November 5, 1912, the Superintendent of Nurses with two nurse instructors, the Housekeeper and two maids, occupied the Superintendent's residence, this building being the only one of the group suitable for occupancy at that time.

On November 7 five pupils were admitted. Their instruction began at once in temporary classrooms supplemented by the use of a laboratory in the Harvard Medical School. Of the five pupils admitted at that time, three have been accepted into the school.

On March 19, 1913, possession was taken of the nurses' own building with its comfortable single rooms, its splendid bathing facilities, and its convenient classrooms. Eleven pupils were admitted at this time, ten of whom are now in the school, and in June seven pupils were admitted, six of whom still remain. These three groups now form the first or senior class.

Up to the present time a total of seventy-three pupils have been admitted. Forty-five of these have been accepted into the school. Sixteen are still serving their probationary term. The remaining twelve have left or been dropped for sufficient reasons.

The course of instruction is planned to cover a period of three years. The probationary period is six months, of which time four months are given over to the preliminary course. Some attempt has been made to establish the preliminary course on a credit basis. Four months have been chosen as being the equivalent of one semester,



making it possible to measure the work of the preliminary course by the standards used in other educational institutions. During this period the pupils are taught those sciences upon which the practice of nursing is based, and the underlying principles and the technique of all the common nursing procedures.

The choice of instructors for carrying on this important work has proved most fortunate. To Miss Watson, the instructor of theory, Miss Clarke, of practice, and to Miss Johnson, the assistant superintendent of nurses, is due the success of the preliminary course.

The coöperation of the resident physicians and surgeons in the further instruction of the pupils by means of lectures and clinical teaching, has been most gratifying.

In order to supplement the work of this school and render its pupils eligible upon graduation for the examinations of the State Board of Registration in Nursing, it has been necessary to affiliate with other schools for training in those branches of nursing which this hospital does not provide.

Eight pupils a year, for a period of three months each, are now being sent to the New York Lying-In Hospital to obtain instruction and experience in obstetric nursing.

On January 4, 1915, a year's trial affiliation with our neighbor, the Children's Hospital, begins.

It is also possible to offer the nurses of this school affiliation with the Instructive District Nursing Association for public health nursing, with the Massachusetts Psychopathic Hospital for mental nursing, and with the Boston Floating Hospital for experience in infant nursing.

In organizing the work of a new hospital with a new school it has been necessary to employ a large number of graduate nurses as head nurses and on general ward duty. During these two years eighty-two graduate nurses, representing forty-eight training schools, serving periods of

## REPORT OF THE SUPERINTENDENT OF NURSES

time ranging from four days to one year and eleven months, have been employed. For many months, under these conditions, it was impossible to carry on the work of the wards with any degree of uniformity. Here again Miss Johnson has proved herself valuable in organizing and systematizing the ward work.

There are at present on the nursing staff:

Superintendent of Nurses . . . . .	1
Assistant Superintendent of Nurses . . . . .	1
Instructors to Nurses . . . . .	2
Supervisor . . . . .	1
Night Supervisor . . . . .	1
Head nurses and graduate assistants in wards and departments . . . . .	24
Pupil nurses . . . . .	43
Pupil nurses at New York Lying-In Hospital . .	2
Pupils in preliminary course . . . . .	16
<hr/>	
Total . . . . .	91

This is the full quota for whom there are quarters in the nurses' building, making the housing of the January class of fourteen somewhat problematical.

The most urgent problem, however, is the selection and equipment of a suitable room for a diet laboratory where the pupils may receive proper instruction in dietetics.

It is with the greatest pleasure that I here record my appreciation of the cordial support and coöperation of the Superintendent of the hospital in solving the problems of the School of Nursing.

CARRIE M. HALL, R. N.

*Superintendent of Nurses and  
Principal of the School of Nursing.*



## Social Service

THE Social Service work as a department was not started until the ninth of September, 1914, therefore it seems too soon to make more than a brief report.

As the department covers the Hospital wards as well as the Out-Door Department, with the services of one paid worker, the work necessarily must be extensive rather than intensive. That it is an integral part of the Hospital, supported and controlled by it, is a most hopeful promise of its future usefulness.

Medical social service already has found many fields of usefulness, but so far our efforts have been confined to the following functions: the more efficient medical treatment for the patient; the more effective coöperation with outside social agencies.

It has been a great pleasure to start this Department as the need of such a one has been felt for some time, and the response and help from hospital officers and doctors have been hearty and cordial; there also has been splendid coöperation from outside agencies.

The following statistics indicate the amount of work accomplished from the organization of the department on September 9, 1914, to December 31, 1914:

100 Patients referred to Social Service.

84 Visits to homes of patients.

78 Visits to patients on wards.

73 Visits with patients in Out-Door Department.

Reason referred:

21 For care during convalescence.

13 For care in chronic illness.

12 For Tuberculosis Sanitarium.

19 To return for treatment.

## SOCIAL SERVICE

- 6 To return for observation.
- 3 Epilepsy.
- 1 Feeble-minded.
- 5 Employment for handicapped.
- 1 Employment.
- 1 Neglect.
- 3 Illegitimacy.
- 4 Instruction in hygiene.
- 5 Aid in home.
- 1 Trades-school.
- 1 Deportation.
- 1 Baby to be weaned.
- 1 Temporary care of baby.
- 2 Abdominal belts.

In this work the following special agencies were made use of:

### Hospitals:

- Robert B. Brigham Hospital.
- Boston Consumptives' Hospital, Out-Patient Department.
- Psychopathic Hospital.
- Lying-In Hospital.
- Monson State Hospital.
- Tewsbury State Infirmary.
- Long Island Hospital.
- House of the Good Samaritan.

### Homes for Convalescent and Chronic Care:

- Chickering House.
- Channing Home.
- Milton Convalescent Home.
- St. Luke's Convalescent Home.
- Bishop Williams Farm.
- St. Monica's Home.

### Societies:

- Associated Charities.
- Associated Charities Department for Homeless Men.
- Boston Society for Care of Girls.
- Children's Aid Society.
- Federated Jewish Charities.
- Milk and Baby Hygiene.
- Women's Educational and Industrial Union.



PETER BENT BRIGHAM HOSPITAL

Society for Helping Destitute Women and Children.  
Young Women's Christian Association.  
Massachusetts Babies Hospital.  
District Nursing Association.  
State Department, Mothers' Pensions.

Social Service Departments:

Massachusetts General Hospital.  
Children's Hospital.  
Boston Dispensary.

ALICE M. CHENEY.

## Report of the Pathologist

THERE have been 147 autopsies performed in the hospital during the two years. The total number of deaths during this period was 252, giving a  $58\frac{1}{2}$  per cent of autopsies to deaths. Due to many causes there is an extremely low percentage of autopsies in most of the hospitals in this country. While 58 per cent must be considered a low one, it is the highest which obtains in this city.

The importance of post mortem examinations has always been recognized and the autopsy is one of the foundation stones on which medical knowledge and efficiency has been erected. What we know of disease is due mainly to the study of the causes, their mode of action, and effects produced, as illustrated in the examination of the body after death. Such study has never been of more importance than at the present time, for the past experience and new methods of investigation, chemical, microscopical and bacteriological, are enabling us to go further in research. One of the difficulties in obtaining permission for such examinations is that on the part of the laity, their importance in obtaining knowledge which can often be directly applied to the alleviation of disease is imperfectly understood. Only recently a form of cerebral disease, the existence of which has not been suspected in this part of the country, has been shown by post mortem examination, and could not have been demonstrated in any other way. By means of these examinations great light has been thrown on the character and mode of growth of certain tumors of the brain which will assist in their treatment, and there are many other examples which might be cited. Without the exact knowledge which comes from the examination of fatal cases of dis-



## REPORT OF THE PATHOLOGIST

ease there will be uncertainty of diagnosis and therapeutic measures, and such uncertainty is sure in time to lead to false confidence. Such false confidence in diagnosis and treatment, combined with inadequate study of the patient and routine procedures of treatment, are commonly seen in those hospitals in which post mortem examinations are not made at all or on a very small proportion of the cases.

In addition to the examinations made on cases which died in the hospital, five examinations were made on cases which had been patients in the hospital and had died after leaving it.

All examinations are carefully recorded, this including microscopic examinations of all organs, and the records of the more important cases are illustrated by photomicrographs. It is hoped that such records will be of value in the study of disease. A number of special researches, some of them of wide extent, are in progress, based on the material which has come to the laboratory.

In addition to the post mortem examinations 847 specimens of various sorts, chiefly from the surgical service, were examined and recorded within a single year. Such examinations are often of material assistance in the treatment of cases and often determine the necessity for and the character of a surgical operation.

W. T. COUNCILMAN,

*Pathologist.*

# Report of the Surgeon-in-Chief

**Introduction.** Departmental reports are usually perfunctory things. A busy university colleague tells me that there is but a single way to prepare one — so badly that you will never be called upon in the same capacity again. Judging from a glance through various hospital reports, this advice may sometimes be followed.

As a rule these yearly publications from our American hospitals concern themselves chiefly, if not solely, with administrative affairs and fail to record with any detail or accuracy the varied accomplishments or failures of the clinical services. Whether or not it is worth while to include some clinical material in these annual reports depends upon their readers or possible readers, and it would appear from Dr. Christian's inquiries that the audience cannot be large nor include many beside administrators and trustees. It is true that the patients are carefully enumerated, but the difference in point of view may be illustrated by such an item as the usual table of occupations, which, though of some administrative interest, would only be of value for the clinician if it recorded the chief maladies incidental to these occupations. One cannot measure patients by the meter, or weigh diseases in kilos, or estimate therapy in dollars and cents; and most reports neglect in large part, except in so far as the cost per patient per day and like subjects are concerned, a consideration of the problems of disease for which the hospital is actually administered.

**Character of Service.** All hospitals, even so-called general hospitals, have a certain individuality of their own, even on the administrative side, but this is particularly true as regards their clinical departments. Different types



of men of variable number serve in the capacity of clinical chiefs for a few months at a time or for an entire year, and the direction of their interest or of their training necessarily modifies to a considerable degree the character of the clinical material. Some hospitals are teaching institutions and certain patients may be admitted or detained for teaching purposes after they have received as much personal benefit as may be afforded. Other hospitals which do not teach are interested largely in the rapidity with which patients may be treated and discharged. Some hospitals, as is the case with our own, desire, if death is imminent, to have the victim of an incurable disease end his days in the institution, so that the information derived from a post-mortem examination may be had. On the other hand, there are hospitals which never permit a patient to die within their walls if a timely transfer to other surroundings is possible. These and many other factors must modify enormously the statistical character of the clinical reports which appear in the annual volume of these institutions. Many of them indeed have come to omit the tabulations of cases, diagnoses, operations, etc., as being futile. Those which do retain these lists follow no conformity, so that it is well-nigh impossible to make comparison even if comparison be desirable.

At the Peter Bent Brigham Hospital we are in the interesting and somewhat enviable position of being able to begin our service without specialization, so that the entire field of surgery is more or less completely covered;\* for it would appear that so-called general surgery in many institutions is somewhat emasculated by the withdrawal from it of the surgical disorders of the eye, ear, nose and throat, of the pelvic disorders of women, of

\* Operative dentistry may alone be excluded from the subjects which the staff is more or less qualified to cover. Dr. Taft of the Harvard Dental School has in a most satisfactory way taken over this particular work as occasions have arisen.



## REPORT OF THE SURGEON-IN-CHIEF

genito-urinary, neurological, orthopædic, proctological, vascular, thoracic diseases, and so on, so that "general surgery" has come to mean the surgery of the extremities and the alimentary canal. In consequence the majority of so-called general surgeons, perhaps unconsciously, have become more or less specialized workers.

My personal conviction in this relation is that general surgery should cover all of these fields and that groups of patients should be temporarily withdrawn from a general service to be under the direction of one who may be termed a specialist, only in the event of some individual arising in the clinic who shows a special interest in and a peculiar aptitude for a certain kind of special work. It is eminently proper in this event to turn over to this individual, who previously must have had a thorough general training, all of the clinical material which relates to the special domain toward which his predilections lead him. And so long as he continues to make advances in his subject, he should continue therein, but such a special surgical sub-department should remain a fixture only so long as productiveness makes its separation from a general service justifiable. When such an offshoot from the general department ceases to make progress, it would be wise to reabsorb it again within the general service until some other individual develops who may give to the special subject a further impetus. Too often we see special departments which have arisen in this way become sterile for the reason that they have been looked upon as necessarily perpetual, and an institution looking vainly for a new director usually settles upon someone who has been trained exclusively in the narrow specialty and is thereby supported as the logical successor. The more effective plan, in short, consists in building positions around promising and available men as opposed to the custom of formulating positions and of attempting to find men who are likely to be productive if placed therein.



It is our good fortune, however, to have in our immediate neighborhood other institutions which are distinctly specialized — a cancer hospital and radium institute, a dental clinic, a great psychopathic hospital, a children's hospital with an exceptional orthopædic service, an infants' hospital, and still another institution, the Robert Brigham Hospital, for the especial study of chronic diseases. A close university affiliation with most of these institutions has enabled us, through friendly consultation and advice, to strengthen our own weaknesses — and an appreciation of the good will of the directors of these various clinics and also of the coöperation of the heads of the various departments of the Medical School, who have been cordially helpful when there has been need of expert consultants, cannot be too warmly expressed.

As the clinic grows our present organization cannot long continue to cover the whole surgical field, and specialized subdivisions will doubtless become necessary, but it is in the direction outlined above that I trust we shall develop. In the past, only two of the present staff, the Surgeon-in-Chief and the Anæsthetist, have cultivated what might be called special fields of work; but our first move in the direction outlined is to attach to the house service, in the person of Dr. Clifford B. Walker, a full-time appointee who will enable us more effectively both in the wards and Out-Door Department to care for the special maladies incidental to diseases of the eye, ear, nose and throat.

**Staff Organization.** The beds of the Hospital have been equally divided between medicine and surgery, and the organization of the two services is similar. All of the officers serve throughout the year. The Surgeon-in-Chief gives his full working time to his hospital and medical school duties. His two junior associates give the major part of their time, and when provision is made for them to



## REPORT OF THE SURGEON-IN-CHIEF

have their own rooms in the institution they undoubtedly will likewise give their undivided individual service. There are four salaried senior house officers of indefinite term of service — a Resident Surgeon and his three assistant residents, one of whom devotes himself for a year to the special field of neurological surgery and is directly responsible in this work to the Surgeon-in-Chief. Under these men come the eight house officers who are appointed in pairs every four months and serve for sixteen months; and under them in turn students serve as clinical dressers in the wards.

The house-officer service is graded, the men having charge of a certain number of beds from the outset; ten the first four months, about twenty the second four months, and something over thirty the third four months; and in the latter period they alternate for two months on the private ward. During the last four months of the service the senior house officers are in charge of the Out-Door Department, which is in operation all day, and the two men on duty alternate morning and afternoon, thus having half of their time free for investigative work.

In addition there is a supervisor of anæsthesia who personally administers the anæsthetic in the more difficult and responsible cases and who happens to be the desirable type of man who gives his full time and has charge of a laboratory\* for the special study of respiratory problems.

Furthermore we have an affiliation with the Boston Dispensary by which arrangement, as is the case also with Medicine, the chiefs of the surgical Out-Door Department of that honored institution are appointed as Associates in Surgery.

Thus the surgical staff is a little larger than is the med-

\* It is equipped with a Benedict respiration apparatus, a 100 liter spirometer with aluminum bell, a small 6 liter Krogh recording spirometer, 3 Haldane apparatuses for gas analysis, several of the forms of apparatus used by Haldane and Barcroft for blood gas work, a Waller gas balance and the necessary incidental recording instruments.



ical staff and with an equal number of beds must become still more so, if with the inevitable growth of the clinic its members are to become productive rather than routine workers; for even at present it is almost impossible to find uninterrupted time for quiet investigation. This is largely due to the time-consuming nature of surgical therapeutics, for thorough preliminary study must necessarily be accorded to each patient whether in the medical or surgical wards, and yet on the one hand it means an order for treatment often administered by a nurse, whereas in surgery it may mean a fatiguing operation of some hours' duration consuming the time of three or four members of the staff. This is particularly true of the cases requiring neurological study, and I cannot commend too highly the unflagging industry of the three successive assistant residents who have so lightened my labors in this arduous work that it has been possible to attend to the necessary duties connected with the school.

**Growth of Service.** Our first patient, a woman with varicose veins of the leg, entered the Hospital on January 27, 1913. In the twenty-four succeeding months to January 1, 1915, there were 2284 admissions, the average of the last three months being about 150 patients a month, which is approaching the present limit of our 110 beds. With an average hospital residence of 18 days per patient, one bed can care for 20 patients a year, and on this basis we can hardly expect with our present facilities more than 2200 patients annually, or about 180 a month. This, however, when sufficiently controlled provides abundant and varied teaching material.

During the first several months our accommodations were confined to 15 beds on a single floor of the first completed ward where a temporary operating room was equipped; and it was not until a year later that the remaining wards were ready for occupancy. That our clientèle has grown as rapidly as it has reflects great credit

on the capacity, tact and industry of the younger members of the staff; for the reputation of a hospital is carried from patient to patient, and an ill repute, whether deserved or not, spreads quickly in a community, particularly in the case of an untried institution which has no background of honorable tradition to protect it from its occasional and inevitable blunders.

**Annual Clinical Reports.** The comments of my colleague, Dr. Christian, on the tabulations of the medical cases apply as well to the cases submitted to the surgical wards. If we are really to make reports which are to be intelligible and useful, I am not sure but that some such system as is in operation at the large hospitals in Great Britain will be necessary — a system under which the much sought after appointment is made each year from the outgoing house officer staff, of a so-called Registrar whose duty it is to record, tabulate and analyze the cases which during the twelve months pass through the institution. These statistical studies, being chiefly of clinical interest, are usually included in the annual hospital transactions rather than in a hospital administrative report. Another way would be to publish the annual clinical report, as has been occasionally done in Germany, as a special article in some important journal, a custom which seems of late years to have been abandoned. Still another plan, I believe, is about to be adopted by the Massachusetts General Hospital, where two separate hospital reports, one administrative and one clinical, are to be published.\*

It would, I think, be important for our community if all of its major hospitals should employ in their reports the same or a similar system in recording the clinical attendance in the wards and out-patient service — important not

\* This admirable report has since appeared and though it may be faulty on the side of over-elaboration, it should nevertheless be regarded as a standard toward which future reports should strive.



only for purposes of comparative but also for purposes of collective study. It is to be hoped that through some co-operative arrangement this may be brought about, for the plan would be mutually advantageous.

There is one step in the direction of such coöperation which should be taken immediately between the various hospital administrators, and that concerns the hospital wanderers. With all our present agitation, so vigorously championed by Dr. Codman, concerning end results of therapeutic work and follow-up systems, there are, in addition to those who are never reached by letters of inquiry owing to their frequent change of residence, many others who never reply to them, and these unfortunately are apt to be the individuals who have not done well — the very ones of whom we should particularly wish to be informed. I would not venture to say how many patients we have had who have already been inmates of other Boston hospitals, and doubtless an equal percentage of our patients who have been unrelieved or dissatisfied turn up elsewhere. For example, a patient with a recurrent hernia is apt to try another hospital and is less likely to answer the letter of inquiry from the first institution than if he had been cured, though he is the individual above all others from whom a report is desired. For these and other reasons the information should be tactfully secured from every patient on his admission whether he has formerly been an inmate in another hospital, and, if so, a card stating the fact of his entry and the reasons therefor should be sent by the administrator's office to be filed with his hospital record elsewhere and accompanied by a request for a note regarding his condition while there. This will be not only a means of giving and acquiring information, but will spare much of the labor incidental to the follow-up system. Doubtless these and other coöperative interests will be satisfactorily worked out in time.



## REPORT OF THE SURGEON-IN-CHIEF

**Surgical Statistics.** From the outset unusual care has been taken with our case records, which should contain the observations of all those who have seen and passed judgment on each patient, and it is a regulation that the operative notes should always be dictated by the operator himself. The histories are all typewritten, and if they are to be criticised at all, it is on the side of over-elaboration and detail. Once a week the histories of the patients discharged in the interval are reviewed at a staff meeting, by the Surgeon-in-Chief or the Resident Surgeon, and the final diagnosis is then added after all references to pathological, röntgenological, photographic and other data have been appended.

From these completed histories of the past two years tabulations were made by a secretary who had been previously trained to use the International System of Nomenclature as modified by the Bellevue Hospital in New York, but despite her great industry and fidelity the results showed that without constant supervision and interpretation of individual cases by medically trained persons, statistical tabulations compiled in this way from a guide-book leave much to be desired. This doubtless has been the experience of all hospitals.

It has long been the custom in many institutions to publish from their surgical department two tables, one giving the surgical diagnoses, the other recording the list of operations which have been performed. Just why this is done in surgery, whereas no attempt is made to give the statistical results of medical treatment, is not entirely clear. It possibly harks back to the days when operations were few and these were easily recorded. Unquestionably it will be much simpler and better in the future to fuse these two surgical tables into one which assembles the diagnosis, treatment and results for each subdivision of cases, and it is my intention that this shall be done in our next report.



Hospital reports in general vary in their manner of presentation of both these surgical tables, the diagnostic and the operative. On the system which has been followed here — probably an unwise one — but a single diagnosis (the more important one, or the one for which the patient enters the hospital) is included in the table so that the number of patients admitted and the number of diagnoses should coincide. If this plan were consistently carried throughout, the table of operations should also coincide with the number of patients operated upon. Just where to draw the line is hard to decide and the matter is deserving of some inter-institutional understanding or agreement, so that there may be uniformity.

From the reports of other hospitals which are at hand, it is impossible to glean much that is of mutual statistical value. Thus in the annual report of the Johns Hopkins Hospital, in which the white and colored patients are separately tabulated, it is apparent that there is but one diagnosis for each patient admitted, and the operations are not tabulated. In the recent Lakeside Hospital report for 1913 it is to be inferred that the admissions and diagnoses are meant to correspond, but this is not entirely clear. There are 2689 diagnoses listed as "total admitted," and 2281 operations similarly listed in the tables of the Surgical Service. This would mean some 400 surgical patients who have not required an operation, even if but a single operation is recorded for each case. In the 1913 report of the Massachusetts General Hospital there were 3788 surgical admissions, 4249 surgical diagnoses and 3935 tabulated operations, an excess of 461 surgical diagnoses and 147 operations over the number of surgical admissions. Evidently therefore there was neither strict adherence to the plan of a single diagnosis and operation for each patient admitted, nor to the plan of recording all significant diagnoses and operations, regardless of their number, for this would presumably have



## REPORT OF THE SURGEON-IN-CHIEF

made the discrepancy far greater. In the report from St. Mary's Hospital in Rochester for 1913 it is stated that there were 6825 patients admitted during the year, whereas the list of diagnoses reaches a total of 10,027. The number of patients operated upon was 6825 in-patients and 1653 out-patients, making a total of 8478, and the total number of operations is given as 10,166. Thus there is an excess of diagnoses over the total number of patients (including in- and out-patients) of 1530, and an excess of operations over the total number of patients operated upon of 1688. No explanation is made of the principles involved in making this tabulation and the reader is left in doubt as to which of several interpretations to adopt.

Thus do some of the hospitals whose surgical work is of the highest grade differ in their methods of presenting it for purposes of statistical comparison. It is unquestionably difficult to decide where to stop in the matter of several diagnoses in the single patient if more than one is to be given. In illustration, a Civil War veteran enters the ward with a chronic osteomyelitis following a gun-shot wound; he also has a large hydrocele and on the opposite side an inguinal hernia; furthermore he has advanced arteriosclerosis, a cardiac lesion and a small epithelioma of the ear. Four operations under local anæsthesia in two sessions are performed. How should we record such a case if we consistently adhere to the system of one diagnosis per patient per admission? This system, however, is what has been faithfully employed in the following table of diagnoses (Table I) which therefore must be understood as being compiled from the first of the diagnoses which happen to have been put on the history sheet.

Especial difficulties evidently were encountered when the attempt was made to prepare automatically the table of operations, for such a study demands of the statistician a thorough acquaintance with the fluctuating termi-



nology of surgical diseases, a familiarity with the various procedures employed in their treatment and sound judgment concerning what is to be recorded as an operation. As the table was originally made out, it consisted of an alphabetical index of the descriptive features of each operation as dictated on the conclusion of the performance, so that, for example, operations for hæmorrhoids were classified under the chance heading of cauterization, excision, amputation, ligation, and so on, instead of primarily appearing under an anatomical or pathological heading. In consequence this original table has been discarded, and another, based chiefly on a physiological and systematic grouping of disorders (Table II), has been compiled by Dr. Cheever and the Secretary for inclusion in this report.

Though an improvement on its predecessor, this tabulation also is in many ways defective and lends itself to criticisms which will be met, we trust, in subsequent reports. Thus the extraction of teeth and deep alcohol injections for neuralgia occur in the list, whereas such major performances as a first stage osteoplastic craniotomy for brain tumor does not occur provided that the second stage performance has been subsequently completed. The question has naturally arisen as to whether or not to include procedures which may or may not be trifling, for example, the various punctures of the ventricle made for diagnostic or therapeutic purposes. It would be well, I think, in the future to confine the recorded operations, if one is to compile this list at all, to those performances which have required an incision under anæsthesia, though this standard admittedly is not entirely a satisfactory one.

As the tables read, there have been 2166 patients discharged in the interval under discussion and a corresponding number of diagnoses appear in Table I. Naturally a number of these diagnoses have represented readmis-



## REPORT OF THE SURGEON-IN-CHIEF

sions of which to my knowledge several occur in the neurological series alone, so that if the case appears at all in the operative list, an operation may not have been performed until a second or third admission or, on the other hand, a major procedure may have been performed on each successive admission. Then, owing to our diagnostic frailties, different diagnoses may have been made on the same patient on readmission, or indeed the patient may actually have been readmitted for a different disorder.

Out of the full number of 2166 patients recorded as discharged, there may have been, let us say, only 2000 individuals, and of these possibly only 1500 individuals may have been the subject of operation, and yet in Table II, where 1647 operations are recorded, no cognizance is taken of these matters, though to me they seem to be matters of importance. In ways such as this statistical tabulations may unwittingly, without misrepresentation, fail to give figures which may be looked for.

As an important supplement to the table of surgical operations, Dr. Cheever has prepared brief abstracts of the histories of those individuals who died in the Hospital subsequent to operation, and for convenience of reference these abstracts will be appended to the successive groups of operative procedures. The marginal letters to the figures occurring in the column of deaths refer to the foot-notes, which give the serial surgical number of the Hospital records from which these abstracts have been made.\*

Attention may be called to the fairly high percentage of autopsies. In the 118 deaths occurring in the surgical wards, examinations have been held in 81 instances (about 70 per cent) — a fairly large proportion, though one which every effort should be made to increase. The securing of permission for these examinations is a matter which depends, except in the case of certain nationalities and creeds, solely

\* A similar system has been adopted in the annual report of the Massachusetts General Hospital for 1914 issued since this writing.



on the sympathetic and intimate relation established between the Hospital staff and the friends and relatives of the patient. It was our original intention, before the admission of each patient, to obligate the nearest relative to sign a written permission for an examination in case of death; but in view of the feelings in regard to such examinations on the part of our foreign population, the idea was abandoned as impracticable, and, as a matter of fact, the relatives of such patients as are retained for a long period in the Hospital owing to an irrecoverable illness are usually willing to sign such a paper without objection.

Of the 90 patients who have died subsequent to operation on the surgical service in the Hospital, 38, or nearly one-half, will be found in the neurological list. It was my desire that these 90 fatalities should be separately classified, as (1) those in which death was obviously accelerated by the operation; (2) those in which it was remotely attributable to the operation; (3) those in which it occurred so long after an operation — sometimes a matter of months — that the result was obviously uninfluenced or even postponed by the operation. It was felt, however, that such a subdivision might be misleading and all post-operative deaths occurring in the Hospital are therefore recorded as surgical fatalities without qualification.

