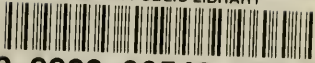


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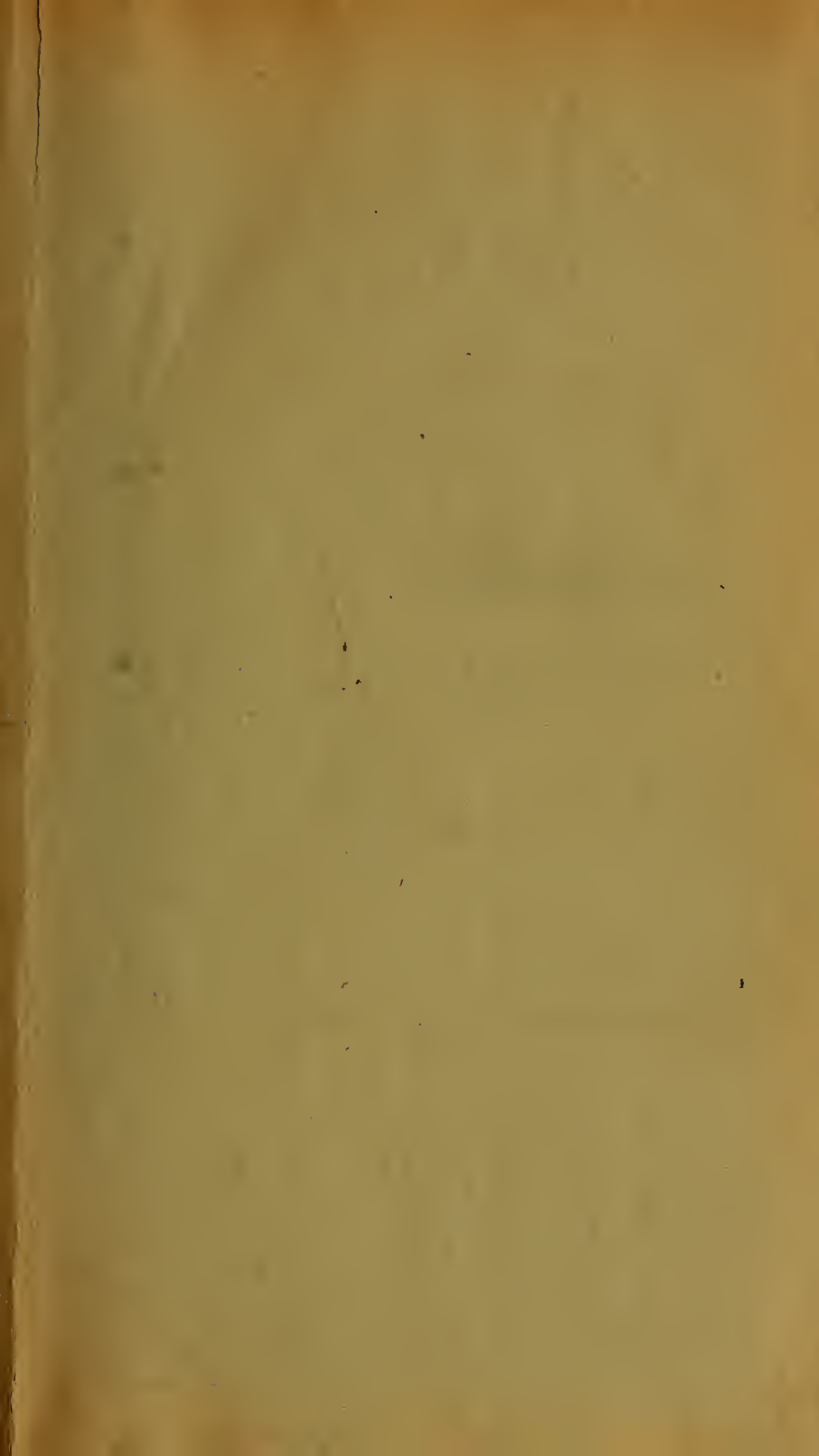
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ANNUAL REPORT
OF THE
HOSPITAL DEPARTMENT
FOR THE YEAR ENDING DECEMBER 31, 1929.

REPORT OF THE TRUSTEES.

BOSTON, January 6, 1930.

HON. MALCOLM E. NICHOLS,
Mayor of the City of Boston.

SIR,— In compliance with the ordinances, the trustees of the Boston City Hospital present the following report of its condition for the year ending December 31, 1929.

This is the sixty-sixth annual report of the Hospital Department which consists of the Main Hospital, the South Department for contagious diseases, the Sanatorium Division, the Haymarket Square Relief Station, the East Boston Relief Station, the Convalescent Home in Dorchester and the West Department. The report of the Sanatorium Division is published in a separate volume.

The Board of Trustees was organized on May 6, 1929, by the election of Mr. Joseph P. Manning as president and Dr. Henry S. Rowen as secretary.

Joseph P. Manning
Secretary

Mr. Alexander Whiteside, who accepted the appointment as Hospital Trustee to complete the unexpired term of Mr. Thomas A. Forsyth (deceased), resigned in April, 1929. The position was filled by the appointment of Mr. Karl Adams for the term ending April 30, 1934.

EXPENDITURES.

The total expenditures for all departments of the Hospital, excepting the Sanatorium Division, during the fiscal year were \$2,612,369.44. Of the total operating expenses \$1,924,716.60 was expended upon the hospital proper and its subdivisions; \$202,323.55 on account of the Out-Patient Department; \$311,564.80 on account of the South Department; \$89,133.66 on account of the Haymarket Square Relief Station; \$45,977.25 on account of the East Boston Relief Station; \$21,994.45 for the Convalescent Home and \$16,659.13 for the West Department. Of the amount spent on Pathological Laboratory, \$47,864.60, \$41,163.56 is included in the hospital proper expenditures, \$1,914.58 in the Out-Patient Department, and \$4,786.46 in the South Department expenditures. The entire amount spent on the Thorndike Memorial Laboratory, \$77,466.58, is included in the hospital proper expenditures. Of the total amount spent on the X-Ray and Photographic Department, \$69,672.32, \$34,139.44 is charged to the hospital proper and \$35,532.88 to the Out-Patient Department. Of the total amount spent on the Department of Physical Therapeutics, \$20,620.92, \$2,886.93 is charged to the hospital proper and \$17,733.99 to the Out-Patient Department. Of the amount spent on the Department of Immunology, \$5,896.09, \$117.92 is charged to the hospital proper and \$5,778.17 to the Out-Patient Department. Of the amount spent on the Clinical Laboratory, \$10,343.19, \$6,826.51 is charged to the hospital proper and \$3,516.68 to the Out-Patient Department. Of the amount spent in the Blood Laboratory, \$2,652.85, \$1,697.82 is charged to the hospital proper and \$995.03 to the Out-Patient Department. Of the amount spent on the Department of Oral Surgery, \$1,668.16, \$417.04 is charged to the hospital proper and \$1,251.12 to the Out-Patient Department. Of the amount spent on the Department of Social Work, \$23,816, \$11,908 is

charged to the hospital proper, \$11,550.76 to the Out-Patient Department and \$357.24 to the South Department. Of the amount spent in ascertaining the settlement of patients, \$1,961.42, \$1,824.12 was spent on the hospital proper and \$137.30 on the South Department.

In Table No. 2 the expenditures on the hospital proper and the South Department are combined under the title "Main Hospital."

The methods of obtaining the per capita cost in the various departments are shown in Tables No. 1 and No. 2 of the Superintendent's report. From the total operating expenses are deducted the increases in stock on hand at the end of the year over that at the beginning of the year (or the decreases are added, as the case may require). There is also deducted the cost of permanent improvements and other extraordinary expenditures (furnishing new House Officers' Building, and making alterations to the building itself; retubing boilers; grading and building catch-basins on Hospital grounds; resurfacing kitchen service rooms in Maternity Building; alterations to the South Department Laundry; installing new furnaces also a new bath room in Convalescent Home; installing doctors' paging system; additional radiation in Wards B, C, D and F, G, H; a 40-drop annunciator for switch board; automatic changes in Maternity Building for present battery group; electric main and fixtures, gas lines, sinks, slop hoppers, still and sterilizer in new laboratories; also new casement window in morgue). This gives the amount properly chargeable to maintenance. This cost of maintenance is divided by the number of days' board given ward patients or the number of visits of out-patients, to obtain the per capita cost per patient.

The per capita cost at the hospital proper was \$5.18 per day for ward patients; at the South Department, \$5.37, but taking the hospital proper and the South Department together, the per capita cost per ward patient was \$5.21. At the Convalescent Home, the per capita cost per patient was \$4.54 per day. The cost of out-patients per visit was 69 cents at the hospital proper, \$2.77 at the Haymarket Square Relief Station and \$1.65 at the East Boston Relief Station. The cost of uncooked food supplies for the hospital in all its departments has been \$4.60 per person per week or 66 cents per day.

PAYING PATIENTS.

During the past year there has been collected for the care and treatment of patients of all classes excepting those at the Sanatorium Division the sum of \$197,985.61, itemized as follows: There was received from the Commonwealth of Massachusetts for the board of patients at the hospital proper, \$26,250.00; from various cities and towns for hospital proper, \$16,171.16; collected at the Superintendent's Office, on account of private room, ward and Out-Patient Department paying patients, \$115,703.96; of which \$9,624.45 was from insurance cases; for board of paying patients at the South Department, \$4,937.33; on account of ward and Out-Patient Department paying patients at the Haymarket Square Relief Station, \$3,903.31, of which \$1,882.44 was from insurance cases; on account of ward and Out-Patient Department paying patients at the East Boston Relief Station, \$171.07, \$143.29 of this being from insurance cases. There was also collected in all departments \$4,825.00 on account of insurance cases, \$1,910.00 of this being from X-ray cases, \$2,875.00 being from clinical record fees, and \$40.00 being from Physiotherapy cases.

There has also been collected for the hospital by the Health Department, for the care of contagious cases at the South Department, and paid to the City Collector the additional sum of \$26,023.78. \$92,767.45 of the income from paying patients was collected by the Overseers of the Public Welfare. The revenue was increased \$12,241.00 by X-ray charges; it was increased \$9,185.45 by physiotherapy charges. It was also increased \$41,687.20 by out-patient treatment, removal of tonsils and adenoids, electro-cardiograms, skin treatment, issuing of *ex-officio* statements, fees for insulin, gold sodium treatment, record fees and payment of nurses' board.

A table showing the revenue received from paying patients, interest on trust funds, sale of old material and other sources, will be found on page 110 of the Superintendent's report.

The following is a tabular statement of the income from paying patients:

	Hospital Proper.	South Department.	Haymarket Square Relief Station.	East Boston Relief Station.	All Departments.	Totals.
Collected at the Hospital:						
From the state	\$26,250 00					\$26,250 00
From cities and towns	16,171 16					16,171 16
From ward and private patients:						
Miscellaneous cases	86,881 06	\$4,937 33	\$1,742 87	\$27 78		93,589 04
X-ray cases	10,053 00		278 00			10,331 00
Physiotherapy cases	9,145 45					9,145 45
From insurance cases:						
House cases	8,973 45		292 44	2 29		9,268 18
Out-patient cases	651 00		1,590 00	141 00		2,382 00
X-ray cases					\$1,910 00	1,910 00
Record fees					2,875 00	2,875 00
Physiotherapy					40 00	40 00
Totals	\$158,125 12	\$4,937 33	\$3,903 31	\$171 07	\$4,825 00	\$171,961 83
Collected by City Collector for contagious cases		26,023 78				26,023 78
Totals	\$158,125 12	\$30,961 11	\$3,903 31	\$171 07	\$4,825 00	\$197,985 61

HOSPITAL BUILDINGS, PLANS, ETC.

Two appropriations, each \$180,000, have been granted for plans, sketches, architects' fees, etc., for new buildings. The money expended from these appropriations have been used in connection with alterations to Nurses' Home and to Power Plant, also for new Surgical Building, House Officers' Building and Medical Pavilion. A statement of this appropriation follows:

Original appropriation	\$180,000 00
Additional appropriation July 23, 1929	180,000 00
	<hr/>
	\$360,000 00
Expended through December 31, 1929	179,735 54
	<hr/>
Balance on hand January 1, 1930	<u>\$180,264 46</u>

NEW SURGICAL BUILDING.

Account of the appropriation granted for erection of the Surgical Building which was opened in 1928:

Appropriation		\$679,500 00
Expenditures		634,209 31
		<u>45,290 69</u>
Transferred to House Officers' Building	\$1,576 90	
Loan Order rescinded	34,500 00	
	<u>36,076 90</u>	
On hand January 1, 1930		<u>\$9,213 79</u>

SURGICAL BUILDING, FURNISHING AND EQUIPPING.

Balance on hand January 1, 1929	\$12,836 83
Transferred to Power Plant, additions and alterations	7,166 98
	<u>\$5,669 85</u>
Expended in 1929	3,559 27
	<u>\$2,110 58</u>

RESIDENCE FOR HOUSE OFFICERS.

The House Officers' Building, opened early in the year 1929, is described in the 1928 Annual Report. Its finances stand as follows:

On hand January 1, 1929	\$79,489 83
Expenditures — 1929	<u>79,489 83</u>

FURNISHING HOUSE OFFICERS' RESIDENCE.

The cost of furnishing the House Officers' Residence was \$27,152.53. To expedite matters, this money was paid from the maintenance appropriation, as is shown in Table No. 3.

MEDICAL PAVILION.

The balance on hand in the appropriation: alterations to Medical Pavilion (Wards F, G and H) was \$17,289.53 on January 1, 1929. To this was added on March 5, 1929, an appropriation of \$749,000 (\$278,000 of this being inside the debt limit and \$471,000 being out-

side the debt limit). The appropriation then totaled \$766,289.53. Expenditures on the new Medical Pavilion during 1929 amounted to \$319,808.75 leaving a balance on hand January 1, 1930, of \$446,480.78. It is expected that this building will be completed by the first of May, 1930.

POWER PLANT, ADDITIONS AND ALTERATIONS.

On January 1, 1929, there was a balance of \$42,829.82 in the appropriation for additions and alterations to the power plant. On February 19, \$7,166.98 was transferred to this appropriation from Surgical Building, furnishing and equipping, so making a total of \$49,996.80. This amount was expended, and the contract of M. S. Kelliher Company completed in March, 1929.

POWER PLANT IMPROVEMENTS.

On October 23, 1929, an appropriation of \$43,000 was granted for power plant improvements. Contract was made with Ames Iron Works for installation of Engine Generator Set in power plant for the sum of \$37,580 plus architects' fees. During 1929, \$400 was paid out from the appropriation, leaving a balance of \$42,600 on January 1, 1930.

Since 1923, the Hospital power house has furnished steam to the adjoining Boston Water Department Building and the Water Department has paid its proportionate part of cost of fuel oil used at the hospital power plant. During 1929, the Water Department paid \$3,290.30 for this.

REMODELING OLD WARD N BUILDING.

The following appropriation has been granted:

Appropriation (inside debt limit) October 23, 1929	\$15,000 00
Appropriation (outside debt limit) October 23, 1929	15,000 00
	<hr/>
On hand January 1, 1930	<u>\$30,000 00</u>

Plans are now under way but not yet advertised.

SHUMAN MEMORIAL BUILDING FOR CONVALESCENT MEN.

To the \$100,000 bequeathed the hospital by the late Abraham Shuman, \$2,174.18 interest has been added

up to January 1, 1930, so making the amount available on that date, \$102,174.18.

OUT-PATIENT DEPARTMENT.

The routine work of the Out-Patient Department has continued as before with the same high standard of efficiency which was established with the opening of the new building in 1924 and which has been maintained ever since.

The work has steadily increased since 1924, as may be readily seen by the following statistics:

1925 average number of visits	. . . . .	815
1926 average number of visits	. . . . .	866
1927 average number of visits	. . . . .	902
1928 average number of visits	. . . . .	965
1929 average number of visits	. . . . .	974

On June 20, 1929, a special clinic for the injection of varicose veins was organized. This clinic has been functioning as a part of the surgical clinic but it had grown so large that it was considered advisable to form a separate clinic. On Monday and Thursday male cases are seen, and on Tuesday and Friday female cases are seen. It is an appointment clinic, the time for appointments being from twelve to one.

On June 14, 1929, a female urological clinic was organized with Doctor Riley as chief. It was thought that there was great need of a clinic of this sort for female cases. They are seen by appointment on every Tuesday in the surgical clinic. The appointments start at eleven o'clock.

On October 18, 1929, the thyroid clinic was organized. It had previously been functioning on the medical floor with Doctor Cochrane as chief. It was transferred to the sixth floor, and given an enlarged staff and a secretary. It is an appointment clinic and functions every Friday morning. The appointments start at eleven o'clock.

In compiling the statistics of the Out-Patient Department for the year 1929 we were able to give not only the number of visits made to the Out-Patient Department and the number of admissions, but also the number of persons who have visited the clinics. The secretary in each clinic gives in her report daily to the record room. That contains among the statistics the number of persons

who have been in the clinic for the first time during the fiscal year. These figures are kept on file in the record room and the result at the end of the year signifies the number of persons who have visited the clinic. We are thus able to show the average of visits per patient. For instance, in the metabolism clinic 4,299 visits were made by 537 people, or eight visits were made per patient. A much better estimate of the work of a clinic may be reached when the number of visits per patient can be determined. The number of visits to a clinic does not signify very much unless you have the number of people who have made those visits.

MEDICAL DEPARTMENT.

The Medical Services treated a total of 7,153 house patients and 11,696 out-patients during the year 1929.

The chief activities in the past year on the Second Medical Service have been metabolic studies carried on by Doctors Ohler and Ullian; a study of the effect of tonsillectomy during the active stage of rheumatic fever by Doctor Finland and Doctor Robey; and the continuance of work in the treatment of lobar-pneumonia with Felton's serum.

The activities of the Fourth Medical Service have continued in a similar manner as heretofore. Every member of the visiting and house officer staff has given lavishly of his time and done splendid work. The result of having two visiting physicians on duty each day has lead undoubtedly to better work, better care of patients and opportunity for calm deliberation.

The junction of the second service with the fourth service, so that both are under the jurisdiction of the chief of the fourth service, appears to be very agreeable to all concerned. Undoubtedly it has enabled better teaching and has been a factor that has led more Harvard Medical students to choose to work at the Boston City Hospital than at either of the other two large hospitals. Students stimulate physicians and the interest in the former has brought most pleasing contact between the physicians of both services, to the advantage of patients, students and the visiting staff.

Early in January, the service, the medical profession and many friends suffered a great loss and were plunged into deep sorrow by the death of Dr. Harold Hogue, one of the house officers, a brilliant physician, who undoubt-

edly would have enhanced medical art and science and have done so much for the sake of others if pneumonia had been banished from this earth.

SURGICAL DEPARTMENT.

In order to care adequately for the surgical requirements of the citizens of Boston, the number of surgical services has increased from the original three general services to five such services, with the sixth, as the specialized Bone and Joint Division, and a Neuro-Surgical Service is about to be formed.

Dr. Frederic Jay Cotton, Senior Surgeon-in-Chief, has organized the Sixth Service with painstaking care. Associated with Doctor Cotton are Drs. Otto J. Hermann, Joseph H. Shortell and Joseph H. Burnett of the present hospital staff. Junior members are Drs. Russell Sullivan and Gordon M. Morrison in the Out-Patient Department. It is planned to further enhance the value of this service by adding primarily for teaching purposes Dr. James W. Sever, Assistant Professor of Orthopedic Surgery, for Harvard students, Dr. Mark H. Rogers, Professor of Orthopedic Surgery, for Tufts Medical classes and Boston University students of medicine are expected to receive instruction on this service in the near future.