HARVEY CUSHING,

*Surgeon-in-Chief.*

# Table I

## Surgical Diagnoses

JANUARY 27, 1913 — DECEMBER 31, 1914

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
ABNORMITIES AND MALFORMATIONS, CONGENITAL						
Branchial cyst neck . . . . .	1	1				
Meningo-encephalocele (cf. Nervous system) .						
Cleft Palate . . . . .	2	2				
Syndactylism . . . . .	1		1			
Imperforate hymen . . . . .	1		1			
Spina bifida (cf. Nervous system) . . . . .	3	1	1			1
Hyaloid canal (?) . . . . .	1				1	
THE BLOOD						
Hæmophilia . . . . .	1		1			
BONES AND CARTILAGES						
Atrophy of skull . . . . .	1				1	
Leontiasis ossea . . . . .	1		1			
Osteomalacia . . . . .	1		1			
Osteomyelitis . . . . .	12	6	6			
Periostitis . . . . .	3		3			
Tumors of Bone (cf. caption "Tumors") . . .						
BURSÆ						
Bursitis . . . . .	4	3			1	
THE CIRCULATORY SYSTEM						
ARTERIES AND VEINS						
Aneurysm of abdominal aorta . . . . .	1					1
Aneurysm of thoracic aorta . . . . .	1					1
Arterial sclerosis, general . . . . .	3		2	1		
Phlebitis . . . . .	1				1	
<i>Carried forward</i>	38	13	17	1	4	3



# PETER BENT BRIGHAM HOSPITAL

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	38	13	17	1	4	3
Thrombo-phlebitis . . . . .	1	1	1	1		1
Thrombosis . . . . .	1	1				
Thrombo-angeitis . . . . .	1		1			
Varix of legs . . . . .	55	44	8		3	
<b>THE DIGESTIVE SYSTEM</b>						
<b>APPENDIX</b>						
Appendicitis, acute . . . . .	73	66	2			5
Appendicitis, subacute . . . . .	27	25	1		1	
Appendicitis, chronic . . . . .	50	42	4		4	
<b>INTESTINE</b>						
Autointoxication, intestinal . . . . .	1	1				
Constipation . . . . .	8		4		4	
Diverticulitis with perforation . . . . .	1	1				
Duodenal bands (congenital) . . . . .	2		2			
Fæcal fistula . . . . .	3	2	1			
Neurosis, intestinal . . . . .	3	1	1		1	
Obstruction, intestinal . . . . .	7	2			1	4
Visceroptosis . . . . .	3		1		2	
Ulcer of duodenum . . . . .	6	2	4			
<b>LIVER, GALL BLADDER, GALL DUCTS</b>						
<i>Liver</i>						
Cirrhosis of liver with ascites . . . . .	3		1			2
Jaundice, catarrhal . . . . .	3		2		1	
Obstruction, biliary . . . . .	1			1		
<i>Gall Bladder and Gall Ducts</i>						
Cholangitis . . . . .	1		1			
Cholecystitis . . . . .	4	3	1			
Pericholecystitis . . . . .	2	1				1
Cholelithiasis . . . . .	38	25	3	1	7	2
Fistula of gall bladder . . . . .	1	1				
<b>MESENTERY, OMENTUM, AND PERITONEUM</b>						
<i>Peritoneum</i>						
Peritonitis, general . . . . .	4	2				2
Abscess, pelvic . . . . .	5	4	1			
Abscess, subphrenic . . . . .	1		1			
<i>Carried forward</i>	343	236	57	4	28	20

TABLE OF SURGICAL DIAGNOSES

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	343	236	57	4	28	20
MOUTH, PHARYNX, SALIVARY GLANDS, ETC.						
<i>Teeth, Gums, and Alveoli</i>						
Abscess, alveolar . . . . .	1	.....	1	.....	.....	.....
<i>Tongue</i>						
Cicatrix of (cf. page 65)						
<i>Tonsils</i>						
Abscess, peritonsillar . . . . .	5	3	2	.....	.....	.....
Tonsillitis, acute . . . . .	2	1	.....	.....	1	.....
Tonsillitis, chronic . . . . .	14	12	2	.....	.....	.....
Hypertrophy of tonsils . . . . .	79	73	2	.....	4	.....
RECTUM AND ANUS						
Abscess about rectum . . . . .	10	9	1	.....	.....	.....
Fissure of anus . . . . .	1	1	.....	.....	.....	.....
Fistula in ano . . . . .	14	8	5	.....	1	.....
Hæmorrhoids . . . . .	46	43	1	1	1	.....
Prolapse of rectum . . . . .	1	1	.....	.....	.....	.....
Stricture of rectum . . . . .	2	1	.....	.....	1	.....
Ulcer of rectum . . . . .	1	1	.....	.....	.....	.....
STOMACH						
Cardiospasm . . . . .	2	.....	2	.....	.....	.....
Hourglass stomach (Classify under Congenital Malf.) . . . . .	1	.....	1	.....	.....	.....
Indigestion . . . . .	4	.....	1	1	2	.....
Gastric neurosis . . . . .	4	.....	1	.....	3	.....
Gastritis, alcoholic . . . . .	1	1	.....	.....	.....	.....
Gastrospasm . . . . .	1	.....	1	.....	.....	.....
Hyperacidity . . . . .	1	.....	.....	.....	1	.....
Stenosis of pylorus . . . . .	7	5	2	.....	.....	.....
Ulcer of stomach . . . . .	15	9	2	.....	4	.....
THE DUCTLESS GLANDS						
PINEAL						
	2	.....	.....	.....	.....	2
PITUITARY						
Acromegaly						
With tumor . . . . .	17	12	.....	5	.....	.....
Without tumor . . . . .	6	1	1	4	.....	.....
<i>Carried forward</i>	580	417	82	15	46	22



PETER BENT BRIGHAM HOSPITAL

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	580	417	82	15	46	22
Dyspituitarism						
With tumor . . . . .	56	2	36	5	10	3
Without tumor . . . . .	19	.....	3	2	14	.....
Polyglandular syndrome . . . . .	16	5	2	8	.....	1
THYROID GLAND						
Cretinism . . . . .	1	.....	.....	.....	1	.....
Dysthyroidism . . . . .	3	2	1	.....	.....	.....
Goitre, colloid . . . . .	3	3	.....	.....	.....	.....
Goitre, cystic . . . . .	1	1	.....	.....	.....	.....
Hyperthyroidism . . . . .	18	1	13	.....	4	.....
Persistent thyroglossal duct . . . . .	3	3	.....	.....	.....	.....
MISCELLANEOUS						
Eunochoidism . . . . .	1	.....	.....	.....	1	.....
Progeria . . . . .	1	.....	.....	.....	1	.....
THE EAR						
Otitis media . . . . .	5	1	3	.....	1	.....
THE EYE						
Amblyopia . . . . .	1	.....	1	.....	.....	.....
Cataract . . . . .	2	1	1	.....	.....	.....
Keratitis . . . . .	4	4	.....	.....	.....	.....
Primary optic atrophy . . . . .	1	.....	1	.....	.....	.....
Ulcer of cornea . . . . .	2	1	1	.....	.....	.....
HERNIÆ						
Epigastric hernia . . . . .	2	2	.....	.....	.....	.....
Femoral hernia . . . . .	8	8	.....	.....	.....	.....
Femoral hernia, strangulated . . . . .	3	3	.....	.....	.....	.....
Inguinal hernia . . . . .	96	86	3	.....	7	.....
Inguinal hernia, strangulated . . . . .	6	5	.....	.....	.....	1
Umbilical hernia . . . . .	6	5	1	.....	.....	.....
Umbilical hernia, strangulated . . . . .	2	.....	.....	.....	.....	2
Ventral hernia . . . . .	9	8	.....	.....	1	.....
INFECTIVE DISEASES						
Abscess						
Arm . . . . .	1	1	.....	.....	.....	.....
Axillary . . . . .	2	.....	2	.....	.....	.....
Buttock, pyogenic . . . . .	1	1	.....	.....	.....	.....
<i>Carried forward</i>	853	560	150	30	86	29

TABLE OF SURGICAL DIAGNOSES

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	853	560	150	30	86	29
<b>Abscess</b>						
Epigastric region, multiple . . . . .	1	1				
Face . . . . .	1		1			
Groin . . . . .	1	1				
Leg . . . . .	1	1				
Neck . . . . .	8	6	2			
Parotid gland . . . . .	1	1				
Retro cæcal . . . . .	1	1				
Sublingual . . . . .	1	1				
Thigh . . . . .	2	1	1			
Blastomycosis, meningeal . . . . .	1					1
Carbuncle . . . . .	2	1	1			
Furunculosis . . . . .	3	3				
Infected wound . . . . .	22	12	10			
Septicæmia . . . . .	4		1			3
Syphilis . . . . .	5		2		3	
Syphilis, cerebral . . . . .	12		4	2	6	
Syphilis of larynx . . . . .	1			1		
Syphilis of tongue . . . . .	1		1			
<b>Tuberculosis</b>						
Cæcum and appendix . . . . .	1		1			
Cerebral . . . . .	1				1	
Epididymis . . . . .	3	1	2			
Kidney . . . . .	3				2	1
Lymph glands of neck . . . . .	22	12	10			
Peritonæum . . . . .	1					1
Phalanx of toe . . . . .	1	1				
Scapula . . . . .	1	1				
Scrotum . . . . .	1		1			
Shoulder . . . . .	1	1				
Spine . . . . .	1				1	
Testis . . . . .	1	1				
Wrist . . . . .	3		2		1	
Tuberculosis, chronic pulmonary . . . . .	1			1		
Typhoid fever . . . . .	2	1				1
<b>JOINTS</b>						
Ankylosis . . . . .	2		2			
Arthritis, acute . . . . .	3	1	1		1	
<i>Carried forward</i>	969	608	192	34	101	36



# PETER BENT BRIGHAM HOSPITAL

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	969	608	192	34	101	36
Arthritis, chronic . . . . .	7	1	4	1	1	....
Arthritis deformans . . . . .	1	....	1	....	....	....
Arthritis, gonorrhœal . . . . .	1	....	1	....	....	....
Hallux valgus . . . . .	3	3	....	....	....	....
Pes planus . . . . .	1	....	1	....	....	....
LYMPHATIC SYSTEM						
Elephantiasis . . . . .	2	1	....	....	1	....
Hodgkin's disease . . . . .	1	....	....	....	1	....
Lymphadenitis, acute . . . . .	9	4	4	....	1	....
Lymphadenitis, chronic . . . . .	1	1	....	....	....	....
Lymphangitis . . . . .	8	6	1	....	....	1
DISEASES OF THE MIND						
Dementia . . . . .	3	....	....	1	2	....
Dementia, præcox . . . . .	1	....	....	....	1	....
Feeble Mindedness — cerebral defective . . . . .	3	....	....	....	3	....
General paralysis of the insane . . . . .	4	....	....	....	4	....
Imbecility . . . . .	3	....	....	....	3	....
Melancholia . . . . .	1	....	....	....	1	....
Mental deficiency . . . . .	3	....	....	....	3	....
Psychosis, manic depressive . . . . .	2	....	....	1	1	....
MISCELLANEOUS DISEASES AND CONDITIONS						
Adhesions . . . . .	12	5	5	....	2	....
Blood donor . . . . .	3	3	....	....	....	....
Cicatrical contraction . . . . .	1	....	....	1	....	....
Debility . . . . .	3	....	1	....	2	....
Diabetes Mellitus . . . . .	5	....	....	....	4	1
Gangrene . . . . .	6	1	1	....	1	3
Migraine . . . . .	16	....	2	1	13	....
Raynaud's disease . . . . .	4	....	3	1	....	....
Sinus of axilla, tuberculous . . . . .	1	1	....	....	....	....
Neck . . . . .	1	....	1	....	....	....
Pilonidal . . . . .	6	2	3	....	1	....
Thoracic wall (old empyema) . . . . .	2	....	2	....	....	....
Unknown (no diagnosis) . . . . .	3	....	....	....	3	....
Vertigo . . . . .	1	....	....	1	....	....
<i>Carried forward</i>	1087	636	222	41	149	41

TABLE OF SURGICAL DIAGNOSES

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	1087	636	222	41	149	41
MUSCLES, FASCIÆ, TENDONS, AND TENDON SHEATHS						
MUSCLES AND FASCIÆ						
Contracture of spine (hysterical) . . . . .	1	1	....	....	....	....
Contracture of tendon . . . . .	8	2	3	3	....	....
Dupuytren's contraction . . . . .	5	3	2	....	....	....
Myositis, acute . . . . .	1	1	....	....	....	....
Tenontosynovitis of tendons of hand . . . . .	1	....	1	....	....	....
NERVOUS SYSTEM						
BRAIN, SPINAL CORD, AND MENINGES						
Abscess of brain . . . . .	4	....	....	....	1	3
Apoplexy . . . . .	3	1	....	....	2	....
Arterial sclerosis, cerebral . . . . .	6	....	1	2	3	....
Atrophy, progressive muscular . . . . .	1	....	....	....	1	....
Cyst of brain (porencephalic) . . . . .	3	....	2	....	1	....
Embolism of cerebral arteries . . . . .	2	....	....	....	....	2
Hæmorrhage, cerebral birth . . . . .	1	....	....	....	....	1
Hæmorrhage, cerebral-traumatic . . . . .	12	4	4	....	3	1
Hemiplegia . . . . .	3	....	....	....	3	....
Hydrocephalus . . . . .	7	....	2	1	3	1
Meningitis, acute septic . . . . .	2	....	....	....	....	2
Meningitis, cerebrospinal . . . . .	1	....	....	....	1	....
Meningitis, serosa . . . . .	3	2	....	....	1	....
Meningitis, tuberculous . . . . .	1	....	....	1	....	....
Arachnoiditis (chronic serous) . . . . .	8	1	2	1	4	....
Meningo-encephalocele, occipital . . . . .	1	1	....	....	....	....
Meningo-encephalocele, frontal . . . . .	1	....	....	....	1	....
Myasthenia gravis . . . . .	1	....	....	....	1	....
Myelitis, transverse . . . . .	2	....	....	2	....	....
Pachymeningitis, chronic . . . . .	1	....	....	....	....	1
Paraplegia, ataxic . . . . .	1	....	....	....	1	....
Paraplegia, spastic . . . . .	6	....	3	1	1	1
Sclerosis, amyotrophic lateral . . . . .	1	....	....	....	1	....
Sclerosis, disseminated . . . . .	5	....	1	1	3	....
Sclerosis, lateral . . . . .	2	....	....	....	2	....
<i>Carried forward</i>	1181	652	243	53	182	53



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DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	1181	652	243	53	182	53
Spina bifida (cf. Congenital malformations) . .						
Tabes dorsalis . . . . .	4			2	2	
Thrombosis, cerebral . . . . .	2			2		
Tumor, cf. caption "Tumors" { Brain Cord						
BRAIN TUMORS						
For pituitary and pineal tumors cf. Ductless Glands						
Cerebrum						
Glioma . . . . .	23		16		1	6
Gliomatous cyst . . . . .	13	5	6		2	
Echinococcus cyst . . . . .	1					1
Endothelioma . . . . .	9	4	3		1	1
Sarcoma metastatic . . . . .	3					3
Syphiloma . . . . .	6	2	3		1	
Tuberculoma . . . . .	4		1		2	1
Uncertified* . . . . .	30	2	17	2	7	2
Pons						
Glioma . . . . .	6		2	1	2	1
Tuberculoma . . . . .	2				1	1
Cerebellum .						
Intracerebellar						
Glioma . . . . .	13		9			4
Gliomatous cyst . . . . .	13	1	8		3	1
Syphiloma . . . . .	1				1	
Tuberculoma . . . . .	3			1		2
Extracerebellar						
Angioma . . . . .	1					1
Endothelioma . . . . .	10	2	5		1	2
Uncertified . . . . .	16		7	2	4	3
<i>Pseudo Tumor</i> †						
Cerebrum . . . . .	7	1	3		2	1
Cerebellum . . . . .	12	1	8		3	
<i>Carried forward</i>	1360	670	331	63	215	83

\* "Uncertified" at time of recorded admission, though possibly certified at a later admission.

† This group includes some cases of chronic serous arachnoiditis, focal epilepsy, and arterial sclerosis with suspicious tumor syndrome and possibly some cases of actual tumor.

TABLE OF SURGICAL DIAGNOSES

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	1360	670	331	63	215	83
SPINAL CORD TUMORS						
Endothelioma . . . . .	3	3				
Sarcoma . . . . .	3		1		1	1
Tuberculoma . . . . .	1		1			
Uncertified . . . . .	1		1			
<i>Cranial and Spinal Nerves</i>						
Meniere's syndrome . . . . .	1				1	
Neuralgia of sciatic nerve . . . . .	2			1	1	
Neuralgia, trigeminal . . . . .	94	66	16	4	8	
Neuritis of ulnar nerve . . . . .	1	1				
Paralysis of brachial plexus . . . . .	3			2	1	
Paralysis of deltoid muscle . . . . .	1			1		
Paralysis of ulnar nerve . . . . .	2	1			1	
Paralysis, Volkmann's . . . . .	1		1			
<i>Functional Nervous Disorders</i>						
Epilepsy . . . . .	51		13	3	35	
Hysteria . . . . .	8	2	6			
Neurasthenia . . . . .	3				3	
Neurosis, functional . . . . .	1				1	
Neurosis, post traumatic . . . . .	1				1	
Paralysis agitans . . . . .	1		1			
Psychæsthenia . . . . .	5				5	
FUNGI AND ANIMAL PARASITES						
Actinomycosis of jaw . . . . .	1		1			
Tænia saginata . . . . .	1		1			
POISONINGS AND INTOXICATIONS						
Alcohol poisoning . . . . .	2		2			
Lead poisoning . . . . .	1			1		
REPRODUCTIVE ORGANS						
FUNCTIONAL DISTURBANCES INVOLVING MALE AND FEMALE SEXUAL ORGANS						
Amenorrhœa . . . . .	2				2	
Dysmenorrhœa . . . . .	7	2	2		3	
Menorrhagia . . . . .	10	9	1			
<i>Carried forward</i>	1567	754	378	75	278	84



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DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	1567	754	378	75	278	84
Metrorrhagia . . . . .	7	5	2			
Sterility . . . . .	2	2				
<i>Mammary Gland</i>						
Abscess of Mammary Gland . . . . .	4	2	2			
Galactoceles . . . . .	1	1				
Mastitis, acute . . . . .	5	3	2			
Mastitis, chronic . . . . .	5	4			1	
Tumor, cf. caption "Tumors"						
<b>FEMALE REPRODUCTIVE ORGANS</b>						
<i>Ligaments, Ovaries, and Tubes</i>						
Gestation, extrauterine . . . . .	5	5				
Oöphoritis, chronic . . . . .	1				1	
Salpingitis, acute . . . . .	10	7	3			
Salpingitis, chronic (to include hydrosalpinx) . . . . .	9	5	1		2	1
Salpingitis and Oöphoritis . . . . .	7	7				
<i>Uterus</i>						
Displacement of uterus						
Anteflexion . . . . .	1		1			
Prolapse of uterus . . . . .	16	15			1	
Retroversion . . . . .	22	12	5		5	
Endometritis . . . . .	11	7	4			
Metritis . . . . .	1		1			
Parametritis . . . . .	1		1			
Laceration of cervix uteri, old . . . . .	6	5			1	
<i>Vagina</i>						
Laceration of pelvic floor . . . . .	3		2		1	
Prolapse of anterior vaginal wall (cystocele) . . . . .	11	7	2		2	
Prolapse of posterior vaginal wall (rectocele) . . . . .						
Relaxation of pelvic floor . . . . .	2	1	1			
Vaginitis (leucorrhœa) . . . . .	2		1		1	
<i>Vulva</i>						
Abscess of Bartholin's gland . . . . .	2	2				
Pruritus vulvæ . . . . .	1	1				
<b>MALE REPRODUCTIVE ORGANS</b>						
<i>Penis</i>						
Paraphimosis . . . . .	1	1				
Phimosis . . . . .	1	1				
<i>Carried forward</i>	1704	847	406	75	293	85

TABLE OF SURGICAL DIAGNOSES

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	1704	847	406	75	293	85
<i>Prostate Gland</i>						
Abscess of prostate . . . . .	2	2				
Enlargement of prostate . . . . .	13	5	4	1	1	2
Prostatitis, acute . . . . .	1		1			
<i>Spermatic Cord</i>						
Hydrocele . . . . .	9	8			1	
Varicocele . . . . .	3	3				
<i>Testicle and Epididymis</i>						
Epididymitis, acute . . . . .	2	1	1			
Epididymitis, chronic . . . . .	1	1				
Undescended testicle . . . . .	3	2			1	
<i>Tunica Vaginalis</i>						
Spermatocele . . . . .	1	1				
RESPIRATORY SYSTEM						
BRONCHI AND TRACHEA						
Bronchitis, acute . . . . .	1	1				
LUNG						
Abscess of lung . . . . .	3		2			1
Embolism of pulmonary artery . . . . .	1		1			
Pneumonia, broncho . . . . .	1	1				
Pneumonia, lobar . . . . .	1					1
NASAL PASSAGES AND ACCESSORY SINUSES						
Epistaxis . . . . .	1	1				
Frontal sinusitis . . . . .	1		1			
PLEURA						
Hæmo-pneumothorax (traumatic) . . . . .	1	1				
Pleurisy, suppurative (empyema) . . . . .	12	4	6	2		
SKIN, HAIR, AND NAILS						
Cicatrix of tongue (cf. page 57) . . . . .	1				1	
Eczema . . . . .	1		1			
Herpes . . . . .	1	1				
Ulcers . . . . .	8	6	2			
<i>Carried forward</i>	1772	885	425	78	297	89



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DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	1772	885	425	78	297	89
<b>TUMORS</b>						
(For brain and cord tumors, cf. Nervous system)						
<b>BENIGN TUMORS</b>						
Adenoma of breast . . . . .	1	1				
Adenoma of parotid gland . . . . .	1	1				
Adenoma of thyroid . . . . .	3		3			
Cyst of breast, multiple . . . . .	1	1				
Cyst of broad ligament . . . . .	1		1			
Cyst of ovary . . . . .	8	7	1			
Desmoid of abdominal wall . . . . .	1		1			
Enchondroma of phalanx . . . . .	1				1	
Enchondroma of sacrum . . . . .	2		1		1	
Fibroma of breast . . . . .	1	1				
Fibroma of uterus . . . . .	13	10	2		1	
Hemangioma of cheek . . . . .	1	1				
Lipoma (various) . . . . .	5	5				
Lymphoma of neck . . . . .	1				1	
Myoma of uterus . . . . .	6	4			1	1
Myxoma of breast (intracanalicular) . . . . .	3	3				
Neuroma (von Recklinghausen's disease) . . . . .	1				1	
Osteoma of skull . . . . .	3	2			1	
Papilloma of bladder . . . . .	1				1	
Papilloma of cervix uteri (polyp) . . . . .	4	4				
Papilloma of vulva . . . . .	1		1			
Caruncle of urethra . . . . .	2	2				
Retention cyst (mucocoele) . . . . .	1		1			
Retention cyst (wen) . . . . .	1				1	
<b>MIXED BENIGN TUMORS</b>						
Fibroadenoma of breast . . . . .	2	2				
Fibromyxoma of thigh . . . . .	1	1				
<b>UNKNOWN TUMORS</b>						
Mediastinal tumor (nature unknown) . . . . .	1				1	
<b>MALIGNANT TUMORS</b>						
Carcinoma of bladder . . . . .	1				1	
Carcinoma of breast . . . . .	13	6	4	1	1	1
Carcinoma of cæcum . . . . .	2			1		1
Carcinoma of cervix uteri . . . . .	10	2	4	2	2	
<i>Carried forward</i>	1865	938	444	82	311	92

TABLE OF SURGICAL DIAGNOSES

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	1865	938	444	82	311	92
Carcinoma of cheek . . . . .	1			1		
Carcinoma of face . . . . .	2		1	1		
Carcinoma of gall bladder . . . . .	1					1
Carcinoma of liver . . . . .	1					1
Carcinoma of lymph glands . . . . .	1	1				
Carcinoma of mouth (floor) . . . . .	1		1			
Carcinoma of naso-pharynx . . . . .	1			1		
Carcinoma of neck . . . . .	2		1			1
Carcinoma of œsophagus . . . . .	9		2	1	4	2
Carcinoma of ovaries . . . . .	1		1			
Carcinoma of pancreas . . . . .	3		1			2
Carcinoma of pelvis . . . . .	1					1
Carcinoma of penis . . . . .	1		1			
Carcinoma of pharynx . . . . .	1					1
Carcinoma of prostate . . . . .	2		1		1	
Carcinoma of rectum . . . . .	4	1		1	2	
Carcinoma of sigmoid . . . . .	1		1			
Carcinoma of skin of chest wall . . . . .	1	1				
Carcinoma of stomach . . . . .	21	9	1	2	4	5
Carcinoma of transverse colon . . . . .	1		1			
Carcinomatosis . . . . .	2			2		
Embryoma (?) intrathoracic . . . . .	1		1			
Epithelioma of lip . . . . .	4	3			1	
Epithelioma of nose . . . . .	1	1				
Hypernephroma of kidney . . . . .	1	1				
Sarcoma of groin . . . . .	2	1	1			
Sarcoma of kidney? . . . . .	1				1	
Sarcoma of leg . . . . .	1				1	
Sarcoma of lymph glands . . . . .	1					1
Sarcoma of neck . . . . .	1			1		
Sarcoma of orbit . . . . .	1			1		
Sarcoma of retroperitoneal structure . . . . .	1	1				
Sarcoma of skin (multiple) . . . . .	1				1	
Sarcoma of skull . . . . .	1				1	
Sarcoma of tonsil . . . . .	1	1				
<b>MIXED MALIGNANT TUMORS</b>						
Fibro-epithelioma (retropharyngeal) . . . . .	2	1	1			
Lympho-sarcoma of axillary and pectoral glands . . . . .	1			1		
<i>Carried forward</i>	1944	959	459	94	327	107



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DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	1944	959	459	94	327	107
Lympho-sarcoma of retroperitoneal lymph glands	1	.....	.....	1	.....	.....
Osteo-sarcoma of mandible . . . . .	1	.....	1	.....	.....	.....
<b>URINARY ORGANS</b>						
<b>BLADDER</b>						
Abscess of bladder . . . . .	1	1	.....	.....	.....	.....
Calculus in bladder . . . . .	4	4	.....	.....	.....	.....
Cystitis . . . . .	7	1	4	1	.....	1
Fistula of bladder . . . . .	1	1	.....	.....	.....	.....
<b>KIDNEY</b>						
Abscess, perinephritic . . . . .	4	3	.....	.....	.....	1
Nephritis, chronic . . . . .	7	.....	2	3	2	.....
Nephrolithiasis . . . . .	9	6	2	.....	.....	1
Nephroptosis . . . . .	4	1	1	.....	2	.....
Pyelitis . . . . .	1	.....	1	.....	.....	.....
Pyonephrosis . . . . .	6	3	2	.....	.....	1
<b>URETER</b>						
Calculus in ureter . . . . .	4	1	1	.....	2	.....
<b>URETHRA</b>						
Abscess about urethra . . . . .	1	1	.....	.....	.....	.....
Rupture of urethra . . . . .	1	1	.....	.....	.....	.....
Stricture of urethra . . . . .	9	3	5	.....	1	.....
<b>OBSTETRICAL CONDITIONS, DISEASES AND INJURIES</b>						
Abortion . . . . .	2	2	.....	.....	.....	.....
Miscarriage . . . . .	12	8	3	.....	1	.....
Pregnancy, normal . . . . .	7	.....	3	1	3	.....
Puerperium (retained membranes) . . . . .	1	1	.....	.....	.....	.....
<b>INJURIES</b>						
<b>BONE</b>						
Epiphyseal separation of femur . . . . .	2	.....	.....	.....	2	.....
Fracture of clavicle . . . . .	8	5	2	.....	1	.....
Fracture of bones of face . . . . .	2	.....	2	.....	.....	.....
Fracture of femur . . . . .	8	4	2	.....	1	1
Fracture of bones of forearm . . . . .	7	5	2	.....	.....	.....
Fracture of bones of forearm, compound . . . . .	1	1	.....	.....	.....	.....
<i>Carried forward</i>	2055	1011	492	100	342	112

TABLE OF SURGICAL DIAGNOSES

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	2055	1011	492	100	342	112
Fracture of humerus . . . . .	7	5	2	.....	.....	.....
Fracture of bones of leg . . . . .	12	7	4	.....	1	.....
Fracture of bones of leg, compound . . . . .	1	1	.....	.....	.....	.....
Fracture of pelvis . . . . .	1	.....	1	.....	.....	.....
Fracture of semilunar cartilage . . . . .	2	2	.....	.....	.....	.....
Fracture of skull . . . . .	18	7	5	.....	1	5
Fracture of skull, compound . . . . .	1	.....	.....	1	.....	.....
Fracture of vertebra . . . . .	9	4	2	1	1	1
Fracture of wrist . . . . .	2	1	1	.....	.....	.....
Fracture of wrist, compound . . . . .	1	.....	1	.....	.....	.....
BURNS	6	6	.....	.....	.....	.....
CONTUSIONS (Various)	9	5	3	.....	1	.....
DISLOCATION						
Elbow . . . . .	2	1	1	.....	.....	.....
Semilunar cartilage . . . . .	1	1	.....	.....	.....	.....
Shoulder . . . . .	4	1	2	1	.....	.....
Vertebra (cervical) . . . . .	1	1	.....	.....	.....	.....
FOREIGN BODY (Various)	9	7	1	.....	1	.....
FROST BITE	1	.....	1	.....	.....	.....
HÆMOTOMA						
Buttock . . . . .	1	.....	1	.....	.....	.....
SPRAIN						
Neck . . . . .	1	1	.....	.....	.....	.....
SYNOVITIS, TRAUMATIC						
Knee . . . . .	2	1	1	.....	.....	.....
WOUNDS						
<i>Gunshot</i>						
Hand . . . . .	1	1	.....	.....	.....	.....
Skull . . . . .	1	.....	.....	.....	1	.....
<i>Lacerated Wounds (Various)</i>	14	4	10	.....	.....	.....
<i>Punctured</i>						
Thigh . . . . .	1	1	.....	.....	.....	.....
<i>Stab</i>						
(Brachial plexus) . . . . .	1	.....	1	.....	.....	.....
FINAL TOTAL . . . . .	2164	1068	529	103	348	118



## Table II

### Surgical Operations

*Prepared by Dr. Cheever with a Prefatory Note*

TABULATIONS of diagnoses or operations should permit the reader to acquire the information he desires without undue labor. Examination of many such tables in reports of various hospitals shows the widest variety of method, and in many their relative failure to attain the object desired. Evidently a uniformly adopted nomenclature is in the first place desirable because the reader may seek his topic under a different heading from that employed. In the simple alphabetical method so often used, one finds, for example, "Pes Planus" adjoining "Phimosis"; "Movable Kidney" next to "Morton's Toe"; "Palsy" next to "Papilloma." The regional method is likewise often employed, and this too makes strange bedfellows, for under "lesions of the back" in illustration one finds "Laminectomy" next to "Lipoma." A third arrangement, that which we have tentatively employed, is to group physiologically and anatomically related organs together, but even when this method is followed inconsistencies arise, as in a recent report, in which operations on the spleen are tabulated under the heading "Operations on the Glands," and those for the relief of extra-uterine pregnancy are recorded in three different places — under "Exploratory Laparotomy," "Salpingectomy" and "Salpingo-oöphorectomy." In some reports, moreover, the malignant tumors are grouped together; thus we must look under "Stomach" for ulcer of the stomach and under "Carcinoma" for carcinoma of that organ.

It is evident, then, to anyone who tries to examine or

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compile tabulations of this nature, that any system breaks down at certain points, and of this our own original attempt was a particularly good illustration.

In the following table the effort has been made to group the operations under the physiological system to which the involved organ belongs. Evidently in certain cases the decision is difficult, but where confusion is likely to arise a cross reference may be given. These main headings which have been provisionally selected are in alphabetical order: (1) the alimentary system, including the peritoneum and miscellaneous abdominal lesions, (2) the cardio-vascular system, (3) congenital malformations, (4) ductless glands, (5) hernia, (6) the lymphadenoid system, (7) the muscular system, including fasciæ and bursæ, (8) the nervous system, (9) the reproductive system, female and male, (10) the respiratory system, (11) the skeletal system, including the joints, (12) the tegumentary system, cutaneous and subcutaneous, (13) the urinary system, and finally (14) the miscellaneous, unclassified topics. It has seemed wise to place hernia under a separate heading, since the repair of the hernial opening is often associated with an operation on a contained viscus. The heading "Unclassified" takes care of other vagrants.

The question of multiple operations on the same patient has been handled as follows:

I. Several related procedures carried out at the same session are tabulated as one operation under a composite title, as, for instance, "Trachelorrhaphy, Colporrhaphy and Perineal Repair."

II. Operations carried out in two or more stages for the relief of a single lesion are tabulated as a single operation (unless the patient was discharged from the hospital during the interval), even though each stage may represent a major procedure. Such operations have been especially frequent on the nervous system.



III. Essentially unrelated operations performed at the same session on the same individual have been listed as separate operations, as, for instance, "Ventral Suspension and Cholecystectomy." There have been 136 such operations; in other words, there have been 136 fewer operative sessions than are indicated by the total number of operations. Examinations, such as cystoscopic and proctoscopic, though carried out under anæsthesia, are not recorded as operations.

# Table II

## Surgical Operations

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Dead
ALIMENTARY SYSTEM					
TEETH					
Extraction . . . . .	5	3	2	...	...
TONGUE					
Excision benign tumor . . . . .	1	...	1	...	...
PALATE					
(For cleft palate, cf. Congenital malform.)					
Cauterization, benign ulcer . . . . .	1	1	...	...	...
SALIVARY GLANDS					
Excision benign tumor parotid . . . . .	1	1	...	...	...
PHARYNX (see Respiratory system)					
ESOPHAGUS					
Dilatation of cardiospasm . . . . .	3	...	3	...	...
Gastrostomy for carcinoma œsophagus . . . . .	5	...	2	...	3 <sup>a</sup>
STOMACH, PYLORUS, AND DUODENUM					
Closure perforated gastric ulcer, with gastro-enterostomy	1	1	...	...	...
Post. gastro-enterostomy, inoperable carcinoma . . .	11	...	10	...	1 <sup>b</sup>
Pylorotomy and gastro-enterostomy for carcinoma . .	1	...	1	...	...
Gastrectomy, partial and gastro-enterostomy for carcin..	2	...	1	...	1 <sup>c</sup>
Gastrectomy, partial with end to end anastomosis for hourglass stricture . . . . .	1	...	1	...	...
Gastro-gastrostomy for hourglass stricture . . . . .	1	...	1	...	...
Gastro-plasty for hourglass stricture . . . . .	1	...	1	...	...
Excision ulcer stomach . . . . .	4	4	...	...	...
Post. gastro-enterostomy for benign pyloric stenosis . .	1	...	1	...	...
Transection pyloric antrum and gastro-enterostomy for duodenal ulcer . . . . .	3	3	...	...	...
Plastic closure pylorus, gastro-enterostomy for duodenal ulcer . . . . .	2	...	2	...	...
<i>Carried forward</i>	44	13	26	...	5



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DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Dead
<i>Brought forward</i>	44	13	26	...	5
Partial exclusion pylorus, gastro-enterostomy for duodenal ulcer . . . . .	1	...	1	...	...
Pyloroplasty (Heincke-Mickulicz) . . . . .	1	1	...	...	...
Gastro-duodenostomy (Finney) . . . . .	6	5	1	...	...
Excision duodenal ulcer . . . . .	1	1	...	...	...
Closure traumatic rupture duodenum . . . . .	1	1	...	...	...
Release of duodenal bands and adhesions . . . . .	4	1	3	...	...
<b>LIVER AND BILIARY TRACT</b>					
Cholecystostomy for cholecystitis or cholelithiasis . . .	13	13	...	...	...
Cholecystostomy for malignant obstruction . . . . .	2	...	...	...	2 <sup>d</sup>
Cholecystenterostomy for malignant obstruction . . .	1	...	1	...	...
Cholecystectomy for cholecystitis or cholelithiasis . .	13	11	...	1	1 <sup>e</sup>
Cholecystectomy and choledochostomy . . . . .	4	4	...	...	...
Choledochotomy, transduodenal . . . . .	2	...	...	...	2 <sup>f</sup>
Choledochotomy, transduodenal with cholecystostomy	2	2	...	...	...
Drainage sub-phrenic abscess, trans-thoracic . . . . .	1	...	...	1	...
<b>INTESTINES (see also Hernia)</b>					
Ileo-colostomy for malignant obstruction . . . . .	1	1	...	...	...
Colostomy for malignant obstruction . . . . .	3	...	3	...	...
Colo-colostomy for malignant obstruction . . . . .	1	...	1	...	...
Closure of fecal fistula . . . . .	6	5	1	...	...
Closure of typhoid perforation . . . . .	1	...	...	...	1 <sup>g</sup>
Release angulation terminal ileum . . . . .	2	2	...	...	...
<b>APPENDIX</b>					
Appendicectomy for subacute appendicitis . . . . .	21	20	1	...	...
Appendicectomy for acute appendicitis . . . . .	20	20	...	...	...
Appendicectomy for acute appendicitis with abscess . .	21	21	...	...	...
Appendicectomy for acute appendicitis with local peritonitis . . . . .	5	5	...	...	...
Appendicectomy for acute appendicitis with diffusing peritonitis . . . . .	2	1	...	...	1 <sup>h</sup>
Appendicectomy for acute appendicitis with general peritonitis . . . . .	3	...	...	...	3 <sup>i</sup>
Appendicectomy for chronic appendicitis . . . . .	35	33	2	...	...
Appendicectomy for tuberculosis of appendix . . . . .	1	...	1	...	...
Appendicectomy, incidental . . . . .	29	25	2	2	...
Drainage appendix abscess . . . . .	1	1	...	...	...
<i>Carried forward</i>	248	186	43	4	15

TABLE OF SURGICAL OPERATIONS

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Dead
<i>Brought forward</i>	248	186	43	4	15
PERITONEUM AND MISCELLANEOUS ABDOMINAL					
Exploratory laparotomy, negative findings . . . . .	7	1	4	2	...
Exploratory laparotomy for inoperable neoplasm . . . .	8	...	...	4	4 <sup>j</sup>
Exploratory laparotomy for tubercular peritonitis . . .	2	...	...	...	2 <sup>k</sup>
Exploratory laparotomy for mesenteric thrombosis . .	1	...	...	...	1 <sup>l</sup>
Release of bands or adhesions, chronic obstruction . .	5	3	2	...	...
Release of bands or adhesions, acute intestinal obstruction . . . . .	2	...	...	...	2 <sup>m</sup>
Release of bands or adhesions, acute intestinal obstruction with enterostomy . . . . .	2	1	...	...	1 <sup>n</sup>
Release strangulated retro-peritoneal hernia . . . . .	1	...	...	...	1 <sup>o</sup>
Release intestinal obstruction by Meckel's diverticulum	1	1	...	...	...
Drainage residual abscess . . . . .	3	3	...	...	...
Drainage diverticulitis of sigmoid . . . . .	1	1	...	...	...
Drainage gonorrhœal general peritonitis . . . . .	1	1	...	...	...
Drainage pyogenic general peritonitis . . . . .	1	...	...	...	1 <sup>p</sup>
Omentopexy, for portal stasis . . . . .	2	...	...	...	2 <sup>q</sup>
RECTUM AND ANUS					
Resection of rectum for prolapse . . . . .	1	1	...	...	...
Resection of rectum for benign stricture . . . . .	1	1	...	...	...
Ligation and excision of hæmorrhoids . . . . .	38	38	...	...	...
Clamp and cautery operation for hæmorrhoids . . . . .	7	7	...	...	...
Whitehead operation for hæmorrhoids . . . . .	1	1	...	...	...
Radical excision, fistula in ano . . . . .	18	11	7	...	...
Drainage, ischio-rectal abscess . . . . .	9	8	1	...	...
TOTAL . . . . .	360	263	57	10	29

a 311, 778, 832.

b 1969.

c 519.

d 238, 352.

e 2094.

f 1367, 1567.

g 361.

h 1569.

i 310, 551, 771

j 332, 383, 1190, 2206.

k 1031, 1176.

l 692.

m 1719, 1876.

n 638.

o 1135.

p 1165.

q 205, 936.

## ALIMENTARY SYSTEM: FATALITIES

## 311. GASTROSTOMY FOR CARCINOMA OF ŒSOPHAGUS.

Male, 52 years. An emaciated man, 7 weeks of epigastric pain, dysphagia, cachexia; stomach tube and radiograph show obstruction at cardia. Transferred from Medical to Surgical service for gastrostomy, which was done under ether by Senn's method. Massive carcinoma of cardia. Good immediate operative recovery, with increased nutrition. Persistent pain and gastric hemorrhage. Rather sudden death 3 weeks later.



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*Autopsy:* perforation of extensive gastric and œsophageal carcinoma into the peritoneum and left pleural cavities and extensive metastases.

### 778. GASTROSTOMY FOR CARCINOMA OF PHARYNX.

Male, 26 years. Increasing dysphagia for 3 months. Entered hospital profoundly emaciated and dyspnoëic from an obstructive malignant growth of pharynx. Tracheotomy performed under local anæsthesia the day after admission, 5 days later a Witzel gastrostomy under local anæsthesia. Patient made a satisfactory operative recovery and 70 days after admission died, death being due to the normal progress of his disease.

*Autopsy:* Carcinoma of pharynx, larynx and base of the tongue, metastases of the lung and heart.

### 832. GASTROSTOMY FOR CARCINOMA ŒSOPHAGUS.

Male, 74 years. Emaciated man. Dysphagia for 3 months. Recently supported by nutrient enemata. Evidence of a malignant infiltrating growth, involving the œsophagus at the level of the seventh and eighth thoracic vertebræ. Witzel gastrostomy 2 days after admission under ether. Normal convalescence. Feeding entirely by means of the gastrostomy tube. Patient out of bed.

Pathological fracture of the clavicle and evidence of involvement of the lung. Death from exhaustion 21 days after operation.

*Autopsy:* carcinoma of the œsophagus, metastases in lung, liver, lymph nodes, adrenal gland and clavicle. Small abscess in the vicinity of the cardia.

### 1969. GASTROENTEROSTOMY FOR MALIGNANT PYLORIC OBSTRUCTION.

Male, 50 years. A cachectic nearly starved man with complete pyloric obstruction by malignant tumor for 6 weeks with constant vomiting. Wassermann positive.

Under scopolamin-morphine and local anæsthesia a posterior gastroenterostomy was done. Enormous infiltrating carcinoma of the stomach with liver metastasis. Operation well borne. No further vomiting. Comfort much promoted. Liquid feeding begun, retained, and enjoyed. Nevertheless, steady decline. Death rather sudden 4 days later.

*Autopsy:* refused.

### 519. PARTIAL GASTRECTOMY AND GASTROENTEROSTOMY FOR CARCINOMA.

Male, 43 years. Gastric symptoms for 1 year. Tumor in the epigastrium noticed 3 months ago. Ill nourished man with visible and palpable tumor of epigastrium. Pus and blood in vomitus, hypo-acidity, filling defect by X-Ray.

Operation unsatisfactory, ether anæsthesia. Patient sub-cyanotic. Radical removal of gastric carcinoma by partial gastrectomy with gastroenterostomy. Condition critical. Fair rally. Subsequent breaking down of wound, but no evidence of leakage of visceral sutures. Later, signs of fluid in the right chest, foul sputum, failing condition. One month after operation, transfusion, thoracotomy, with evacuation of foul abscess at base of right lung. Drainage not satisfactory. 3 days later, transfusion, transpleural drainage of a large abscess, apparently interdiaphragmatic. Death 5 days later.

Complete *autopsy* refused. Examination through wound showed no peritonitis. Satisfactory condition of the primary operative field.



## TABLE OF SURGICAL OPERATIONS

### 238. CHOLECYSTOSTOMY FOR MALIGNANT OBSTRUCTION.

Male, 60 years. Increasing debility for 2½ months, painless jaundice for 6 weeks. Enlarged liver and palpable gallbladder, arterio-sclerosis, secondary anemia, and chronic nephritis. Diagnosis: probable malignancy.

Ether. Exploratory laparotomy. A mass found involving the head of the pancreas. A cholecystotomy was done on the chance that the mass might be a chronic pancreatitis instead of malignant. Patient rallied well at first, but on the eighth day his wound gave way and a coil of intestine was extruded. It was at once replaced and the wound repaired. Death in a few hours.

*Autopsy:* refused.

### 352. CHOLECYSTOSTOMY FOR MALIGNANT OBSTRUCTION.

Female, 52 years. Poorly nourished woman, jaundice of 3 months' duration. Pain, vomiting, gastric stasis, steadily depreciating condition. 2 weeks after admission, ether, laparotomy. Distended gall-bladder, firm infiltrating mass involving posterior aspect of the pylorus, head of pancreas, and common duct, probably malignant. Cholecystostomy. Operation well borne. Persistent post-operative bleeding, suppression of bile, vomiting, death on the third day.

*Autopsy:* carcinoma head of pancreas, interstitial pancreatitis, obstruction of choledochus and jaundice.

### 2094. CHOLECYSTECTOMY.

Female, 53 years. A short, middle-aged, very obese woman, subject for 15 years to severe asthma with cardiac palpitation. Recurring attacks suggesting gall-stones. At a previous admission, operation withheld, as she was considered a very poor risk. After 3 weeks' preliminary treatment, operation was undertaken at urgent request of patient for relief of pain. Gas-oxygen anæsthesia. Massive adhesions divided and shrunken gall-bladder incompletely removed with considerable technical difficulty. Withstood anæsthesia badly, cyanotic throughout. Rapid failure with pneumonic symptoms and death in 36 hours.

*Autopsy:* refused.

### 1367. CHOLEDOCHOTOMY, TRANSDUODENAL.

Female, 46 years. An obese, jaundiced woman with recurring attacks of symptoms of cholelithiasis for 3 months. Operation 4 days after admission. Ether. A small fibrous, adherent gall-bladder removed with accidental slight wounding of the common duct, which was repaired. Further exploration of the common duct negative.

Good operative recovery. Persistent biliary sinus with fever and leukocytosis.

Secondary exploration 27 days later. Sinus traced to the common duct. Hepatic and common ducts probed. Transduodenal exploration confirmed the passage of the probe downward into the duodenum, and seemed to preclude the possibility of a stone in the ampulla. Opening in the common duct repaired with fine silk suture constriction. Cigarette drain. Some exhaustion. Profuse biliary discharge and no bile in the stools. Vomiting. On the ninth day development of a duodenal fistula, which, with the biliary discharge diminished under treatment. Irregular fever. 24 days after second operation, increase of biliary discharge, which continued with persistent vomiting, right sided



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pleurisy, progressive exhaustion, and death 40 days after the second operation.

*Autopsy:* examination through operative wound showed a small calculus in the ampulla of Vater.

### 1567. CHOLEDOCHOTOMY, TRANSDUODENAL.

Male, 54 years. Poorly nourished, deeply jaundiced man. Attack of pain and distress in upper abdomen; vomiting and jaundice for the past 7 weeks with marked failure of general condition. Under observation diminishing jaundice for 2 weeks, when severe attack of pain demanded relief.

Operation 15 days after admission. Ether. Right rectus incision; massive adhesions; shrunken gall-bladder; dilated common duct. Choledochotomy, friable calculi removed from hepatic ducts. No obstruction demonstrable below. Transduodenal exploration of ampulla negative. Tube drainage of common duct. Operation poorly borne. Vomiting, partial suppression of urine, cardiac failure. Death 4 days after operation.

*Autopsy:* peritonitis. Repair of duodenum apparently secure.

### 361. LAPAROTOMY, CLOSURE OF TYPHOID PERFORATION.

Female, 23 years. Patient in fifth week of typhoid, very ill, several hæmorrhages. Evidence of perforation. Immediate laparotomy under novocaine. Drainage of extravasated fecal contents without search for perforation on account of patient's poor condition. Death in 12 hours.

*Autopsy:* refused.

### 1569. APPENDICECTOMY FOR ACUTE APPENDICITIS AND DIFFUSING PERITONITIS.

Male, 33 years. Obese, somewhat alcoholic. Onset, acute abdominal symptoms. 36 hours before admission took Epsom salts and castor-oil; chill. On admission, distended, board-like abdomen, dyspnoea, pulse 96, temperature 100.8, leukocytes 19,000. Immediate operation. Ether, poorly taken, cyanosis. Right rectus incision, free turbid fluid, no limiting adhesions. Acutely inflamed, perforated appendix found in the pelvis, removed. The pus wiped out. 3 cigarette drains. Fair ether recovery. Then progressive distention and vomiting. Proctoclysis, gastric lavage, stimulation.

Death 3½ days after operation.

*Autopsy:* refused. Infecting organism unknown.

### 310. APPENDICECTOMY FOR ACUTE APPENDICITIS WITH GENERAL PERITONITIS.

Male, 47 years. An obese man, very ill, cold extremities, alcoholic history, acute abdominal symptoms with vomiting, chills and fever 24 hours. Epsom salts self-administered. General abdominal distention, tenderness and spasm, especially on the right. Immediate operation. Ether. Very purulent fluid. No adhesions. Gangrenous appendix removed. Drainage. Condition fair, persistent vomiting, fecal fistula on the fourth day. Purulent sputum. Patient died on the tenth day with symptoms of sepsis and pneumonia.

*Autopsy:* acute purulent peritonitis, right sided with many undrained pus pockets sub-hepatic and elsewhere, acute pleuritis and broncho-pneumonia.

## TABLE OF SURGICAL OPERATIONS

### 551. APPENDICECTOMY FOR ACUTE APPENDICITIS WITH GENERAL PERITONITIS.

Male, 17 years. 6 days recurring attacks of abdominal pain, Epsom salts, self-administered, fever, chills, vomiting. Very ill appearing boy, generally distended and rigid abdomen, evidence of free fluid. Pulse 92, temperature, 99, leukocytes 18,000.

Immediate operation. Free pus over the whole lower abdomen. No adhesions. A perforated appendix removed, pus sponged away, drainage, distention, toxemia, death in 3 days.

*Autopsy:* Purulent peritonitis, chronic endocarditis, broncho-pneumonia

### 771. APPENDICECTOMY FOR ACUTE APPENDICITIS AND GENERAL PERITONITIS.

Male, 32 years. Healthy man. Acute abdominal symptoms 2 days. Vomiting becoming semi-fecal; abdomen distended, with board-like rigidity. Pulse 120, temperature 100, leukocytes 8,000. Immediate laparotomy. Ether. General purulent peritonitis. No adhesions. Perforated appendix excised. Enterostomy. Drainage. Rally and some progress for 3 days. Then increasing weakness, toxemia, vomiting without evidence of obstruction. Death 9 days after operation.

*Autopsy:* refused.

### 332. EXPLORATORY LAPAROTOMY FOR TUMOR.

Female, 26 years. 6 years ago gastric ulcer symptoms. 3 years ago operation for perforated gastric ulcer. Pulmonary abscess during convalescence, recovery. In recent months increasing abdominal symptoms with pain, vomiting, constipation, bladder irritation, dysmenorrhea, and general weakness. On admission, a very sick woman, with distended, tender abdomen, and a mass felt by vagina. Pulse 120, temperature 103, leukocytes 12,000, Hb. 30%. Immediate operation. Ether. In the hope of finding a pelvic abscess, a vaginal puncture was made with negative results. Laparotomy. A huge pelvic tumor was found, with secondary nodules in omentum and peritoneum. Immediate closure. Fair post-operative rally. Rapid decline and death in 13 days.

*Autopsy:* a carcinoma ascending colon with perforation and retroperitoneal abscess. Secondary carcinoma of ovary and liver.

### 383. EXPLORATORY LAPAROTOMY FOR TUMOR.

Female, 45 years. Very obese woman, vague abdominal symptoms, fever, tumor, pyelitis. Massive carcinomatosis of whole lower abdomen, probably intestinal in origin with necrosis and pus formation. Partial removal of tumor, drainage. Fecal fistula. Progressive decline. Death 2 months later.

*Autopsy:* refused.

### 1190. EXPLORATORY LAPAROTOMY FOR TUMOR.

Female, 53 years. Poorly nourished woman, sub-acute epigastric symptoms for 3 months. Lately several acute attacks of pain and vomiting. Pulse 100, temperature 101, respiration 30, Hb. 78%, leukocytes 9,000. Epigastric tumor. Exploratory laparotomy under local (novocaine) anesthesia. Infiltrating carcinoma with extensive liver metastases. Closure without further procedure. Operation well borne. Slow and imperfect convalescence for 21 days. While being dressed to go home, sud-



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den collapse, symptoms suggestive of perforation or hæmorrhage. Death some hours later.

*Autopsy:* refused.

2206. EXPLORATORY LAPAROTOMY FOR TUMOR.

Male, 50 years. An emaciated Hebrew, suffering severe abdominal pain, evidently fatally ill. Marked icterus. A large oval, firm tumor in epigastrium. Positive complement fixation test for *ecchinococcus* reported from another institution. Aspiration with local anæsthesia in the hope of relieving pain. No fluid obtained. A small incision disclosed enormous carcinoma of liver. Immediate closure. No opportunity to determine primary focus. Condition apparently not affected by operation. Death 8 hours later.

*Autopsy:* refused.

1031. EXPLORATORY LAPAROTOMY FOR TUBERCULAR PERITONITIS.

Male, 34 years. Constipation. Loss of weight. Abdominal distress for 8 months. Exploratory laparotomy 7 days after entrance. Novocaine anæsthesia. Extensive tubercular peritonitis of the dry type. Patient failed slowly and died 10 days later.

*Autopsy:* showed tuberculosis of the abdominal viscera.

1176. EXPLORATORY LAPAROTOMY, TUBERCULAR PERITONITIS.

Male, 50 years. Poorly nourished man with history of vague pains and marked constipation for 10 weeks. 25 pounds loss of weight. Irregular fever and a mass in the right iliac fossa. Operation after several days' study. Ether. Incision. Old chronic inflammatory mass about the appendix, cecum, and ileum with friable tissues. Appendicectomy. Operation ill borne. Shock, cyanosis, rapid failure, and death in 8 hours.

*Autopsy:* tuberculosis of cecum, ascending colon, retroperitoneal nodes and prostate. Arterio-sclerosis.

692. EXPLORATORY LAPAROTOMY MESENTERIC THROMBOSIS.

Male, 26 years. 16 days abdominal pain, chills, vomited once, tarry stools, alternating constipation and diarrhœa. A very ill-looking man. Pulse 58, temperature sub-normal, leukocytes 10,000, slight tenderness left abdomen, cystoscopic and X-Ray examinations negative, diagnosis doubtful.

Exploratory laparotomy 3 days after admission. Free blood-stained fluid. A chronically inflamed adherent appendix removed. Steady decline after operation, vomiting; no tenderness or spasm but apparent post-operative ileus, characterized by severe pain and distention. Death 5 days after operation.

*Autopsy:* extensive thrombosis of mesenteric veins. Pathological examination of appendix: chronic appendicitis.

1719. RELEASE OF INTESTINAL ADHESIONS, FOR OBSTRUCTION.

Male, 68 years. Appendicectomy and drainage 3 years ago. Acute abdominal pain, vomiting and constipation for 24 hours. Condition poor; spastic, tender, slightly distended abdomen; temperature 101, pulse 100, respiration 35, sub-cyanotic; dyspnœic, fecal vomiting.