Since the hospital, during the winter, cares for over 1,300 patients at a time, it will not be long before 2,000 beds will be needed to handle the immense volume of surgery of all kinds which passes through this institution, the largest and best equipped in New England.

As many as fifty-five surgical operations have been performed in one day on our own operating floor. Over eight thousand surgical operations were performed during the current year, exclusive of the Gynecological and Obstetrical Services, four thousand of which were general surgical operations.

The operating has been of a high order, and great credit is due Dr. Herbert G. Dunphy, Resident Surgeon, and Dr. Edward A. Cooney, Assistant Resident Surgeon, as well as the Chief Nurse in charge of the operating pavilion, Miss Etta M. Dwyer, and her assistants. Their faithfulness and devotion to duty have contributed in great part to the success of our surgical staff.

Our operating floor has been newly equipped with

modern operating tables; the latest gas-oxygen-ether apparatuses have been installed; and improved lighting facilities are provided.

A new endotherm machine has been used extensively for certain types of surgery; radium has been applied in an increasing number of surgical cases, with the co-operation of Dr. Frederick W. O'Brien, Professor of Roentgenology at Tufts, and Chief of the Radiation Therapy Division of the X-Ray Department.

To aid in determining the amount and extent of use of radium, a Radium Committee has been appointed, consisting of Drs. Paul F. Butler, Irving J. Walker, Robert C. Cochrane, Frederick W. O'Brien, John T. Williams, William R. Ohler and Jeremiah J. Corbett, representing the various services using radium.

This hospital is to be congratulated on having as Senior Surgeon-in-Chief, a man of such outstanding ability and long experience in general surgery, as well as in bone and joint surgery, as Doctor Cotton. Doctor Cotton has interested himself, not only in maintaining high surgical standards in this hospital, but throughout the country as a founder and former Regent of the American College of Surgeons.

The loyalty of Doctor Cotton to this hospital, and to his associates, as well as his generosity and interest in the younger surgeons of this staff, has been an inspiration to all the members of this hospital.

An extensive study has been made by Doctor Cotton of arthroplasties of the important joints of the body, particularly after traumatic and industrial injuries, with most gratifying results.

Original work by Doctor Cotton on hip fractures and septic joints has been responsible for advances in the treatment of these grave cases, resulting not only in the saving of many lives, but also restoring function to joints which were formerly impaired by the accepted methods of treatment.

One of the forward movements has been the "conference clinic" in the Out-Patient Department, instituted in June, 1925, by Doctor Cotton, a conference clinic held each Friday at 11 a. m., in the fracture Out-Patient Department to see cases referred by the Out-Patient Department surgeons, cases not only of fractures, but of bone and joint disease, and of orthopedic troubles.

This has grown to be something of an institution, and the Friday visit has always been more than a bit of a "gallery," both from within the Hospital and from the outside.

It is permanently interesting and very valuable; and from this clinic the wards of the Sixth Surgical Service are in no small measure recruited with worthwhile cases.

For five years Doctor Cotton carried this as a personal clinic, with 100 per cent attendance by him; now it is a Sixth Surgical Clinic, Doctor Hermann taking the days when the Chief cannot be there.

Since about January, 1929, the Sixth Surgical Service has run the first "follow-up" clinic, on the surgical side, and ever since then the service resident, Dr. Richard Berg at first, and later Doctor Ragolsky, has been at hand, and with Doctor Manary, Executive Director, furnishing the clerical help, we have been able to keep track of this astounding mass of clinical material.

One of our problems is that of records. The Sixth Surgical Service, and latterly, the Neurosurgical Service, have come to support the plan of modern "unit system" records.

During the past year Dr. David D. Scannell has investigated and operated upon a large number of cases of gall bladder disease, with most excellent end results.

Dr. Horace Binney, Professor of Surgery at Tufts Medical School, has had a special assignment of all the cases of bronchiectasis and lung abscess in this Hospital. Dr. George W. Papen has been associated with him in this important work. Their studies in this special field have markedly reduced the mortality and morbidity of these chest cases.

Dr. Halsey B. Loder, Instructor in Oral Surgery at the Harvard Dental School, has been interested in surgery of the mouth, particularly malignant diseases; he has been using the new "radio-knife" most effectively for these serious conditions.

Dr. Irving J. Walker, Professor of Surgery at Harvard Medical School, has been working on obstruction of the common bile duct, with jaundice, not caused by calculus. These complicated cases, carrying with them the risks of hemorrhage, infections, etc., present special problems for the surgeon in this difficult field.

A special study of surgery of the spleen in conjunction

with certain blood diseases has been made by Dr. Arthur R. Kimpton, requiring blood transfusion and splenectomy, with remarkably good results.

Dr. Robert C. Cochrane, Assistant Professor of Surgery at Harvard Medical School, has continued in charge of the Thyroid Clinic.

The special assignment of thyroid surgery was first granted to Dr. Robert C. Cochrane two years ago, and in this relatively short space of time there have been several noteworthy developments. At its inception, this clinic functioned alone, meeting once weekly in the Out-Patient Department to see new patients referred by the Medical Out-Patient Thyroid Clinic conducted by Doctors Ohler and Ullian. Ere long there was an appreciable increase in the number of thyroid cases referred to the Hospital for operation, further augmented by cases recommended from the four medical services. In the first year of this assignment, there were more thyroid cases operated upon in this hospital than during the entire preceding span of ten years, with a very definite lowering in the mortality rate.

A suggestion was offered that the medical and surgical clinics might function more effectively under the same roof; this was carefully considered and finally thought to be feasible and expedient. Thus these hitherto titularly separate departments merged, and first met as a combined clinic on October 18, 1929, under the charge of Doctors Cochrane, Ohler and Ullian, with the assistance of Dr. David D. Berlin who has been especially associated with Doctor Cochrane. The clinic has since constantly carried on, in a corporate fashion, with gratifying results. It has been possible to adopt a complete and unified record system of all thyroid cases, and carefully document all clinical and laboratory data for purposes of a future detailed publication. We can already report that since the reorganization in October, a period of only ten weeks, the number of out-patient visits has more than trebled, while the number of cases operated upon in the Hospital during 1929 has increased by 30 per cent over the previous, or first year, of the assignment.

We cannot conclude our report without first calling attention to a development of the first magnitude; namely, a striking improvement in the good will of the patient toward the clinic and the Hospital. Indeed it

was not so long ago when it was an arduous task to have patients submit to thyroid surgery in this Hospital. Today they consent willingly and recommend their friends.

Even though we are restricted by custom to discuss in an annual report the events beyond any twelve months of a given year, may we be permitted to predict that the progress in the year to come will completely eclipse the record of the year 1929.

Dr. Otto J. Hermann has been assigned fractures of the os calcis for special study and operations. His results have been most remarkable. He breaks up the impaction present in the heel bone, molds the heel, and applies ice-tong traction, and subsequently plaster casts. In certain cases he has used to advantage Doctor Cotton's scoop operation and later, if pain persists, a subastragaloid arthrodesis is done. Doctor Hermann has recently reported a series of forty consecutive cases, which he has operated on with 77 per cent good results, using conservative treatment.

A noteworthy study of carbuncles has been made by Dr. Somers Fraser, using X-ray, vaccine and other therapy in addition to surgery. Many of these cases have been complicated by diabetes, which has increased the risks of surgical treatment.

Dr. Francis F. Henderson has had an unique series of cases of injuries to the spleen, with splenectomy and excellent end results.

The assignment of papilloma of the bladder has been given to Dr. Herbert H. Howard, who has used the various modern methods of caring for this disease. Radium, X-ray and cauterization have been employed by him in addition to surgery, enabling Doctor Howard to cure many patients who were formerly considered hopeless.

Dr. James J. Hepburn, Assistant Professor of Surgery at Tufts, has had a special assignment of plastic surgery, particularly after burns and traumatic injuries. The one stage and multiple stage operations have successfully resulted in restoring function, as well as cosmetic contours, especially in the face and neck cases.

The neuro-surgical cases in the Hospital have been cared for by Dr. Donald Munro; he has limited his work to the special study of these cases only. In conjunction with the Nerve Service, with the close cooperation of Doctors Abraham Myerson, Professor of Neurology at

Tufts, and Stanley Cobb, Professor of Neuropathology at Harvard, this service in their new building and with new modern equipment has a brilliant future ahead.

Dr. Joseph H. Shortell has been assigned recurrent hernias, and has successfully made use of *fascia lata* strips from the patient's own leg for sutures in the cure of these difficult diseases.

Lesions of the kidney and ureter, and particularly their anomalies, have been investigated by Dr. Augustus Riley, Assistant Professor of Genito-Urinary Surgery at Harvard Medical School. Doctor Riley has a remarkable series of lantern slides demonstrating variations in the size, shape and course of the ureters. He has continued in charge of the Genito-Urinary Out-Patient Department, associated with Dr. Gordon Atkinson and Dr. John A. Seth. This out-patient work has been carried on so efficiently that very few external urethrotomies are now done in this Hospital, as the patients with urethral strictures who present themselves for adequate dilatation are successfully treated without operation.

Dr. William Reid Morrison, Assistant Professor of Surgery at Boston University School of Medicine, has been given the assignment of all perforated ulcers of the stomach and duodenum on all five surgical services for special study and operation.

Dr. Edward Harding was associated with Doctor Morrison, for some months working in this field.

Since these cases constitute the last and most serious phase of the progressive course of ulcers of the stomach and first portion of the adjacent small intestine, Doctor Morrison has been investigating improved methods concerning diagnosis, pre-operative treatment, anesthesia, operation and post-operative measures.

In most of these patients, the surgeons encounter a general peritonitis, with fatal results if an early and prompt diagnosis is not reached. Doctor Morrison was the first surgeon in this Hospital to clinch the diagnosis of perforated ulcer by making use of fluoroscopic examination and X-ray plates, demonstrating the presence of air between the liver and diaphragm, with the patient in the erect position; however absence of air does not rule out the presence of perforation.

Doctor Morrison has found that local injection of one half of one per cent novocain solution has been the anesthesia of choice in the poorer risks, while spinal

anesthesia using Pitkin's solution, or the crystals of novocain, has been given in the good or fair risks.

A consecutive series of fifty perforated ulcers of the stomach and duodenum, which have been operated on by him, has been reported by Doctor Morrison recently; with excellent results, despite the peritonitis which complicates these cases.

Dr. Thomas K. Richards, Instructor in Surgery at Harvard, and Dr. Newton C. Browder, Instructor in Surgery at Boston University, have been interested in bone and joint surgery, particularly in traumatic cases of this class. They have made use of all types of physiotherapy as an aid to speedy recovery, especially in the field of athletics, with astonishing results.

Dr. Thomas W. Wickham, Instructor in Surgery at Tufts, has been working on focal infection, and its relation to surgery, from a clinical point of view, for the purpose of prompt relief of disability and restoration of health.

The Fisher-Wasel treatment for cancer has been investigated by Dr. Charles C. Lund, Instructor in Surgery at Harvard, in a small operating room on the accident floor which Doctor Lund has converted into a laboratory. Very interesting reactions have been observed by him to date.

Dr. Joseph H. Burnett, Instructor in Surgery at Boston University, has done a large amount of work on fractures of the carpal scaphoid, determining the best type of fixation, apparatus, length of treatment, including physiotherapy. His series of lantern slides demonstrate very good end results.

Dr. William F. Cotting has interested himself in certain problems in bone and joint surgery with marked success.

Dr. John J. Lucy has been interested in certain investigation of intestinal work, in both children and adults.

Dr. Gerald L. Doherty, Assistant in Surgery at Boston University, has been on leave of absence this year.

Dr. Howard A. Bouvé, Instructor in Surgery at Boston University, has had a remarkable series of cases of intestinal obstruction caused by enteroliths, with excellent results.

Drs. John Seth and W. W. Everett have been investigating certain subjects relating to genito-urinary diseases.

Drs. E. E. O'Neil, Richard I. Smith, William A. White, Jr., Allan Davis, John Hopkins, A. J. A. Campbell and M. E. McGarty, have made great progress in the treatment of varicose veins by injection, also in the care of varicose ulcers, under the direction of Doctor O'Neil in the Out-Patient Department.

Renewed interest has been stimulated in spinal anesthesia, particularly by the address and demonstrations given by Dr. George P. Pitkin, who was invited by Dr. William R. Morrison to the Boston City Hospital as his guest during the recent meeting of the American College of Surgeons at Boston.

Spinal anesthesia has been used more and more, at first for operations below the diaphragm, in adults. Subsequently novocain crystals have been made use of for operations above the diaphragm, in children as well as for adults. In fact, on some of our surgical services but little ether or other inhalation anesthesia is being used.

The new seven-story house officers' building, with its modern equipment, has provided our house staff excellent facilities in every way, for housing and recreation. The excellent dining room, reading rooms, sun rooms, squash courts, swimming pool, locker rooms and showers are indeed luxuries undreamed of by former house officers.

The visiting surgeons of the Hospital are proud of our house staff, who in return for twenty months of hard work without financial return, are repaid by an excellent general surgical training. Thanks to the generosity of the present visiting surgeons, and under their tutelage, our house surgeons are better trained and more efficient than their predecessors.

This is mainly afforded by the vast amount of surgery coming to our doors, and the opportunity given these young men to do things themselves, rather than watch or assist the senior surgeons as in former years.

A private pavilion is urgently needed for this Hospital and its Staff. Certain of our patients demand private rooms which are not available at all times, and it is the wish of every member of our Surgical Staff that such provision be made in the near future. Greater efficiency for this Hospital and its patients would be obtained if the visiting surgeons could operate and see their private patients, as well as their service cases, at the same time.

A large source from which we derive our surgical cases is the Surgical Out-Patient Department under the efficient leadership of Dr. Joseph H. Burnett, Senior Out-Patient Surgeon, and our Executive Director, Dr. James W. Manary.

Doctor Burnett has assigned groups of four or five surgeons in each department, not only for teaching, but for the routine treatment of our patients, who are cared for better than ever before. A careful check-up of attendance of the Junior Visiting Surgeons, by means of a time clock, has been of material aid in holding the work to a high standard.

For teaching purposes our Out-Patient Department cannot be excelled. Harvard, Tufts and Boston University medical students are doing excellent work and in return are receiving valuable clinical teaching.

The departments of physiotherapy and roentgenology have cooperated fully with the surgeons in all parts of the Hospital.

The Social Service Department has contributed greatly to the patient's welfare and has aided the surgical staff in every possible way.

Our surgical wards have been completely filled to their capacity particularly during the winter months; the nursing care and treatment of patients has been most efficient. The new eight-story surgical building has fulfilled all our expectations. This palatial structure, costing more than half a million dollars, including up-to-the-minute equipment of all kinds, has been erected through the generosity and faithful support of Mayors James M. Curley and Malcolm E. Nichols and the farsighted and painstaking plans of our Superintendent and Trustees.

The new accident wards, with the modern shock rooms and up-to-date appurtenances, cannot be surpassed. Since all of the gravest surgical emergency cases have been most efficiently cared for in these accident wards many lives have been saved.

The patients, nursing staff and doctors have appreciated the wards full of sunlight, well ventilated, heated and cared for; the sun porches on each floor have been used to their full extent, with great benefit to our convalescents.

The Surgical Services treated a total of 8,661 house patients and 34,611 out-patients during the year.

The Hospital surgical activities are roughly divided into seven units—five devoted to general clinical surgery, one to gynecology and one to fracture or bone and joint surgery. To one of these general units has been attached the initial start of a unit for surgical research with a small laboratory. This work has progressed slowly but on the whole satisfactorily. The Trustees have planned that a portion of the new surgical building, soon to be erected, house this unit with an adequate number of beds, laboratories and an operating suite.

The Trustees and the Surgical Staff are in agreement as to the necessity of surgical research in our institution.

This type of surgical work, in contradistinction to the work of the clinical surgeons, calls for one who is prepared to devote all his time to the task. Without research in our hospital, surgical progress will be slow. The laboratory will serve not only as a work shop but a place where the work done will be subjected to careful study and criticism.

For the past three years, through the efforts of Dr. Alexander S. Begg, Dean of Boston University School of Medicine, third-year students of that school have had instruction in surgery in the Out-Patient Clinics of the Boston City Hospital, in addition to the teaching at the Massachusetts Memorial Hospitals, formerly the Massachusetts Homeopathic Hospital.

The large and varied character of the Male and Female Surgical and Fracture Clinics have given the instructors and students a wealth of surgical material unexcelled in any other hospital in New England.

GYNECOLOGICAL AND OBSTETRICAL DEPARTMENT.

In May, 1929, upon recommendation of the Staff, the Board of Trustees authorized the division of the Gynecological and Obstetric Department into two services. This division did not in any way affect the integrity of the department, which continues to function as a unit. It was made solely for the purpose of improving the efficiency of service to the patients, by distributing to better advantage the work of the members of the Staff in caring for the constantly increasing number of patients admitted to the department.

During the year 1929 there were 1,623 gynecological cases admitted to the house.

The operative work performed was as follows:

Abdominal operations	388
Plastic operations	80
Total minor operations	612
	1,080

There were 1,654 obstetric cases admitted to the House. The total number of deliveries was 1,550, of which 1,503 were alive. Of these 1,015 were normal and 535 were operative. Of the cases admitted to the House, 1,277 were referred from the Out-Patient Department and 361 came from various other sources.

In the Out-Patient Department the total number of new gynecological patients was 1,181. The number of new obstetric patients was 1,085. The total number of new patients was 2,266. The number of visits of new and old gynecological patients was 4,074. The number of visits of new and old obstetric patients was 5,113. The total number of visits of all patients was 9,187.

The work of the Visiting Staff, the House Staff and the Nursing Staff has been in every way satisfactory. Helpful cooperation has been obtained from the Department of Social Service.

Lectures to nurses have again been given by the Visiting Staff, thirty-six in obstetrics and eight in gynecology. Teaching for the Harvard Medical School in gynecology and obstetrics, for the Tufts Medical School in obstetrics, and for Internes from the United States Naval Hospital, Chelsea, in obstetrics and gynecology has been continued.

The department continues to appreciate the opportunities and facilities afforded by its new building. The opening of the First Obstetric Ward in this building especially has made possible the better care of the constantly increasing number of obstetric cases.

NEUROLOGICAL DEPARTMENT.

Following is a brief résumé written by Dr. Stanley Cobb on the advanced work of the Neurological Service.

It is our desire to train two kinds of men. (1) Men who wish to learn a moderate amount of neurology and then go into internal medicine or surgery. This we look on as a very important function because we feel that neurology is a real part of general medicine and ought

not to be looked on as a specialty. (2) We offer special training for those men who wish to go on and work in neurology or neuropathology in an advanced way.