Immediate laparotomy, local anæsthesia with a little ether inhalation. Free turbid fluid, many adhesions, especially on the right. No definite



## TABLE OF SURGICAL OPERATIONS

obstruction found. Marked post-operative dyspnoea. Rapid pulse. Speedy decline and death in 19 hours.

*Autopsy:* slight peritonitis, degeneration of spleen and adrenals, fatty myocarditis, slight arterio-sclerosis, bacteremia.

### 1876. LAPAROTOMY, RELEASE OF A BAND CAUSING INTESTINAL OBSTRUCTION.

Female, 56 years. Operation for fibroids 4 years ago. Since then increasing constipation. Onset of acute pain with absolute constipation 4 days ago. Persistent vomiting, fecal on admission; pulse 120, temperature 97, leukocytes 16,000. Marked exhaustion and toxemia.

Operation, Ether. Immediate laparotomy. Obstruction of the ileum by a band which was freed. Intestinal contents evacuated by trocar. Some rally, but death in 6 hours.

*Autopsy:* showed nothing of added significance.

### 638. LAPAROTOMY, RELEASE OF BAND CAUSING OBSTRUCTION, ENTEROSTOMY.

Female, 34 years. Hysterectomy 3½ years ago. Since then persistently increasing constipation.

4 days' complete constipation, vomiting first day only, pain at onset but none since, distended abdomen, not tender nor spastic, no masses, anxious facies, evidently toxic, pulse 110, temperature sub-normal, operation advised on admission but refused. Accepted the next day.

Ether, laparotomy. Intestinal obstruction by a band, release, enterostomy. Operation fairly well borne, marked toxemia. Death in 3 days in spite of satisfactory intestinal drainage.

*Autopsy:* refused.

### 1135. RELEASE OF STRANGULATED RETRO-PERITONEAL HERNIA.

Female, 22 years. Symptoms intestinal obstruction 24 hours' duration, free fluid, marked toxemia. Ether. Immediate laparotomy, bloody ascites, developmental anomaly of intestinal tract found due to failure of rotation, with incarceration of entire small intestine in a large retro-peritoneal fossa. Release, closure, death in a few hours.

*Autopsy:* relief of mechanical obstruction. Fibrinous peritonitis, beginning gangrene.

### 1165. DRAINAGE OF GENERAL PERITONITIS, OF UNKNOWN ETIOLOGY.

Female, 47 years. A crippled woman (Pott's Disease). 10 days' vague abdominal symptoms. Constant acute exacerbation 12 hours before admission. Abdomen spastic, tender, not distended. Pulse 130, temperature 100, respirations 20. Leukocytes 23,000. Marked toxemia.

Operation. Ether. Immediate laparotomy. Diffuse peritonitis. No cause found. Appendix removed, but not primarily inflamed. Drainage. Operation lasted 20 minutes. Death in 4 hours.

*Autopsy:* refused.

*Pathological examination* of tissue removed at operation: chronic appendicitis.

### 205. LAPAROTOMY, OMENTOPEXY FOR PORTAL STASIS.

Female, 60 years. Eight months' abdominal discomfort, asthenia, ascites, tapped several times before admission. Etiology obscure. After prolonged study and treatment on the Medical Service was transferred to surgical for an attempt at relief by an Eck fistula. Laparotomy. Shrunken cirrhotic liver, adhesions and bleeding presented technical difficulties and



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attempt was abandoned. Modified Talma operation was performed. Patient made an operative recovery and died  $2\frac{1}{2}$  months later, apparently of normal course of the disease.

*Autopsy:* refused.

### 936. LAPAROTOMY, OMENTOPEXY FOR PORTAL STASIS.

Male, 41 years. Months of recurring ascites repeatedly tapped with withdrawal of enormous mass of fluid. Prolonged study by Medical Service. Exploratory laparotomy under gas-oxygen and novocaine. Shrunken liver, adherent omentum, much free fluid. Steps preliminary to an attempt at making an Eck fistula carried out, but operation discontinued on account of patient's poor condition. Omentopexy. Operation poorly borne. Partial suppression of urine. Delirium, coma, death in 3 days.

*Autopsy:* diffuse cirrhosis of liver.

TABLE OF SURGICAL OPERATIONS

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Dead
CARDIO VASCULAR SYSTEM					
ARTERIES					
Ligation of temporal arteries for migraine . . . . .	1	....	...	1	...
VEINS					
Radical excision, varicose veins of leg . . . . .	48	43	5	...	...
Local excision, varicose veins of leg . . . . .	4	3	1	...	...
Multiple ligation, varicose veins of leg . . . . .	4	4	...	...	...
Transfusion * . . . . .	27	...	27	...	...
TOTAL . . . . .	84	50	33	1	...
CONGENITAL MALFORMATIONS AND LESIONS					
Branchial cleft carcinoma; radical excision; block dissection . . . . .	1	....	...	...	1 <sup>a</sup>
Branchial cleft cyst, excision . . . . .	1	1	...	...	...
Cleft palate, radical cure . . . . .	2	2	...	...	...
Dermoid cyst: angle of orbit: excision . . . . .	1	1	...	...	...
Imperforate hymen, incision with plastic repair . . . . .	1	...	1	...	...
Meningo encephalocele, occipital, extirpation . . . . .	1	1	...	...	...
Pilo-nidal sinus, extirpation . . . . .	5	2	3	...	...
Spina bifida: myelomeningocele, extirpation . . . . .	2	1	1	...	...
Syndactylism, radical cure . . . . .	1	...	1	...	...
Thyroglossal duct, excision . . . . .	3	3	...	...	...
TOTAL . . . . .	18	11	6	...	1

<sup>a</sup> 1849.

## CONGENITAL MALFORMATIONS: FATALITIES

## 1849. RADICAL EXCISION, CARCINOMATOUS TUMOR OF NECK.

Male, 42 years. Extensive deep infiltrating carcinoma (branchial cleft), left neck. Left vocal paralysis. Very extensive block extirpation of tumor with the sternomastoid muscle, common carotid artery, internal jugular vein, vagus nerve and lymph nodes.

Poor operative recovery. Partial right hemiplegia, aphasia, respiratory failure. Artificial respiration with laryngeal tube and Connell apparatus with oxygen. Failure and death in 3 days.

*Autopsy:* refused.

\* This does not include all emergency transfusions in course of operations nor does it embrace donor as well as recipient though both have open wounds.



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DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Dead
DUCTLESS GLANDS					
HYPOPHYSIS					
Transphenoidal operation with partial removal of struma	28	3	23	1	1 <sup>a</sup>
Sellar decompression . . . . .	6	....	6	...	...
Transfrontal osteoplastic exploration . . . . .	4	....	1	3	...
Transfrontal exploration: cyst evacuation . . . . .	2	....	2	...	...
OVARY AND TESTES (cf. Reproductive system)					
PARATHYROID GLANDS					
Implantation for paralysis agitans . . . . .	1	....	1	...	...
PINEAL GLAND					
Callosal puncture . . . . .	1	....	1	...	...
Ventricular puncture . . . . .	2	....	...	...	2 <sup>b</sup>
THYROID GLAND					
Partial thyroidectomy for adenoma . . . . .	6	3	3	...	...
Partial thyroidectomy for colloid or cystic goitre . . . . .	4	4	...	...	...
Partial thyroidectomy, hyperthyroidism . . . . .	11	1	10	...	...
Partial thyroidectomy, dysthyroidism . . . . .	1	....	1	...	...
TOTAL . . . . .	66	11	48	4	3

<sup>a</sup> 78.

<sup>b</sup> 851, 1227.

## DUCTLESS GLANDS: FATALITIES

### 78. TRANSPHENOIDAL SELLAR DECOMPRESSION, WITH PARTIAL REMOVAL OF PITUITARY STRUMA.

Male, 38 years. Pituitary struma, hypopituitarism, marked neighborhood symptoms. 2 previous transphenoidal operations with relief. Return of symptoms, demanding intervention. Ether. Difficult third exploration with partial removal of struma. Death in 20 hours.

*Autopsy:* pituitary struma invading cranial chamber; fatty degeneration heart and liver.

### 851. VENTRICULAR PUNCTURE.

Male, 12 years. Boy of 12 discharged from the hospital 1 month ago with diagnosis of probable tubercular meningitis. Brought back on account of focal attacks and aphasia. Under local anæsthesia puncture of left lateral ventricle with removal of 50 c.c. blood tinged fluid.

Death the same day.

*Autopsy:* struma of pineal gland.

## TABLE OF SURGICAL OPERATIONS

### 1227. VENTRICULAR PUNCTURE.

Male, 23 years. Symptoms of brain tumor for 2 years. 18 months ago a decompression had been performed elsewhere. On admission brain symptoms with marked pressure. Ventricular puncture under local anæsthesia, to determine presence of internal hydrocephalus, which was found.

No operative relief possible. Gradual decline and death 6 weeks later.

*Autopsy:* pineal tumor. Internal hydrocephalus.



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DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Dead
<b>HERNIA</b>					
<b>EPIGASTRIC</b>					
Radical cure . . . . .	4	4	...	...	...
<b>FEMORAL</b>					
Simple radical cure . . . . .	9	9	...	...	...
Strangulated, radical cure . . . . .	4	4	...	...	...
<b>INGUINAL</b>					
Indirect bilateral radical cure . . . . .	24	24	...	...	...
Indirect unilateral radical cure . . . . .	62	59	3	...	...
Indirect with retained testes . . . . .	2	2	...	...	...
Indirect strangulated . . . . .	6	4	1	...	1 <sup>a</sup>
Direct unilateral radical cure . . . . .	2	2	...	...	...
<b>RETROPERITONEAL</b>					
Cf. Peritoneum; abdominal, etc.					
<b>UMBILICAL</b>					
Simple, radical cure . . . . .	6	5	1	...	...
Strangulated, resection of intestine . . . . .	1	...	...	...	1 <sup>b</sup>
Strangulated, ileostomy . . . . .	1	...	...	...	1 <sup>c</sup>
<b>TOTAL</b> . . . . .	<b>121</b>	<b>113</b>	<b>5</b>	<b>...</b>	<b>3</b>

<sup>a</sup> 733.

<sup>b</sup> 1477.

<sup>c</sup> 1363.

## HERNIA: FATALITIES

### 733. RELEASE OF STRANGULATED INGUINAL HERNIA, WITH PERFORATION OF BOWEL AND PERITONITIS.

Male, 49 years. Hernia for 4 weeks. Symptoms suggesting strangulation for 4 days. Condition critical.

Immediate operation with local anæsthesia. A loop of large intestine found incarcerated in the sac, perforated by a small bone and surrounded by a large abscess which communicated through the neck of the sac with the left iliac fossa and pelvis.

Resection of incarcerated intestine, no repair attempted, enterostomy. Drainage of pelvis and iliac fossa. Operation poorly borne, fair rally for 4 days. Rather sudden failure on fifth day with evidence of increasing peritonitis and toxemia. Death 5 days after operation.

*Autopsy:* refused.

## TABLE OF SURGICAL OPERATIONS

### 1477. RELEASE OF STRANGULATED UMBILICAL HERNIA, ENTEROSTOMY.

Male, 53 years. Umbilical hernia for 3 years. Attacks of sub-acute obstruction. Acute strangulation  $2\frac{1}{2}$  days before admission. Fecal vomiting. Immediate operation under local anæsthesia. Release of strangulation and ileostomy. Symptoms of acute strangulation were relieved but the patient was profoundly toxic, acidosis developed and he sank and died  $5\frac{1}{2}$  days after admission.

*Autopsy:* refused.

### 1363. RELEASE OF STRANGULATED UMBILICAL HERNIA, INTESTINAL RESECTION.

Female, 48 years. An obese woman with incarceration and later strangulation of old umbilical hernia for 14 days. Persistent vomiting, fecal on admission. Pulse 100, temperature 99, respiration 30. Local anæsthesia.

Immediate operation. Spontaneous gangrenous perforation of bowel with fecal extravasation found. Resection of bowel well borne, but persistent distention and toxemia required re-opening of wound and ileostomy at point of anastomosis 6 days later. Distention relieved. No vomiting, but patient failed and died 15 days after operation, without definite evidence of peritonitis.

*Autopsy:* refused.



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DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Dead
<b>LYMPH-ADENOID SYSTEM</b>					
<b>LYMPHATICS AND LYMPH GLANDS</b>					
Excision lymph node, for diagnosis . . . . .	5	.....	.....	5	....
Radical excision, carcinomatous glands of neck . . . .	3	.....	2	1	....
Radical excision, tubercular glands of neck . . . . .	21	.....	21	...	....
Partial excision, tubercular glands of neck . . . . .	2	.....	2	.....	....
Radical excision, tubercular glands axilla . . . . .	1	.....	1	.....	....
Curetting, tubercular glands axilla . . . . .	1	.....	1	.....	....
Curetting, tubercular glands groin . . . . .	1	.....	1	.....	....
Radical excision, metastatic sarcoma inguinal glands .	1	.....	1	.....	....
Radical excision, metastatic sarcoma iliac glands . . .	1	.....	1	.....	....
Plastic operation, elephantiasis of leg . . . . .	1	.....	1	.....	....
<b>TONSILS AND ADENOIDS</b>					
Tonsillectomy . . . . .	86	75	10	...	1 <sup>a</sup>
Tonsillectomy and adenoidectomy . . . . .	13	13	...	...	....
Incision peritonsillar abscess . . . . .	4	3	1	...	....
Radical excision, sarcoma tonsil and cervical glands . .	1	.....	1	.....	....
<b>TOTAL . . . . .</b>	<b>141</b>	<b>91</b>	<b>43</b>	<b>6</b>	<b>1</b>

<sup>a</sup> 1489.

## LYMPH-ADENOID SYSTEM: FATALITIES

Med. No. 1489.\* TONSILLECTOMY.

Male, 7 years. A previously healthy boy, chorea for 2 years; 2 weeks of high fever, cyanosis and prostration, enlarged heart, acute endocarditis. Markedly hypertrophied tonsils. Condition improved under treatment, but persistent temperature led to advise to have the tonsils removed. Ether anæsthesia, Sewall mouth gag. Heart action stopped in early stages of anæsthesia. Respiration soon ceased. Tracheotomy: death on the table.

*Autopsy:* Acute endocarditis, enlarged thymus. ("Status lymphaticus"?)

\* This case was not transferred to the surgical service and therefore is not enrolled among the number of surgical admissions. It is also recorded as a fatality among the medical cases and therefore is twice represented in the hospital death column.

TABLE OF SURGICAL OPERATIONS

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Dead
<b>MUSCULAR SYSTEM</b> (including fasciæ and bursæ)					
BURSÆ					
Septic bursitis of olecranon, drainage . . . . .	1	1	...	...	...
Septic bursitis prepatellar, drainage . . . . .	1	1	...	...	...
Chronic bursitis, popliteal, excision . . . . .	1	...	1	...	...
Chronic bursitis, infra patellar, excision . . . . .	1	1	...	...	...
Chronic bursitis, prepatellar . . . . .	1	1	...	...	...
FASCIÆ					
Dupuytren's contraction, excision palma fascia . . . . .	3	2	1	...	...
MUSCLES					
Torticollis, excision sterno cleido mastoid . . . . .	1	...	1	...	...
Lacerated wound pectoralis major, repair . . . . .	1	1	...	...	...
Acute myositis, incision . . . . .	1	1	...	...	...
Hysterical contraction, manipulation . . . . .	1	1	...	...	...
NEOPLASMS					
Fibro myxoma adductors of thigh, excision . . . . .	1	1	...	...	...
TENDONS					
Laceration of tendon of supra spinatus, suture . . . . .	1	...	...	1	...
Divided tendons of wrist, suture . . . . .	3	1	2	...	...
Contracted tendon, plastic operation . . . . .	1	...	1	...	...
Tubercular teno-synovitis wrist, incision . . . . .	1	...	1	...	...
Tenotomy, spastic paraplegia . . . . .	1	...	1	...	...
<b>TOTAL</b> . . . . .	<b>20</b>	<b>11</b>	<b>8</b>	<b>1</b>	<b>...</b>
<b>NERVOUS SYSTEM</b> (For lesions of pituitary, see Ductless glands)					
CRANIUM, BRAIN, AND MENINGES					
Sub-temporal decompression, for tumor, trauma, meningitis, etc. . . . .	64	11	40	3	10 <sup>a</sup>
Sub-occipital exploration and decompression for tumor . . . . .	8	1	7	...	...
Exploratory osteoplastic craniotomy for tumor of cerebrum . . . . .	23	...	13	6	4 <sup>b</sup>
<i>Brought forward</i>	95	12	60	9	14

<sup>a</sup> 8, 13, 811, 1054, 1323, 1400, 1580, 1631, 1717, 2161.<sup>b</sup> 20, 168, 636, 1406.



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DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Dead
<i>Carried forward</i>	95	12	60	9	14
Exploratory craniotomy for tumor cerebellum . . . . .	20	2	7	3	8 <sup>c</sup>
Osteoplastic craniotomy with decompression for tumor.	17	3	11	2	1 <sup>d</sup>
Osteoplastic craniotomy for trauma, epilepsy, etc. . . .	6	1	3	1	1 <sup>e</sup>
Craniotomy with tumor extirpation, partial or complete, or cyst evacuation: cerebral . . . . .	35	8	20	1	6 <sup>f</sup>
Craniotomy (ditto): cerebellar . . . . .	21	1	14	2	4 <sup>g</sup>
Re-elevation osteoplastic flap and evacuation of clot after tumor extirpation . . . . .	3	1	1	...	1 <sup>h</sup>
Craniectomy for tumor, fracture, epilepsy, etc. . . . .	3	1	2	...	...
Callosal puncture . . . . .	2	...	1	...	1 <sup>i</sup>
Ventricular punctures * . . . . .	1	...	...	...	1 <sup>j</sup>
Excision fungus cerebri . . . . .	1	...	1	...	...
Subcutaneous puncture cerebellar cyst . . . . .	1	...	1	...	...
CRANIAL NERVES					
Avulsion sensory root, for trigeminal neuralgia (major)	62	58	4	...	...
Alcohol injection, trigeminal neuralgia (minor) † . . . .	21	9	10	2	...
Peripheral neurectomy, trigeminal neuralgia . . . . .	4	2	2	...	...
SPINAL CORD					
Exploratory laminectomy for trauma, tumor, etc. . . . .	9	...	3	5	1 <sup>k</sup>
Exploratory laminectomy with extirpation of tumor . . .	4	3	1	...	...
Spina bifida (cf. Congenital malformation) . . . . .					
SPINAL NERVES					
Nerve suture, ulnar . . . . .	3	1	2	...	...
Nerve suture, median . . . . .	1	...	1	...	...
Nerve anastomosis, n XI to outer cord brachial plexus .	1	...	...	1	...
Alcohol injection, median and radial nerves for Raynaud's	1	...	1	...	...
Freeing ulnar nerve from callus . . . . .	1	...	1	...	...
SYMPATHETIC SYSTEM					
Cervical sympathectomy for exophthalmic goitre . . . .	2	...	2	...	...
TOTAL . . . . .	314	112	147	26	38

<sup>c</sup> 81, 192, 320, 1156, 1426, 1933, 1963, 2077.

<sup>d</sup> 928.

<sup>e</sup> 2235.

<sup>f</sup> 95, 417, 542, 693, 862, 857.

<sup>g</sup> 148, 664, 807, 1508.

<sup>h</sup> 458.

<sup>i</sup> 1036.

<sup>j</sup> 1527.

<sup>k</sup> 1521.

\* Ventricular punctures in course of craniotomy or for hydrocephalus are not included.

† Does not include injections for neuralgia made in the wards.

## TABLE OF SURGICAL OPERATIONS

### NERVOUS SYSTEM: FATALITIES

8. SUBTEMPORAL DECOMPRESSION FOR CEREBRAL CONTUSION.  
Male, 3½ years. Semi-comatose child who sustained a fall 2 days before admission. Immediate sub-temporal decompression. No epidural or subdural clot. Markedly increased tension. Death in 12 hours.  
*Autopsy:* (Medical Examiner) cerebral contusion.
13. SUBTEMPORAL DECOMPRESSION FOR PRESSURE; UNSUSPECTED ABSCESS.  
Female, 36 years. Three weeks ago convulsion and rapid development of pressure symptoms. Left sub-temporal decompression, 9 days after admission. Markedly increased pressure found. Attempted puncture of lateral ventricle. Progressive decline, stupor. Death one month later.  
*Autopsy:* large unsuspected abscess of left hemisphere. Small bronchiectatic cavity of lung.
811. SUBTEMPORAL DECOMPRESSION — CEREBRAL CONTUSION AND INFECTION.  
Male, 46 years. Healthy man, said to have fallen upon his head. Admitted in semi-coma with symptoms of fracture of base. Bloody spinal fluid under considerable tension. Immediate right subtemporal decompression with evacuation of clots. Death 5 days later.  
*Autopsy:* bursting fracture of the base. Streptococcus meningitis. Pneumonia. (Medico-legal case.)
1054. SUBTEMPORAL DECOMPRESSION FOR CEREBRAL CONTUSION.  
Male, 38 years. Patient admitted in deep coma with evidence of severe cerebral injury due to a fall. Immediate subtemporal decompression without anæsthesia. Brain under great tension. Evacuation of subdural clots. Death without recovery of consciousness.  
*No Autopsy.* (Medico-legal case.)
1323. SUBTEMPORAL DECOMPRESSION FOR CEREBRAL CONTUSION.  
Male, 63 years. 4 days ago cranial injury, headache, vomiting, focal epileptiform attacks. Left-sided weakness, paresthesia, stupor, disorientation. Operation day after admission. Ether. Right subtemporal decompression. Evacuation large subdural clot. Patient continued stuporous. Wound reopened next day without anæsthesia. Removal of more clot. Coma, death in 2 days.  
*Autopsy:* extensive subdural hemorrhage with cerebral contusions. No fracture. (Medico-legal case.)
1400. SUBTEMPORAL DECOMPRESSION FOR MENINGITIS  
Male, 62 years. Otitis media for 2 weeks. Cranial symptoms for 2 days. Semi-conscious on admission with meningeal symptoms. Immediate subtemporal decompression without anæsthesia, in the hope of establishing drainage. Meningitis found. Death in 12 hours.  
*Autopsy:* purulent meningitis. Streptococcus mucosus capsulatus.
1580. SUBTEMPORAL DECOMPRESSION FOR CEREBRAL CONTUSION.  
Female, 82 years. An old woman, struck by a motorcycle day before admission and brought to the hospital unconscious. Right subtemporal



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decompression without ether; evacuation of small subdural clot; fracture skull found. Lived 5 days without regaining consciousness.

*Autopsy:* fracture of base, marked contusion of brain with subdural clot. (Medico-legal case.)

### 1631. SUBTEMPORAL DECOMPRESSION FOR PRESSURE SYMPTOMS — BLASTOMYCOTIC MENINGITIS.

Female, 42 years. One month "brain tumor" symptoms. Ether, right subtemporal decompression, much tension, no fluid obtained in effort to tap lateral ventricle. Death 12 days later.

*Autopsy:* meningeal blastomycosis; pneumonia.

### 1717. SUBTEMPORAL DECOMPRESSION FOR UNLOCALIZED TUMOR.

Female, 37 years. Nine months of brain tumor symptoms with evidence of marked pressure and total blindness. Ether, left subtemporal decompression. Puncture lateral ventricle. Immediate operative recovery with some symptomatic improvement, death 2 months later.

*Autopsy:* refused.

### 2161. SUBTEMPORAL DECOMPRESSION FOR INOPERABLE TUMOR.

Male, 29 years. Brain tumor symptoms of 5 months' duration, stupor, marked pressure symptoms. Right subtemporal decompression. Death on third day, with acute pressure symptoms.

*Partial Autopsy:* huge thalamic glioma.

### 20. EXPLORATORY OSTEOPLASTIC CRANIOTOMY FOR TUMOR OF CEREBRUM.

Male, 50 years. Plethoric man with diabetes. Attacks of focal epilepsy for 6 weeks and brain tumor symptoms. Status epilepticus. Immediate operation. Ether. Right osteoplastic exploratory craniotomy. Edematous arachnoid, otherwise negative findings. Continuance of attacks, death in 30 hours.

*Autopsy:* glioma, right hemisphere; broncho-pneumonia, fatty degeneration of heart, chronic pancreatitis.

### 168. EXPLORATORY OSTEOPLASTIC CRANIOTOMY FOR TUMOR OF CEREBRUM.

Male, 61 years. An old man with brain tumor symptoms. Right osteoplastic exploration and decompression at a previous date. Progressive weakness of the left side, the presence of an abscess suspected. Ether, subtemporal exploration through decompression area, negative findings. Gradual decline and death, 2 months later.

*Autopsy:* enormous deep-seated glioma of the right hemisphere.

### 636. EXPLORATORY OSTEOPLASTIC CRANIOTOMY FOR CEREBRAL ECCHINOCOCCUS.

Male, 22 years. Brain tumor symptoms for 3 months. 1. Operation, ether, left osteoplastic exploration with decompression, evacuation and removal of 3 ecchinococcus cysts from left hemisphere, the size of golf balls. 2. Six days later, ether, re-elevation of bone flap, for supposed extravasation of blood. Marked improvement for 1 month, then steady decline. 3. Two months after last operation, repeated aspirations of dilated ventricle. 4. One month later, re-elevation of flap and its removal, for continuance of pressure symptoms. Two and a half months later, death.

## TABLE OF SURGICAL OPERATIONS

*Autopsy:* ecchinococcus cysts of heart, pericardium, and brain, unsuspected large cyst of right hemisphere, broncho-pneumonia.

### 1406. EXPLORATORY OSTEOPLASTIC CRANIOTOMY FOR SUSPECTED TUMOR OF CEREBRUM.

Male, 45 years. An emaciated man with pronounced general pressure symptoms for 6 months; unlocalizable. Subtemporal decompression 5 days after admission; great tension. 2 weeks later, left frontal osteoplastic exploration for suspected frontal symptoms. Death in 11 days.

*Autopsy:* tuberculoma of cerebellum.

### 81. SUBOCCIPITAL EXPLORATION FOR TUMOR OF CEREBELLUM.

Female, 15 years. Cerebellar symptoms for 1 year. Suboccipital exploration. Extreme tension necessitating puncture left lateral ventricle, and removal posterior arch of atlas. Exposure of large median cerebellar glioma. Cessation of respiration a few hours later. Re-opening of wound under artificial respiration: partial extrusion of tumor found. Death on the table 24 hours after primary operation.

*Autopsy:* large cystic glioma with invasion of brain stem. Hemorrhage into fourth ventricle, internal hydrocephalus.

### 192. SUBOCCIPITAL EXPLORATION FOR TUMOR OF CEREBELLUM.

Male, 29 years. Symptoms beginning 5 years ago. Pronounced cerebellar symptoms. Picture was high tension and dysphagia, etc. Ether, suboccipital exploration; an angioma composed of huge tortuous vessels (pia) embracing posterior aspect medulla and cerebellum. Removal impossible. Death in 7 hours, from respiratory failure.

*Autopsy:* refused.

### 320. EMERGENCY EXPOSURE OF TUMOR OF CEREBELLUM AFTER RESPIRATORY FAILURE.

Female, 6½ years. 5 months of rapidly progressing symptoms of cerebellar type. 11 days after admission, sudden attack of convulsions and unconsciousness. 40 minutes later, another seizure, complete apnoea. Artificial respiration. Immediate operation while artificial respiration was continued with intratracheal tube and Connell apparatus, suboccipital exploration, much tension, otherwise negative findings. Ventricular puncture, death 2 hours later.

*Autopsy:* large median cerebellum glioma with direct pressure on fourth ventricle.