Under (1) general neurology for internists, we offer: (a) internships for men who are graduates and intend to go on into medicine or surgery, but we desire men who have already had a medical or surgical internship. In this category in the last four years we have trained about twenty men. (b) General practitioners who are already practising medicine are offered informal clinics Monday mornings in the Out-Patient and Saturday mornings on the ward. Here there is a discussion of the difficult cases of the week with an elaboration of the problem along the lines of anatomy and physiology. These exercises have been well attended by the Staff of the Hospital and we have had a rather irregular attendance from doctors outside the Hospital. These clinics have been running for three years. The usual attendance in the Out-Patient, exclusive of the students, is about ten and in the house about fifteen. We are planning to inform the profession of the opportunity to learn neurology in this way. (c) Each year a voluntary course has been offered in comparative anatomy of the nervous system or in the histopathology of the nervous system to the internes and students who are at work on the wards. In this course we have usually had three or four outside physicians as well as the members of our own Staff. This has consisted of two afternoons a week for two or three months, the average number of hours being perhaps forty. This is an informal course and is offered as a review to brush up the anatomy and the pathology for men who are learning the clinical neurology with us; (2), advanced teaching for men who wish to specialize in neurology. For these men we offer a residency on the Neurological Service of one year. The routine work is arranged to only use up the morning hours. In the afternoon the resident is expected to work on a problem. We have only had our resident for two and one-half years. The first incumbent worked on the problem of vitamine lack. After leaving the residency he spent a year in my laboratory doing experimental work along that line and he has now gone to another university to a full-time academic position. The next resident after spending a year in the Hospital where his problem was the determination of calcium in the spinal fluid, has now taken the position of my first assistant

in the neuropathological laboratory and is working on the problem of variations in the cerebral circulation. Of the internes who have gone through our service three have continued afterwards and worked on a special problem in my laboratory. Two of the others have gone on to take an internship in psychiatry and have asked me if after this they may work in my laboratory.

I am mentioning these details because it illustrates what we consider the right way to train young men. We believe that offering them special degrees and having them go through an organized course in order to obtain these degrees is the wrong way. Our ideal is to form a group that will work together in an informal but stimulating way to attract men to the internships who will afterwards go on into either special work in the laboratory or the residency. We are in close relationship with Doctor Ayer's unit at the Massachusetts General Hospital and with Doctor Campbell's unit at the Psychopathic Hospital. Our men usually work with all three units before leaving Boston. In brief, we wish to develop here a school of neuropsychiatry but in an entirely informal way depending rather upon the ability of the teachers to attract men to work with them than upon any organization and advertised curriculum.

All of this work has been done up to the present time in extremely inadequate quarters. The ward has been a temporary one in the basement. The laboratories have been scattered in various other buildings of the Hospital and at the medical school. Next April the new building should be completed and then there will be a real neurological institute at the Boston City Hospital. This will consist of two wards with space for about sixty patients, an operating room on one of the wards; above these wards is a whole floor of laboratories for research work, both clinical and experimental, and above this on the roof there is to be an animal house and operating room for experimental work.

The Staff is to consist of two visiting physicians for neurology (Dr. Abraham Myerson, the Professor of Neurology at Tufts, and Dr. Stanley Cobb, Professor of Neuropathology at Harvard. The latter is to be also the director of the laboratories), two neurological surgeons, Dr. Donald Munro and Dr. Tracy J. Putnam, to whom are assigned eighteen of the beds and who have control of the operating room and of laboratory space for neurosurgery. In the laboratories there will

be a division for chemistry under Dr. Frank Fremont-Smith, a division of experimental physiology under Dr. H. S. Forbes, a division of neuropathology under Dr. Stanley Cobb, and a department of experimental neurosurgery under Dr. Tracy Putnam. These are all closely integrated and on any one problem there are usually at least two of us at work. Under each of these men there will be one or more special students, usually men who have graduated from the work on the wards and are spending an extra year or more with us. This is a very brief outline but it at least indicates our general scheme and our policy.

AURAL AND LARYNGOLOGICAL DEPARTMENT.

During the year 1929, 2,362 ward patients were treated in the Department for Diseases of the Ear and Throat. Eight thousand four hundred thirty-seven out-patients were also treated. Of these out-patients 6,546 were new patients. The out-patients made 14,692 visits to the department for advice and treatment.

OPHTHALMIC DEPARTMENT.

During the year 1929 the Ophthalmic Service treated in the Out-Patient Department 4,890 patients who made 11,948 visits. Of these 3,903 were new cases. During that same period of time there were 3,391 refractions. In the House Service there were 165 admissions and of this number 110 underwent operations.

DERMATOLOGICAL DEPARTMENT.

The Department for Diseases of the Skin has suffered a great loss in the past year through the death of its revered and respected chief, Dr. Townsend W. Thorn-dike. No radical changes have been attempted, and we have tried to follow along the lines so well laid out by him.

During the past year, 19,192 visits were made to this department by 4,647 patients. Of these, 3,342 were new cases. Of the latter, 298, or about 8 per cent, were syphilitic. This large number of patients has brought much routine technical work to be done, largely by Staff members. In treating the syphilitic patients alone, 6,691 injections were given and 2,413 specimens were taken for Wassermann reactions. This routine work

has caused more or less discontent, because in the rush of routine work, little time was left for observation and study of the cases. With the added technical help which is promised us for the first of the year, and a little more cooperation on the part of all of us, this feeling of discontent is fast disappearing. The hospital authorities have been most generous in the past year in providing increased personnel and materials for our work, but there are still certain phases of dermatology for which we urgently need new equipment and personnel. The chief of these are X-ray for the treatment of skin diseases, and laboratory equipment and technical assistance for pathological and mycological investigations.

The house officers during the past year, who have been assigned from the Fourth Medical Service, have been most satisfactory, and I think that they have found this a valuable part of their training. With the more regular assignment of pupil nurses which has been attempted during the last year or two, I think that they are getting better instruction in this branch of nursing and it certainly is a great advantage to the department to have the nurses on for longer periods than they were formerly. The social service continues to be a great aid to the department.

As Doctor Thorndike mentioned in his last report, we are still greatly hampered in our work by not having our own hospital ward, but we are given to understand that this has been provided for in the present building program. As the service already frequently occupies fifteen or eighteen beds, the new ward to accommodate growth, should have a twenty-five bed capacity. On account of the disagreeable appearance of many of the cases, it should be divided into small rooms. We also hope to have a small laboratory in connection with the ward.

PATHOLOGICAL DEPARTMENT.

The Staff as a whole this year has been more actively engaged in teaching than last year. Dr. F. B. Mallory, Professor of Pathology at Harvard Medical School, has continued his course of lectures to the second-year class. He is assisted in this by Dr. G. Kenneth Mallory, Assistant in Pathology at Harvard. Dr. G. Kenneth Mallory demonstrates autopsies at the Hospital to the second-year class. Dr. Frederic Parker, Jr., Assistant

Professor of Pathology at Harvard, holds weekly meetings with the fourth-year students of the Fifth Surgical Service and bi-weekly conference with the students of the Fourth Medical Service. Dr. T. D. Spies, Instructor of Pathology at Tufts Medical School, demonstrates autopsies at the Hospital to second-year students of that school. Dr. D. M. Gay, Instructor of Pathology at Tufts, teaches at Tufts Medical School and also gives demonstrations in surgical pathology at the Hospital to members of the fourth-year class. Dr. T. T. Walker holds the position of Assistant in Physiology at Tufts Medical School and teaches that subject at the school. All paid members of the laboratory staff are engaged in active teaching. While such teaching involves a certain amount of time, it seems well worth it for the sake both of the laboratory and of the Hospital.

The monthly conferences with the medical services are continuing for the third year and are proving of great value.

The pathological work at the Sanatorium Division which is under the direction of the laboratory, is being done this year by Dr. D. M. Gay who holds the position of Visiting Pathologist.

This year the work of the laboratory continues to reflect the increased work of the Hospital. We have an additional technician and have asked for another resident and another additional technician.

Doctor Mallory has been continuing his studies on cirrhosis of the liver, with especial reference to that of infectious origin. He, with the assistance of Doctor MacMahon, completed a paper on obstructive cirrhosis, a hitherto poorly described type. Doctor Mallory also is repeating in part some of his work on the relation of copper to hemochromatosis since his earlier results have recently been disputed.

Doctor Parker, in collaboration with Dr. Henry Jackson, Jr., of the Thorndike Laboratory, is going on with the study of the diseases of the lymph nodes and blood. This work was started last year and thus far over one hundred cases have been examined. One of the objects of this study is the correlation of the pathological picture with prognosis and clinical course, a project possible only with the close cooperation of clinician and pathologist.

Doctor MacMahon, in addition to his work with

Doctor Mallory on obstructive cirrhosis in man, completed a study of experimental biliary obstruction. He was assisted in this by Dr. John Lawrence of the Thorndike Laboratory.

Doctor Spies is working on the pathological effects on rabbits of large doses of ergosterol. This is a subject that is receiving world-wide attention and study. His results to date have yielded considerable new information of importance. In part of this work, he has had Doctor Glover of the Fourth Medical Service as collaborator, the latter handling the chemical side of the problem. In addition, Doctor Spies is carrying on some studies on the effect of ergosterol on tubercles.

Dr. Kenneth Mallory is continuing his studies on the changes of the blood vessels in hypertension, not confining his attention to the kidney but examining the vascular system in all organs and tissues. This work is being done in part in collaboration with Doctor Weiss of the Thorndike Laboratory who is attacking the problem from a physiological standpoint.

Doctor McGregor, a National Research Fellow, has been going on with her studies of the histological changes in the kidney in primary hypertension with special emphasis on the glomerular and arteriolar pathology. She has just completed a paper on certain fundamental glomerular changes that have been overlooked in the past.

Doctor Cochran in collaboration with Doctor Boland of the Gynecological Out-Patient Department is carrying on a study of gonorrhoea in women with special reference to treatment of endocervicitis and endometritis.

Doctor Gay has just finished the study, pathological and bacteriological, of a case of Madura-foot, a disease so rare in this country that it merits publication.

It is interesting to note in looking over the above records that in five of the problems mentioned, close cooperation with members of the clinical staff is playing an important part. This point is brought up since it is felt that such a state of affairs should be the aim of any hospital laboratory. Indeed the opportunity for such collaboration is one great advantage that such a laboratory has over a university laboratory and it is too often not made full use of. Medicine has reached a stage of such complexity that a man trained in one

branch can accomplish little without the aid and active cooperation of experts in other lines of work.

WORK OF THE PATHOLOGICAL LABORATORY DURING THE YEAR 1929.

Autopsies	384
Surgical diagnoses	3,116
Clinical bacteriology, positive	1,047
Clinical bacteriology, negative	1,499
Blood cultures, positive	364
Blood cultures, negative	849
Guinea-pig inoculations	143
Sputa typed	334
Bacillus diphtheriæ, total	19,868
Bacillus diphtheriæ, positive	2,942
Wassermanns	3,127
Number of positives	1,332
Kahn tests	11,962
Positive Kahn	1,850
Hinton test	1,123

THE THORNDIKE MEMORIAL LABORATORY.

The Thorndike Memorial Laboratory offers opportunities for individuals to be free to devote themselves whole heartedly to the investigation of disease and to train themselves to become wise clinicians. Such opportunities have increased greatly in recent years and have led to the development of much valuable knowledge by observing phenomena accurately and apprehending their relations to their causes and to one another. A laboratory is apt to be thought of as a place where test tubes and apparatus dominate the scene, but in a clinical laboratory like the Thorndike, the sick individual is the center of the picture. The care of the patient is foremost. To produce knowledge requires far-sighted imagination with scientific training and the capacity to grasp hints from observations. One cannot expect brilliant practical results daily, but by the greatest possible freedom in the character of studies and by perseverance, with a desire to aid mankind, useful information is obtained at the Thorndike and the training the physicians receive make them wise practitioners of medicine.

There is a tendency that the physicians, on account of their efforts to help in every possible way, have their time for deliberation and progressive calm work

interrupted. It is imperative that investigators be free from more than a small amount of so-called routine duties and free from anxiety regarding administrative, financial and allied matters.

A great deal of work has been accomplished during the year 1929 and the prospects for continued useful achievements are high for the year 1930. The widespread recognition of the laboratory is reflected by the fact that two of the appointees, Doctors Vaughn and Lewis, are British National Research Council Fellows. The departure of Doctors Wearn and Lawrence to accept prominent positions in Cleveland and Rochester respectively is a loss to the laboratory, but an honor to them.

For the year 1929 the work here may be formulated under five headings:

I. Studies concerning the treatment of anemia and other aspects of disorders of blood and conditions associated with defective diets, under the direction of Doctors Minot and Castle.

Many patients with anemia have been extraordinarily benefited and have served to rapidly advance knowledge. In March Dr. Edwin J. Cohn of the Harvard Medical School prepared a liver extract sufficiently pure to be administered intravenously. It was at the Thorndike that the first patient with pernicious anemia received this material, since when dramatic beneficial effects have occurred with regularity. A report on these observations and the use of the substance is in preparation and studies continue to progress that concern the nature of the active principle effective in pernicious anemia.

The use of large doses of iron in certain sorts of anemia, the response of the blood forming organs to iron under varying conditions, the influence of the chemical reaction of the gastro-intestinal tract on the action of iron (Doctor Mettier), the elimination of iron in health and disease, are subjects of intense study which are leading to valuable therapeutic information.

Progressive knowledge concerning optimal doses of the active principle effective in pernicious anemia is yielding practical clinical results, especially as concerns maintaining the patient's best health. The important role played by defective diets in the production of anemia, pellagra, nerve disorders, etc., are also under scrutiny.

Experimental medical observations related to clinical

problems are also of importance in the study of disorders of the blood. Doctor Muller's studies concerning cholesterol metabolism have lead her to prepare a monograph on the subject. Her observations of the division rate of chick embryo primitive blood cells are significant. Doctor Vaughn has begun studies concerning the influence of pregnancy on the bone marrow, *i. e.*, the chief blood forming organ, and with Doctor Muller she is investigating the action of potent substances on the bone marrow under experimental conditions. The life of the young red blood cells has been studied profitably by Doctor Heath and Miss Daland, together with other special aspects concerning the biology of blood cells. Unusual observations regarding blood pigment metabolism initiated by a student, Mr. L. S. Davis, have promise of yielding important information.

Doctor Castle's work which has been advanced greatly during the year is monumental and epoch making. It demonstrates a totally new aspect of the role played by a lack of gastric secretion in the production of diseases and aids to explain the nature of pernicious anemia. He has been awarded the Warren Triennial prize, and has received international recognition, as is illustrated among other ways by the splendid reception he received when he addressed in June the Royal Society of Medicine in London. Doctor Townsend assisted Doctor Castle during the year and Doctor Townsend is to be congratulated for his excellent work.

Doctor Castle is continuing with Doctor Heath similar studies and has progressed far with observations concerning the effect of diet and gastric secretions on degeneration of the spinal cord.

Doctor Minot has continued general supervision of the work concerning pernicious anemia and acknowledges with gratitude the generosity and cordial cooperation of Doctors Means, Richardson and Suzman at the Massachusetts General Hospital, Doctor Murphy at the Peter Bent Brigham Hospital and Doctor Blumgart at the Beth Israel Hospital. Doctor Minot was awarded in April the Charles Mickle Fellowship of the University of Toronto and in May the Kober Medal of the Association of American Physicians.

2. Studies concerning the cardio-vascular system, under the direction of Doctor Weiss.

Information pertaining to high blood pressure by

means of statistical, experimental and keen clinical observations is advancing rapidly as the result of Doctors Weiss', Ellis' and their associates' work. The state of the small arteries in the production of the essential form of this common disorder of civilized life has received detailed attention. Observations concerning the effect of certain substances on patients point out the character required of an effective therapeutic agent.

Doctor Faulkner is in charge of the electrocardiographic work and continues to study the accumulating data. He has in press a paper giving information about a type of heart irregularity in elderly individuals.

Doctors Wearn and Bromer have added data to their studies on the capillaries.

3. Studies concerning cancer and allied disorders, under the direction of Doctor Jackson.

Investigations of this subject are peculiarly difficult and often necessarily very abstract. To comprehend malignant tumors better than we do, fundamental biological processes must first be understood. Studies of the life processes of abnormal cells have been and are being carried out. The work is difficult and perplexing, but progress is being made. Numerous aspects concerning the malignant disorders of the lymphatic tissue from a clinical and pathological point of view have led to a study of an unusually large amount of material due in great part to the cordial assistance of the C. P. Huntington Memorial Hospital, the Beth Israel Hospital, the Massachusetts General Hospital and the Pondville Hospital, together with great perseverance by Doctor Jackson.

Doctor Glover and Miss Daland have completed an intricate study on the life processes (metabolic) of normal and abnormal blood cells.

4. Studies concerning the bacteriological aspects of disease, under the direction of Doctors Nye and Sutliff.

A large program has been formulated and work commenced on the nonspecific factors of resistance and immunity. The role that diet, light, fatigue, temperature and the like play in enhancing infectious conditions is probably much greater than usually is appreciated so that observations over a period of years should lead to useful information.

The treatment of pneumonia is a vital problem. A well-organized group of four men are studying this sub-

ject critically. The actual treatment of patients is supplemented by highly technical, but important, experiments on animals.

5. Miscellaneous studies, under the direction of Doctor Minot and Senior Associates.

Studies concerning arthritis are being conducted by Doctor Young who, with Doctor Taylor, has also studied problems pertaining to the therapeutic value of different mercury preparations. Doctor Taylor, a chemist, serves the interest of this clinical laboratory in an important way. He has helped numerous physicians in their problems and has himself devised methods for determining certain substances in the blood.

Doctor Davidson has made experimental studies on the absorption of material from the large bowel and is working upon a paper on a rare form of malignant tumor of the stomach.

Doctor Lennox, associated with the Neurological Department, continues his studies on epilepsy within the Thorndike Laboratory, pending space for him in new quarters. Dr. Fremont-Smith, also associated with the Neurological Department, worked within the laboratory until his new quarters were available in September.

Doctor Blumgart, Doctor Ernstene and Doctor Gargill have completed at the Beth Israel Hospital studies of various sorts that were begun at the Thorndike Laboratory. Their dramatic demonstration of the curative effect of large amounts of vitamin D in severe osteomalocia is noteworthy.

The close association of the Staff of the Thorndike Laboratory with members of the Second and Fourth Medical Services has brought to all concerned exchange of knowledge, assistance and stimulus to routine and investigative work.

This outline only indicates the breadth of activities, many intricate studies have been alluded to and others not mentioned.

The financial assistance from gifts of over \$10,000 a year are gratefully acknowledged and have permitted the expansion of the work within the past two years. Where there were nine full time workers at the Thorndike in 1923, there are now sixteen. The influence of the laboratory is indicated in part by the men who have been former appointees. Since the building was opened, twenty-four men have served as members of the staff who now hold positions elsewhere; all but one are asso-

ciated with prominent institutions. Eleven hold academic positions of professional grades. In addition, over eighteen volunteer graduate students have worked for a few months and have come from eight different countries. Applications frequently have to be turned down as the laboratory is full to its capacity.

Science is unstable and art is uncertain, yet a successful physician must utilize and promote science and become an artist — one who can perceive the manifold qualities and relation of things. He must deal with the individual human affairs and have a creative imagination. He should recognize that the laboratory bench and apparatus are only a part of a clinical laboratory, are a means to an end, but do not supplant wisdom, sympathy and the intelligent care of the sick. It is with such viewpoints that the progressive work in the Thorndike Memorial Laboratory is conducted.

X-RAY AND PHOTOGRAPHIC DEPARTMENT.

The work of this Department is advancing beyond our expectations. An increase of approximately 20 per cent occurred in the work of last year over that of the preceding year. The time has arrived when we are planning to install additional equipment in the Out-Patient Department. This equipment which has already been requisitioned will furnish quick service and will relieve the Central Department of much work.