### 1156. SUBOCCIPITAL EXPLORATION AFTER PRIMARY DECOMPRESSION FOR TUMOR, UNCERTIFIED, OF CEREBELLUM.

Male, 10 years. 7 months marked "brain tumor" symptoms of cerebellar type. Ether. Right subtemporal decompression. Moderate increase of tension found. Satisfactory primary operative convalescence, gradual increase of symptoms and evidence of tension. Four months later, right ventricular puncture under novocaine demonstrating hydrocephalus; marked relief of headaches; 5 days later after preliminary ventricle puncture, suboccipital exploration under ether, negative findings except for tension.

*Autopsy:* refused.



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## 1426. SUBOCCIPITAL CRANIOTOMY FOR RELIEF OF CEREBELLO PONTINE PRESSURE SYMPTOMS.

Male, 30 years. Patient discharged from hospital (see Surgical 1282) recently with advice against operation. Brain tumor symptoms cerebellar type, rapidly increasing, begs for operative relief of cephalalgia. Ether: suboccipital exploration, negative findings. Death in 20 hours.

*Autopsy:* multiple foci of tuberculosis; solitary tubercle of pons.

## 1933. SUBOCCIPITAL RE-EXPOSURE OF CEREBELLAR CYSTIC GLIOMA.

Female, 43 years. Cerebellar exploration and decompression 1 year ago for presumed cerebellar tumor. Marked improvement at first, but exacerbation of all symptoms during recent months. Ether, re-opening of former suboccipital wound, two enormous cystic cavities found largely occupying the place of the cerebellar hemispheres. Immediate operative recovery. Sudden death from respiratory failure on seventeenth day.

*Partial autopsy:* bilateral gliomatous cyst of cerebellum: dilatation of all ventricles.

## 1963. SUBOCCIPITAL DECOMPRESSION FOR PRESUMED TUMOR OF CEREBELLUM.

Female, 16 years. 6 months of "brain tumor" symptoms, of supposed cerebellar type. Ether, suboccipital exploration and decompression, release of tension, no lesion found. Death in 4 days.

*Autopsy:* large glioma of left thalamus: internal hydrocephalus.

## 2077. SUBOCCIPITAL EXPLORATION FOR PRESUMED TUMOR OF CEREBELLUM.

Male, 25 years. Symptoms of cerebellar type with pressure phenomena. Ether, suboccipital exploration and decompression, ventricular puncture; marked tension; tumor not disclosed. Death in 9 days.

*Autopsy:* refused.

## 928. OSTEOPLASTIC CRANIOTOMY WITH DECOMPRESSION.

Male, 21 years. A man with pulmonary tuberculosis and symptoms for 6 weeks of intracranial pressure, failing vision, extreme headaches, focal epilepsy. Diagnosis: tuberculoma. Left osteoplastic exploration with decompression. Great tension. Meningeal tubercles. After operation, nearly complete hemiplegia and aphasia. Death 7 days later.

*Autopsy:* general miliary tuberculosis: tubercular meningitis: multiple tuberculomas of cerebrum.

## 2235. OSTEOPLASTIC CRANIOTOMY FOR BIRTH HEMORRHAGE.

Female, 4 days. High forceps' delivery after prolonged labor, symptoms of intracranial hæmorrhage. Immediate exploration, bilateral, with evacuation of subdural clot. Early fatality.

*Autopsy (partial):* fracture of both parietal bones with extensive subdural hemorrhage.

## 95. CRANIOTOMY (TWO STAGES) WITH EXTIRPATION OF SARCOMA.

Male, 42 years. Brain tumor syndrome, duration 6 months. Ether. Exposure of tumor involving right parietal bone. 6 days later extirpation of large sarcoma involving cortex of right hemisphere and longitudinal sinus.

A long operation with much loss of blood. Death 1 hour later during attempt at transfusion.

*Autopsy:* refused.



## TABLE OF SURGICAL OPERATIONS

### 417. OSTEOPLASTIC FRONTAL CRANIOTOMY WITH EXTIRPATION HYPOPHYSEAL TERATOMA.

Female, 14 years. A girl previously operated on for relief of pressure by decompression. Now general pressure symptoms and neighborhood pituitary manifestations. Operation, intratracheal anæsthesia. Frontal osteoplastic approach, attempted extirpation of an interpeduncular tumor. Severe hemorrhage, transfusion. Complete unconsciousness, left-sided spastic hemiplegia. 4 days later without anæsthesia, re-elevation of bone flap, very great tension. Sub-frontal approach impossible. Tumor removed by approach through the frontal lobe. Transfusion. Death in 24 hours without regaining consciousness. Tumor an interpeduncular teratoma.

*Autopsy:* refused.

### 542. ATTEMPTED EXTIRPATION OF RECURRENT GLIOMA.

Male, 39 years. Glioma of right parietal region partially removed several months ago by two stage operation. Temporary great improvement. Return of convulsions. Partial left hemiplegia. Stupor. 5 days after admission, ether, re-elevation of bone flap, removal of enormous recurrent glioma right parietal and occipital lobes. Collapse, transfusion, once repeated.

*Autopsy:* glioma of brain. Tuberculosis of lungs.

### 693. DECOMPRESSION: OSTEOPLASTIC CRANIOTOMY: PARTIAL EXTIRPATION OF GLIOMA.

Female, 48 years. For 10 months symptoms of intracranial pressure, headache, failing vision, vomiting, aphasia. Ether. Preliminary right subtemporal decompression, extreme tension found. 3½ weeks later right parietal osteoplastic exploration. Extreme tension. Large glioma enucleated from parietal region. Death in 1½ days.

*Autopsy:* extensive generalized cerebral gliosis and multiple gliomata.

### 862. CRANIOTOMY AND DECOMPRESSION, WITH EVACUATION OF GLIOMATOUS CYST.

Male, 31 years. 5 weeks of pronounced brain tumor symptoms. Ether. Right osteoplastic exploration with decompression. Aspiration of gliomatous cyst of temporal lobe. Immediate relief of general pressure symptoms. Gradual failure and death 3½ months after operation.

*Autopsy:* massive glioma of right hemisphere. Broncho-pneumonia.

### 1857. SUBTEMPORAL DECOMPRESSION WITH EXTENSION OF METASTATIC SARCOMA.

Male, 24 years. Poorly nourished man, 11 weeks recurring convulsions and "brain tumor" symptoms. Ether, right subtemporal decompression, marked tension, no lesion noted at first: slight rupture cortex with spontaneous extrusion of melanotic tumor, size of golf ball. Satisfactory primary convalescence. Sudden decline and death 3 weeks later.

*Autopsy:* multiple secondary melanotic sarcomata of brain; from unsuspected primary focus in breast.

### 148. SUBOCCIPITAL EXTIRPATION OF CEREBELLAR TUBERCULOMAS.

Female, 3 years. For 3 months left-sided muscle weakness, tremor, dysphagia, disturbed speech, headache, ataxia, suboccipital tenderness



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etc. Ether, suboccipital exploration, enucleation of 2 tuberculomas from left cerebellar lobe. Immediate great improvement. Subsequent hemiplegia and death,  $2\frac{1}{2}$  months after operation.

*Autopsy:* tuberculosis of the peritoneum, intestine, uterus, lung, and a third solitary tubercle in the crus cerebri.

### 664. SUBOCCIPITAL EXTIRPATION OF TWICE RECURRENT CEREBELLAR GLIOMA.

Female, 9 years. Characteristic cerebellar syndrome. Sub-occipital exploration  $2\frac{1}{2}$  years ago with evacuation of cerebellar cyst. Marked improvement for 6 months. 14 months later extirpation of glioma. Relief for 1 year. Recent urgent symptoms. 5 days after admission re-exploration of cerebellum. Large glioma involving almost entire cerebellum removed. Meningitis. Death 6 days later.

*Autopsy:* acute streptococcus meningitis, acute endocarditis. The operating room orderly assisting at the operation had an acute sore throat and developed scarlet fever on the following day.

### 807. SUBOCCIPITAL PARTIAL EXTIRPATION (FOR THIRD TIME) OF RECURRENT GLIOMA.

Male, 13 years. Symptoms of cerebellar tumor for 9 years. Blindness. November, 1910, suboccipital decompression: relief 1 year. January, 1912, partial removal cystic glioma: relief  $2\frac{1}{2}$  years. Re-entry with advanced symptoms of pressure. Third cerebellar exposure with radical extirpation of huge cystic tumor. Death in 12 hours.

*Autopsy:* extension of glioma through entire length of spinal cord.

### 1508. SECOND SUBOCCIPITAL OPERATION WITH ENUCLEATION OF GLIOMA.

Male, 36 years. Advanced cerebellar syndrome. Suboccipital exploration with exposure of tumor — patient's condition prohibiting attempt at removal. Marked improvement for 3 months. Recurrence and exacerbation of symptoms. Ether: cerebellar exposure, enucleation of large cerebellar glioma; implantation of radium seeds; hæmorrhage from injured lateral sinus, transfusion, death 9 hours after operation.

*Autopsy:* tumor — an encapsulated glioma — had been completely enucleated.

### 458. OSTEOPLASTIC EXPLORATION FOR PRESUMED TUMOR. RE-ELEVATION OF FLAP FOR POST-OPERATIVE HÆMORRHAGE.

Male, 36 years. 8 years obscure progressive symptoms, right muscular weakness, numbness, paræsthesia, incontinence of urine, signs of intracranial pressure. 9 days after admission left parietal osteoplastic exploration with decompression. Negative findings. Cerebral edema? Epileptiform seizures after operation; 4 days later re-elevation of bone flap, evacuation of clot, and arrest of secondary bleeding; continued convulsive seizures. Death 9 days after operation.

*Autopsy:* no pathological lesion to account for symptoms. (Pseudo-tumor Cerebri.)

### 1036. TWO OSTEOPLASTIC FRONTAL PROCEDURES FOR EVACUATION OF HYPOPHYSEAL CYST. COLLOSAL PUNCTURE.

Female, 41 years. A woman with pressure symptoms partially relieved by former (6 months) decompression. Almost total blindness, pituitary type. Operation: (1) Osteoplastic sub-frontal exploration with

## TABLE OF SURGICAL OPERATIONS

evacuation of supra-sellar cyst and fragmentary removal of cyst wall. Restoration of vision temporary. (2) 27 days later re-exploration and evacuation. Temporary return of vision for second time. (3) 25 days later owing to return of symptoms puncture of refilled cyst through corpus collosum. Death 5 weeks later after return of pressure symptoms.

*Autopsy:* large interpeduncular teratomatous cyst.

### 1527. VENTRICULAR PUNCTURE FOR DIAGNOSIS.

Male, 47 years. Paralysis of bladder 7 years; convulsions and frontal lobe symptoms for 1 year. Condition rapidly became desperate after admission; coma; right ventricular puncture under local anæsthesia. Release of tension. Death in 8 hours.

*Autopsy:* glioma left frontal region, arterio-sclerotic changes with areas of softening.

### 1521. EXPLORATORY LAMINECTOMY FOR TRAUMATIC PARAPLEGIA.

Male, 33 years. 48 hours before entrance was knocked unconscious in headon collision, paraplegia, evidence of total transverse lesion supposedly at level of 4th cervical. Intra-tracheal anæsthesia, cervical laminectomy, negative findings. Death in 10 days.

*Autopsy* (Medico-legal): complete transverse myelitis, second cervical segment, probably due to temporary subluxation, self-reduced.



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DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Dead
<b>REPRODUCTIVE SYSTEM</b>					
(FEMALE)					
<b>MAMMARY GLAND</b>					
Drainage of abscess . . . . .	6	4	2	...	...
Local excision, benign tumor . . . . .	5	5	...	...	...
Plastic resection . . . . .	1	1	...	...	...
Plastic excision . . . . .	3	3	...	...	...
Amputation . . . . .	5	5	...	...	...
Radical operation, malignant tumor . . . . .	11	7	3	...	1 <sup>a</sup>
<b>UTERUS AND VAGINA</b>					
Abdominal hysterectomy, benign tumor . . . . .	13	13	...	...	...
Hysterectomy, combined route benign tumor . . . . .	1	...	...	...	1 <sup>b</sup>
Pan-hysterectomy (Wertheim) for carcinoma . . . . .	3	2	1	...	...
Myomectomy . . . . .	3	3	...	...	...
Ventral fixation, bisection and intra-parietal implantation . . . . .	2	2	...	...	...
Ventral fixation vaginapexy . . . . .	4	3	1	...	...
Ventral suspension . . . . .	29	25	4	...	...
Dilatation and curettage . . . . .	66	49	17	...	...
Trachelorrhaphy . . . . .	4	3	1	...	...
Anterior colporrhaphy . . . . .	4	3	...	1	...
Anterior and posterior colporrhaphy . . . . .	7	5	2	...	...
Dilatation and curettage and trachelorrhaphy . . . . .	9	9	...	...	...
Dilatation and curettage and anterior colporrhaphy . . . . .	2	1	1	...	...
Dilatation and curettage, colporrhaphy, trachelorrhaphy, perineal repair . . . . .	12	10	2	...	...
Excision uterine polyp . . . . .	4	4	...	...	...
Dilatation cervix and extraction of foetus . . . . .	1	1	...	...	...
Cauterization cervix, inoperable carcinoma . . . . .	5	...	3	2	...
Drainage, vulvo-vaginal abscess . . . . .	2	2	...	...	...
<b>UTERINE APPENDAGES AND PELVIC PERITONEUM</b>					
Salpingo-oophorectomy, ruptured ectopic pregnancy . . . . .	5	5	...	...	...
Salpingectomy, unilateral, for acute salpingitis . . . . .	3	2	1	...	...
Salpingectomy, bilateral, for acute salpingitis . . . . .	2	2	...	...	...
Salpingectomy, unilateral, for chronic salpingitis . . . . .	4	4	...	...	...
Salpingo-oophorectomy, unilateral, for acute salpingitis . . . . .	5	5	...	...	...
Salpingo-oophorectomy, unilateral for chronic salpingitis . . . . .	5	5	...	...	...
Salpingo-oophorectomy bilateral for chronic salpingitis . . . . .	7	7	...	...	...
<i>Carried forward</i>	233	190	39	3	2

<sup>a</sup> 471.

<sup>b</sup> 1185.

TABLE OF SURGICAL OPERATIONS

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Dead
<i>Brought forward</i>	233	190	38	3	2
Salpingectomy, bilateral, tubercular salpingitis . . . . .	1	....	...	...	1 <sup>c</sup>
Laparotomy and drainage, pelvic peritonitis . . . . .	4	2	1	...	1 <sup>d</sup>
Excision of ovarian cyst . . . . .	7	7	...	...	...
Excision of Dermoid cyst of broad ligament . . . . .	1	....	1	...	...
Excision carcinoma of ovary . . . . .	1	....	...	...	1 <sup>e</sup>
<b>TOTAL</b> . . . . .	<b>247</b>	<b>199</b>	<b>40</b>	<b>3</b>	<b>5</b>

<sup>c</sup> 1206.<sup>d</sup> 676.<sup>e</sup> 1029.

## FEMALE REPRODUCTIVE SYSTEM: FATALITIES

## 471. RADICAL OPERATION, MALIGNANT TUMOR OF BREAST.

Female, 35 years. Tumor in the right breast noticed for 11 months. An obese woman, with large malignant tumor of the breast, involving axillary and cervical glands. Ether. Attempted radical extirpation with axillary and cervical metastases; complete extirpation found impossible. Skin graft. Operation fairly well borne. Edema of the arm. Pulmonary symptoms in the right chest; jaundice 2 weeks later. Rapidly failing condition. Death 3½ weeks after operation.

*Autopsy:* refused. Possibly a case of rapid diffusion of carcinomatous metastases incidental to operative interference.

## 1185. HYSTERECTOMY FOR BENIGN TUMOR, COMBINED ROUTE.

Female, 40 years. Very obese woman with fibroid tumor causing dysmenorrhœa and menorrhagia. Hb. 65%, urine normal.

Operation. Ether. Vaginal hysterectomy attempted, but found too difficult and hysterectomy completed by laparotomy. Many technical difficulties encountered. Operation prolonged; marked loss of blood. Collapse. Transfusion. Death on the operating table in 6½ hours.

*Autopsy:* refused.

## 1206. BILATERAL SALPINGECTOMY FOR TUBERCULAR SALPINGITIS.

Female, 28 years. History of 3 weeks of sub-acute and acute symptoms in the lower abdomen.

Diagnosis: pelvic inflammatory.

Operation 12 days after admission. Bilateral salpingo-oöphorectomy with drainage of a pelvic abscess. Tubercles noted on the omentum and pelvic peritoneum.

Delayed operative recovery. Persistent sinus. Fecal fistula. Progressive emaciation. Vomiting with irregular temperature. Death 83 days after operation.

*Autopsy:* Tuberculosis of the liver, spleen, and peritoneum with areas of mixed infection of the lung and acute bronchitis.



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676. LAPAROTOMY AND DRAINAGE, ACUTE PELVIC PERITONITIS.

Female, 28 years. History of 12 days of vomiting, abdominal pain and diarrhoea. A young woman with distended abdomen, regurgitating gastric contents, acutely tender and spastic lower abdomen, purulent vaginal discharge. Vaginal examination shows no mass or special tenderness, fundus retroverted. Diagnosis: acute pelvic peritonitis. Neisser organism found. Expectant treatment, fair progress, sudden exacerbation of symptoms sixth day.

Immediate laparotomy under novocaine. Free pus, drainage. Death in 16 hours.

*Autopsy:* acute peritonitis, chronic salpingitis, tubo-ovarian abscess, recent pregnancy, abortion(?).

1029. EXCISION OF CARCINOMA OF OVARY.

Female, 49 years. Obese woman with painless jaundice and vomiting for 6 weeks. Fluid in the abdomen; questionable tumor in epigastrium. Ether. Laparotomy. Extensive carcinoma involving liver and gall-bladder; adhesions; large tumor of left ovary, in trying to deliver which a mass of tumor came away. Bleeding. Through another incision ovarian pedicle was clamped and tied. Patient made primary operative recovery, lived one month with persistence of jaundice and vomiting and died of exhaustion and erysipelas.

*Autopsy:* carcinoma of ovary, gall-bladder and liver.

# TABLE OF SURGICAL OPERATIONS

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Dead
REPRODUCTIVE SYSTEM					
(MALE)					
PENIS					
Incision of prepuce for phimosis . . . . .	1	1	...	...	...
Circumcision . . . . .	6	5	1	...	...
TESTICLE AND TUNICA VAGINALIS					
Orchidectomy, for tuberculosis . . . . .	2	2	...	...	...
Epididymectomy . . . . .	1	1	...	...	...
Partial resection of epididymis, for tuberculosis . . . . .	2	1	1	...	...
Radical cure undescended testicle (see also Hernia) . . . . .	2	2	...	...	...
Excision of hydrocele sac . . . . .	7	7	...	...	...
Eversion of hydrocele sac. (Bevan) . . . . .	4	4	...	...	...
SPERMATIC CORD					
Excision of varicocele . . . . .	5	5	...	...	...
PROSTATE AND SEMINAL VESICLES					
Prostatotomy, for abscess . . . . .	2	2	...	...	...
Prostatectomy, perineal . . . . .	4	2	2	...	...
Prostatectomy supra-pubic . . . . .	4	3	...	...	1 <sup>a</sup>
Resection of median bar: supra-pubic . . . . .	1	...	...	1	...
TOTAL . . . . .	41	35	4	1	1

<sup>a</sup> 1577.

## MALE REPRODUCTIVE SYSTEM: FATALITIES

### 1577. SUPRA-PUBIC PROSTATECTOMY.

Male, 65 years. A cachectic looking man with chronic heart lesion. Urinary obstruction for 4 years. Catheter life 1½ years. Marked cystitis. Probably pyelitis; constant irregular fever. Phthalein test 35 to 50% in 2 hours. Hb. 60%. Promotion of renal function and urinary antisepsis for 1 month. Small firm prostate. Cystoscopy essentially negative. Operation 1 month after admission. Spinal anæsthesia. Supra-pubic incision. Median prostatic bar resected. Operation well borne. Later periurethral abscesses and evidence of general sepsis. Death 35 days after operation.

*Autopsy:* bronchial pneumonia. Open foramen ovale. Retrocecal abscess. Periurethral and periprostatic cellulitis. Bacteremia (*B. coli*).



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DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Dead
RESPIRATORY SYSTEM					
NOSE AND ACCESSORY SINUSES					
Drainage of frontal sinus . . . . .	2	....	1	1	...
Exploration maxillary sinus . . . . .	3	1	1	1	...
PHARYNX					
Partial excision, retro-pharyngeal fibro-epithelioma . .	2	1	1	...	...
TRACHEA					
Tracheotomy . . . . .	2	....	2	...	...
LUNG					
Thoracostomy and drainage lung abscess . . . . .	3	....	2	...	1 <sup>a</sup>
PLEURA					
Thoracostomy for acute empyema . . . . .	10	3	7	...	...
Decortication of lung . . . . .	3	....	3	...	...
Thoracoplasty for chronic empyema . . . . .	1	....	1	...	...
TOTAL . . . . .	26	5	18	2	1

<sup>a</sup> 1951.

## RESPIRATORY SYSTEM: FATALITIES

### 1951. THORACOTOMY AND DRAINAGE OF LUNG ABSCESS.

Female, 59 years. Stout, middle-aged woman, dyspnoëic, expectorating large amounts of foul pus from a lung abscess for 3 months' duration. Local anæsthesia, thoracotomy. Drainage of cavity in right lower lobe. Cerebral apoplexy on the operating table. Left hemiplegia, facial paralysis, right external strabismus, coma. Patient rallied and lived 11 days. Expectoration much benefited. Death sudden with renewed cerebral symptoms.

*Autopsy:* refused.

TABLE OF SURGICAL OPERATIONS

DISEASES AND CONTITIONS	Total	Well	Imp.	Unimp.	Dead
<b>SKELETAL SYSTEM (including joints)</b>					
(For skull and spine, cf. Nervous system)					
<b>BONES</b>					
<i>Tumors</i>					
Excision enchondroma of sacrum . . . . .	1	....	1	...	...
Radical excision, osteo-sarcoma mandible . . . . .	1	....	1	...	...
Radical excision, carcinoma mandible . . . . .	2	....	2	...	...
<i>Osteomyelitis, Acute</i>					
Of ulna, drainage . . . . .	2	2	...	...	...
Of tibia, drainage, removal of sequestra, etc. . . . .	5	3	2	...	...
Of humerus, drainage . . . . .	1	....	1	...	...
Multiple, drainage and removal of sequestra . . . . .	1	....	1	...	...
<i>Osteomyelitis, Chronic</i>					
Of mandible, curetting, removal of sequestra . . . . .	3	1	2	...	...
Multiple, curetting . . . . .	1	....	1	...	...
Of phalanx, amputation . . . . .	2	2	...	...	...
<i>Osteomyelitis, Tubercular</i>					
Of phalanx, excision . . . . .	1	1	...	...	...
Of spine of scapula, resection . . . . .	1	....	1	...	...
<i>Osteomyelitis, actinomycotic</i>					
Of inferior maxilla . . . . .	2	....	2	...	...
<i>Fractures</i>					
Operative reduction, mandible . . . . .	1	....	1	...	...
Operative reduction radius and ulna . . . . .	1	1	...	...	...
Operative reduction radius . . . . .	2	....	2	...	...
Wiring, clavicle . . . . .	3	3	...	...	...
Wiring, olecranon . . . . .	1	1	...	...	...
Wiring, ulna . . . . .	11	11	...	...	...
Wiring, radius . . . . .	1	1	...	...	...
Suture, patella . . . . .	1	1	...	...	...
Bone plating, femur . . . . .	1	1	...	...	...
Bone plating, humerus . . . . .	1	1	...	...	...
Bone plating, tibia . . . . .	1	1	...	...	...
Excision comminuted fragment humerus . . . . .	1	1	...	...	...
Excision comminuted fragment radius . . . . .	1	1	...	...	...
<i>Carried forward</i>	49	32	17	0	...



# PETER BENT BRIGHAM HOSPITAL

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Dead
<i>Brought forward</i>	49	32	17	0	...
<b>JOINTS</b>					
(For Bursæ, see Muscular system)					
Lateral arthrotomy of knee . . . . .	9	5	3	1	...
Median arthrotomy of knee . . . . .	2	2	...	...	...
Arthrotomy of elbow . . . . .	1	...	1	...	...
Hallux valgus, radical operation . . . . .	5	5	...	...	...
Dislocations, reduction:					
Of shoulder . . . . .	3	1	2	...	...
Of elbow . . . . .	1	1	...	...	...
Of cervical spine . . . . .	1	1	...	...	...
<b>TOTAL</b> . . . . .	71	47	23	1	...
<b>TEGUMENTARY SYSTEM</b>					
(Cutaneous and Subcutaneous)					
<b>NEOPLASMS</b>					
Epithelioma of lip, local excision . . . . .	2	2	...	...	...
Epithelioma of lip, radical operation . . . . .	1	1	...	...	...
Carcinoma of cheek, curetting . . . . .	1	...	...	1	...
Carcinoma of skin, excision and grafting . . . . .	1	1	...	...	...
Epithelioma of nose, local excision . . . . .	1	1	...	...	...
Hemangioma of cheek, excision . . . . .	1	1	...	...	...
Anal papilloma, excision . . . . .	1	...	1	...	...
Pigmented mole, excision of . . . . .	1	1	...	...	...
<b>ULCER</b>					
Benign ulcer of lip, excision . . . . .	2	2	...	...	...
Varicose ulcer, excision and skin graft. (See also Varicose veins) . . . . .	3	2	1	...	...
<b>BURNS</b>					
Skin grafting . . . . .	1	1	...	...	...
Plastic operation for cicatrix . . . . .	3	1	1	1	...
<b>INFECTIONS</b>					
Cellulitis: drainage of . . . . .	45	26	17	...	2 <sup>a</sup>
Carbuncle: excision . . . . .	3	1	2	...	...
Tubercular fistula: axilla excision . . . . .	1	1	...	...	...
<i>Carried forward</i>	67	41	22	2	2

<sup>a</sup> 558, 1443.

TABLE OF SURGICAL OPERATIONS

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Dead
<i>Brought forward</i>	67	41	22	2	2
MISCELLANEOUS					
Skin grafting . . . . .	2	2	...	...	...
Exploratory incision . . . . .	1	1	...	...	...
Repair of cutaneous wounds . . . . .	4	3	1	...	...
TOTAL . . . . .	74	47	23	2	2

## TEGUMENTARY SYSTEM: FATALITIES

## 558. MULTIPLE INCISIONS FOR CELLULITIS, SEPTICEMIA.

Male, 49 years. An obese man, carbuncle of the neck 1 month ago. Cellulitis of leg beginning 1 week ago, marked toxemia. On entrance immediate operation, ether. Multiple incisions, positive blood cultures of staphylococcus albus. 7 days later drainage of suppurative arthritis of the knee. Death from septicemia next day.

*Autopsy:* acute pericarditis, pleuritis, edema of the lung and meninges, staphylococcus septicemia.

## 1443. MULTIPLE INCISIONS FOR CELLULITIS; DIABETES, SEPTICEMIA.

Female, 66 years. A woman with symptoms of impending diabetic coma, with gangrene of thumb and extensive cellulitis of arm. Immediate operation under gas-oxygen anæsthesia. Multiple incisions. Pure culture of streptococcus. Death in 8 hours.

*Autopsy:* arterio-sclerosis. Fatty degeneration of liver and pancreas. Streptococcus septicemia.



# PETER BENT BRIGHAM HOSPITAL

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Dead
URINARY SYSTEM					
KIDNEY					
Nephrectomy, for hypernephroma . . . . .	1	1			
Nephrectomy, for tuberculosis . . . . .	3	2	1		
Nephrectomy, for calculus . . . . .	3	1	1	1	
Nephrectomy, for pyonephrosis . . . . .	1	1			
Nephrotomy, for calculus . . . . .	4	3	1		
Nephrotomy, for pyonephrosis . . . . .	1				1 <sup>a</sup>
Nephrotomy, for cortical abscess (hæmatogenous) . .	1	1			
Nephrotomy, pyelotomy, decapsulation . . . . .	1		1		
Nephropexy . . . . .	1	1			
Drainage, peri nephric abscess . . . . .	4	2			2 <sup>b</sup>
URETERS					
Ureterotomy for calculus . . . . .	2	2			
BLADDER					
Supra pubic cystotomy, for calculus . . . . .	3	2	1		
Supra pubic cystotomy, for stricture . . . . .	1		1		
Litholopaxy . . . . .	2	2			
Drainage para vesical cystitis . . . . .	1	1			
Closure supra pubic fistula . . . . .	1	1			
MALE URETHRA					
External urethrotomy, for extravasation . . . . .	3	3			
External urethrotomy, for stricture . . . . .	3	1	2		
Divulsion of stricture . . . . .	5	1	4		
FEMALE URETHRA					
Excision of caruncle . . . . .	2	2			
Cauterization of caruncle . . . . .	1	1			
TOTAL . . . . .	44	28	12	1	3

<sup>a</sup> 489.

<sup>b</sup> 1389, 2177.

## URINARY SYSTEM: FATALITIES

### 489. NEPHROTOMY FOR PYONEPHROSIS; SEPTICEMIA.

Female, 28 years. Fragile woman, weight 75 pounds. Delivery of fourth child 4 weeks ago. 7 weeks ago pain in left abdomen with incontinence of urine. Since delivery fever, pain radiating to bladder, tender

## TABLE OF SURGICAL OPERATIONS

mass in the left lumbar region. On admission, pulse 110, temperature 103, leukocytes 8,000, urine loaded with pus.

Ether. Left nephrotomy, drainage of a large pyonephrosis. Nephrectomy impossible on account of poor condition. Operation fairly well borne, but patient steadily declined, evidently general sepsis. Blood culture staphylococcus albus. Phlebitis of leg. Death from septicemia 1 month after operation.

*Autopsy:* refused.

### 1389. OPERATIONS FOR MULTIPLE LESIONS OF URINARY TRACT. UREMIA.

Male, 16 years. A boy with a pyonephrosis and calculus in a congenitally rudimentary and functionless left kidney. Right pyelo-nephritis and calculi in both ureters and bladder. Urine: sp. gr. 1005. Much pus and blood, early signs of uremia at entrance.

Operations: (1) 5 days after entrance, attempted litholapaxy and supra-pubic cystotomy for stone.

(2) Right lumbar exploration for drainage of urinary extravasation due to ulceration of calculus through the wall of the ureter. Pyelotomy for drainage of pyelo-nephritis and ureterotomy with removal of calculus.

(3) Exploration of left kidney for relief of supposed calculous anuria. Rudimentary kidney found and removed. Blood transfusion. Death from uremia 15 days after last operation.

*Autopsy:* refused.

### 2177. DRAINAGE OF PERINEPHRIC ABSCESS.

Male, 21 years. On Medical Service for 18 days with hemorrhagic purpura and carbuncle. Transferred for incision of a large perinephric abscess.

Emaciated young man almost in extremis, pulse 130, temperature 103, respirations 30. Leukocytes 33,000.

Operation. Gas-oxygen anæsthesia. Incision large lumbar abscess. Fair rally. Progressive failure and death in 3 days.

*Autopsy:* refused.



# PETER BENT BRIGHAM HOSPITAL

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Dead
UNCLASSIFIED					
MISCELLANEOUS TUMORS					
Subcutaneous lipoma, excision . . . . .	4	4	...	...	...
Deep lipoma of thigh excision . . . . .	1	1	...	...	...
Desmoid tumor abdominal wall, excision . . . . .	1	...	1	...	...
Embryoma of anterior mediastinum . . . . .	1	...	1	...	...
ORGANS OF SPECIAL SENSE					
Eye cataract extraction . . . . .	2	2	...	...	...
Ear paracentesis . . . . .	1	...	1	...	...
Mastoiditis, radical operation . . . . .	1	1	...	...	...
AMPUTATION INVOLVING THE EXTREMITIES					
Of forearm, for tuberculosis . . . . .	1	...	1	...	...
Of leg, for gangrene . . . . .	2	...	...	...	2 <sup>a</sup>
Of thigh, for gangrene . . . . .	2	...	1	...	1 <sup>b</sup>
Of foot, for gangrene . . . . .	1	...	1	...	...
Of toe, for gangrene . . . . .	2	...	1	1	...
Of finger, for sepsis . . . . .	1	...	1	...	...
TOTAL . . . . .	20	8	8	1	3
FINAL TOTAL . . . . .	1647	1031	476	59	90

<sup>a</sup> 1344, 1744.

<sup>b</sup> 1063.

## AMPUTATIONS: FATALITIES

### 1344. AMPUTATION OF LEG FOR GANGRENE OF FOOT.

Male, 73 years. An emaciated old man with myocarditis, fibrillating auricle and dilated heart. Gangrene of right foot of 3 weeks' duration. Chronic nephritis.

Operation 2 weeks after admission. Regional novocaine anæsthesia. Amputation of mid leg. Operation well borne. Gangrene and infection of stump. (Gas bacillus?) Death in 3½ days.

*Autopsy:* refused.

### 1744. AMPUTATION OF LEG FOR GANGRENE OF FOOT.

Male, 66 years. Marked arterio-sclerosis, chronic nephritis, diabetes. No acid bodies in urine. Extensive dry and moist gangrene of foot beginning 4 months ago. Pulse 100, temperature 102. Leukocytes 23,000. Patient apathetic and toxic.

## TABLE OF SURGICAL OPERATIONS

Operation 2 days after admission. Regional novocaine anæsthesia. Amputation lower leg. Gangrene of stump. Gas bacillus infection. Death in 4 days.

*Autopsy:* marked arterio-sclerosis. Septicemia.

### 1063. AMPUTATION OF THIGH FOR GANGRENE OF LEG.

Male, 37 years. Under treatment Medical Service for valvular disease of the heart. Four weeks ago embolism femoral artery with gradual appearance of gangrene of the foot. On admission line of demarcation just below the knee.

Spinal anæsthesia. Amputation of lower third of thigh. Death in a few hours from cardiac failure.

*Autopsy:* acute and chronic endocarditis. Mitral stenosis. Thrombosis coronary artery and right common femoral.



## Publications of the Surgical Staff

January 1913 to January 1915

- WALTER M. BOOTHBY. Ether Percentages. *Journ. of Am. Med. Assoc.*, 1913, LXI, pp. 830-834.
- The Determination of the Anæsthetic Tension of Ether Vapor in Man, with some Theoretical Deductions therefrom as to the Mode of Action of the Common Volatile Anæsthetics. *Journ. of Pharm. and Exp. Therap.*, 1914, V, pp. 379-392.
- Critical Review of the Literature on the Problem of General Anæsthesia. *Intern. Abstr. of Surg.*, 1914, pp. 117-124.
- WALTER M. BOOTHBY and FRANCIS W. PEABODY. A Comparison of Methods of Obtaining Alveolar Air. *Arch. of Int. Med.*, 1914, XIII, pp. 497-506.
- WALTER M. BOOTHBY and IRENE SANDIFORD. The Calibration of the Waller Gas Balance and the Connell Anæsthetometer. *Journ. of Pharm. and Exp. Therap.*, 1914, V, pp. 369-378.
- HARVEY CUSHING. Robert Fletcher, 1823-1912. *Boston Med. and Surg. Journ.*, 1913, CLXVIII, p. 330.
- Concerning the Symptomatic Differentiation between Disorders of the Two Lobes of the Pituitary Body. *Am. Journ. of Med. Sci.*, 1913, CXLV, p. 313.
- Psychic Disturbances Associated with Disorders of the Ductless Glands. *Am. Journ. of Insan.*, 1913, LXIX, pp. 965-990.
- Concerning Diabetes Insipidus and the Polyurias of Hypophysial Origin. *Boston Med. and Surg. Journ.*, 1913, CLXVIII, pp. 901-910.
- Realignment in Greater Medicine: Their Effect upon Surgery and the Influence of Surgery upon them. General Address in Surgery, the XVIIth Intern. Cong. of Med., London, Aug. 7, 1913, Oxford University Press, 1914.
- Surgical Experiences with Pituitary Disorders. *Journ. of Am. Med. Assoc.*, 1914, LXIII, pp. 1515-1525.

PUBLICATIONS OF THE SURGICAL STAFF

- HARVEY CUSHING and EMIL GOETSCH. Hibernation and the Pituitary Body. *Proc. of Soc. for Exp. Biol. and Med.*, 1913, XI, pp. 25-26.
- The Pars Anterior (Pituitary Body) and its Relation to the Reproductive Glands. *Proc. of Soc. for Exp. Biol. and Med.*, 1913, XI, pp. 26-27.
- HARVEY CUSHING and CLIFFORD B. WALKER. Distortions of the Visual Fields in Cases of Brain Tumor. IV. Binasal Hemianopsia. *Arch. of Ophth.*, 1912, XLI, pp. 559-598.
- HARVEY CUSHING, LEWIS H. WEED and CONRAD JACOBSON. Further Studies on the Rôle of the Hypophysis in the Metabolism of Carbohydrates. The Autonomic Control of the Pituitary Gland. *Johns Hopk. Hosp. Bull.*, 1913, XXIV, pp. 40-52.
- E. C. CUTLER and F. FISCHLER. Die Rolle des Pankreas bei der zentralen Läppchennekrose der Leber. *Arch. für experim. Path. und Pharm.*, 1913, LXXV, pp. 1-9.
- EMIL GOETSCH. Critical Review: The Pituitary Body. *Quart. Journ. of Med.*, 1914, VII, pp. 173-208.
- EMIL GOETSCH and HARVEY CUSHING. Hibernation and the Pituitary Body. *Proc. of Soc. for Exp. Biol. and Med.*, 1913, XI, pp. 25-26.
- The Pars Anterior (Pituitary Body) and its Relation to the Reproductive Glands. *Proc. of Soc. for Exp. Biol. and Med.*, 1913, XI, pp. 26-27.
- ERNEST G. GREY. Observations on the Protective Enzymes of the Body (Abderhalden). *Johns Hopk. Hosp. Bull.*, 1914, XXV, p. 117.
- ERNEST G. GREY and WARREN R. SISSON. An example of Dissociated Personality. *Boston Med. and Surg. Journ.*, 1914, CLXXI, p. 365.
- ERNEST G. GREY and L. E. EMERSON. A Striking Acquirement of Visualizing Power and the Development of Dreams Following a Cerebral Tumor Extirpation. *Journ. of Am. Med. Assoc.*, 1913, LXI, pp. 2141-2145.
- JOHN HOMANS. Degeneration of the Islands of Langerhans Associated with Experimental Diabetes in the Cat. *Journ. of Med. Research*, 1914, XXX, pp. 49-68.



- SAMUEL H. HURWITZ. Osteitis deformans, Paget's Disease: A Report of Six Cases Occurring in the Johns Hopkins Hospital and Dispensary. Johns Hopk. Hosp. Bull., 1913, XXIV, p. 263.
- Osteitis deformans (Paget) Involving a Single Bone. Amer. Journ. of Med. Sci., 1914, CXLVII, p. 855.
- CONRAD JACOBSON, LEWIS H. WEED and HARVEY CUSHING. Further Studies on the Rôle of the Hypophysis in the Metabolism of Carbohydrates. The Autonomic Control of the Pituitary Gland. Johns Hopk. Hosp. Bull., 1913, XXIV, pp. 40-52.
- EDWIN P. LEHMAN. On the Rate of Absorption of Cholesterol from the Digestive Tract of Rabbits. Journ. of Biol. Chem., 1914, XVI, pp. 495-503.
- ALFRED LUGER. Zur Kenntnis der im Röntgenbild sichtbaren Hirntumoren mit besonderer Berücksichtigung der Hypophysengangsgeschwülste. Fortschr. auf dem Geb. der Röntgenstr., 1914, XXI, pp. 605-614.
- JOHN J. MORTON. A Case of Rotary Dislocation of the Atlas. Boston Med. and Surg. Journ., 1914, CLXXI, pp. 822-823.
- CARL W. RAND. A Case of Supposed Progeria (Premature Senility) in a Girl of Eight Years, with Remarks. Boston Med. and Surg. Journ., 1914, CLXXI, pp. 107-111.
- CLIFFORD B. WALKER. Topical Diagnostic Value of the Hemiopic Pupillary Reaction and the Wilbrand Hemianoptic Prism Phenomenon: with a New Method of Performing the Latter. Journ. of Am. Med. Assoc., 1913, LXI, 1152-1156.
- CLIFFORD B. WALKER and HARVEY CUSHING. Binasal Hemianopsia. Arch. of Ophth., 1912, XLI, pp. 559-598.
- STUDIES ON CEREBRO-SPINAL FLUID\*
- HARVEY CUSHING. I. Introduction.
- LEWIS H. WEED. II. The Theories of Drainage of Cerebro-Spinal Fluid with Analysis of the Methods of Investigation.
- III. The Pathways of Escape from the Subarachnoid Spaces with Particular Reference to the Arachnoid Villi.

\* The above papers, "Studies on Cerebro-Spinal Fluid," II-VII, appeared in the Journal of Medical Research, 1914, XXXI, pp. 21-176.

PUBLICATIONS OF THE SURGICAL STAFF

LEWIS H. WEED. IV. The Dual Source of Cerebro-Spinal Fluid.

PAUL WEGEFARTH. V. The Drainage of Intra-Ocular Fluids.

— VI. The Establishment of Drainage of Intra-Ocular and Intracranial Fluids into the Venous System.

PAUL WEGEFARTH and LEWIS H. WEED. VII. The Analogous Processes of the Cerebral and Ocular Fluids.

L. H. WEED, HARVEY CUSHING and CONRAD JACOBSON. Further Studies on the Rôle of the Hypophysis in the Metabolism of Carbohydrates. The Autonomic Control of the Pituitary Gland. Johns Hopk. Hosp. Bull., 1913, XXIV, pp. 40-52.



# Report of the Physician-in-Chief

ON March 31, 1913, the first patients were admitted to the medical service of the Peter Bent Brigham Hospital. On that day one ward was ready for service; in June, 1913, the second building was opened. Since then construction work and painting for much of the time has prevented all medical wards from being in service at once. Consequently this, the first report of the work on the medical service, is a report of work done with only a part of the beds in service. The report covers the period from March 31, 1913, to December 31, 1914.

## DISCUSSION OF HOSPITAL REPORTS

By way of introduction in the first report of a new hospital it seems not inappropriate to discuss briefly the subject of hospital reports in relation to the medical service. A glance at a series of annual hospital reports from representative large general hospitals in the United States immediately impresses one with the fact that in general the annual report concerns itself in very large part with hospital finances and hospital administration; it shows administrative costs; it acknowledges gifts; it perpetuates the names of donors of funds; it gives a detailed statement of investments and their earnings. It is in the main a report of the administrative unit of the hospital organization.

Many hospital reports (New York, Roosevelt, St. Luke's and Presbyterian Hospitals of New York as examples) contain no statistics of patients from the point of view of disease and its treatment, or merely the briefest summary of the diseased conditions. A report from the



medical staff is the exception rather than the rule. When present its brevity is such that it tells us but little of what the staff has accomplished or has attempted to accomplish during the year.

In other hospital reports (Massachusetts General Hospital, Boston City Hospital and Pennsylvania Hospital as examples) quite detailed tables appear in which are tabulated the number and sex of patients treated with a given disease and the result of this treatment. In hospital reports in which these statistical tables do not appear it may be fairly said that the annual report does not concern itself with the medical unit of the hospital organization but only with the administrative unit. In some of these latter, however, the report from the trustees or from the superintendent contains some, though usually brief, mention of the medical work of the institution.

What inferences may we draw from these conditions in annual reports of our hospitals? Does it mean that the public is more interested in costs than in work accomplished? Does it signify that hospital administrators are more keenly alive to the value of presenting to the public the details of their work than is the case with the medical staff? Does it mean that medical men are not interested in reading the reports of medical work done in various hospitals? Does it indicate that statistical tables as published in some annual reports are not considered by medical men as worth while? I shall not attempt to answer these several questions, but I feel that they should be discussed by medical men with the view to devising a form of hospital report that may give a better indication of medical work accomplished than it is now possible to obtain from a perusal of most hospital reports. I feel that the reports of administrative work should be supplemented by better reports of medical work.



Having myself felt for some time that in the form used in most hospital reports the statistical report of diseases and the results of treatment, however carefully made, was of comparatively little value to the medical man and so interested him but little, I have come to the conclusion that, if published, such statistical reports should be accompanied by a report from the medical staff which gives from year to year some descriptive statement of work being done. It has seemed to me that if cost of publication compelled omissions, that the statistical table rather than the descriptive report of the medical staff should disappear; and if further curtailment is needed, administrative reports should be reduced so as to allow publication of medical reports. In my opinion it is desirable to retain administrative reports and to so amplify and improve medical reports that the hospital report will increase in its interest to the lay public and physicians.

Doubtful myself of the value to medical men of statistical medical tables as published in hospital annual reports (some reasons for this view will be found in the discussion following the statistical report of my service, see page 134), I have sought an expression of feeling from my colleagues at two large hospitals in Boston (Massachusetts General Hospital and Boston City Hospital), which publish in their annual reports carefully prepared statistical tables of medical diseases. Sixteen members of the visiting medical staff of these two hospitals were kind enough to answer questions. To the question, "Do you ever look over the statistics of medical diseases published in the report of your hospital?" 3 answered "no," 8 answered "occasionally," 4 answered "frequently," 1 answered "regularly." To the questions, "Have you during the past five years made any use of these statistics? If so, what kind?" 8 answered that they had made no use of these medical tables, 1 that he had used them once, 5 occasionally and 2 frequently. The use



## REPORT OF THE PHYSICIAN-IN-CHIEF

made of them seemed to be in the main to form an idea of the varying numbers of cases from year to year ill with certain diseases or the relative frequency of given diseases. The above analysis of answers gives little evidence that the statistical tables are greatly valued or much used by the visiting staff. None of my colleagues seemed satisfied with the usual type of hospital report in so far as the medical work was concerned. That the statistical tables are of some value, however, is indicated, and as they may give an idea, though often an erroneous one, of the range of disease treated in a given hospital it seems wise for us to adhere to the plan followed by some of the hospitals and publish, at least for the present, a statistical medical report in the form commonly used and to amplify this by a descriptive report dealing with staff organization and types of work undertaken at the Peter Bent Brigham Hospital. In general the policy will be adhered to of not following any fixed form of report, but by changing seek to get a type of report of interest to the reader. In doing this I will avail myself of some of the suggestions made by my colleagues in answering the questions which I propounded to them. For the present statistical tables of medical cases will be published, made up and arranged on the plan recently followed at the Boston City Hospital and the Massachusetts General Hospital from the diagnoses sent to the record room of the Hospital. The International System of Nomenclature as modified by the Bellevue Hospital of New York has been used and all diagnoses have been made or approved by myself or, during my vacation, by the physician, Dr. Frothingham.

### STAFF ORGANIZATION

The medical staff of the Hospital has been organized as follows: There is a Physician-in-Chief on duty throughout the year. In addition to his work in connection



with Hospital patients he is furnished offices for consultation work on ambulatory patients. To the Hospital may be admitted private patients, and for the medical care of these the visiting medical staff may make charges. The Physician-in-Chief holds a chair of medicine in the Harvard Medical School, but his teaching work is done in large measure in the Hospital. By this arrangement the Physician-in-Chief is at the Hospital throughout the day. There is a Physician, who likewise is on duty throughout the year, and is required to devote half of his time to hospital work. In the absence of the Physician-in-Chief, the Physician is in charge.

The other members of the staff reside in the Hospital. There is a resident physician, three assistant resident physicians and eight medical house officers for a service of 80 public ward beds and a varying number of private ward patients. (A private pavilion with 38 beds is divided between medical and surgical services.) The resident and assistant resident physicians are appointed for a year, subject to reappointment as long as seems desirable. The house officers serve for sixteen months, with four months' service in the ward laboratories, four months as junior and four months as senior in charge of ward patients and four months (the final term of service) in charge of out-patients. To the house officers falls most of the work in the routine care of patients, while the residents supervise the work and have direction of various special methods of studying disease. The house officers receive lodging, board and uniform, while the resident and assistant residents have in addition a salary. Records of the patients are typewritten after dictation to stenographers, so that members of the staff are not required to spend time in transcribing records in longhand, but have their time for the collection and preparation of the data of various kinds that go to make up the present-day record of a hospital patient. With this arrangement of service there



## REPORT OF THE PHYSICIAN-IN-CHIEF

is time available for special investigations; to some of the men such time is available in considerable amount.

In our organization the medical laboratories are an integral part of the medical service under the direction of the Physician-in-Chief, and are situated close to the patients. Various members of the medical staff do the laboratory work incident to the study of patients, such as blood cultures, serum reactions, including the Wassermann test, ammonia and nitrogen determinations in the urine, non-proteid nitrogen and uric acid determinations in the blood, analysis of alveolar air, electrocardiography, etc. The general purpose is to maintain the closest union possible between wards and laboratory; to have the staff engaged simultaneously in clinical work on patients and in laboratory study of material derived from the patients. In addition there is a pathological service under the direction of the Pathologist, with whom there is a free interchange of material and from whom comes the heartiest coöperation and aid in the laboratory work of the medical staff. A Consulting Physiologist and Consulting Chemist furnish suggestions and criticisms to broaden the scope and increase the efficiency of the work of the medical staff.

### OUT-DOOR DEPARTMENT

The Out-Door Department is open throughout the day in order that patients may come for diagnosis, treatment and medical advice at such times as will interfere least with their work and household duties. This arrangement is made possible by the system in use by which the house officer has his final service in the Out-Door Department and which affords a trained resident staff capable of handling the ordinary case that comes to the Out-Door Department. In addition one member of this resident staff, the resident physician, is matured enough in training to fur-



## PETER BENT BRIGHAM HOSPITAL

nish consultation advice in more difficult cases. Finally, the Physician-in-Chief and Physician are in the Hospital throughout the greater part of the day and may be called in to take the responsibility of decision in the more serious cases and each has regular hours in which he is on duty in the Out-Door Department. In these hours the more difficult cases are advised to come for special discussion of their condition.

Patients in the Out-Door Department can be given the advantage of the various special laboratories and more complicated apparatus primarily intended for the study of ward patients. In this way many of the patients, without being required to go into the Hospital wards, may be examined with the same completeness as is done with ward patients.

From the Out-Door Department come a large part of the patients admitted to the wards. In addition there is an affiliation with the Boston Dispensary by which the chiefs of the medical service there are associates in medicine at the Peter Bent Brigham Hospital and patients requiring hospital treatment are sent from the Boston Dispensary to the Peter Bent Brigham Hospital.

### SOCIAL SERVICE WORK

A social service worker is available for aiding in the medical work of the wards and Out-Door Department, and this social service work forms an integral part of that of the medical staff. This phase of the medical work has begun only fairly recently and so its scope is hardly more than indicated so far. Details of the social service work appear in the report of Miss Cheney, the head of this work.



## REPORT OF THE PHYSICIAN-IN-CHIEF

### MEDICAL WARD SERVICE

From March 31, 1913, to December 31, 1914, there were 2110 admissions to the medical wards.\* Of the 2110 admissions a goodly number were readmissions. A considerable number of the readmissions (438) were made up by patients coming at regular intervals for intravascular treatment with salvarsan or intraspinous treatment with salvarsanized serum. The condition of the 1613 patients who were discharged from the service during this period was as follows: well, 182; improved, 817; unimproved, 361; untreated 119; dead, 134. Among the patients included in the above statistics are numerous patients transferred to the surgical service for operation; these, after diagnosis of the condition led to the advice that their treatment should be surgical, did not remain in the medical wards for treatment, or were merely under treatment preparatory to surgical operation. Some of these appear as untreated, others as unimproved. A moderate number of cases are admitted for diagnosis and are returned to their physicians to carry out a treatment based on the diagnosis made of their condition. A few patients refuse to remain in the Hospital long enough for treatment to be carried out.

In these several ways a considerable number of admitted patients are not treated on the medical service or are treated so short a time that little benefit can be expected from such treatment as they receive. In this connection it is to be remembered that diagnosis is often the difficult procedure, requiring elaborate study. Treatment based on this diagnosis may be quite simple and easily carried out at home.

The following tables give statistics of patients treated from March 31, 1913, to December 31, 1914, in the medical wards of the Peter Bent Brigham Hospital.

\* Exclusive of these cases coming frequently for salvarsan treatment 1672 patients were admitted and of these 59 were still under treatment on the day that this report ends.



# Table I

## Medical Diagnoses

MARCH 31, 1913 — DECEMBER 31, 1914.

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<b>ABNORMITIES AND MALFORMATIONS, CONGENITAL *</b>						
Congenital malformation of circulatory system (heart) . . . . .	6	.....	3	1	1	1
Congenital malformation of digestive system (hourglass stomach) . . . . .	1	.....	1	.....	.....	.....
Congenital malformation of urinary organs (kidneys and ureters) . . . . .	1	.....	.....	.....	.....	1
<b>BLOOD</b>						
Anæmia, pernicious . . . . .	20	.....	11	8	.....	1
Anæmia, simple . . . . .	2	.....	1	1	.....	.....
Anæmia, splenic (splenomegaly) . . . . .	1	.....	.....	.....	.....	1
Chlorosis . . . . .	3	1	2	.....	.....	.....
Leucæmia (lymphatic) . . . . .	2	.....	1	1	.....	.....
Purpura . . . . .	5	.....	4	1	.....	.....
<b>BURSÆ</b>						
Bursitis, subdeltoid . . . . .	1	.....	.....	1	.....	.....
<b>THE CIRCULATORY SYSTEM</b>						
<b>ARTERIES AND VEINS</b>						
Aneurysm of aorta . . . . .	7	.....	5	.....	2	.....
Arterial sclerosis, general † . . . . .	37	1	23	11	2	.....
<i>Carried forward</i>	86	2	51	24	5	4

\* This table has the cases grouped under the system followed in the Bellevue Hospital Nomenclature.

† This diagnosis is made in patients in whom there is a marked degree of general arterial sclerosis and no marked degree of pathological disturbance in single organs. — H. A. C.

TABLE OF MEDICAL DIAGNOSES

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	86	2	51	24	5	4
Dilatation of arch of aorta . . . . .	5	....	3	1	....	1
Phlebitis . . . . .	3	....	1	2	....	....
Varix of veins of legs . . . . .	1	....	....	1	....	....
HEART						
Angina pectoris . . . . .	8	....	4	3	1	....
Endocarditis, acute (organism not isolated) . .	7	....	3	3	....	1
Endocarditis, acute (staphylococcus albus) . .	1	....	....	1	....	....
Endocarditis, acute (streptococcus) . . . . .	2	....	....	....	....	2
Valvular disease, chronic cardiac						
Aortic insufficiency . . . . .	9	....	9	....	....	....
Aortic and mitral insufficiency . . . . .	5	....	4	....	....	1
Aortic stenosis and insufficiency . . . . .	12	....	8	2	....	2
Mitral insufficiency . . . . .	18	....	14	2	....	2
Mitral stenosis . . . . .	17	....	16	1	....	....
Mitral stenosis and insufficiency . . . . .	51	....	26	10	....	15
Mitral stenosis and aortic insufficiency . .	3	....	1	....	1	1
Heart block . . . . .	3	....	1	....	....	2
Hypertrophy, cardiac * . . . . .	1	....	....	1	....	....
Myocarditis, chronic . . . . .	62	....	41	5	....	16
Pericarditis, acute . . . . .	3	....	2	1	....	....
Pericarditis chronic (adherent pericardium) . .	1	....	1	....	....	....
Tachycardia (including paroxysmal tachycardia).						
(Re-entry 6) † . . . . .	5	....	4	....	1	....
THE DIGESTIVE SYSTEM						
APPENDIX AND INTESTINE						
<i>Appendix</i>						
Appendicitis, acute . . . . .	5	1	....	4	....	....
Appendicitis, subacute . . . . .	3	....	....	3	....	....
Appendicitis, chronic . . . . .	1	....	1	....	....	....
<i>Carried forward</i>	312	3	190	64	8	47

\* A case in which no cause for cardiac hypertrophy could be discovered.  
— H. A. C.