The apparatus in the South Department is now ready for use, especially for the treatment of whooping cough and of tuberculous glands. We are beginning at the South Department a series of treatments on throats of diphtheria carriers with a view to shortening the duration of infection in these carriers. This will be an interesting piece of research work and we are confident of cutting down the length of stay of these carriers in the hospital.

One of the handicaps for consistently good work has been the fluctuation of current supplied by the generating machines in our hospital power plant. This has been an expensive experience because these uncontrollable fluctuations have destroyed X-ray tubes. This difficulty is about to be removed by the purchase of alternating current direct from the Edison Company.

A new visiting physician has been added to our Staff this year, Dr. Albert M. Moloney, a graduate of our Department.

A different method of reporting cases has been in use for the past several months. Duplicate card reports are made to each service on the morning following an examination. These cards are pasted into the clinical record in the ward, and this saves the internes the time which they formerly spent in transcribing our reports by longhand into their records.

Teaching is still being done for both Harvard and Tufts Medical Schools. Graduate students are required to work out one problem each month and submit a thesis on it.

We are to have a Resident Radiologist this coming year. He will be a graduate of radiology in this or some other hospital. This is a forward step and should contribute greatly to the efficiency of the Department. This position is much needed on account of the necessity of having a man constantly on duty to supervise the care and upkeep of our expensive apparatus.

Following is the statistical report of the X-Ray Department for the year:

DIAGNOSTIC CLINIC.

1. Routine Cases.

Number of ward patients	15,856	
Number of out-patients	12,245	
Number of outside doctors' patients	2,867	
	<hr/>	
Total number of patients		30,968

2. Gastro-Intestinal Cases.

Number of ward patients	797	
Number of out-patients	461	
Number of outside doctors' patients	549	
	<hr/>	
Total number of patients		1,807

3. Haymarket Square Relief Station.

Number of patients	1,311	
Total number of patients		1,311
	<hr/>	
<i>Brought forward</i>		34,086

<i>Carried forward</i>	34,086
<i>4. East Boston Relief Station.</i>	
Number of patients	682
Total number of patients	682
<i>5. South Department.</i>	
Number of patients	122
Total number of patients	122
Total number of ward patients	18,768
Total number of out-patients	12,706
Total number of outside doctors' patients	3,416
Total number of diagnostic cases	<u><u>34,890</u></u>

TREATMENT CLINIC.

1. X-Ray Treatment Cases (New).

Number of ward patients	136
Number of out-patients	216
Number of outside doctors' cases	69
Total number of patients	<u><u>421</u></u>

2. X-Ray Treatment Cases (Old).

Number of old patients returned	816
Total number of old patients returned	<u><u>816</u></u>

3. Radium Treatment Cases (New).

Number of ward patients	55
Number of out-patients	1
Number of outside doctors' patients	4
Total number of patients	<u><u>60</u></u>

4. Radium Treatment Cases (Old).

Number of old patients returned	24
Total number of old patients returned	<u><u>24</u></u>

5. Radon Cases (New).

Number of ward patients	11
Total number of radon cases	<u><u>11</u></u>

6. X-Ray and Radium Treatments (New and Old).

Number of ward patients treated	490
Number of out-patients treated	1,144
Number of outside doctors' patients treated	482
Total number of X-ray and radium treatments	<u><u>2,116</u></u>

7. *Consultations and Examinations.*

Number of ward patients	205	
Number of out-patients	535	
Number of outside doctors' patients	185	
		<hr/>
Total number of consultations and examinations		<u>925</u>

8. *X-Ray Treatments Given.*

Number of house patients treated	417	
Number of out-patients treated	1,134	
Number of outside doctors' patients treated,	470	
		<hr/>
Total number of treatments (old and new)		<u>2,021</u>

9. *Total Cases (Seen and Treated).*

Number of house patients	695	
Number of out-patients	1,679	
Number of outside doctors' patients	667	
		<hr/>
Total number of cases seen and treated		<u>3,041</u>

10. *Total Number of all Patients.*

Number of all patients (diagnostic and treatment)		<u>36,222</u>
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NUMBER OF FILMS USED.

For routine cases	47,835	
For gastro-intestinal cases	8,943	
Dental films	6,661	
At the South Department	379	
At the Haymarket Square Relief Station	3,330	
At the East Boston Relief Station	834	
		<hr/>
Total		<u>67,982</u>

DEPARTMENT OF PHYSICAL THERAPEUTICS.

The following table records the work of the Department of Physical Therapeutics during the year 1929, showing it in comparison to the work of the year 1928.

	1928.	1929.
Ward patients treated	889	1,148
Out-patients treated	4,030	4,988
All of these out-patients were also treated in another department	4,030	4,988
Total individuals treated	4,919	6,136
Visits of ward patients	7,013	6,539
Visits of out-patients	50,972	38,860
Total visits	57,985	45,399
Estimated number of treatments given	166,976	181,595

This table shows that there has been an increase of 23 per cent in the number of patients referred to the Department; also that during the year 1928 the average number of visits made by individual patients was thirteen, and the average number of visits made by individual patients during the year 1929 was eight, there being a decrease of 39 per cent in the last year.

The increase in number of ward patients treated was 29 per cent. This may have been the result of extra attention paid to ward patients by the Department.

The head of the Physiotherapy Department visits each of his ward patients at least once a week, often in company with the Staff Member who referred the case to the Department.

A physiotherapy sheet forms part of the chart of each ward patient treated as a permanent record.

Considerable teaching has been done during the year, the students consisting of nurses and graduates of recognized schools in physical education, they being admitted for a six months' period of training.

A group of about fifteen students from the Posse-Nissen School of Physical Education daily carry on the work of massage and exercise.

Three hundred twenty different conditions were treated in the Department during the year, the most frequent ones being:

Fractures.	Various forms of paralysis.
Sprains.	Neuritis.
Dislocations.	Myositis.
Septic processes.	Rickets.
Arthritis.	Postural deformities.
Bursitis.	Circulatory disturbances.
Synovitis.	Upper respiratory tract
Burns.	infections.

DEPARTMENT OF IMMUNOLOGY.

The statistical report of the Department of Immunology from January 1, 1929, to January 1, 1930:

Total number of patients:		
In Out-Patient Department	. . . . .	1,258
In House	. . . . .	82
		1,340
Total number of visits to Out-Patient clinics	. . . . .	10,718
Total number of visits of doctors to house patients	. . . . .	188

Curative and diagnostic inoculation:	
Number of patients (including house patients)	478
Number of visits (including visits of doctors to house patients)	6,419
Number of curative and diagnostic inoculations	10,666
Protective inoculation:	
Number of individuals (chiefly doctors and nurses) receiving protective inoculation against typhoid and paratyphoid	150
Number of protective typhoid and paratyphoid inoculations	576
Number of visits	576
Number of individuals (chiefly nurses and doctors) receiving protection against diphtheria	37
Number of toxin-antitoxin injections	122
Number of individuals receiving the Schick test	102
Number of Schick tests done	105
Number of visits	348
Number of individuals (chiefly nurses and doctors) receiving protection against scarlet fever	63
Number of Dick toxin injections	378
Number of individuals receiving the Dick test	161
Number of Dick tests	208
Number of visits	700
Number of individuals receiving protection against hay fever	138
Number of cutaneous tests, or protective and therapeutic inoculations in treatment of hay fever	2,288
Number of visits	1,016
Number of individuals receiving protection against smallpox	9
Number of visits	18
Number of dog bite (or other animal bite) cases	409
Number of individuals receiving protective injections against rabies	65
Number of protective antirabic injections	903
Number of visits	1,320
Chemo-serum Therapy:	
Number of patients under treatment for neurosyphilis	41
Number of visits of neurosyphilis patients	650
Number of intravenous Arsphenamine injections	214
Number of intradural Arsphenaminized serum injections	142
Number of intramuscular bismuth injections	119
Number of intramuscular mercury injections	33
Number of lumbar punctures done for diagnosis	27
The work of the laboratory:	
Number of autogenous vaccines prepared	1,040
Number of Swift-Ellis and Ogilvie sera prepared	144

Number of colloidal gold tests done:		
For this service	116	
For other services	45	
	—	161
Number of spinal fluid cell counts done		70

From seven specimens of blood taken from convalescent patients the following doses of sera were prepared and bottled for the South Department:

Convalescent measles sera	38	
Convalescent scarlet fever sera	5	
	—	43

These sera were used in treatment of, or protection against the above-mentioned diseases at the South Department.

PEDIATRIC DEPARTMENT.

Nine hundred forty-six ward patients and 3,903 out-patients were treated in the Pediatric Service during the past year. Of the out-patients treated 2,871 were new patients this year. The out-patients made 7,365 visits. These out-patient figures include the number of baby hygiene cases: the figures on baby hygiene alone being 103 cases (of which 72 were new this year) and 512 visits.

CLINICAL LABORATORY.

This department has full charge of all the routine laboratory work in the various surgical services. Furthermore, the department continues to do special laboratory work for all the services with the exception of the Fourth Medical Service. During the year 1929, 4,680 special blood tests have been done on patients in the house; 1,026 special blood tests in the Out-Patient Department; 312 basal metabolism determinations on patients in the House and 1,800 basal metabolism determinations on patients in the Out-Patient Department.

DEPARTMENT OF ORAL SURGERY.

Following is a report of work done in the Oral Surgery Department for the year 1929:

Ward patients treated	1,032
Visits of ward patients	1,571
Out-patients treated	1,757

Out-patients counted elsewhere	1,162
Visits of out-patients	3,038
Consultations	896
Teeth extracted	4,208
Supernumerary teeth removed	9
Impacted teeth removed	47
Novocaine anesthesia	3,116
Nitrous oxide anesthesia	110
Ether anesthesia	35
Ethyl-chloride anesthesia (local)	90
Alveolar abscesses	224
Alveolar abscesses incised on face	74
Fractured jaws	89
Pathological fractured jaws	3
Osteomyelitis	68
Spiculæ and sequestra removed	43
Bone cysts	5
Cysts surgically removed	18
Parotid gland abscesses	4
Sub-maxillary gland abscess	1
Sarcoma	1
Carcinoma of jaw	5
Necrosis of jaw	8
Removal of foreign body	1
Epulis	1
Extraction involving antrum	1
Pemphigus treated	1
Root amputations	3
Temporary fillings	88
Hemorrhages stopped	30
Stomatitis	27
Vincent's infection	89
Treatments	1,318
Prophylaxis	736
Prophylaxis by Forsyth students	35
Removal of dentigerous cyst and impacted third molar extra-orally	1
Removal of three warts from junction of hard and soft palate with radio-knife needle	1

GASTRO-INTESTINAL SERVICE.

This clinic is steadily growing. This year there were 1,422 out-patient visits compared with 772 a year ago and 525 two years ago. This is the first full year in which the clinic has been held twice a week. The advantages are obvious; it is easier to refer patients from other clinics, and the examination with its laboratory work is finished more promptly. It also provides care for more patients per year without increasing the

number of workers. We have five or six regular trained workers, one visiting physician, one or two junior visiting physicians, and three appointed assistants in medicine. Two or three of the workers are present on Tuesdays and three or four on Fridays.

The appointment system begun last year is working well. It evens up the work of the clinic, makes a good impression on the patient, and makes the follow-up of ulcers and other cases more systematic and satisfactory. Our large and comfortable quarters never fail to make a good impression on visitors from clinics in other cities.

A new method of dealing with the symptom free peptic ulcers is being tried, namely, an educational class in charge of Doctor Jankelson. A large number of our ulcer cases are referred from either medical or surgical wards for follow-up. They usually come symptom free, and the problem of the clinic is to keep them so. Our past experience has been that many of these cases report once or twice, and then fail to reappear until there is a recurrence of symptoms.

The patients are first treated individually to relieve symptoms and eliminate focal infection, and are then taught in groups how to promote healing of the ulcer and prevent recurrences. The symptom free ulcer cases meet in classes once a week for eight or ten times in order to educate them as to the cause, pathology, symptoms, complications, and treatment of ulcer.

The results are: For the physician, closer contact with the symptom free ulcer patients and better understanding of their point of view; and, for the patient, clearer and better ideas derived from discussion of the many practical ulcer problems, better cooperation, and, we believe, better end results.

The X-Ray Department has been overwhelmed by the large numbers of digestive cases referred from the out-patient departments for examination. The gastro-intestinal clinic has often been consulted by other out-patient services to decide in which cases this examination will prove most useful.

The cases seen in consultation in the wards have been very interesting and important and very useful for study and teaching. We are grateful to our colleagues for this opportunity. This clinic would welcome more digestive cases from all the services after discharge from the wards. There is still plenty of room for extension of this work.

The following clinical research has been carried out during the year:

Doctor White has been making observations on the healing of gastric ulcer by serial X-ray studies during the course of medical treatment.

Doctors White and Jankelson have been making a trial of intra-gastric photography by means of an instrument kindly loaned by the Gastro-Photograph Company. The results are very interesting, but we have not reached any decision yet regarding their clinical importance or relation to X-ray examination.

Doctor Davidson has tried high vitamin treatment with cod liver oil and tomato juice in a group of peptic ulcers without relying on frequent feeding or the use of alkali.

Doctors White and Jankelson have begun a clinical study of all cases of gastric hemorrhage treated in the last eight years.

The following figures represent the work of the clinic for the year:

Number of ward patients treated or seen in consultation	150
Number of out-patients treated	379
Number of out-patient visits	1,442

BLOOD LABORATORY.

The work of the Blood Laboratory during the year 1929 is represented by the following figures:

House cases studied	118
House cases completed	121
Total	<u>239</u>
Out-Patient Department complete blood examinations	257
Total blood examinations	496
House incomplete bloods	214
Total	<u>710</u>
Number of consultations	118
Number of typings	437
Number of Wassermanns	95
Number of donors	450
Number of out-patients	40
Number of these out-patients counted elsewhere	31
Visits of out-patients	257

The Blood Laboratory has continued to maintain its large list of professional donors and to supply them for transfusions, both in the hospital and outside of it. The exact number supplied cannot be stated, as the list has to be kept open for the use of house officers at times when the technicians are not present, and because donors are frequently sent for without being used.

The appointment of a resident physician on the First Medical Service has resulted in somewhat better supervision of the work of the laboratory. But the resident's duties in teaching and other things are so heavy that there is still much to be desired. The material handled by the laboratory is surely sufficient to support a paid research man, and would undoubtedly increase if it were used more fully.

SERVICE FOR TROPICAL DISEASES.

The service for tropical diseases during the past year has been concerned chiefly with the diagnosis, observation and study of the following cases in the general wards of the hospital:

Adult scurvy	3
Malaria	1
Intestinal parasitism	5
Ulcerative colitis	2
Pellagra	12
Amebic dysentery	6
Trichiniasis	1

In addition to these cases, a considerable number of patients were seen in consultation by Dr. George C. Shattuck. Such cases involved the question of diagnosis of such diseases as echinococcus cyst, schistosomiasis, trichiniasis and pellagra. The stools of about thirty-six patients from the Out-Patient Department and from the general wards have been examined for diagnosis.

Research work is proceeding along various lines. Of especial importance has been Doctor Townsend's work upon the nature of the anemia in adult scurvy, and upon the influence of anayodin in ulcerative colitis; and the work now in progress by Doctor Heath in collaboration with Mr. Spencer Davis upon the pigmentary and skin changes in pellagra.

The service at present is especially interested in patients with colitis and pellagra and in those showing an eosinophilia, but it is also prepared for the study of all cases coming under the scope of tropical medicine.

Dr. Wilmot C. Townsend was resident on this service from January to September, 1929; Dr. Clark W. Heath from September through December. Both of these residents have divided their time between the study of cases of tropical disease in the general wards of the hospital and work upon pernicious anemia and secondary anemia under Drs. George R. Minot and William B. Castle of the Thorndike Memorial Laboratory.

CARDIAC CLINIC.

One hundred sixty-two patients were treated in the Cardiac Clinic during the year 1929: of these 114 were new admissions. These out-patients made a total of 710 visits to the department.

During 1929 the Cardiac Clinic has "carried-on" along the same lines of the previous year

The intensive follow-up work of chronic cardiaes discharged from the house and referred to the clinic has been continued and the results obtained from this group have been most satisfactory, the object being, by advice, medication and proper adjustment to industry, to keep these patients within their cardiac reserve.

Cases have been referred from the various out-patient departments, either for opinions or treatment with follow-up work. An attempt has been made to cooperate with the prenatal clinic and to be a help in solving their particular problems.

Many consultations have been held, at which members of the staff, house officers, and practising physicians who were interested were present.

The interest displayed by the other departments and the cooperation which has existed has been most gratifying.

CIRCULATORY CLINIC.

A Circulatory Clinic has been started. During the year 1929 the number of patients treated was 618. Three hundred eighty of these were new patients. These out-patients made a total of 2,116 visits to the clinic.

DEPARTMENT OF SOCIAL WORK.

The work of the Department continued as in previous years. There were no additions to our paid staff and no increase in the general nature or volume of the work carried.

We gave definite social service outside the hospital to 2,844 patients on whom social records were made, a monthly average of 549. Two thousand two hundred and twenty-two of these were new and 277 were patients reinstated for the first time during the year. Our case workers paid a total of 4,986 visits outside the hospital to homes and agencies in the interests of patients.

The monthly average of our paid staff was $22\frac{1}{2}$, $14\frac{7}{8}$ of these were social case workers. These latter were pretty evenly distributed between House and Out-Patient Department.

In addition to our socially recorded work many patients were given definite service which was not so recorded. The following were among the larger groups so served:

Syphilis patients attending the Skin Clinic whom we kept track of to insure regularity of treatment either in this or in other clinics. We have to make a rather elaborate monthly statistical report on these cases to the State Board of Health, as this is one of the regular subsidized clinics. Women and girls suffering from certain forms of infectious disease are reported by us to the State Board of Health from the Gynecological Clinic.

A group of tubercular patients coming to the Medical clinics were steered by us to local Health Units or elsewhere for treatment and care.

Our two recreational workers in the Main Hospital and the South Department gave some form of recreational service, good reading material, games, occupational therapy to many hundred of sick children confined in the wards of the Main Hospital and the South Department.

Our work in connection with the Maternity Service, both in the House and Out-Patient Department, continued very active. Owing largely to the large amount of unemployment, much poverty, undernourishment and misery were met with among the patients. Distressing wherever found, these conditions seemed particularly pathetic in cases of pregnant women and unborn children. We met the situations as best we

could with such help as could be obtained from the various charitable agencies.

There were 1,488 applications to our Pre-natal admitting desk in the Out-Patient Department, an increase of nearly 300 over the previous year; 1,309 were admitted to the Maternity Clinic, 179 non-Boston settled were advised as to other community resources for confinement. Of the 1,550 deliveries in the House, 1,277, about 82 per cent, were admitted through the Out-Patient Department and had received some pre-natal care. As in past years, we referred the great majority of all pre-natal out-patients to the Community Health Association for home nursing and instruction. During any one month there were between three and four hundred of these referred patients on our active follow-up list.* There were 5,002 return visits by old and new patients to the Maternity Clinic during 1929. In addition, of course, our case workers, in both the clinics and the House gave intensive social service to a smaller group of patients.

All this detailed work and follow-up involves an immense amount of effort and is only made possible by the good cooperation of all concerned, including Staff Physicians and Nurses, and Community Health Nurses and other outside agencies.

EXPENDITURES.

As in previous years, support for the Department has been received from both public and private sources.

Expended Through the Hospital Budget.

Salaries.....	\$21,947 78	
Printing, stationery and postage...	357 07	
Furniture and furnishings.....	192 65	
Telephone rentals.....	762 86	
Telephone, telegraph and messenger service.....	140 64	
Transportation.....	415 00	
		<u>\$23,816 00</u>
In addition there was expended for surgical apparatus from the interest on the Perkins Fund		<u>\$164 23</u>

* Figures for three months show the average number dealt with: October, total 406 (old 315, new 91); November, 362 (old 269, new 93); December, 355 (old 251, new 102).

From the Hettie Lang Shuman Memorial Library Fund for books and magazines for the Children's Library	<u>\$152 67</u>
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Expended Through the Private Committee.

Salaries	\$14,291 65	
Carfares, telephone, laundry, etc.	194 39	
Miscellaneous	28 62	
Publicity	590 00	
	<hr/>	
Total		<u>\$15,104 66</u>

In addition there was received for special relief of certain patients and for supplies for our recreational work with ward children as follows:

Committee of the Permanent Charity Fund, Inc.	\$840 64	
Collected by case workers	1,128 15	
Special donation for relief of needy patients	55 00	
For supplies for Children's Recrea- tional Work	336 50	
	<hr/>	
Total		<u>\$2,360 29</u>

PRIVATE COMMITTEE.

Mrs. George H. Monks, Chairman.

Mrs. Reid Hunt, Secretary.	Mrs. George R. Minot.
Mrs. Edward H. Bradford.	Mrs. I. A. Ratshesky.
Mrs. Charles A. Coolidge.	Mrs. William H. Robey.
Mrs. Thomas M. Devlin.	Mrs. John Rock.
Mrs. Henry Ehrlich.	Mrs. Milton J. Rosenau.
Mrs. Charles C. Lund.	Mrs. Ernest B. Young.

Mr. William C. Endicott, Treasurer, 71 Ames Building,
Boston.

Miss Gertrude L. Farmer, Executive Director.

HOSPITAL SCHOOL FOR CHILDREN.

The Hospital School for Children, conducted under the auspices of the Boston Public School Committee, had a total of 398 pupils enrolled during the year 1929, the average number of pupils being 55, of whom 48 were active. Of the children who remained in the hospital two months or longer, the average number of pupils receiving daily instructions was 15.

In June, nine children who had been hospital patients for two months or longer, were assured of promotion to the next higher grade in school. Also seven children were recommended for promotion on trial.

The summer session of the School had a total registration of 142 pupils, with an average membership of 49 pupils.

SOUTH DEPARTMENT.

During the thirty-five years that the department has been in operation, 82,139 patients have been received, nearly all ill with an infectious disease.

HAYMARKET SQUARE RELIEF STATION.

This Relief Station has been in commission twenty-eight years. In these twenty-eight years, 869,620 patients have been treated. The number of patients treated during the first year was 20,150 and during the past year 27,920. These patients received 29,092 days' treatment.

EAST BOSTON RELIEF STATION.

In the twenty-one years that the East Boston Relief Station has been in operation, 244,691 patients have been treated. For the year ending December 31, 1929, 9,342 patients were treated. These patients received 27,330 days' treatment.

CONVALESCENT HOME.

During the thirty-nine years that the Convalescent Home has been in operation, 13,392 patients have been benefited.

The number of patients treated during the past year was 316, who received 4,495 days' treatment.

WEST DEPARTMENT.

The West Department, after being used by the United States Government for ten years as General Hospital No. 10 for war veterans, was returned to the Boston City Hospital Trustees in November, 1918.

The buildings are in fairly good condition and are unfurnished. Watchmen are caring for the plant until its future use is decided upon.

SANATORIUM DIVISION.

The Sanatorium Division (formerly the Boston Sanatorium) became a department of the Boston City Hospital on April 1, 1927. The annual report of this department is published in a separate volume.

OBITUARY.

The Trustees of the Boston City Hospital wish to record their deep sense of loss in the death of Dr. TOWNSEND W. THORNDIKE. For twenty-three years he has given devoted service to the Hospital; as Chief of the Dermatological Service he has maintained it on a high grade of efficiency. He was among the first to recognize the necessity for the development of laboratory facilities and the duty of municipal hospitals to protect the community from disease by a study of its causes, and he exerted a potent influence in making the generous bequest of his uncle, Mr. George L. Thorndike, available for the Thorndike Laboratory. His skill as a physician, his kindness and his untiring care for their interests gained the respect and love of his patients, while his unflinching interest in the development of the Hospital made him a valuable member of its Staff.

The Trustees of the Boston City Hospital wish to record their sense of great personal loss in the death of Dr. EDWARD N. LIBBY. For thirty years he gave distinguished service to the Hospital, whose welfare was one of his chief interests. An exceptional teacher, he inspired his students with the best traditions of his profession; an able diagnostician, he was widely sought as a consultant, but he was no less eminent in representing the highest type of the family physician. As their physician and friend, he gave with self-sacrificing devotion the same full measure of his talents to all his patients, whether in private practice or in the wards of the Hospital. His modesty, generosity, sanity and wisdom, made him the trusted adviser of his colleagues and the Trustees.

In the death of Dr. LEON W. JESSAMAN we have lost both a fellow Alumnus and a faithful Staff Surgeon of the Boston City Hospital. To record formally such a loss as this in itself avails nothing, and yet, futile as it may seem, it helps us all, as we continue for a little while our earthly labors, to again appreciate his loyalty and devotion to our common endeavors. His example stimulates us to renewed efforts, for we know that he was one of those who "have left behind them that loving remembrance which is better than fame, and if their epitaphs are chiseled briefly in stone, they are written at full length on living tablets in a thousand homes to which they carried their ever-welcome aid and sympathy."

Dr. VINCENT YARDLEY BOWDITCH, Consulting Physician, died in December, having been a member of the Visiting Staff for thirty-nine years. He served as physician to out-patients, Assistant Visiting Physician and Visiting Physician from 1891 until 1901, and as Consulting Physician from 1901 until his death. He was eminent as a physician for the care of tuberculosis, being a pioneer in this work. This Hospital offers its tribute of gratitude and respect.

MORTON HENRY PRINCE, M. D., Consulting Physician, passed away in August. A noted neurologist, lecturer, author, decorated by several nations for distinguished service during the World War, the Boston City Hospital records with deep appreciation his long association: A year of internship, two years' service for diseases of the throat, twenty-nine years' service as physician for diseases of the nervous system, and fifteen years as consulting physician.

Dr. HAROLD ALEXANDER HOGUE, Fourth Medical House Officer, passed away in January. He lost his life while engaged in the true work of the physician, making possible life for others. Although at the very beginning of his career, his high character and con-

scientious work gave that promise which is the hope of all youth. As a young man whose fine being endeared him to all who knew him, his death brings regret; and to those who were his comrades, the sorrow of losing a true friend.

CHANGES IN THE MEDICAL AND SURGICAL STAFF.

The following members of the Visiting Staff resigned their positions: Henry F. R. Watts, M. D., Physician to the Convalescent Home since 1906, and earlier an Interne; Joseph T. Wearn, M. D., Junior Visiting Physician and Associate Director of the Thorndike Laboratory; Edward J. Butler, M. D., Junior Visiting Surgeon for Diseases of Ear and Throat.

The following promotions were made: William P. Boardman, M. D., from the position of Visiting Physician for Diseases of the Skin to that of Physician-in-Chief for Diseases of the Skin; Joseph Resnik, M. D., from the position of Visiting Physician for Physical Therapeutics to that of Physician-in-Chief for Physical Therapeutics; Donald Munro, M. D., from the position of Assistant Visiting Surgeon to that of Visiting Surgeon; Joseph H. Shortwell, M. D., from the position of Assistant Visiting Surgeon to that of Visiting Surgeon; Thomas K. Richards, M. D., from the position of Junior Visiting Surgeon to that of Assistant Visiting Surgeon; Thomas W. Wickham, M. D., from the position of Junior Visiting Surgeon to that of Assistant Visiting Surgeon; George W. Papen, M. D., from the position of Junior Visiting Surgeon to that of Assistant Visiting Surgeon; Charles C. Lund, M. D., from the position of Junior Visiting Surgeon to that of Assistant Visiting Surgeon; E. Everett O'Neil, M. D., from the position of Assistant to Visiting Surgeons to that of Junior Visiting Surgeon; William F. Cotting, M. D., from the position of Assistant to Visiting Surgeons to that of Junior Visiting Surgeon; John J. Lucy, M. D., from the position of Assistant to Visiting Surgeons to that of Junior Visiting Surgeon; Howard A. Bouvé, M. D., from the position of Assistant to Visiting Surgeons to that of Junior Visiting Surgeon; Gerald L. Doherty, M. D., from the position of Assistant to Visiting Surgeons to that of Junior Visiting Surgeon; Robert M.

Green, M. D., from the position of Visiting Surgeon for Gynecology and Obstetrics to that of Surgeon-in-Chief for Gynecology and Obstetrics; John T. Williams, M. D., and Frederick L. Good, M. D., from the position of Assistant Visiting Surgeons for Gynecology and Obstetrics to that of Visiting Surgeons for Gynecology and Obstetrics; Harold V. Hyde, M. D., Frederick J. Lynch, M. D., Reginald D. Margeson, M. D., from the positions of Junior Visiting Surgeons for Gynecology and Obstetrics to that of Assistant Visiting Surgeons for Gynecology and Obstetrics; Frank Fremont-Smith, M. D., from the position of Junior Visiting Physician for Neurology to that of Assistant Visiting Physician for Neurology.

The following appointments were made:

To the position of Curator of the Hospital Museum: Dwight O'Hara, M. D.

To the position of Junior Visiting Physician: Soma Weiss, M. D.

To the position of Assistant to the Visiting Surgeons: William A. White, Jr., M. D., Allan L. Davis, M. D., Daniel J. Duggan, M. D., Winchester W. Everett, M. D., James C. Healy, M. D., Greene Fitzhugh, M. D.

To the newly created position of Research Assistant to the Surgical Laboratory and the Fifth Surgical Service: Milton Miller, M. D.

To the position of Junior Visiting Surgeon for Gynecology and Obstetrics: G. Elliott May, M. D.

To the position of Assistant to the Visiting Surgeons for Gynecology and Obstetrics: William J. McDonald, M. D., Benedict F. Boland, M. D., Emilio D'Errico, M. D., Kenneth G. Farnsworth, M. D.

To the position of Assistant Visiting Ophthalmic Surgeons: Frederick H. Salls, M. D., Joseph H. McLaughlin, M. D.

To the position of Junior Visiting Surgeons for Diseases of Ear and Throat: Fred Heimlich, M. D., Charles W. DeWolf, M. D., Philip G. Berman, M. D., Vincent J. Kelley, M. D.

To the position of Visiting Physicians for Neurology: Tracy J. Putnam, M. D., William Herman, M. D.

To the position of Assistant Visiting Physicians for Physical Therapeutics: Girdie W. Dickinson, M. D., Arthur J. Cole, M. D.

Dr. Thomas J. O'Brien from the Medical Staff and

Dr. Robert C. Cochran from the Surgical Staff were appointed members of the Committee on Public Relations.

ASSISTANTS TO THE VISITING STAFF.

The following temporary appointments were made for the term of one year:

To the position of Assistant in Medicine: Beginning January 1, 1929: William B. Castle, M. D., Soma Weiss, M. D., Wilmot C. Townsend, M. D., John S. Lawrence, M. D., Albert W. Bromer, M. D., Lawrence B. Ellis, M. D., Stacey R. Mettier, M. D., Clark Heath, M. D., David Stern, M. D., Hyman B. Goldberg, M. D., Edward J. Leonard, M. D., I. R. Jankelson, M. D., Samuel Morein, M. D., Lloyd D. Felton, M. D. Dr. Lawrence served until July 1, when he resigned to go to the University of Rochester.

Beginning March 8, 1929: Abraham Rudy, M. D.

Beginning April 5, 1929: Herbert S. Saver, M. D. (for the First Medical Service).

Beginning December 13, 1929: Bernard I. Goldberg, M. D., Hyman B. Goldberg, M. D., H. Louis Kramer, M. D., David Stern, M. D., Norman A. Welch, M. D.

To the position of Assistant in Surgery: Beginning January 1, 1929: Daniel C. Goldfarb, M. D., Philip S. Foisie, M. D., Aaron Thurman, M. D., David D. Berlin, M. D., Allan L. Davis, M. D., Alexander J. A. Campbell, M. D., A. Bedell Shoemaker, M. D. (Genito-Urinary Service), Gordon D. Atkinson, M. D. (Genito-Urinary Service), George R. Murphy, M. D. Dr. Davis served until May 17, when he became Assistant to the Visiting Surgeons.

Beginning April 5, also August 1, 1929: Gordon M. Morrison, M. D. (Sixth Surgical Service.)

Beginning April 18, 1929: Israel Edelstein, M. D. (Genito-Urinary Service.)

Beginning May 6, 1929: Henry R. Gilbert, M. D.

Beginning August 1, 1929: Joseph W. Tiede, M. D., Gordon M. Morrison, M. D., Leonard P. Landry, M. D., Michael E. McGarty, M. D., Roger T. Doyle, M. D., John V. McMackin, M. D.

Beginning December 6, 1929: Edward A. Cooney, M. D., Daniel J. McSweeney, M. D., Arthur T. Ronan, M. D., Harold A. Spaulding, M. D.

To the position of Assistant in Gynecology and

Obstetrics: Beginning January 1, 1929: G. Elliott May, M. D., Harold I. Cohen, M. D., Emilio D'Errico, M. D. Dr. May served until May 17, when he became Junior Visiting Surgeon for Gynecology and Obstetrics. Dr. D'Errico served until May 17 also, when he became Assistant to the Visiting Surgeons for Gynecology and Obstetrics.

Beginning October 1, 1929: P. Francis Weiss, M. D. (for remainder of year).

To the position of Assistant in Physical Therapeutics: Beginning February 8, 1929: Girdie W. Dickinson, M. D. (for six months).

Beginning April 5, 1929: Arthur J. Cole, M. D. (for six months). Dr. Dickinson and Dr. Cole served until May 17, when they became Assistant Visiting Physicians for Physical Therapeutics.

Beginning May 6, 1929: J. B. Albert Johnson, M. D. (for six months).

Abraham Blumenfeld, M. D., was appointed Voluntary Assistant in the Dermatological Department beginning December 13, 1929.

PUBLICATIONS OF THE STAFF.

Following is a list of the publications of the Hospital Medical and Surgical Staff during the year 1929:

"Scleroderma, with Special Reference to its Etiology and Treatment," by William P. Boardman, M. D. *Archives of Dermatology and Syphilis*, Vol. 19, p. 901, June, 1929.

"Maintenance Dose of Digitalis — an Electrocardiographic Study," by A. W. Bromer, M. D., and H. L. Blumgart, M. D. *Journal of American Medical Association*, 92:204, January 19, 1929.

"Blood Vessels of Non-Inflammatory Origin in Human Heart Valves," by A. W. Bromer, M. D., L. J. Zschiesche and J. T. Wearn, M. D. Proceedings of American Society of Clinical Investigation, *Journal Clinical Investigation*, 7:487, August, 1929.

"Methods and Problems of Medical Education," by P. F. Butler, M. D. *The Rockefeller Foundation*, twelfth series, 1929.

"A case of Giant Cell Sarcoma," by P. F. Butler, M. D. *American Journal of Roentgenology and Radium Therapy*, May, 1929.

"A case of Lithopedion," by P. F. Butler, M. D. *American Journal of Roentgenology and Radium Therapy*, May, 1929.

"A Domestic Liver Extract for Use in Pernicious Anemia," by W. B. Castle, M. D., and M. A. Bowie, M. D. *Journal of American Medical Association*, 92:183, June 1, 1929.

"Achyilia Gastrica and Pernicious Anemia," by W. B. Castle, M. D. *British Medical Journal*, 1:1120, June 12, 1929.

"Some Conditions Affecting the Capacity for Prolonged Muscular Work," by F. A. deM. Campos, M. D., W. B. Cannon, M. D., H. Lundin, M. D., and T. T. Walker, M. D. *American Journal of Physiology*, 87:680-701, 1929.

"The Etiological Relationship of Achyilia Gastrica to Pernicious Anemia," by W. B. Castle, M. D. *Proceedings of the Royal Society of Medicine*, 22:58, July, 1929.

"Observation on the Etiologic Relationship of Achyilia Gastrica to Pernicious Anemia. I. The Effect of the Administration to Patients with Pernicious Anemia of the Contents of the Normal Human Stomach Recovered after the Ingestion of Beef Muscle," by W. B. Castle, M. D. *American Journal of Medical Science*, 178:748, December, 1929.

"Observation on the Etiologic Relationship of Achyilia Gastrica to Pernicious Anemia. II. The Effect of the Administration to Patients with Pernicious Anemia of Beef Muscle after Incubation with Normal Human Gastric Juice," by W. B. Castle, M. D., and W. C. Townsend, M. D. *American Journal of Medical Science*, 178:764, December, 1929.

"The Strain on the Collateral Lung in Collapse Therapy," by Edward D. Churchill, M. D. *Archives of Surgery*, 18:553-560, January, 1929. Pt. 2.

"Rapid Shallow Breathing Results from Pulmonary Congestion and Edema," by Edward D. Churchill, M. D., and Oliver Cope. *Journal of Experimental Medicine*, xlix:531-537, April 1, 1929.

"The Technic of Rib Resection and Osteomyelitis of the Rib Ends," by Edward D. Churchill, M. D. *Journal of the American Medical Association*. 92.644-645, February 23, 1929.

Chapter on Anesthesia in "Synopsis of the Practice of Preventive Medicine," pp. 110-126, Cambridge, 1929, by Edward D. Churchill, M. D.

"Surgical Treatment of Pulmonary Tuberculosis," by Edward D. Churchill, M. D. *Common Health*, 16:78-81 July, August, September, 1929.

"Decortication of the Heart (Delorme) for Adhesive Pericarditis," by Edward D. Churchill, M. D. *Archives of Surgery*, 19: 1457-1469 (December), 1929. Pt. 2.

"Kaiser Wilhelm Society for the Advancement of Science, Dedication of the Institute for Research in Psychiatry in Munich," by Stanley Cobb, M. D. *Archives of Neurology and Psychiatry*, 21:704, 1929.

"The Cerebral Circulation. VIII. A Quantitative Study of the Capillaries in the Hippodampus," by Stanley Cobb, M. D. *Archives of Surgery*. 18:1200, 1929. (Cushing Volume.)

"The Cerebral Circulation. VII. Changes in Cerebral Capillary Bed following Cervical Sympathectomy," by Stanley Cobb, M. D. *Archives of Neurology and Psychiatry*. 21:1102, 1929.

"The Cerebral Circulation. X. The Action of Histamine," by Stanley Cobb, M. D., H. G. Wolff, M. D., and H. S. Forbes, M. D. *American Journal of Physiology*. 89, No. 2:266, 1929.

"Changes in the Interstitial Cells of the Brain with Morphine Intoxication," by Stanley Cobb, M. D., H. G. Wolff, M. D., and W. P. Reed, M. D. *Archives of Neurology and Psychiatry*. 21:1387, 1929.

"Beobachtungen an halbseitigen Thalamuskaten und Striatumkaten sowie nach halbseitiger Exstirpation des Frontaloder Occipitalpoles," by Stanley Cobb, M. D., and G. Schaltenbrand. *Pflüger's Arch, f. d. ges. Physiol. des Menschen u. d. Tiere*. 222:Band 5 u. 6 Heft, 1929.