† Where "Re-entry" appears after a diagnosis the totals in columns indicate individual patients admitted once. Re-entry indicates that some of the same patients were readmitted from one to several times but these are not included in the totals. This plan is followed in only certain conditions in which re-entries were especially frequent.



PETER BENT BRIGHAM HOSPITAL

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	312	3	190	64	8	47
<i>Intestine</i>						
Colitis, acute . . . . .	5	1	2	2	....	....
Colitis, chronic (syphilitic). (Re-entry 10) . .	12	....	12	....	....	....
Constipation . . . . .	20	....	16	4	....	....
Enteritis, acute . . . . .	7	5	2	....	....	....
Neurosis, intestinal (diarrhoea) . . . . .	4	1	3	....	....	....
Obstruction, intestinal . . . . .	3	....	....	3	....	....
Splanchnoptosis . . . . .	1	....	....	1	....	....
Duodenum (congenital band constricting) . .	1	....	....	1	....	....
Ulcer of duodenum . . . . .	9	....	3	6	....	....
<i>See TUMOR</i>						
<i>LIVER, GALL BLADDER, AND GALL DUCTS</i>						
<i>Liver</i>						
Cirrhosis of liver . . . . .	22	....	17	2	....	3
Fatty liver . . . . .	1	....	1	....	....	....
Jaundice, catarrhal . . . . .	5	1	3	1	....	....
<i>See TUMOR</i>						
<i>Gall Bladder and Gall Ducts</i>						
Cholelithiasis . . . . .	14	1	2	9	2	....
<i>See TUMOR</i>						
<i>MESENTERY, OMENTUM, AND PERITONEUM</i>						
<i>Peritoneum</i>						
Peritonitis. . . . .	1	....	1	....	....	....
<i>See TUMOR</i>						
<i>MOUTH, PHARYNX, SALIVARY GLANDS, ETC.</i>						
<i>Mouth</i>						
Stomatitis . . . . .	3	1	1	1	....	....
Vincent's Angina . . . . .	2	....	2	....	....	....
<i>Teeth, Gums, and Alveoli</i>						
Pyorrhoea alveolaris* . . . . .	1	....	1	....	....	....
<i>Carried forward</i>	423	13	256	94	10	50

\* A case in which this condition caused a fever simulating a general infection.  
— H. A. C.

TABLE OF MEDICAL DIAGNOSES

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	423	13	256	94	10	50
<i>Tonsils</i>						
Abscess, peritonsillar . . . . .	1	.....	1	.....	.....	.....
Tonsillitis, acute* . . . . .	40	23	13	3	.....	1
Tonsillitis, chronic . . . . .	1	.....	.....	1	.....	.....
<i>OESOPHAGUS</i>						
<i>See TUMOR</i>						
<i>PANCREAS</i>						
Pancreatitis, chronic . . . . .	1	.....	.....	1	.....	.....
<i>See TUMOR</i>						
<i>RECTUM AND ANUS</i>						
Fistula in ano . . . . .	1	.....	.....	1	.....	.....
Proctitis . . . . .	2	2	.....	.....	.....	.....
<i>See TUMOR</i>						
<i>STOMACH</i>						
Cribbing . . . . .	1	.....	1	.....	.....	.....
Dilatation of Stomach . . . . .	1	.....	1	.....	.....	.....
Gastritis, acute . . . . .	1	1	.....	.....	.....	.....
Gastritis, acute alcoholic . . . . .	2	1	1	.....	.....	.....
Gastritis, chronic alcoholic . . . . .	1	.....	.....	1	.....	.....
Gastroptosis . . . . .	2	.....	2	.....	.....	.....
Hematemesis of unknown cause . . . . .	1	.....	.....	.....	.....	1
Hyperchlorhydria . . . . .	6	1	5	.....	.....	.....
Hypochlorhydria . . . . .	4	.....	2	1	1	.....
Nervous Dyspepsia . . . . .	1	.....	1	.....	.....	.....
Neurosis of stomach . . . . .	1	.....	1	.....	.....	.....
Stenosis of Pylorus . . . . .	2	.....	2	.....	.....	.....
<i>See TUMOR</i>						
Ulcer of Stomach . . . . .	13	.....	5	7	.....	1
Vomiting, recurrent . . . . .	6	1	4	.....	1	.....
<i>THE DUCTLESS GLANDS AND SPLEEN</i>						
<i>PITUITARY BODY</i>						
Acromegaly . . . . .	1	.....	.....	1	.....	.....
Dyspituitarism . . . . .	1	.....	1	.....	.....	.....
Hypopituitarism . . . . .	2	.....	1	1	.....	.....
<i>SUPRARENAL GLAND</i>						
Addison's disease . . . . .	1	.....	1	.....	.....	.....
<i>Carried forward</i>	516	42	298	111	12	53

\* The fatal case was complicated by an extensive broncho pneumonia.

—H. A. C.



# PETER BENT BRIGHAM HOSPITAL

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	516	42	298	111	12	53
THYROID GLAND						
Hyperthyroidism (including exophthalmic goitre)	10	.....	4	6	.....	.....
Hypothyroidism (myxœdema) . . . . .	6	.....	6	.....	.....	.....
See TUMOR						
THE EAR						
Otitis media . . . . .	2	.....	2	.....	.....	.....
THE EYE AND ANNEXA						
Iritis . . . . .	1	.....	.....	1	.....	.....
Primary optic atrophy (cause unknown) . . .	1	.....	.....	1	.....	.....
Thrombosis of central vein of retina . . . . .	1	.....	.....	1	.....	.....
INFECTIVE DISEASES						
Abscess of buttock . . . . .	1	.....	.....	1	.....	.....
Abscess, cervical . . . . .	1	.....	.....	1	.....	.....
Abscess retro sigmoid . . . . .	1	.....	.....	1	.....	.....
Dysentery, bacillary . . . . .	2	.....	1	.....	.....	1
Erysipelas . . . . .	4	2	1	.....	.....	1
Fever of unknown cause* . . . . .	13	8	4	.....	.....	1
Gonococcus infection of joints . . . . .	1	.....	.....	1	.....	.....
Gonococcus infection of vagina . . . . .	4	.....	3	1	.....	.....
Infection of unknown cause . . . . .	1	1	.....	.....	.....	.....
Influenza . . . . .	2	1	.....	1	.....	.....
Malaria . . . . .	4	2	1	.....	1	.....
Mumps . . . . .	1	1	.....	.....	.....	.....
Rabies . . . . .	1	.....	.....	.....	.....	1
Rheumatic fever, acute . . . . .	33	6	27	.....	.....	.....
Rheumatic fever, subacute . . . . .	5	1	4	.....	.....	.....
Scarlet fever . . . . .	1	.....	.....	1	.....	.....
Septicæmia (staphylococcus albus) . . . . .	1	.....	.....	1	.....	.....
Septicæmia (streptococcus) . . . . .	1	.....	.....	.....	.....	1
Septicæmia (streptococcus mucosus capsulatus)	1	.....	.....	.....	.....	1
Septicæmia, puerperium . . . . .	1	1	.....	.....	.....	.....
<i>Carried forward</i>	616	65	351	128	13	59

\* These are patients with fever of varying duration in which hospital study revealed no definite cause for the fever so far as the isolation of any specific organism from the blood or local process or the identification of a specific cause by serological study was concerned. The fatal case was a marasmatic infant of 8 months with high fever. Autopsy refused; cause of death not made out. — H. A. C.

TABLE OF MEDICAL DIAGNOSIS

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	616	65	351	128	13	59
Syphilis. (Re-entry 260) . . . . .	98	4	65	6	23	....
Syphilis of aorta. (Re-entry 24) . . . . .	20	....	10	1	6	3
Syphilis of cerebro spinal meninges. (Re-entry 47) . . . . .	5	....	4	....	....	1
Tuberculosis of epididymis . . . . .	2	....	....	2	....	....
Tuberculosis of kidney . . . . .	2	....	....	2	....	....
Tuberculosis of peritoneum . . . . .	3	....	1	1	....	1
Tuberculosis of vertebra . . . . .	1	....	....	1	....	....
Tuberculosis, acute pulmonary . . . . .	3	....	....	3	....	....
Tuberculosis, acute pulmonary miliary . . . . .	1	....	....	....	....	1
Tuberculosis, chronic pulmonary . . . . .	42	....	19	18	1	4
Typhoid fever . . . . .	37	31	2	....	2	2
JOINTS						
Arthritis, acute . . . . .	3	1	2	....	....	....
Arthritis, chronic . . . . .	24	....	11	11	2	....
LYMPHATIC SYSTEM						
Hodgkin's disease . . . . .	1	....	....	1	....	....
Lymphangitis of leg . . . . .	1	....	....	1	....	....
Status lymphaticus . . . . .	1	....	....	....	....	1
DISEASES OF THE MIND						
Dementia præcox . . . . .	2	....	....	2	....	....
General paralysis of the insane. (Re-entry 18) . . . . .	6	....	4	1	1	....
Melancholia, involutional . . . . .	1	....	....	1	....	....
Monoplegia and Aphasia . . . . .	1	....	....	1	....	....
Psychosis, manic depressive . . . . .	2	....	....	2	....	....
Psychosis (syphilophobia) . . . . .	1	....	1	....	....	....
MISCELLANEOUS DISEASES AND CONDITIONS						
Adhesions, post operative . . . . .	1	....	....	1	....	....
Beriberi . . . . .	1	....	1	....	....	....
Chyluria . . . . .	1	....	1	....	....	....
Cystinuria . . . . .	1	....	....	1	....	....
<i>Carried forward</i>	877	101	472	184	48	72



# PETER BENT BRIGHAM HOSPITAL

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	877	101	472	184	48	72
Debility . . . . .	5	2	3	.....	.....	.....
Diabetes insipidus . . . . .	2	1	1	.....	.....	.....
Diabetes mellitus . . . . .	43	2	34	4	.....	3
Gout . . . . .	5	.....	5	.....	.....	.....
Hæmochromatosis. (Re-entry 1) . . . . .	2	.....	2	.....	.....	.....
Headache* . . . . .	4	.....	3	1	.....	.....
Hemorrhage from gums . . . . .	1	.....	1	.....	.....	.....
Malnutrition . . . . .	1	.....	.....	.....	.....	1
Obesity . . . . .	1	.....	1	.....	.....	.....
Raynaud's disease . . . . .	1	.....	.....	1	.....	.....
Unknown (presenting no definite disease or condition). No disease . . . . .	39	.....	.....	.....	39	.....
 <b>THE NERVOUS SYSTEM</b>						
<b>BRAIN, SPINAL CORD, AND MENINGES</b>						
Abscess of brain . . . . .	2	.....	.....	1	.....	1
Anæmia of brain . . . . .	1	1	.....	.....	.....	.....
Atrophy, progressive neuro muscular . . . . .	3	.....	.....	3	.....	.....
Hemorrhage, cerebral . . . . .	1	.....	.....	.....	.....	1
Meningitis, serous . . . . .	1	.....	.....	1	.....	.....
Meningitis, cerebro spinal . . . . .	1	.....	.....	.....	.....	1
Meningitis, hæmorrhagic . . . . .	1	.....	1	.....	.....	.....
Meningitis, tuberculous . . . . .	4	.....	.....	.....	.....	4
Meningitis of unknown cause . . . . .	1	1	.....	.....	.....	.....
Myelitis, transverse . . . . .	1	.....	.....	1	.....	.....
Paraplegia, hereditary spastic . . . . .	1	.....	.....	1	.....	.....
Poliomyelitis, anterior . . . . .	2	.....	1	1	.....	.....
Poliomyelitis, acute bulbar . . . . .	1	.....	.....	.....	.....	1
Sclerosis, amyotrophic lateral . . . . .	3	.....	.....	3	.....	.....
Sclerosis, lateral . . . . .	1	.....	.....	.....	1	.....
Sclerosis, lateral and posterior . . . . .	5	.....	.....	5	.....	.....
Sclerosis, multiple . . . . .	2	.....	.....	2	.....	.....
Syringomyelia . . . . .	1	.....	.....	1	.....	.....
Tabes dorsalis. (Re-entry 61) . . . . .	27	.....	11	12	4	.....
<i>See TUMOR</i>						
<i>Carried forward</i>	1040	108	535	221	92	84

\* Cases admitted with this symptom in which no organic cause could be discovered. — H. A. C.

TABLE OF MEDICAL DIAGNOSES

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	1040	108	535	221	92	84
CRANIAL AND SPINAL NERVES						
Neuralgia . . . . .	3	....	3	....	....	....
Neuritis . . . . .	3	1	1	1	....	....
Neuritis, multiple* . . . . .	2	....	....	....	1	1
Paralysis of arm . . . . .	1	....	....	....	1	....
FUNCTIONAL NERVOUS DISORDERS						
Angiospastic œdema . . . . .	1	....	1	....	....	....
Athetosis . . . . .	1	....	1	....	....	....
Chorea . . . . .	26	10	14	2	....	....
Epilepsy . . . . .	7	....	3	4	....	....
Hiccough (hysterical) . . . . .	1	1	....	....	....	....
Hysteria . . . . .	14	2	6	4	2	....
Neurasthenia . . . . .	26	1	20	5	....	....
Neurosis, vaso motor . . . . .	1	....	....	....	1	....
PARASITES: FUNGI AND CERTAIN ANIMAL PARASITES						
TAPE WORMS						
Echinococcus of abdomen . . . . .	1	....	....	1	....	....
Tænia saginata . . . . .	10	4	3	3	....	....
Trichiniasis . . . . .	1	....	1	....	....	....
POISONINGS AND INTOXICATIONS						
Alcohol poisoning . . . . .	6	1	4	1	....	....
Lead poisoning . . . . .	6	....	6	....	....	....
Mercury poisoning . . . . .	1	1	....	....	....	....
Morphine poisoning, chronic . . . . .	1	....	....	1	....	....
Pellagra. (Re-entry 7) . . . . .	9	....	8	1	....	....
REPRODUCTIVE ORGANS						
FUNCTIONAL DISTURBANCES INVOLVING MALE AND FEMALE SEXUAL ORGANS						
Dysmenorrhœa . . . . .	1	....	....	1	....	....
Menorrhagia . . . . .	1	....	....	1	....	....
<i>Carried forward</i>	1163	129	606	246	97	85

\* The fatal case was a child aged 3. A partial autopsy allowed of the study of the spinal cord and cervical plexus of nerves. The former was normal; the latter showed the degenerative changes of a neuritis. — H. A. C.



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DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	1163	129	606	246	97	85
FEMALE REPRODUCTIVE ORGANS						
<i>Ligaments, Ovaries, and Tubes</i>						
Salpingitis, acute . . . . .	2	.....	.....	2	.....	.....
Salpingitis, chronic . . . . .	2	.....	2	.....	.....	.....
See TUMOR						
<i>Uterus</i>						
Prolapse of uterus . . . . .	1	.....	1	.....	.....	.....
Endometritis, chronic . . . . .	1	.....	.....	1	.....	.....
Metritis, chronic . . . . .	1	.....	.....	1	.....	.....
See TUMOR						
<i>Vagina</i>						
Prolapse of anterior and posterior vaginal wall (Cystocele and rectocele)	1	.....	.....	1	.....	.....
MALE REPRODUCTIVE ORGANS						
<i>Penis</i>						
Chancroid of penis . . . . .	2	.....	2	.....	.....	.....
<i>Prostate Gland</i>						
Enlargement of prostate . . . . .	1	.....	1	.....	.....	.....
See TUMOR						
<i>Spermatic Cord</i>						
Varicocele . . . . .	1	.....	.....	1	.....	.....
RESPIRATORY SYSTEM						
BRONCHI AND TRACHEA						
Asthma . . . . .	9	.....	8	1	.....	.....
Bronchiectasis . . . . .	2	.....	1	1	.....	.....
Bronchitis, acute . . . . .	13	5	8	.....	.....	.....
Bronchitis, chronic . . . . .	6	1	3	2	.....	.....
LARYNX AND EPIGLOTTIS						
Laryngitis . . . . .	4	3	1	.....	.....	.....
LUNG						
Abscess of lung . . . . .	5	.....	1	2	2	.....
Emphysema, senile pulmonary . . . . .	6	.....	5	1	.....	.....
Hæmoptysis, cause not made out . . . . .	2	.....	.....	2	.....	.....
Infarct of lung . . . . .	2	1	1	.....	.....	.....
<i>Carried forward</i>	1224	139	640	261	99	85

TABLE OF MEDICAL DIAGNOSES

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	1224	139	640	261	99	85
Pneumonia, broncho . . . . .	9	8	1	.....	.....	.....
Pneumonia, lobar . . . . .	62	25	19	2	.....	16
<i>See TUMOR</i>						
NOSE, NASAL PASSAGES, AND ACCESSORY SINUSES						
<i>Nose and Nasal Passages</i>						
Rhinitis . . . . .	1	.....	1	.....	.....	.....
<i>Accessory Sinuses</i>						
Sinusitis, frontal and maxillary . . . . .	1	.....	1	.....	.....	.....
PLEURA						
Pleurisy, acute fibrinous . . . . .	12	3	7	2	.....	.....
Pleurisy, chronic fibrous . . . . .	5	.....	2	2	1	.....
Pleurisy, serofibrinous . . . . .	14	4	9	1	.....	.....
Pleurisy, suppurative (empyema) . . . . .	5	.....	.....	4	1	.....
SKIN, HAIR, AND NAILS						
Dermatitis venenata . . . . .	1	1	.....	.....	.....	.....
Eczema . . . . .	1	.....	1	.....	.....	.....
Erythema of face . . . . .	1	.....	1	.....	.....	.....
Herpes . . . . .	1	.....	.....	.....	1	.....
Mycosis fungoides . . . . .	1	.....	1	.....	.....	.....
<i>See TUMOR</i>						
TUMORS						
BENIGN TUMORS						
Adenoma of thyroid . . . . .	1	.....	1	.....	.....	.....
Dermoid cyst of ovary . . . . .	1	.....	.....	1	.....	.....
Fibromata, multiple skin . . . . .	1	.....	.....	1	.....	.....
Lymphocytoma, neck . . . . .	1	.....	1	.....	.....	.....
Myoma of uterus . . . . .	1	.....	.....	1	.....	.....
Papilloma of rectum (polyp) . . . . .	1	.....	.....	1	.....	.....
MIXED BENIGN TUMORS						
Fibromyoma of uterus . . . . .	1	.....	1	.....	.....	.....
<i>Carried forward</i>	1345	180	686	276	102	101



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DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	1345	180	686	276	102	101
UNKNOWN TUMORS						
Tumor of abdomen . . . . .	2	.....	.....	2	.....	.....
Tumor of mediastinum . . . . .	1	.....	.....	1	.....	.....
Tumor of pylorus . . . . .	1	.....	.....	1	.....	.....
MALIGNANT TUMORS						
Carcinoma of gall duct . . . . .	1	.....	.....	1	.....	.....
Carcinoma of intestine . . . . .	1	.....	.....	1	.....	.....
Carcinoma of liver . . . . .	2	.....	.....	1	.....	1
Carcinoma of lung . . . . .	3	.....	.....	1	.....	2
Carcinoma of œsophagus . . . . .	3	.....	.....	3	.....	.....
Carcinoma of ovary . . . . .	1	.....	.....	1	.....	.....
Carcinoma of pancreas . . . . .	6	.....	.....	5	.....	1
Carcinoma of peritoneal cavity . . . . .	1	.....	.....	.....	1	.....
Carcinoma of prostate . . . . .	2	.....	.....	.....	1	1
Carcinoma of rectum . . . . .	4	.....	.....	2	2	.....
Carcinoma of vertebral column . . . . .	1	.....	.....	1	.....	.....
Carcinoma of stomach . . . . .	22	.....	1	13	5	3
Carcinoma of uterus . . . . .	1	.....	.....	.....	.....	1
Carcinomatosis, general . . . . .	1	.....	.....	1	.....	.....
Glioma and allied tumors of Central Nervous System . . . . .	10	.....	1	9	.....	.....
Hypernephroma of kidney . . . . .	1	.....	.....	1	.....	.....
Sarcoma of retroperitoneal glands . . . . .	2	.....	.....	2	.....	.....
MIXED MALIGNANT TUMORS						
Adenocarcinoma of liver . . . . .	1	.....	.....	1	.....	.....
Fibrosarcoma of retroperitoneal glands . . . . .	1	.....	.....	1	.....	.....
URINARY ORGANS						
BLADDER						
Cystitis . . . . .	12	1	6	2	3	.....
KIDNEY						
Abscess, perinephritic . . . . .	3	.....	.....	3	.....	.....
Albuminuria . . . . .	3	.....	1	1	1	.....
Hematuria, renal . . . . .	2	.....	1	1	.....	.....
Hemoglobinuria, paroxysmal. (Re-entry 4) . . . . .	1	1	.....	.....	.....	.....
Hydronephrosis, intermittent . . . . .	2	.....	2	.....	.....	.....
<i>Carried forward</i>	1436	182	698	331	115	110

TABLE OF MEDICAL DIAGNOSIS

DISEASES AND CONDITIONS	Total	Well	Imp.	Unimp.	Untr.	Dead
<i>Brought forward</i>	1436	182	698	331	115	110
Nephritis, acute . . . . .	2	....	2	....	....	....
Nephritis, chronic . . . . .	124	....	81	23	3	17
Nephritis, chronic interstitial . . . . .	34	....	22	5	1	6
Nephritis, chronic parenchymatous . . . . .	3	....	2	....	....	1
Nephrolithiasis . . . . .	2	....	1	1	....	....
Pyelitis . . . . .	5	....	5	....	....	....
Pyonephrosis . . . . .	1	....	....	1	....	....
<i>See TUMOR</i>						
OBSTETRICAL CONDITIONS, DISEASES, AND INJURIES						
Pregnancy, normal . . . . .	3	....	3	....	....	....
Pregnancy, vomiting of . . . . .	1	....	1	....	....	....
INJURIES						
Fracture of skull . . . . .	1	....	1	....	....	....
Wound of pleura, stab . . . . .	1	....	1	....	....	....
FINAL TOTAL . . . . .	1613	182	817	361	119	134

Re-entries on Syphilis, Tabes Dorsalis, Paralysis of the Insane, etc. . . . 438

Medical cases remaining in wards December 31, 1914 . . . . . 59

In using a statistical report such as the above, it should be kept clearly in mind what sort of data the report presents and the conditions under which it is made. In the first place, it is to be remembered that a given patient who may have several unrelated diseases appears in this table under only one heading. This disease under which the patient is tabulated is the first diagnosis of the several appearing on the history. The attempt is made to place first the more important diagnosis. How well this is carried out depends upon who make the diagnosis and how frequently the importance of arrang-



ing the diagnoses on this plan is forgotten. Furthermore, many cases are of such a nature that it is almost impossible to say which diagnosis under the above plan should come first. In these the element of chance determines in large part whether there are more or fewer cases in a given year under a certain heading.

By whatever method or however well the diagnoses are arranged, the fact remains that such a statistical table must give an inaccurate idea of the frequency of a given condition during the period covered by the report, since if a patient presents four conditions only one can be tabulated in such a report. As examples of this: the report shows 3 patients with acute pericarditis, yet the condition actually occurred in 17 patients; the report shows 2 patients with simple or secondary anæmia, whereas this diagnosis was made on 7 patients; with chlorosis, 3 patients instead of 5; with acute endocarditis, 10 patients instead of 20; with aortic insufficiency alone and combined with other valvular lesions, 29 patients instead of 77; with general arteriosclerosis, 37 instead of 92; and so on. This suffices to show why these statistical tables are of very little value in showing the comparative frequency of many diseased conditions. On the other hand, it is evident that in a number of such diseases as typhoid fever and diabetes mellitus tabulated as above the figures would fairly indicate the frequency of these diseases, inasmuch as this type of diagnosis is likely to be placed first in the diagnoses on the history, since it is apt to be the chief or only disease which brings the patient to the hospital.

However, inaccuracy in this type of statistical report is not alone on the side of underestimation. Errors equally may occur under certain circumstances which lead to the impression that a given disease is more common than is really the case. This concerns the question of readmissions. In most cases the admissions, not the pa-



## REPORT OF THE PHYSICIAN-IN-CHIEF

tients, are tabulated. This is the case in our report except in certain diseases (syphilitic conditions) in which readmissions for treatment occur so regularly that they are noted in the report. However, this latter plan is not followed in all diseases. For example, the report shows 20 patients with pernicious anæmia, whereas the correct number is 16, 4 having been readmissions. If the syphilitic cases had not had the readmissions tabulated separately, the error in overestimations would have been large; in most diseases the error is really not large from this source.

By reason of these two sources of error a statistical report made up as ours has been cannot be used to indicate the relative frequency of diseased conditions. Since, as I have pointed out earlier in this report, this is the use which medical men appear to wish to make of a statistical report, the cause is obvious for what myself and my colleagues have expressed, the feeling that the hospital statistical report was inaccurate and of not much use to the medical man. From this viewpoint a report giving the actual number of cases showing a given lesion would seem of more value to medical men than the form we have used. In such a report groupings of conditions which occur frequently might be tabulated as combined diagnoses. It would not detract from the value of such a type of report to omit many diagnoses of conditions of relatively little importance. In such a report the total number of admissions could not be obtained by adding the number of patients under each head and discharge results could not be given in a way to be of any value, since the result refers to the entire patient, not to the special diagnosis. For example, a patient with congenital heart disease may have pneumonia. The latter disease brings him to the hospital and he goes home well; the congenital heart lesion may never have given him any symptoms, and yet you could not tabulate him as "well" of a congenital mal-



formation. Still both these conditions are of enough interest to appear in the tabulation of diagnoses.

Does a report such as I have used give any adequate idea of the results of the medical treatment of patients? "Yes" and "no" are each appropriate answers. "Yes" in the sense that the report gives the total number of cases improved, unimproved, etc., and a general idea of the types of cases benefited or not. "No" in the sense that no adequate idea is given in many instances by the diagnosis under which the case is tabulated as to why the result was a given one, because when the patient has a number of diseases in combination he must appear in the tables under but one of these. Furthermore, the patient may have been in the hospital too short a time for any treatment to be carried out. This does not appear always in a statistical table. These and other factors vitiate the value of the report as indicating results. I know of no tabular way of presenting satisfactory results. I think the reporting of results in certain special conditions with comments and explanations of methods of treatment, etc., would be of far more use in an annual report, though obviously such would not be in any sense a complete report of service results.

Of what value is our report from the point of view of mortality statistics? Relatively little, because only one of several causes of death appear. A separate report, arranged particularly to show causes of death, would seem more valuable. Especially would this be true if causes of death verified by post-mortem examination were tabulated separately.

The form of statistical report which we have used this year may have a very definite value. Just what its value consists in I do not know. Very likely the hospital administrators find it useful. If so it should be retained for this reason. It has seemed to me worth while to criticise it from a medical standpoint as I have done above in the



hope that my criticisms may arouse an interest in this subject and be productive of helpful suggestions whose adoption will enable us next year to present our work in a form better suited to the needs of medical men and more useful to all who are interested in hospitals.

### SPECIAL STUDIES

A number of problems were being studied by members of the staff during the period covered by this report. Some of these investigations have been completed and published; others have been continued and will be mentioned in subsequent annual reports after the papers describing them have been published.

During 1913 and 1914 the following scientific papers were published by members of the medical staff or by those working under their immediate supervision.