"The Cerebral Circulation. IX. The Relationship of the Cervical Sympathetic Nerves to Cerebral Blood Supply," by Stanley Cobb, M. D. *American Journal of Medical Science*. 178, No. 4:528, 1929.

"The Cerebral Hemorrhage from Venous and Capillary Stasis. A Report of Five Cases with Autopsy," by Stanley Cobb, M. D., and J. P. Hubbard, M. D. *American Journal of Medical Science*. 178, No. 5:693, 1929.

"The Electromyogram in Myasthenia Gravis," by Stanley Cobb, M. D., H. G. Wolff, M. D., and H. Kreutmann, M. D. *Brain*. 51, No. 4:508, 1928.

"The Relation of Certain Physico-chemical Processes to Epileptiform Seizures," by Stanley Cobb, M. D., and William G. Lennox, M. D. *American Journal of Psychiatry*. 8, No. 5: 837, 1929.

"The Nature of the Material Effective in Pernicious Anemia. III," by E. J. Cohn, M. D., T. L. McMeekin, M. D., and G. R. Minot, M. D. Abstracts of Communications, in the XIII *International Physiological Congress*, Boston, Mass., August 19, 1929, p. 55.

"Biological Abstracts," published by the University of Pennsylvania, Albert Ehrenfried, M. D., a member of Collaborating Staff.

"The Measurement of the Capillary Pressure under Natural Conditions and After Arteriolar Dilatation in Normal Subjects and in Patients with Arterial Hypertension and with Arteriosclerosis," by L. B. Ellis, M. D., and Soma Weiss, M. D. *Journal of Clinical Investigation*, 8:47, December, 1929.

"Observations on Coronary Thrombosis, with a Report of Three Covered Cases," by A. C. Ernstene, M. D. *American Journal of Medical Science*, 178:383, September, 1929.

"Studies on Red Blood Cell Diameter, IV, The Decrease in the Mean Diameter of the Reticulocytes and Adult Red Blood Cells in Pernicious Anemia Following Liver Therapy," by G. Fitzhugh, M. D., and E. L. Persons, M. D. *Journal of Clinical Investigation*, 7:631, October, 1929.

"Late Results of Surgical Treatment of Peptic Ulcer," by Maurice Fremont-Smith, M. D. *American Journal of Medical Science*, No. 1, Vol. 177, p. 33, January, 1929.

"Multiple Sclerosis — a Pitfall in Diagnosis," by Maurice Fremont-Smith, M. D. *New England Journal of Medicine*. Vol. 201, No. 11, p. 531. September 12, 1929.

"The Pneumotachograph in Certain Intrathoracic Diseases," by M. Hochrein, M. D., and Soma Weiss, M. D. *Archives of International Medicine*, 44:289, August, 1929.

"Is the Vital Capacity an Aid in the Diagnosis of Hilum Gland Tuberculosis?" by Eli Friedman, M. D., and John B. Hawes, 2d, M. D. *Journal of the American Medical Association*, February 2, 1929.

"Some Observations on the Diagnosis of Mild Cases of Poliomyelitis," by Eli Friedman, M. D. *New England Journal of Medicine*, February 21, 1929.

"Interpretation of Roentgenograms in Tracheobronchial Gland Tuberculosis," by Eli Friedman, M. D. *The Journal of the American Medical Association*, February 23, 1929.

"Certain Clinical Aspects of the Malignant Lymphomas," by H. Jackson, Jr., M. D. *New England Journal of Medicine*, 200:108, January 17, 1929.

"The Vitamin B Content of Cancer," by H. Jackson, Jr., M. D., and C. I. Krantz, M. D. *Journal of Clinical Investigation*, 6:609, February 20, 1929.

"Exploratory Laparotomy in Cases of Doubtful Abdominal Malignancy," by H. Jackson, Jr., M. D. *Medical Clinics of North America*, 13:165, July 1, 1929.

"Recent Advances in the Biology of Cancer," by H. Jackson, Jr., M. D. *New England Journal of Medicine*, 201:294, August 15, 1929.

"Diagnosis and Treatment of Malignant Lymphoma," by H. Jackson, Jr., M. D. *New England Journal of Medicine*, 201:1284, December 26, 1929.

"Malignant Disease of Bones considered as Rheumatism," by Henry Jackson, M. D. *Transactions of the Association of American Physicians*, Vol. XLIV, p. 212.

"Diabetic Manual," by Elliott P. Joslin, M. D. Fourth edition, published by Lea & Febiger, Philadelphia, 1929.

"Diabetic Children," by Elliott P. Joslin, M. D., with Priscilla White, M. D. *Journal of American Medical Association*, January, 1929, 92, pp. 143-146.

"Insulin and Carbohydrate Tolerance," by Elliott P. Joslin, M. D. *Annals of Internal Medicine*, April, 1929, 2, 10, pp. 1001-1012.

"Abolishing Diabetic Coma," by Elliott P. Joslin, M. D. *Journal of American Medical Association*, July, 1929, 93, p. 33.

"Prevention of Diabetic Deaths," by Elliott P. Joslin, M. D. *Commonwealth of Massachusetts, Department of Public Health*, June, 1929.

"Diabetic Coma," by Elliott P. Joslin, M. D. *Medical Clinics of North America*, 13, 1, July, 1929.

"Treatment of Diabetes Mellitus," by Elliott P. Joslin, M. D. *Minnesota Medicine*, October, 1929, 12, p. 569.

"The Dental Expert," "Johannes Muller," editorials by Frederick A. Keyes, D. M. D. *The Apollonian*. Vol. IV. January, 1929.

"What! A Dentist?" "Sir Bertram Windle," editorials by Frederick A. Keyes, D. M. D. *The Apollonian*. Vol. IV. April, 1929.

"Out with the Pulpless Tooth," "Pierre Fauchard," editorials by Frederick A. Keyes, D. M. D. *The Apollonian*. Vol. IV. July, 1929.

"The Child's Permanent Teeth," "Marcellus Malpighi," editorials by Frederick A. Keyes, D. M. D. *The Apollonian*. Vol. IV. October, 1929.

"Two Cases with Purpura," by J. S. Lawrence, M. D. *Medical Clinics of North America*, 13:155, July, 1929.

"The Relation of Certain Physico-Chemical Processes to Epileptiform Seizures," by W. G. Lennox, M. D., and Stanley Cobb, M. D. *American Journal of Psychiatry*, 8:837, March, 1929.

"Studies in Epilepsy. VI. Factors Affecting Convulsions Induced in Rabbits," by W. G. Lennox, M. D., R. Nelson, M. D., and W. B. Beetham, M. D. *Archives of Neurology and Psychiatry*, 21:625, March, 1929.

"A Comparison of Arsphenamin and Catarrhal Jaundice, with Special Reference to the Blood Picture," by J. Lerman, M. D. *American Journal of Medical Science*, 178:54, July, 1929.

"Complete Pneumothorax of Unknown Cause," ("Spontaneous" or "Idiopathic" so called), by Edwin A. Locke, M. D. *Medical Clinics of North America*, 13:75, July, 1929.

"Is the Rehabilitation of the Advanced Sero-Negative Tabetic Possible?" by LeRoy A. Luce, M. D. *New England Journal of Medicine*, April 18, 1929.

"The Influence of the Thyroid Gland on the Action of Morphine," by Charles C. Lund, M. D. *New England Journal of Medicine*. Vol. 201, No. 8. pp. 345-353, August 22, 1929.

"Allusions to Medicine in Classical Literature," by Fred B. Lund, M. D. *Bulletin of New York Academy of Medicine*, 2d series, 1929, Vol. V., p. 845.

"The Importance of Medical Care and Consultation in Gall Bladder Disease. Also the Advantage of Spinal Anesthesia in Operation on the Gall Bladder," by Fred B. Lund, M. D. *New England Journal of Medicine*, Vol. 201, No. 22, p. 1089, November 28, 1929.

"The Surgeon and His Environment — Historical Sketch," by Fred B. Lund, M. D. *New England Journal of Medicine*, Vol. 201, No. 25, p. 1233, December 19, 1929.

"Melanotic Sarcoma of the Small Intestine," by Fred B. Lund, M. D. *New England Journal of Medicine*, Vol. 201, No. 23, p. 1133, December 5, 1929.

"Case Reports of Interesting Oral Lesions," by Francis P. McCarthy, M. D. *Apollonian*, October, 1929, and January, 1930.

"The Responsibility of the Dentist in Cancer of the Mouth," by Francis P. McCarthy, M. D. *New England Journal of Medicine*, December 12, 1929.

"Meningococcus Endocarditis, Report of a Case," by H. E. MacMahon, M. D., and E. A. Burkhardt, Jr., M. D. *American Journal of Pathology*, Vol. 197, 1929.

"Carbon Tetrachloride Poisoning with Macroscopic Fat in the Pulmonary Artery," by H. E. MacMahon, M. D., and Sona Weiss, M. D. *American Journal of Pathology*, 5:623, November, 1929.

"Experimental Obstructive Cirrhosis," by H. E. MacMahon, M. D., J. S. Lawrence, M. D., and S. J. Maddock, M. D. *American Journal of Pathology*. 5:631, November, 1929.

"Obstructive Cirrhosis," by H. E. MacMahon, M. D., and F. B. Mallory, M. D. *American Journal of Pathology*, Vol. 645, 1929.

"Electric Shock," by H. E. MacMahon, M. D. *American Journal of Pathology*, Vol. 333, 1929.

"Pathologic Histology of Adrenalectomized Cats," by H. E. MacMahon, M. D., and R. L. Zwemer, M. D. *American Journal of Pathology*, Vol. 491, 1929.

"Congenital Anomalies of the Liver," by H. E. MacMahon, M. D., *American Journal of Pathology*, Vol. 499, 1929.

"Bronchitis, Fibrosa Obliterans," by H. E. MacMahon, M. D., and H. Blumgart, M. D. *Clinics of North America*, 1929.

"Hemorrhages from Lacerations of the Cardiac Orifice of the Stomach Due to Vomiting," by G. K. Mallory, M. D., and Soma Weiss, M. D. *American Journal of Medical Science*, 178:506, October, 1929.

"Abdominal Cæsarian Section," by Reginald D. Margeson, M. D. *New England Journal of Medicine*, Vol. 200, No. 22, May 30, 1929.

"Demonstration of Direct Vascular Communication between the Coronary Arteries and Chambers of the Heart," by S. R. Mettier, M. D., L. J. Zschiesche and J. T. Wearn, M. D. *Transactions of Association of American Physicians*, 44:345, 1929.

"The Effect of Iron on Blood Formation as Influenced by Changing the Acidity of the Gastric Contents in Certain Cases of Anemia," by S. R. Mettier, M. D., and G. R. Minot, M. D. Proceedings of the Society of Clinical Investigation. *Journal of Clinical Investigation*, 7:511, 1929.

"The Structural Changes of the Liver in Pernicious Anemia," by S. R. Mettier, M. D. *Archives of Pathology*, 8:213, August, 1929.

"Recent Progress: Treatment of Pernicious Anemia," by G. R. Minot, M. D. *Nelson Loose-Leaf Living Medicine*, New York, T. Nelson Company, 4: 59a, 1929.

"A Non-fatal Case Simulating Acute Leukemia with Anemia

and Thrombopenic Purpura," by G. R. Minot, M. D. *Medical Clinics of North America*, 13:1, July, 1929.

"Some Fundamental Clinical Aspects of Deficiencies," by G. R. Minot, M. D. *Annals of Internal Medicine*, 3:216, September, 1929.

"Treatment of Pernicious Anemia," by G. R. Minot, M. D. *Billings-Forchheimer's Therapeutics of Internal Diseases*, George Blumer Edition, New York, D. Appleton & Co., Supplement: 423, 1929.

"Treatment of Anemia, other than Pernicious Anemia, with Diet," by G. R. Minot, M. D. *Billings-Forchheimer's Therapeutics of Internal Diseases*, George Blumer Edition, New York, D. Appleton & Co., Supplement: 435, 1929.

"Acknowledgment of Receipt of Kober Medal," by George R. Minot, M. D. *Transactions of the Association of American Physicians*, 44:11, 1929.

"Intestinal Localization. A Review of Certain Studies on the Cadaver, in the Surgical Anatomy of the Small Intestine and its Mesentery," by George H. Monks, M. D. *Surgery, Gynecology and Obstetrics*, August, 1929.

"A Series of Fifty Perforated Ulcers of the Stomach and Duodenum," by William R. Morrison, M. D. *New England Journal of Medicine*, March 21, 1929.

"Experimental Bone Marrow Reactions. V. The Influence of Water and Alcohol Extracted Liver on Blood Regeneration in Pigeons," by Gulli Lindh Muller, M. D., and E. Goode. *American Journal of Physiology*, 88:130: February, 1929.

"Experimental Bone Marrow Reactions. VI. The Adequacy of Kidney, Pancreas, Spleen and Brain for Blood Regeneration in Pigeons with Nutritional Anemia Produced by Starvation," by Gulli Lindh Muller, M. D., and A. Scorpio. *American Journal of Physiology*, 88:259, March, 1929.

"The Serum Cholesterol, Lecithin Phosphorus, and Fatty Acids of Pigeons fed Beef Tissues," by Gulli Lindh Muller, M. D. *Journal of Biological Chemistry*, 84:345, October, 1929.

"The Relation of Cholesterol, Lecithin Phosphorus and Fatty Acids to the Remission of Pernicious Anemia," by Gulli Lindh Muller, M. D. *American Journal of Medical Sciences*, December, 1929.

"Freud's Theory of Sex: a Criticism in Sex in Civilization," by Abraham Myerson, M. D., edited by V. P. Calverton. MacAulay Company, New York, 1929.

"Inheritance of Feeble-Mindedness," by Abraham Myerson, M. D., and Henry B. Elkind, M. D., forthcoming Walter E. Fernald Memorial Volume. 1929.

"Sugar Content of the Blood Going to and From the Brain by the Technique of Internal Jugular and Carotid Puncture," by Abraham Myerson, M. D., and Roy D. Halloran, M. D., in the forthcoming publication by Kaiser Wilhelm Institute, Munich, Ger., 1929.

"Studies on Filtrable Viruses. III. Further Observations on Vaccine Virus," by R. N. Nye, M. D., and F. Parker, Jr., M. D. *American Journal of Pathology*, 5:147, March, 1929.

"Non-Hemolytic Streptococci and Acute Rheumatic Fever," by R. N. Nye, M. D., and D. Seegal. *Journal of Experimental Medicine*, 49:539, April 1, 1929.

"The Pathogenicity of Yeastlike Fungi Isolated from the Human Gastro-Intestinal Tract," by R. N. Nye, M. D., L. G. Zervas, M. D., and M. A. Cornwall, M. D. *American Journal of Medical Science*, 178:515, October, 1929.

"Roentgen Diagnosis and Treatment of Enlarged Symptomless Thymus," by Frederick W. O'Brien, M. D. *New England Journal of Medicine*, March, 1929.

"Some Aspects of Physical Therapy," by Frederick W. O'Brien, M. D. *New England Journal of Medicine*, April 4, 1929.

"The Injection Treatment of Varicose Veins," by Eugene O'Neil, M. D. *New England Journal of Medicine*, May 9, 1929.

"The Facts of Modern Medicine," by Francis W. Palfrey, M. D. D. Appleton & Co., 1929.

"The Cause of the First Heart Sound," by Francis W. Palfrey, M. D. *New England Journal of Medicine*, Vol. 20, No. 18, May 2, 1929.

"Diagnosis, or Determining What is the Matter," by Francis W. Palfrey, M. D. *Harvard Alumni Bulletin*, 31:876, May 2, 1929.

"Syllabus of Lectures in Freshmen Hygiene," by Francis W. Palfrey, M. D. (with Doctors Worcester and Findlay). *The Department of Hygiene of Harvard University*.

"The Cause of the First Heart Sound," by Francis W. Palfrey, M. D. *New England Journal of Medicine*, 200:917, May 2, 1929.

"Separation of Growth-Promoting Hormone from that Inducing Premature Estrus in the Anterior Pituitary Gland," by Tracy J. Putnam, M. D. *Archives of Surgery*, 18:7699-1707, 1929.

"Studies in Acromegaly, VII. Experimental Canine Acromegaly Produced by Injection of Anterior Lobe Pituitary Extract," by Tracy J. Putnam, M. D., E. B. Benedict and H. T. Teel. *Ibid* 18:1708-1716, 1929.

"Physiotherapy in Subdeltoid Bursitis with Calcification," by Joseph Resnik, M. D. *Journal of Physical Therapeutics*, June, 1929.

"Physiotherapy in Facial Paralysis," by Joseph Resnik, M. D. *International Journal of Medicine and Surgery*, October, 1929.

"Physical Illness as an Etiological Factor in Psychoneurosis," by G. P. Reynolds, M. D. *Medical Clinics of North America*, 13:125, July, 1929.

"Nephropexy for Ureteral Kinks," by Augustus Riley, M. D. Reprinted from the *New England Journal of Medicine*, November 1, 1929.

"The Age and Sex Incidence in Arterial Hypertension," by J. E. F. Riseman, M. D., and Soma Weiss, M. D. *American Heart Journal*, 5:172, December, 1929.

"Surgical Aspects of a Few Tropical Diseases," by George C. Shattuck, M. D. *New England Journal of Medicine*, Vol. 200, No. 5, p. 229, January 31, 1929.

"The Interdependence of Tropical Medicine and General Medicine," by George C. Shattuck, M. D. *New England Journal of Medicine*, Vol. 200, No. 24, p. 1229, June 13, 1929.

"Cutaneous Respiration in Man, I. Factors Affecting the Rate of Carbon Dioxide Elimination and Oxygen Absorption," by L. A. Shaw, M. D., A. C. Messer, M. D., and Soma Weiss, M. D. *American Journal of Physiology*, 90:107, September, 1929.

"Recent Advances in the Treatment of Leprosy," by Richard P. Strong, M. D. Supplementary Volume, Blumer Edition of Billings-Forchheimer's "Therapeutics of Internal Diseases," 1929, p. 178.

"Yaws," (press) by Richard P. Strong, M. D. For publication in "Text book of Medicine" by various authors: new edition.

"Immediate Reactions to Concentrated Serum," by W. P. Sutliff, M. D. *Journal of Allergy*, October, 1929.

"The Treatment of Spastic Paralyses," by John J. Thomas, M. D. *Physiotherapy Review*, 1929, IX, 111.

"Female Sterility," by A. S. Troupin, M. D. *Medical Journal and Record*, New York, May 7, 1929.

"Sub-acute Bacterial Endocarditis — Discussion of a Case," by Louis J. Ullian, M. D. *Medical Journal Clinics of North America*, Boston, July, 1929.

"Carcinoma of the Head of the Pancreas," by Irving J. Walker, M. D. *New England Journal of Medicine*, Vol. 201, No. 7, pp. 291-294, August 15, 1929.

"Indications for Surgical Treatment in Ulcer of the Stomach and Duodenum," by Irving J. Walker, M. D. *New England Journal of Medicine*, Vol. 201, No. 24, page 1193, June 11, 1929.

"The Effect of Digitalis Bodies on the Velocity of Blood Flow through the Lungs and on other Aspects of the Circulation," by Soma Weiss, M. D., and H. Blumgart, M. D. *Journal of Clinical Investigation*, 7:11, April 20, 1929.

"The Nature and Management of Cerebral Hemiplegia in Patients with Arterial Hypertension," by Soma Weiss, M. D. *Medical Clinics of North America*, 13:111, July, 1929.

"The Velocity of Blood Flow in Health and Disease as Measured by the Effect of Histamine on the Minute Vessels," by Soma Weiss, M. D., G. P. Robb, M. D., and H. Blumgart, M. D. *American Heart Journal*, 4:664, August, 1929.

"The Dynamics of the Circulation in Hypertension and its Bearing on Therapy," by Soma Weiss, M. D., and L. B. Ellis, M. D. *Journal of Clinical Investigation*, 7:156, August, 1929.

"The Dilator Effect of Histamine on the Cerebral Vessels in Man," by Soma Weiss, M. D., W. G. Lennox, M. D., and G. P. Robb, M. D. *Proceedings of the Society of Experimental Biology and Medicine*, 26:706, 1929.

"Therapeutic Indications and the Dangers of the Intravenous Administration of Sodium-Phenol-Ethyl Barbiturate (Sodium Luminal) and other Barbituric and Derivatives," by Soma Weiss, M. D. *American Journal of Medical Science*, 178:390, September, 1929.

"Bodily Responses in Man During the Continuous Intravenous Administration of Histamine," by Soma Weiss, M. D., L. B. Ellis, M. D., and G. P. Robb, M. D. *American Journal of Physiology*, 90:551, October, 1929.

"Observations on the Healing of Gastric Ulcer," by Franklin W. White, M. D. *New England Journal of Medicine*, November 28, 1929.

"The Cerebral Circulation, VI, The Effect of Normal and of Increased Intracranial Cerebrospinal Fluid Pressure on the Velocity of Intracranial Blood Flow," by H. G. Wolff, M. D., and H. L. Blumgart, M. D. *Archives of Neurology and Psychiatry*, 21:795, April, 1929.

"An Electrolytic Method for the Determination of Small Amounts of Mercury in Body Fluids and Tissues," by A. G. Young, M. D., and F. H. L. Taylor, M. D. *Journal of Biology and Chemistry*, 84:377, October, 1929.

ADDRESSES OF THE STAFF.

Following is a list of addresses and lectures made by members of the Hospital Medical and Surgical Staff during the year 1929.

"Gall Bladder Disease," address by P. F. Butler, M. D., before the Essex South District Medical Society, Salem, Mass., January 2, 1929.

"Medical and Non-Medical Uses of X-ray," address by P. F. Butler, M. D., before the Carney Hospital Alumni, Boston, Mass., April 3, 1929.

"X-ray on Bone Conditions," address by P. F. Butler, M. D., before the South Boston Medical Society, Boston, Mass., May 13, 1929.

"The Treatment of Pernicious Anemia," address by William B. Castle, M. D., before the Brooklyn Institute of Arts and Sciences, Brooklyn, N. Y., April 6, 1929.

"Pernicious Anemia," address by William B. Castle, M. D., before the American College of Physicians, Boston, Mass., April 9, 1929.

"Observations on the Etiological Relationship of Achylia Gastrica to Pernicious Anemia," address by William B. Castle, M. D., before the Boston Biological Society, Boston, Mass., April 26, 1929.

"The Etiological Relationship of Achylia Gastrica to Pernicious Anemia," address by William B. Castle, M. D., before the Royal Society of Medicine, London, Eng., June 11, 1929, and before the New York Academy of Medicine, New York City, October 13, 1929.

"The Relationship of Achylia Gastrica to Pernicious Anemia and to Degenerative Changes in the Spinal Cord," address by William B. Castle, M. D., before the International Clinical Club, Boston, Mass., December 7, 1929.

"Deficiencies Associated with Disturbances of the Gastro-Intestinal Tract," address by William B. Castle, M. D., before the Medical Staff Meeting, Massachusetts General Hospital, December 16, 1929.

"Surgery of the Heart and Pericardium," address by Edward D. Churchill, M. D., before the American College of Physicians, Spring, 1929.

"Clinical Problems in Thoracic Surgery," address by Edward D. Churchill, M. D., before the Eastern Surgical Society, March 7, 1929.

"Decortication of the Heart (Delorme) for Adhesive Pericarditis," address by Edward D. Churchill, M. D., before the American Association of Thoracic Surgery, April 26, 1929.

"Surgery in Pulmonary Tuberculosis," address by Edward D. Churchill, M. D., before the Worcester Medical Society, October 8, 1929.

"Surgical Treatment of Pulmonary Tuberculosis," address by Edward D. Churchill, M. D., before the State Department of Public Health at Rutland Sanatorium October 17, 1929.

"Phrenicectomy," address by Edward D. Churchill, M. D., before the Trudeau Society, November 13, 1929.

"Pericardial Surgery," address by Edward D. Churchill, M. D., before the New England Heart Association, November 21, 1929.

"Post-Operative Complications," address by Edward D. Churchill, M. D., before the New Bedford Medical Society, December 11, 1929.

"Change in the Interstitial Cells of the Brain with Morphine Intoxication," article by Stanley Cobb, M. D., H. G. Wolff, M. D., and W. P. Reed, M. D., read by Doctor Cobb before the American Neurological Association, Washington, D. C., June 1928.

"Cerebral Hemorrhage from Venous and Capillary Stasis. Report of Five Cases with Autopsy," paper read by Stanley Cobb, M. D., before the Association of American Physicians, Hotel Traymore, Atlantic City, N. J., May, 1929.

"The Cerebral Circulation. X. The Action of Histamine," article by Stanley Cobb, M. D., H. G. Wolff, M. D., and H. S. Forbes, M. D., read by Doctor Cobb before the Association for Research in Nerves and Mental Diseases, New York, December, 1928.

"Surgical Treatment of Thyroid Disease," address by Robert

C. Cochrane, M. D., before the Staff of Leonard Morse Hospital, Natick, Mass., February 5, 1929.

"Diseases of the Thyroid," address by Robert C. Cochrane, M. D., before the Malden Hospital Training School, February 11, 1929.

"Surgery of the Thyroid," address by Robert C. Cochrane, M. D., before the Middlesex East Medical Society, September 11, 1929.

"Treatment of Diseases of the Thyroid," address by Robert C. Cochrane, M. D., before the Cambridge Medical Improvement Society, November 12, 1929.

"Ulcer of the Oesophagus," address by Percy B. Davidson, M. D., before the American College of Physicians, Boston, Mass., April 9, 1929.

"Cholecystography," address by Percy B. Davidson, M. D., before the American College of Physicians, Boston, Mass., April 12, 1929.

"Ulcerative Colitis," address by Percy B. Davidson, M. D., before the American College of Physicians, Boston, Mass., April 12, 1929.

"Some Functional Roentgen Factors of Significance in the Treatment of Digestive Disease," address by Percy B. Davidson, M. D., before the New England Roentgen-Ray Society, Boston, Mass., November 15, 1929.

"Treatment of Pneumonia," paper read by Girdie W. Dickinson, M. D., before the New England Association for Physical Therapeutics, May, 1928.

"Cases of Skin Diseases," discussion by John G. Downing, M. D., before the Atlantic Dermatological Society, December 5, 1929.

"Dermatology," course of lectures to Nurses at St. Elizabeth's Hospital, also to Nurses at St. Margaret's Hospital, also to Nurses at Chelsea Memorial Hospital, by John G. Downing, M. D.

"Bleeding Before, During and After Labor," address by Kenneth G. Farnsworth, M. D., before the Forest Hills Medical Society, 1929.

"The Cerebral Circulation. X. The Action of Histamine," article by Stanley Cobb, M. D., H. G. Wolff, M. D., and H. S. Forbes, M. D.: read by H. S. Forbes, M. D., before the American Society for Clinical Investigation, 1929.

"The Fourth Drainage of the Central Nervous System. Its Effect on the Blood and the Cerebrospinal Fluid," paper by Tracy J. Putnam, M. D., and Stanley Cobb, M. D.: read by Frank Fremont-Smith, M. D., before the American Neurological Association, Atlantic City, N. J., May, 1929.

"Multiple Sclerosis—A Pitfall in Diagnosis," address by Maurice Fremont-Smith, M. D., before the American College of Physicians, Boston, Mass., April 11, 1929.

"The Value of the Well Baby Conference as a Teaching Clinic," paper read by Eli Friedman, M. D., at the convention at Portland, Oregon, July 8, 1929.

"Combined Iridenclisis and Sclerectomy for Chronic Glaucoma," paper read by Allen Greenwood, M. D., before the New England Society of Ophthalmology, on November 19, 1929.

"Recognition and Treatment of Heart Failure," address by Burton E. Hamilton, M. D., before the Marlborough Medical and Surgical Society, Marlborough, Mass., January 8, 1929.

"A Case of Prolonged Rheumatic Fever," by Burton E. Hamilton, M. D., address before the Boston City Hospital Clinical Meeting, Boston, Mass., March 30, 1929.

"Arteriosclerotic Heart Disease in Non-Diabetics," address by Burton E. Hamilton, M. D. Clinic for the American College of Physicians, Boston, Mass., at New England Deaconess Hospital, April 11, 1929.

"Cardiacs in Pregnancy," address by Burton E. Hamilton, M. D. Clinic for Obstetrical Societies of New York, Philadelphia and Boston, Boston Lying-In Hospital, April 16, 1929.

"Hearts in Pregnancy," address by Burton E. Hamilton, M. D. Clinic for the New England Obstetrical and Gynecological Society at Boston Lying-In Hospital, Boston, Mass., November 20, 1929.

"Malignant Disease of Bones Considered as Rheumatism," address by Henry Jackson, M. D., before the Association of American Physicians, Atlantic City, N. J., May 7 and 8, 1929.

"Modern Aspects of Cancer," paper read by Henry Jackson, Jr., M. D., before the Roxbury Clinical Record Club, March 12, 1929.

"Diagnosis and Treatment of Leukemia," address by Henry Jackson, Jr., M. D., before the Greater Boston Medical Society, Beth Israel Hospital, March 13, 1929.

"Malignant Lymphoma," address by Henry Jackson, Jr., M. D., before the American College of Physicians, Boston, Mass., April 10, 1929.

"Malignant Lymphoma," address by Henry Jackson, Jr., M. D., before the Massachusetts Medical Society, Boston City Hospital, Boston, Mass., June 6, 1929.

"Malignant Lymphoma," address by Henry Jackson, Jr., M. D. Cancer Course, Pondville Hospital, April 24, 1929.

"Clinical Aspects of Lymphoma," address by Henry Jackson, Jr., M. D., before the New Haven County Medical Society, Waterbury, Conn., October 24, 1929.

"Diabetes," radio talk over WBZA by Elliott P. Joslin, M. D., for E. R. Squibb & Sons, New York, February, 1929.

"Diabetes," address by Elliott P. Joslin, M. D., before the Wayne County Medical Society, Detroit, Mich., March, 1929.

"Diabetes," address by Elliott P. Joslin, M. D., before the Yonkers Academy of Medicine, Yonkers, N. Y., April, 1929.

"Diabetes," address by Elliott P. Joslin, M. D., before the Cornell University Medical School, New York, May, 1929.

"Treatment of Diabetes," address by Elliott P. Joslin, M. D., before the Minnesota State Medical Society, St. Paul, Minn., May, 1929.

"Diabetes," address by Elliott P. Joslin, M. D., before the Keuka Medical Society, Syracuse, N. Y., July, 1929.

"Recent Progress in Diabetes," address by Elliott P. Joslin, M. D., before the Worcester District Medical Society, Worcester, Mass., September, 1929.

"The Abolition of Diabetic Coma in the United States," address by Elliott P. Joslin, M. D., before the Indiana State Medical Society, Evansville, Ind., September, 1929.

"Prevention of Diabetes," address by Elliott P. Joslin, M. D., before the Eastern Medical Society, New York City, October, 1929.

"Recent Advances in the Treatment of Diabetes," address by Elliott P. Joslin, M. D., before the Bronx County Medical Society, Bronx, N. Y., October, 1929.

"The Diagnosis of Diabetes," address by Elliott P. Joslin, M. D., before the Inter-state Post Graduate Medical Assembly, Detroit, Mich., October, 1929.

"The Prognosis of Diabetes from a Medical and Surgical Point of View," address by Elliott P. Joslin, M. D., before the St. Louis Medical Society, St. Louis, Mo., November, 1929.

"The Prevention of Diabetic Deaths and of Diabetes," radio talk over WBZA by Elliott P. Joslin, M. D., for Boston Tuberculosis Association, December, 1929.

"Surgical Treatment of Defects of Maxilla and Mandible in Relation to Dental Prosthesis," lecture by V. H. Kazanjian, D. M. D., M. D., before the Chicago Dental Association, Chicago, Ill., January 15, 1929.

"Traumatic Surgery of Face and Jaws as Seen in Everyday Life," a lecture by V. H. Kazanjian, D. M. D., M. D., before the Worcester District Dental Society, Worcester, Mass., February 18, 1929.

"Treatment of Face and Jaw Injuries," lecture by V. H. Kazanjian, D. M. D., M. D., before the Arlington and Lexington Medical Societies, Arlington, Mass., March 12, 1929.

"Plastic Repair of the Head and Face in Industrial Accidents," lecture by V. H. Kazanjian, D. M. D., M. D., before the Eastern New York Eye, Ear, Nose and Throat Associations, Schenectady, N. Y., March 20, 1929.

"Traumatic Surgery of the Face, Including Maxillary Fractures," lecture by V. H. Kazanjian, D. M. D., M. D., before the Fitchburg Medical and Dental Societies, Fitchburg, Mass., March 29, 1929.

"Plastic Surgery of the Nose" (Round Table Clinic), lecture by V. H. Kazanjian, D. M. D., M. D., before the American Academy of Ophthalmology and Otolaryngology, Atlantic City, October 23, 24, 25, 1929.

"The Treatment of Face Injuries Caused by Automobile Accidents," lecture by V. H. Kazanjian, D. M. D., M. D., before the Fall River Medical Society, Fall River, Mass., December 11, 1929.

"Parochial School Dental Problem," paper read by Frederick A. Keyes, D. M. D., before the Chicago Guild of St. Apollonia, Chicago, Ill., January, 1929.

"Parochial School Dental Problem," paper read by Frederick A. Keyes, D. M. D., before the Washington Guild of St. Apollonia, Washington, D. C., October 7, 1929.

"The Teeth as a Causative Factor in Systemic Disease," paper read by Frederick A. Keyes, D. M. D., before the Boston College Post-Graduate School, January 14, 1929.

"The Teeth as a Causative Factor in Systemic Disease," paper read by Frederick A. Keyes, D. M. D., before the Boston Teachers College, February 11, 1929.

"The Teeth as a Causative Factor in Systemic Disease," paper read by Frederick A. Keyes, D. M. D., before the Institute for Catholic Teachers of the Archdiocese of Boston, August 29, 1929.

"Epilepsy," paper read by William G. Lennox, M. D., before the Cambridge Medical Society, Cambridge, Mass., September, 1929.

"Recent Studies in Epilepsy," paper read by William G. Lennox, M. D., before the Harvard Medical Society, Boston, Mass., October 28, 1929.

"The Non Institutional Epileptic: report of 844 cases," by William G. Lennox, M. D., with Stanley Cobb, M. D., paper read by William G. Lennox, M. D., before the Association for Research in Nervous and Mental Diseases, New York, December 27, 1929.

"Certain Physiological Factors in Seizures," paper read by William G. Lennox, M. D., before the Association for Research in Nervous and Mental Diseases, New York, December 27, 1929.

"The Relation of Certain Physico-chemical Processes to Epileptiform Seizures," article by Stanley Cobb, M. D., and William G. Lennox, M. D., read by W. G. Lennox, M. D., before the Harvard Medical Society at Peter Bent Brigham Hospital, October, 1929.

"Empyema," address by Edwin A. Locke, M. D., before the Trudeau School of Medicine at Saranac Lake, June 19, 1929.

"Case of Pneumonia," paper read by Edwin A. Locke, M. D., before the American College of Physicians, Boston, Mass., April 7, 1929.

"The Influence of the Thyroid Gland on the Action of Morphine," paper read by Charles C. Lund, M. D., before the Clinical Meeting of the American College of Surgeons at the Boston City Hospital, October 12, 1928.

"Allusions to Medicine in Classical Literature," address by Fred B. Lund, M. D., before the New York Academy of Medicine, January 11, 1929.

"The Importance of Medical Care and Consultation in Cases of Gall Bladder Disease, Also the Advantage of Spinal Anesthesia in Operations on the Gall Bladder," address by Fred B.

Lund, M. D., before the Massachusetts Medical Society, Boston, June 11, 1929.

"The Surgeon and His Environment — Historical Sketch," address by Fred B. Lund, M. D., before the Medical Association of the State of Alabama, Mobile, April 18, 1929.

"Melanotic Sarcoma of the Small Intestine," address by Fred B. Lund, M. D., before the New England Surgical Society, Providence, R. I., September 28, 1929.

"Remarks on Tumors in the Upper Abdomen," address by Fred B. Lund, M. D., before the Framingham Union Hospital, Framingham, Mass., November 18, 1929.

"Lesions of the Mouth of Interest to the Dentist," address by Francis P. McCarthy, M. D., before the Greater Boston Dental Society, November, 1929.

"Diagnosis of Oral Diseases," address by Francis P. McCarthy, M. D., before the St. Elizabeth's Hospital Staff, June, 1929.

"Diagnosis of Oral Diseases," address by Francis P. McCarthy, M. D., before the Fenway Hospital Staff, November, 1929.

"Discussion of Dermatological Cases," by Francis P. McCarthy, M. D., before the Atlantic Conference Dermatological Societies, New York, December 6, 1929.

"The Toxemias of Pregnancy," paper read by G. Elliott May, M. D., before meeting of Newton Hospital Staff, September 23, 1929.

"The Importance of Diet in the Treatment and Prevention of Anemia," address by George R. Minot, M. D., before the Simmons College School for Social Work, January, 1929.

"The Treatment of Pernicious Anemia," address by George R. Minot, M. D., before the Greater Boston Medical Society, Beth Israel Hospital, Boston, Mass., January 9, 1929.

"Dietary Deficiency as a Cause of Anemia," address by George R. Minot, M. D., before the Staff Meeting, Boston City Hospital, Boston, Mass., March 2, 1929.

"Treatment of Pernicious Anemia," also "Treatment of Anemia other than Pernicious Anemia, Particularly with Diet and Iron," the Thayer lectures by George R. Minot, M. D., before Johns Hopkins University, Baltimore, Md., March 7 and 8, 1929.

"Discussion of Diet as a Cause of Sterility," address by George R. Minot, M. D., before the Boston Obstetrical Society, March 19, 1929.

"Some Fundamental Aspects of Deficiencies," address by George R. Minot, M. D., before the American College of Physicians, Boston, Mass., April 8, 1929.

"Some Aspects of the Treatment of Anemia," address by George R. Minot, M. D., before the Interstate Post Graduate Assembly of America, Boston, Mass., April 24, 1929.

"The Thorndike Memorial Laboratory and the Training of

Clinicians," address by George R. Minot, M. D., at the Boston City Hospital Alumni Meeting, April 27, 1929.

"Advances in the Treatment of Anemia," address by George R. Minot, M. D., before the Boston Society of Biology, April 26, 1929.

"Acknowledgment of Receipt of Kober Medal," address by George R. Minot, M. D., before the Association of American Physicians, Atlantic City, N. J., May 8, 1929.