- CHRISTIAN. On the Study of Renal Function: The Relation of Functional Tests to Pathological Diagnosis. Trans. Congr. of Am. Phys. and Surg., 1913, IX, p. 1.
- General Summary of the Significance of Methods of Testing Renal Function. Med. Com. of the Mass. Med. Soc., 1913, XXIV.
- Diuretic Drugs in Acute Experimental Nephritis. Journ. of Am. Med. Assoc., 1913, LXI, p. 267.
- Further Studies of Experimental Nephritis: Some Effects of Diuretics. Trans. of Assoc. of Am. Phys., 1913, XXVIII, p. 198.
- The Effect of Theobromin Sodium Salicylate in Acute Experimental Nephritis, as Measured by the Excretion of Phenolsulphonephthalein. Arch. of Int. Med., 1914, XIV, p. 827.
- CHRISTIAN and O'HARE. A Study of the Therapeutic Value of a Diuretic (Theobromin Sodium Salicylate or Diuretin) in Acute Experimental Nephritis. Arch. of Int. Med., 1913, XI, p. 517.
- Glomerular Lesions in Acute Experimental (Uranium) Nephritis in the Rabbit. Journ. of Med. Research, 1913, XXVIII, p. 227.



- FROTHINGHAM. A Glomerular and Arterial Lesion Produced in Rabbits' Kidneys by Diphtheria Toxin. *Journ. of Med. Research*, 1914, XXV, p. 365.
- Etiology of Arteriosclerosis. *Johns Hopkins Hosp. Bull.* 1913, XXIV, p. 323.
- FROTHINGHAM and DENNY. Experimental Arterial Disease in Rabbits. *Journ. of Med. Research*, 1914, XXVI, p. 277.
- FROTHINGHAM and SMILLIE. The Relation between the Phenol-sulphonephthalein Excretion in the Urine and the Non-protein Nitrogen Content of the Blood in Human Cases. *Arch. of Int. Med.*, 1914, XIV, p. 541.
- FROTHINGHAM, FITZ, FOLIN and DENIS. The Relation between Non-protein Nitrogen Retention and Phenolsulphonephthalein Excretion in Experimental Uranium Nephritis. *Arch. of Int. Med.*, 1913, XII, p. 245.
- PEABODY. Studies on Acidosis and Dyspnoea in Renal and Cardiac Disease. *Arch. of Int. Med.*, 1914, XIV, p. 236.
- BOOTHBY and PEABODY. A Comparison of Methods of Obtaining Alveolar Air. *Arch. of Int. Med.*, 1914, XIII, p. 497.
- WALKER. The Specificity of Cholesterin with Syphilitic Serums and of Cholesterin-Reinforced Heart Antigen in the Wassermann Reaction. *Arch. of Int. Med.*, 1914, XIV, p. 563.
- WALKER and DAWSON. The Effect of Diuretic Drugs on the Life of Animals with Severe Acute Nephritis. *Arch. of Int. Med.*, 1913, XII, p. 171.
- WALKER and SWIFT. A Study of the Addition of Cholesterin to the Alcoholic Extracts of Tissues used for Antigens in the Wassermann Reaction. *Journ. of Exp. Med.*, 1913, XVIII, p. 75.
- WALKER and ZAHN. Ueber die Aufhebung der Blutgerinnung in der Pleurahöhle. *Biochem. Zeitsch.*, 1913, LVIII, p. 130.
- FITZ. Tests for Renal Function Based upon the Selective Excretory Activities of the Kidney. *Med. Com. of the Mass. Med. Soc.*, 1913, XXIV.
- The Immediate Effect of Repeated Doses of Theobromin Sodium Salicylate and Theocin on Renal Function in Acute Experimental Nephritis. *Arch. of Int. Med.*, 1914, XIII, p. 945.



## REPORT OF THE PHYSICIAN-IN-CHIEF

- FITZ. The Value of Tests for Renal Function in Early and Advanced Bright's Disease. *Am. Journ. Med. Sciences*, 1914, CXLVIII, p. 330.
- A Comparison of Bang's Micromethod for Determining Blood Sugar with Bertrand's Method. *Arch. of Int. Med.*, 1914, XIV, p. 133.
- Certain Aspects of the Medical History of Exophthalmic Goitre. *Boston Med. and Surg. Journ.*, 1914, CLXX, p. 675.
- A Case of Diabetes Insipidus. *Arch. of Int. Med.*, 1914, XIV, p. 706.
- FOLIN, DENIS and SMILLIE. Some Observations on "Emotional Glycosuria" in Man. *Journ. of Biol. Chem.*, 1914, XVII.
- O'HARE. Experimental Chronic Nephritis Produced by the Combination of a Chemical (Uranium Nitrate) and Bacteria (*B. Coli Communis*). *Arch. of Int. Med.*, 1913, XII, p. 49.
- SISSON. A Clinical Study of Two Hepatic Functional Tests (Galactose and Phenoltetrachlorphthalein). *Arch. of Int. Med.*, 1914, XIV, p. 804.
- GREY and SISSON. An Example of Dissociated Personality. *Boston Med. and Surg. Journ.*, 1914, CLXXI, p. 365.
- YOUNG. Paroxysmal Hæmoglobinuria. *Journ. of Am. Med. Assoc.*, 1914, LXII, p. 356.

A glance at the above titles will show that part of the studies have been of experimental renal lesions in animals; part of renal disease in man. These two groups of studies have had this in common: they concerned themselves with the function of the kidney under the influence of disease as measured by various tests. In some instances the effect of therapeutic measures on these measures of renal function was investigated. Various methods of determining renal function have been compared in both experimental animals and in man. This type of work is being continued.

What has been done so far indicates that diuretic drugs are of little or no benefit in acute experimental lesions, even may be harmful. It is not unreasonable to infer



that in man with acute nephritis they should be used very cautiously to say the least.

In our study of renal function we have come to feel that some of the functional tests are really necessary to any adequate understanding of cases of nephritis. A number of these tests have been introduced. The application of different ones frequently gives results more or less parallel to each other. Some are easier to carry out than others. Some seem to give information of much less value than others. We have felt that they do not greatly aid in making an accurate anatomical diagnosis, but, what is more important, do help in making a functional diagnosis of assistance in prognosis and treatment. Some give a better indication of the immediate functioning capacity of the kidney, while others are chiefly of value in indicating the recent functional activity of the kidney. We have come to feel that as developed up to the present time the phenolsulphonephthalein test and the estimation of non-proteid nitrogen bodies in the blood are of greatest service in prognosis and in the diagnosis of cases with convulsions, coma, etc., and help in planning treatment. The estimation of the kidney's ability to excrete salt and nitrogen seems of more value in outlining a patient's diet. Diets are being outlined for patients on this basis, but it will take a long time to determine of what real value this part of the work will be; in fact, this is a problem difficult to study in hospital work owing to the difficulty in getting patients to adhere to a diet for weeks and months in their homes and to come back once or twice a year for functional tests. Perhaps the hospital worker may be unable to do more than perfect and simplify the methods of testing and leave the application to the family physician.

Tests of hepatic function have been applied in a number of cases of liver disease, but the results here were of much less value in our judgment than is the case with the tests of renal function.



## REPORT OF THE PHYSICIAN-IN-CHIEF

Other studies concern themselves with the causes and types of dyspnœa. Methods of analysis of alveolar air and the determination of the hydrogen-ion concentration of blood and urine have been investigated with the view of using these in the study of the relation of acidosis to dyspnœa. These methods have been applied in the study of patients with dyspnœa associated with cardiac and renal disease. It has seemed to us that acidosis was not the only important factor in producing the dyspnœa, but that other causes were operative. Some of these are at present under investigation.

The Wassermann reaction for syphilis has been studied both in relation to more satisfactory methods of performing it and in relation to quantitating various factors that enter into it with the view of getting more help in diagnosis and better measures of the results of treatment of cases of syphilis. In relation to treating the cases the accurate quantitative methods applied to blood and spinal fluid have been especially helpful.

A few single cases of disease have been reported, such as diabetes insipidus and paroxysmal hæmoglobinuria, either because they were unusual conditions or because some of the newer methods of investigation had been applied in their study.

In the above I have attempted to indicate in a general way what has been done in the study of such problems as have progressed far enough to have some paper published about them. In a sense this is a report of progress, for other phases of these problems are being studied. Naturally other studies have been undertaken but have not advanced far enough to be reported on. It is planned in subsequent annual reports to give briefly the results of these studies, but to report each time only on such as have been published in some detail in one or the other of the journals.

HENRY A. CHRISTIAN,  
*Physician-in-Chief.*



## Register of Former Members of the Staff

### BAGLEY, JR., CHARLES.

M.D., Univ. of Maryland, 1904; B.A., Loyola, 1911; Asst. Res. Phys., Univ. Hospital, Baltimore, 1904-05; Asst. Res. Surg., Univ. Hospital, Baltimore, 1905-06; Med. Supt., Hebrew Hosp., Baltimore, 1906-10; Visiting Surg., Hebrew Hosp., Baltimore, 1910; Consulting Surg., Baltimore Eye, Ear & Throat, 1910; Capt., Med. Corps. 5 Inf. Md. Nat. Guard; Asst. Res. Surg., Peter Bent Brigham Hosp., Jan. 1, 1913-Jan. 1, 1914; Visiting Surg., Church Home & Infirmary, Baltimore.

### BENET, GEORGE.

Student for 3 yrs., Univ. of S. C., and Univ. of Va.; M.D., Harvard, 1913; Med. House Officer, Peter Bent Brigham Hosp., June 1, 1913-July 1, 1914; St. Luke's Hosp., Chicago; American Ambulance Hosp., Paris, France.

### DAWSON, ROGER PAUL.

A.B., Holy Cross College, 1907; M.D., Harvard, 1911; Med. House Officer, Carney Hosp., Boston, Apr. 1911-Aug. 1912; Med. House Officer, Peter Bent Brigham Hosp., Nov. 1, 1912-Nov. 1, 1913; Fellow in Med., Harvard, 1914-15; Phys., Med. O.P.D., Carney Hosp., Boston; Asst. Phys., Med. O.P.D., Boston Dispensary.

### DENNY, GEORGE PARKMAN.

A.B., Harvard, 1909; M.D., Harvard, 1913; Med. House Officer, Peter Bent Brigham Hosp., June 1, 1913-July 1, 1914; Research in Physiological Lab., Johns Hopkins.

### FORBES, HENRY STONE.

A.B., Harvard, 1905; Philippine Islands, 1905-06; Harvard (Graduate School), 1906-07; M.D., Harvard, 1911; Med. House Officer, Boston City Hosp., 1911-13; Med. House Officer, Peter Bent Brigham Hosp., June 1, 1913-Nov. 1, 1913; Phys. for Men, Infirmary, Univ. of California.

### HORRAX, GILBERT.

A.B., Williams, 1909; M.D., Johns Hopkins, 1913; Surg. House Officer, Peter Bent Brigham Hosp., July 1, 1913-Nov. 1, 1914; Arthur Tracy Cabot Fellow, in charge of Laboratory of Surg. Research, Harvard.

### LAMSON, PAUL DUDLEY.

A.B., Harvard, 1905; M.D., Harvard, 1911; Med. House Officer, Mass. Gen'l Hosp., Mar. 1909-Aug. 1910; Pharm. Lab., Univ. of Wurzburg, Germany, 1911-13; Lect. Asst. in Pharmacology, Univ. of Wurzburg, 1912-13; Pharm. Lab., Univ. College, London Univ. and Cardiac Dept. of London Hosp., April to Aug., 1913; Sheldon Traveling Fellowship, 1911-13; Asst. Res. Phys., Peter Bent Brigham Hosp., Oct. 1, 1913-Oct. 15, 1914; Asst. in Exp. Therapeutics, Johns Hopkins, 1914-15; Assoc. in Exp. Therapeutics, Johns Hopkins.

## REGISTER OF FORMER MEMBERS OF THE STAFF

### LIEB, CLARENCE WILLIAM.

A.B., Colorado Col., 1908; A.M., Colorado Col., 1909; M.D., Harvard, 1914; Pathol. House Officer, Peter Bent Brigham Hosp., Apr. 1, 1914-June 6, 1914; Physician, Denver, Colo.

### MORTON, JOHN JAMIESON.

A.B., Amherst, 1907; M.D., Johns Hopkins, 1913; Surg. House Officer, Peter Bent Brigham Hosp., Mar. 1, 1913-July 1, 1914; Fellow in Pathol., Rockefeller Inst., N. Y.

### RAND, CARL WHEELER.

A.B., Williams, 1908; A.M., Williams, 1909; M.D., Johns Hopkins, 1912; Res. House Officer, Johns Hopkins Hosp., 1912-13; Asst. Res. Surg., Peter Bent Brigham Hosp., Oct. 1, 1913-Nov. 1, 1914; House Surg., Mercy Hosp., Chicago.

### RHEA, LAWRENCE, JOSEPH.

B.S., Univ. of Texas, 1901; M.D., Johns Hopkins, 1905; House Officer in Pathol., Boston City Hosp., 1906-07; 2d Asst. in Pathol., Boston City Hosp., Jan. 1907-Aug. 1907; 1st Asst. in Pathol., Boston City Hosp., Aug. 1907-Sept. 1908; Asst. Visiting Pathol., Boston City Hosp., 1908-09; Asst. in Pathol., Harvard, 1908-09; Instr. in Pathol., Harvard, 1909-10; Asst. Pathol., Boston City Hosp., 1909-10; Director of Pathol. Laboratory and Pathol., Montreal Gen'l Hosp., 1910-12; Lect. in Pathol., McGill Univ., 1910-11; Asst. Prof. of Pathol., McGill Univ., 1911-12; Res. Pathol., Peter Bent Brigham Hosp., July 1, 1912-Oct. 1, 1913; Director of the Pathol. Laboratory, Montreal Gen'l Hosp.; McGill General Hosp., Overseas Contingent, France.

### SMILLIE, WILSON GEORGE.

A.B., Colorado, 1908; M.D., Harvard, 1912; Med. House Officer, Peter Bent Brigham Hosp., Nov. 1, 1912-Mar. 1, 1914; Asst. Res. Phys., Peter Bent Brigham Hosp., Mar. 1, 1914-Sept. 1, 1914; Asst. Instr., Dept of Preventive Med., Harvard, 1914-15; Instr., Dept of Preventive Med., Harvard.

### THOMPSON, CHARLES BAKER.

A.B., Haverford, 1909; M.D., Johns Hopkins, 1913; Med. House Officer, Peter Bent Brigham Hosp., Nov. 1, 1913-Nov. 1, 1914; 2d Asst. Res., Phipps Psychiatric Clinic, Johns Hopkins Hosp., 1914-15; 1st Asst. Res., Phipps Psychiatric Clinic, Johns Hopkins Hosp.

### WEGEFARTH, PAUL.

A.B., Johns Hopkins, 1908; Student of Med., Strassburg & Berlin, 1909-11; M.D., Johns Hopkins, 1912; Surg. House Officer, Peter Bent Brigham Hosp., Nov. 1, 1912-Mar. 1, 1914; Asst. Res. Phys., Church Home & Infirmary, Baltimore, 1914; Phys., San Diego, California.



# Officers of the Institution

COMPILED UP TO JANUARY 1, 1915

## *President*

ALEXANDER COCHRANE

## *Treasurer*

EDMUND D. CODMAN

## *Secretary*

LAURENCE H. H. JOHNSON

## *Members of the Corporation*

May 24, 1902 . .	ALEXANDER COCHRANE . . . .	40 Central St.,	Boston
May 24, 1902 . .	EDMUND D. CODMAN . . . . .	27 Kilby St.,	Boston
May 24, 1902 . .	EBEN S. DRAPER (deceased April 9, 1914)		
June 16, 1909 . .	*IRVIN McD. GARFIELD . . . .	30 State St.,	Boston
Oct. 2, 1902 . .	AUGUSTUS HEMENWAY . . . .	53 State St.,	Boston
May 24, 1902 . .	HENRY S. HOWE . . . . .	89 Franklin St.,	Boston
May 24, 1902 . .	WALTER HUNNEWELL . . . .	87 Milk St.,	Boston
May 24, 1902 . .	LAURENCE H. H. JOHNSON . .	27 Kilby St.,	Boston
June 16, 1909 . .	*JOHN P. REYNOLDS . . . . .	30 State St.,	Boston
May 24, 1902 . .	WILLIAM R. TRASK . . . . .	40 State St.,	Boston

## STANDING COMMITTEES OF THE TRUSTEES

### *Building Committee*

JOHN P. REYNOLDS, *Chairman*

ALEXANDER COCHRANE

WALTER HUNNEWELL

L. H. H. JOHNSON

HERBERT B. HOWARD, M.D., *Secretary*

### *Auditing Committee*

WILLIAM ROPES TRASK

\* Appointed by the Governor of the Commonwealth under an Act approved May 8, 1909.

## OFFICERS OF THE INSTITUTION

### VISITING COMMITTEES

#### *Visiting Committees for 1914*

ALEXANDER COCHRANE . . . . .	January
EBEN S. DRAPER . . . . .	February
JOHN P. REYNOLDS . . . . .	March
HENRY S. HOWE . . . . .	April
L. H. H. JOHNSON . . . . .	May
WALTER HUNNEWELL . . . . .	June
EDMUND D. CODMAN . . . . .	July
WILLIAM R. TRASK . . . . .	August
IRVIN McD. GARFIELD . . . . .	September
IRVIN McD. GARFIELD . . . . .	October
JOHN P. REYNOLDS . . . . .	November
AUGUSTUS HEMENWAY . . . . .	December

#### *Visiting Committees for 1915*

ALEXANDER COCHRANE . . . . .	January
ALEXANDER COCHRANE . . . . .	February
HENRY S. HOWE . . . . .	March
JOHN P. REYNOLDS . . . . .	April
L. H. H. JOHNSON . . . . .	May
WALTER HUNNEWELL . . . . .	June
EDMUND D. CODMAN . . . . .	July
WILLIAM R. TRASK . . . . .	August
IRVIN McD. GARFIELD . . . . .	September
AUGUSTUS HEMENWAY . . . . .	December

### MEDICAL ADVISER TO CORPORATION

#### *Appointed*

Feb. 17, 1910	FRANCIS T. HARRINGTON, M.D.(deceased June 8, 1914)
July 9, 1914	FREDERICK C. SHATTUCK, M.D.

### ADMINISTRATIVE DEPARTMENT

#### *Service began*

#### *Superintendent*

May 1, 1908	HERBERT B. HOWARD, M.D.
-------------	-------------------------

#### *Assistant Superintendents*

Oct. 19, 1912	LOUIS H. BURLINGHAM, M.D., <i>Curator</i>
Aug. 1, 1913	THOMAS A. DEVAN, M.D.
May 1, 1914	S. SHELTON WATKINS, M.D.

### BOARD OF CONSULTATION

Mar. 25, 1912	WALTER B. CANNON, M.D., <i>Consulting Physiologist</i>
Mar. 25, 1912	WILLIAM T. COUNCILMAN, M.D., <i>Consulting Pathologist</i> (Resigned Aug. 14, 1913)
Mar. 25, 1912	OTTO FOLIN, Ph.D., <i>Consulting Chemist</i>



## OFFICERS OF THE INSTITUTION

### MEDICAL DEPARTMENT

*Service began*

May 1, 1912	HENRY A. CHRISTIAN, M.D., <i>Physician-in-Chief</i>
July 1, 1912	CHANNING FROTHINGHAM, JR., M.D., <i>Physician</i>
Dec. 12, 1912	HARRY W. GOODALL, M.D., <i>Associate in Medicine</i>
Dec. 12, 1912	NATHANIEL K. WOOD, M.D., <i>Associate in Medicine</i>
Nov. 1, 1912	FRANCIS W. PEABODY, M.D., <i>Resident Physician</i>
Mar. 1, 1913	I. CHANDLER WALKER, M.D. { <i>Assistant Resident Physician</i> (to Mar. 1, 1914) <i>Acting Resident Physician</i>
July 1, 1913	REGINALD FITZ, M.D., <i>Assistant Resident Physician</i>
Oct. 1, 1913	PAUL D. LAMSON, M.D., <i>Assistant Resident Physician</i> (Resigned Oct. 15, 1914)
Mar. 1, 1914	WILSON G. SMILLIE, M.D., <i>Assistant Resident Physician</i> (to Sept. 1, 1914)
Nov. 1, 1914	FRANCIS G. BLAKE, M.D., <i>Assistant Resident Physician</i>
Nov. 14- Nov. 21, 1913	} WILLIAM S. THAYER, M.D., <i>Physician pro tempore</i>
Oct. 26- Nov. 2, 1914	
	} THOMAS LEWIS, M.D., <i>Physician pro tempore</i>

### SURGICAL DEPARTMENT

Sept. 1, 1912	HARVEY CUSHING, M.D., <i>Surgeon-in-Chief</i>
Oct. 1, 1912	DAVID CHEEVER, M.D., <i>Surgeon</i>
May 1, 1912	JOHN HOMANS, M.D., <i>Surgeon</i>
Nov. 17, 1914	HENRY M. CHASE, M.D., <i>Associate in Surgery</i>
Nov. 17, 1914	HILBERT F. DAY, M.D., <i>Associate in Surgery</i>
Sept. 1, 1912	EMIL GOETSCH, M.D., <i>Resident Surgeon</i>
Sept. 1, 1912	CONRAD JACOBSON, M.D., <i>Assistant Resident Surgeon</i>
Jan. 1, 1913	CHARLES BAGLEY, M.D., <i>Assistant Resident Surgeon</i> (Completed service Jan. 1, 1914)
Oct. 1, 1913	CARL W. RAND, M.D., <i>Assistant Resident Surgeon</i> (Completed service Nov. 1, 1914)
Feb. 12, 1914	ERNEST G. GREY, M.D., <i>Assistant Resident Surgeon</i>
Nov. 1, 1914	EDWARD B. TOWNE, M.D., <i>Assistant Resident Surgeon</i>
Dec. 11, 1913	WALTER M. BOOTHBY, M.D., <i>Supervisor of Anæsthesia</i>

### PATHOLOGICAL DEPARTMENT

Aug. 14, 1913	WILLIAM T. COUNCILMAN, M.D., <i>Pathologist</i>
July 1, 1912	LAWRENCE J. RHEA, M.D., <i>Resident Pathologist</i> (Resigned Oct. 1, 1913)
Mar. 1, 1914	WARREN R. SISSON, M.D., <i>Resident Pathologist</i>

### ROENTGENOLOGIST

Jan. 1, 1913	ALFRED LUGER, M.D., absent on leave beginning June 1, 1914
June 1, 1914	GLADYS L. CARR, M. D., <i>Pro tempore</i>

## OFFICERS OF THE INSTITUTION

### MEDICAL HOUSE OFFICERS

<i>Service began</i>		<i>Service completed</i>
Nov. 1, 1912 . . .	I. CHANDLER WALKER, M.D. . . . .	Mar. 1, 1913
Nov. 1, 1912 . . .	REGINALD FITZ, M.D. . . . .	July 1, 1913
Nov. 1, 1912 . . .	ROGER P. DAWSON, M.D. . . . .	Nov. 1, 1913
Nov. 1, 1912 . . .	WILSON G. SMILLIE, M.D. . . . .	Mar. 1, 1914
Mar. 1, 1913 . . .	WARREN R. SISSON, M.D. . . . .	Mar. 1, 1914
June 1, 1913 . . .	HENRY S. FORBES, M.D. . . . .	Nov. 1, 1913
June 1, 1913 . . .	GEORGE P. DENNY, M.D. . . . .	July 1, 1914
June 1, 1913 . . .	GEORGE BENET, M.D. . . . .	July 1, 1914
July 1, 1913 . . .	FRANCIS G. BLAKE, M.D. . . . .	Nov. 1, 1914
July 1, 1913 . . .	WILLIAM W. YOUNG, M.D. . . . .	Left, Feb. 14, 1914
Nov. 1, 1913 . . .	CHARLES B. THOMPSON, M.D. . . . .	Nov. 1, 1914
<i>Service will end</i>		
Nov. 1, 1913 . . .	DAVID A. HALLER, M.D. . . . .	Mar. 1, 1915
Mar. 1, 1914 . . .	FLOYD F. HATCH, M.D. . . . .	Mar. 1, 1915
Mar. 1, 1914 . . .	ROSWELL T. PETTIT, M.D. . . . .	July 1, 1915
Mar. 1, 1914 . . .	CECIL K. DRINKER, M.D. . . . .	July 1, 1915
July 1, 1914 . . .	WARD H. COOK, M.D. . . . .	Nov. 1, 1915
July 1, 1914 . . .	ALAN C. WOODS, M.D. . . . .	Nov. 1, 1915
Nov. 1, 1914 . . .	HORACE GRAY, M.D. . . . .	Mar. 1, 1916
Nov. 1, 1914 . . .	JOHN A. P. MILLET, M.D. . . . .	Mar. 1, 1916

#### *Associate in Medicine*

July 1, 1914 . . .	SAMUEL A. LEVINE, M.D. . . . .	July 1, 1915
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### SURGICAL HOUSE OFFICERS

<i>Service began</i>		<i>Service completed</i>
Nov. 1, 1912 . . .	ERNEST G. GREY, M.D. . . . .	Feb. 12, 1914
Nov. 1, 1912 . . .	PAUL WEGEFARTH, M.D. . . . .	Mar. 1, 1914
Mar. 1, 1913 . . .	STEPHEN A. COBB, JR., M.D. . . . .	Left, Feb. 28, 1914
Mar. 1, 1913 . . .	JOHN J. MORTON, M.D. . . . .	July 1, 1914
July 1, 1913 . . .	EDWARD B. TOWNE, M.D. . . . .	Nov. 1, 1914
July 1, 1913 . . .	GILBERT HORRAX, M.D. . . . .	Nov. 1, 1914
<i>Service will end</i>		
Nov. 1, 1913 . . .	ELLIOTT C. CUTLER, M.D. . . . .	Mar. 1, 1915
Nov. 1, 1913 . . .	SAMUEL H. HURWITZ, M.D. . . . .	Mar. 1, 1915
Mar. 1, 1914 . . .	STANLEY COBB, M.D. . . . .	July 1, 1915
Mar. 1, 1914 . . .	EDWIN P. LEHMAN, M.D. . . . .	July 1, 1915
July 1, 1914 . . .	MARIUS N. SMITH-PETERSEN, M.D. . . . .	Nov. 1, 1915
July 1, 1914 . . .	WILLIAM D. JACK, M.D. . . . .	Nov. 1, 1915
Nov. 1, 1914 . . .	SAMUEL C. HARVEY, M.D. . . . .	Mar. 1, 1916
Nov. 1, 1914 . . .	JULIUS B. BOEHM, M.D. . . . .	Mar. 1, 1916

### PATHOLOGICAL HOUSE OFFICERS

April 1, 1914 . . .	CLARENCE W. LIEB, M.D. . . . .	(Resigned June 6, 1914)
July 1, 1914 . . .	JAMES L. STODDARD, M.D. . . . .	July 1, 1915



## OFFICERS OF THE INSTITUTION

### *Superintendent of Nurses and Principal of the School of Nursing*

#### *Service began*

July 1, 1912 . . . . . CARRIE M. HALL, R.N.

### *Assistant Superintendent of Nurses*

Oct. 1, 1912 . . . . . SALLY M. JOHNSON, R.N.

### *Instructor in Theory*

Oct. 1, 1912 . . . . . SUSAN A. WATSON, R.N.

### *Instructor in Practice*

Sept. 2, 1913 . . . . . JESSIE A. CLARKE, R.N.

### *Supervisor*

Dec. 2, 1912 . . . . . LEONE N. IVERS, R.N.

### *Night Supervisor*

May 1, 1913 . . . . . HANNA S. PETERSON, R.N.

### *Social Service Worker*

Aug. 17, 1914. . . . . ALICE M. CHENEY, R.N.

### *Dietetian*

Dec. 10, 1912. . . . . E. GRACE McCULLOUGH

### *Apothecary*

Dec. 2, 1912 . . . . . HARRY H. COMAN

### *Photographer*

April 1, 1913 . . . . . ERNEST E. FEWKES

### *Clerk*

April 29, 1912 . . . . . LIDA E. CRAWFORD

### *Housekeeper*

Nov. 1, 1912 . . . . . ELIZABETH M. PACKARD

### *Chief Engineer*

Oct. 21, 1911. . . . . JOHN A. AITKEN