"The Effect of Iron on Blood Formation as Influenced by Changing the Acidity of the Gastric Contents in Certain Cases of Anemia," address by George R. Minot, M. D., before the American Society for Clinical Investigation, Atlantic City, N. J., May 6, 1929. By Title with Dr. Stacey R. Mettier.

"The Use of Liver and Iron in the Treatment of Anemia," address by George R. Minot, M. D., before the Boston Dispensary Medical Society, May 29, 1929.

"The Treatment of Anemia," address by George R. Minot, M. D., before the Massachusetts Medical Society, Boston, Mass., June 12, 1929.

"The Treatment of Anemia, especially the Value and Action of Iron in Certain Types of Secondary Anemia," address by George R. Minot, M. D., before the Maine State Medical Association, Poland Springs, Maine, June 18, 1929.

"Improper Diet as a Cause of Disease," address by George R. Minot, M. D., before the Hancock County, Maine, Medical Society, September 6, 1929.

"Work Concerning Anemia at the Thorndike Memorial Laboratory, and the Treatment of Pernicious Anemia with Liver Extract Administered Intravenously," address by George R. Minot, M. D., before the Interurban Clinical Club, Boston, Mass., December 6, 1929.

"The General Management of Stomach and Duodenal Ulcers with Special Reference to Acute Perforated Ulcers," paper read by William R. Morrison, M. D., before the Nashua Medical Society at Nashua, N. H., February 19, 1929.

"Observations on a Series of Fifty Perforated Peptic Ulcers with and without Gastro-Enterostomy," paper read by William R. Morrison, M. D., before the South Boston Medical Society, April 8, 1929.

"Care of Ulcers of the Stomach and Duodenum, including Acute and Chronic Ulcers with and without Bleeding and Perforation," paper read by William R. Morrison, M. D., before the North Shore Medical Fraternity, April 9, 1929.

"Some Notes on Acute and Chronic Ulcers of the Stomach and Duodenum with and without Pyloric Obstruction, Hemorrhage and Perforation," paper read by William R. Morrison, M. D., before the Belmont Medical Society, October 25, 1929.

"Acute Perforated Ulcers of the Stomach and Duodenum Operated under Local and Pitken's Spinal Anesthesia, with and without Posterior Gastro-Enterostomy," also "Anastomosis

of the Gall Bladder to the Duodenum and Drainage of the Common Bile Duct Due to Enlarged Head of the Pancreas," also "Traumatic Rupture of the Spleen and Left Kidney, Blood Transfusion and Splenectomy," end results presented by William R. Morrison, M. D., before the Boston City Hospital Clinical Meeting on March 2, 1929.

"Acute Perforated Ulcers of the Stomach and Duodenum Operated under Local and Pitken's Spinal Anesthesia," also "Balfour Cautery Excision of Gastric Ulcer on Lesser Curvature of the Stomach with Posterior Gastro-Enterostomy," cases presented by William R. Morrison, M. D., at the Massachusetts Medical Society Meeting at the Boston City Hospital, June 10, 1929.

"The Influence of Extracted Beef Liver, Broiled Beef Kidney, Spleen, Pancreas and Brain on Blood Formation in Pigeons with a Physiological Anemia Due to Starvation," address by Gulli Lindh Muller, M. D., before the Boston Biological Society, January 23, 1929.

"The Relation of Cholesterol, Lecithin and Fatty Acids to the Remission in Pernicious Anemia," address by Gulli Lindh Muller, M. D., before the Boston Biological Society, April 26, 1929.

"Environment and Inheritance in Relation to Mental Health," address by Abraham Myerson, M. D., before the Northwest Conference for Child Health and Parent Education, Minneapolis, Minn., October 2, 1929.

"The Visceral Paresthesia of Mental Depression," address by Abraham Myerson, M. D., before the New Haven Medical Society, April 17, 1929.

"Feeble-Mindedness," by Abraham Myerson, M. D., address before the Worcester State Hospital, May 31, 1929.

"Some Unusual Neurological Conditions," address by Abraham Myerson, M. D., before the American College of Physicians at the Beth Israel Hospital, April 9, 1929.

"Brain Injuries," address by Abraham Myerson, M. D., before the Greater Boston Medical Society, May 1, 1929.

"Case of Tumor of Cauda Equina," address by Abraham Myerson, M. D., before the Massachusetts Medicolegal Society at Beth Israel Hospital, June 10, 1929.

"Reflexes and their Significance," address by Abraham Myerson, M. D., before the Greater Biken Cholin Hospital, November 25, 1929.

"The Significance of Enlarged Thymus in Infants and Children," address by Frederick W. O'Brien, M. D., before the Pentucket Medical Association, September 13, 1929.

"The Permanent Home of the Massachusetts Medical Society at Boston," address by Thomas J. O'Brien, M. D., before the Middlesex North District Medical Society, Lowell, Mass., January 30, 1929.

"Medical Treatment of Bleeding Peptic Ulcer," paper read by Thomas J. O'Brien, M. D., before the Clinical Meeting, Amphitheater, Boston City Hospital, March 30, 1929.

"An Unusual Case of Heart Block with Demonstration of Case," paper read by Thomas J. O'Brien, M. D., before the American College of Physicians at Boston City Hospital, April 11, 1929.

"Medical Legislation," address by Thomas J. O'Brien, M. D., before the Essex North Medical Society at Reading Sanatorium, October 16, 1929.

Address by Dwight O'Hara, M. D., before the Graduating Class of Nurses at Symmes Arlington Hospital, Arlington, Massachusetts, September 30, 1929.

"Treatment of Varicose Veins by the Injection Method," address by Eugene E. O'Neil, M. D., before the Middlesex East District Medical Society, January 5, 1929.

"The Injection Treatment of Varicose Veins," address by Eugene E. O'Neil, M. D., before the Norfolk District Medical Society, January 29, 1929.

"The Varicose Vein Problem," address by Eugene E. O'Neil, M. D., before the Boston City Hospital Nurses Alumnae Association, March 10, 1929.

"Injections in Varicose Veins — Observations in 500 Cases," address by Eugene E. O'Neil, M. D., before the Eastern Surgical Society, May 5, 1929.

"Modern Methods in the Treatment of Varicose Veins and Ulcers," address by Eugene E. O'Neil, M. D., before the Thurber Medical Society, May 20, 1929.

"The Injection Treatment of Varicose Veins," address by Eugene E. O'Neil, M. D., before the Norwood Medical Society, November 14, 1929.

"Diagnosis, Treatment and Prognosis in Varicose Veins and Ulcers," address by Eugene E. O'Neil, M. D., before the South Boston Medical Society, November 18, 1929.

"Varicose Veins and Ulcers," address by Eugene E. O'Neil, M. D., before the Waltham Medical Club, December 5, 1929.

"Operation versus Injection in the Treatment of Varicose Veins," address by Eugene E. O'Neil, M. D., before the Arlington Medical Society, December 10, 1929.

"Diagnosis, or Determining What is the Matter," a public lecture of the Harvard Medical School Course, by Francis W. Palfrey, M. D., March 31, 1929.

"A Clinic of Unusual Cases," by Francis W. Palfrey, M. D., before the American College of Physicians, Boston City Hospital, April 9, 1929.

"Experimental Acromegaly," address by Tracy J. Putnam, M. D., before the American Roentgen Ray Society, New York, September 18, 1929.

"Use of Moving Pictures in Teaching Anesthesia," address by Frank L. Richardson, M. D., before the Section on Anesthetics, British Medical Association, Manchester, England, July 26, 1929.

"Nephropexy for Ureteral Kinks," paper read by Augustus Riley, M. D., before the New England Branch of the American Urological Association, Boston, Mass., May 1, 1929.

"Preoperative Lavage in Nephrolithiasis Complicated by Infection," paper read by Augustus Riley, M. D., before the Boston Surgical Society, Inc., Boston City Hospital, November 4, 1929.

"The Interdependence of Tropical Medicine and General Medicine," Annual Discourse of the Massachusetts Medical Society, by George C. Shattuck, M. D., June 12, 1929.

"Syphilis and Yaws," address by George C. Shattuck, M. D., before the Staff of the United States Naval Hospital, Chelsea, October 26, 1929.

"Prevention of Tuberculosis," address by Nathan Sidell, M. D., before the Health Guild, Boston Tuberculosis Association, November 22, 1929.

"The Harvard University Expedition to Liberia and the Congo," address by Richard P. Strong, M. D., before the Brooklyn Institute of Arts and Sciences, Science Department, February 9, 1929. (Illustrated.)

"The Harvard-African Expedition," address by Richard P. Strong, M. D., before the Maine Medical Association Meeting, Poland Springs, Maine, June 18, 1929. (Illustrated.)

"The Treatment of Spastic Paralysis," talk by John J. Thomas, M. D., before the Massachusetts Physiotherapy Association, June, 1929.

"A Consideration of Jaundice," paper read by Irving J. Walker, M. D., before the Waltham Medical Club, Waltham, Mass., February 7, 1929.

"Carcinoma of the Head of the Pancreas," paper read by Irving J. Walker, M. D., before the Clinical Meeting of the American College of Physicians, April 12, 1929.

"Indications for Surgical Treatment in Ulcer of the Stomach and Duodenum," discussion by Irving J. Walker, M. D., of paper written by Dr. Lewis Gregory Cole, before the Section of Radiology and Physiotherapy of the Massachusetts Medical Society, June 11, 1929.

"How can we determine the Efficiency of the Surgical Mask," paper read by Irving J. Walker, M. D., before the American College of Surgeons Hospital Standardization Conference, Chicago, Ill., October 15, 1929.

"Two Cases of Arterial Wall Infection," presented by Irving J. Walker, M. D., before the Clinical Meeting of Boston Surgical Society at the Boston City Hospital, November 4, 1929.

"The Presence of Blood Vessels in the Valves of the Heart," address by Joseph T. Wearn, M. D. (with A. W. Bromer, M. D., and Louise J. Zschiesche), before the American Society for Clinical Investigation, May 6, 1929.

"The Coronary Arteries in Heart Disease," address by Joseph T. Wearn, M. D., before the Trumbull County Medical Society, Warren, Ohio, November 5, 1929.

"The Coronary Arteries in Heart Disease," address by

Joseph T. Wearn, M. D., before the Columbus Academy of Medicine, Columbus, Ohio, November 5, 1929.

"Dynamics of the Circulation in Hypertension and its Bearing on Therapy," address by Soma Weiss, M. D., before the New York Academy of Medicine, New York City, March 19, 1929.

"Hypertension and Arteriosclerosis," address by Soma Weiss, M. D., before the American College of Physicians, April 10, 1929.

"Drug Addiction," Sunday Public Lecture, Harvard Medical School, by Soma Weiss, M. D., Boston, Mass., April 20, 1929.

"Dynamics of the Circulation in Hypertension and its Bearing on Therapy," address by Soma Weiss, M. D., before the American Society for Clinical Investigation, Atlantic City, N. J., May, 1929.

"Bodily Responses in Man Following the Continuous Intravenous Injection of Histamine," address by Soma Weiss, M. D., before the XIII International Physiological Congress, Boston, Mass., August 20, 1929.

"The Clinical Manifestations and the Management of Patients with Bilateral Kidney Diseases," address by Soma Weiss, M. D., before the Central Maine Medical Society, Lewiston, Me., November 22, 1929.

"Observations on the Healing of Gastric Ulcer," paper read by Franklin W. White, M. D., before the Section of Medicine, Massachusetts Medical Society, June 11, 1929.

"The Treatment of Gastric and Duodenal Ulcer," paper read by Franklin W. White, M. D., before the Malden Medical Society, December 17, 1929.

"Focal Infection with Particular Reference to the Gall Bladder," paper read by Thomas W. Wickham, M. D., before the Somerville Medical Society, November 14, 1929.

"Studies of the Distribution and Excretion of Mercury," address by Albert G. Young, M. D. (with F. H. L. Taylor, M. D., and H. H. Merritt, M. D.), before the American Medical Association, Section of Dermatology, Portland, Ore., July, 1929.

"Biochemical Studies of Mercury Compounds," address by Albert G. Young, M. D. (with F. H. L. Taylor, M. D.), before the XIII International Physiological Congress, Boston, Mass., August, 1929.

HOUSE OFFICERS.

The Herbert L. Burrell Ether Prize, given for administering anesthetics in the most skillful and humane manner, was awarded to Abraham E. Hiebert, M. D., of the Third Surgical Service, Leo R. Desmond, M. D., of the Fifth Surgical Service, and Louis E. Hathaway, Jr., M. D., of the Fifth Surgical Service.

CHANGES IN THE HOSPITAL RULES.

Rules regarding the administration of the Medical Department have been altered, the Second and Fourth Medical Services now being in charge of Professors of Medicine nominated by Harvard University and appointed by the Hospital Trustees; the First and Third Medical Services now being in charge of Professors of Medicine nominated by Tufts College and appointed by the Hospital Trustees.

The Staff of the Gynecological and Obstetrical Department has been reorganized, two services being formed in place of one. To effect this, the following new positions have been created; a second position for Surgeon-in-Chief for Gynecology and Obstetrics, a second position for Visiting Surgeon for Gynecology and Obstetrics, a fourth position for Assistant Visiting Surgeon for Gynecology and Obstetrics, four positions for Assistants to the Visiting Surgeons for Gynecology and Obstetrics. The number of Junior Visiting Surgeons for Gynecology and Obstetrics has been changed from six to four.

The following other new positions on the Medical and Surgical Staff have been created: One position for a Junior Visiting Physician, so making the number twenty-one; three positions for Visiting Surgeons, so making the number nine: a position for the Chief of Clinical Laboratories: one position for a Junior Visiting Surgeon for Diseases of Ear and Throat, so making the number nine: one position for a Junior Visiting Physician for Neurology, so making the number four; one position for a Visiting Roentgenologist, so making the number three.

Two positions have been created for Resident Physicians: One for the First Medical Service and one for the Third Medical Service; also a position for a Resident Surgeon for the Neuro-Surgical Service.

Two positions have also been created for House Officers for the Neuro-Surgical Service.

A fifth House Officer has been added to the Ophthalmic and Aural Service.

In the Pathological Department, titles have been changed as follows: the title, "Second Assistant in Pathology and Visiting Pathologist, Sanatorium Division" has been changed to "Second Assistant in Pathol-

ogy": the title, "Fourth Assistant in Pathology" has been changed to "Pathologist to the Sanatorium Division."

The rule has been made that heads of departments shall report in writing to the Board of Trustees once a month anything connected with their service which they consider should be brought to the knowledge of the Board.

A position has been created for a Plant Superintendent whose duties will be to oversee the operation and upkeep of the power plant and buildings and to supervise the work of the mechanics.

The following regulations have been made:

That all medical cases go to the four medical services in rotation.

That the Medical Library be kept open until ten o'clock in the evening, instead of five o'clock, as formerly.

That the cost of endowing a free bed at the Boston City Hospital be \$5,000; with the privilege of nominating the person to occupy the bed and that a tag be attached to the bed.

That no other than regularly appointed House Officers eat or sleep in the House Officers' Residence.

That it is obligatory for special nurses to be present at operations on their patient.

GIFTS AND BEQUESTS.

At various times during the year, income has been received from the Albert N. Blodgett estate, the amount totaling \$1,839.72. This was added to the fund, the interest of which is used for the employment of special nurses for needy patients.

Notification was received that the Hospital is a beneficiary under the will of Benjamin Levy to the extent of \$1,000.

A Von Pitz suturing outfit, paid for by the Augustus Hemenway Fund, was received through Dr. Horace Binney.

Miss Hilda T. Gavin, daughter of the late Dr. Michael F. Gavin, presented to the Hospital the articulated skeleton which Dr. Gavin procured in Paris some years ago. She also placed a plate with suitable inscription upon the cabinet inclosing it.

Miss Ella Johnson sent a check of \$100, asking that

it be used to purchase New Year's gifts for children in the Children's Ward, in memory of the late Dr. Edward N. Libby.

Miss Mary F. Ellis gave the Hospital \$30 to be used for the benefit of ward patients. This was added to the Patrick A. Collins Memorial Library Fund.

Mr. David Wood gave to the Hospital \$10 in appreciation of services rendered him while a patient. This was added to the fund, the interest of which is used for employment of special nurses for needy patients.

The Legal Stamp Company, Inc., awarded to the Hospital \$10 in their contest. This was added to the fund for the interest of which is used for the employment of special nurses for needy patients.

At Christmas time many toys, books and other gifts for the comfort and pleasure of hospital patients were received from clubs, schools and kind people, and during the year numerous other gifts have been received through the Department of Social Work.

Advance in the building program, increase in number of patients, together with the inevitable expansion in personnel, constant advancement in methods and in volume of clinical investigation, also in the dissemination of medical knowledge, combine to make this undoubtedly the greatest year in the Hospital's history.

To his Honor, the Mayor, and to the City Council, whose desire it is to maintain a Hospital progressively improved in service and adequate to the public needs, grateful acknowledgments are tendered.

The Trustees are greatly indebted to Dr. John J. Dowling, Superintendent and Medical Director, and wish to acknowledge with gratitude his work, both at the Main Hospital and at the Sanatorium Division. Beside his work of administering the Hospital, he, in cooperation with the Architects, has developed the new buildings.

The Trustees also wish to express their appreciation of the services of the Architects, Messrs. James H. Ritchie and Associates, whose work on the building program has given unflinching satisfaction.

Respectfully submitted,

JOSEPH P. MANNING, *President.*

HENRY S. ROWEN, M. D., *Secretary.*

GEORGE G. SEARS, M. D.

CARL DREYFUS.

KARL ADAMS.

REPORT OF THE SUPERINTENDENT AND MEDICAL DIRECTOR.

BOSTON CITY HOSPITAL, January 6, 1930.

To the Trustees.

GENTLEMEN,—I present herewith the annual report of the Hospital Department for the year 1929.

On June 1, 1864, The Boston City Hospital was opened for the admission of patients. Since that time the number of house patients treated in the different departments has been 734,269 and the number of out-patients, 2,693,082. The table on page 79 shows the number of patients who have been treated in the hospital proper and the South Department during the last ten years. The principal statistics for the past year are shown on pages 81 and 82. The other tables are self-explanatory.

Patients treated in the hospital during the year:

Medical services	7,153
Surgical services	8,661
Gynecological and obstetrical services	5,052
Pediatric service	946
Ophthalmic service	169
Aural and laryngological service	2,362
Neurological service	421
Dermatological service	175
Total	24,939

Number of visits of patients to the hospital for advice and treatment in the Out-Patient Departments:

Medical	22,825
Medical, afternoon	1,389
Surgical	61,245
Fracture	26,285
Bone and joint	596
Genito-urinary	16,923
Gynecological	4,074
Pre-natal	5,113
<i>Carried forward</i>	138,450

<i>Brought forward</i>	138,450
Urological	122
Pediatric	6,853
Baby hygiene	512
Eye	11,948
Ear, nose and throat	14,692
Dermatological	19,192
Neurological	2,420
Immunology	10,718
Oral surgery	3,038
Physical therapeutics	38,860
Cardiac	710
Circulatory	2,116
Blood	257
Metabolism	4,299
Gastro-intestinal	1,422
Thyroid	154
X-ray	30,780
Accident	7,611
	<hr/>
Total	294,154
	<hr/> <hr/>

TABLE OF ADMISSIONS AND DEATHS FROM FEBRUARY 1, 1920, TO JANUARY 1, 1930.
Hospital Proper and South Department.

	Patients Admitted.	Patients Accidentally Injured Admitted.	Number of Out-Patients Treated.	Number of Patients in Hospital at Beginning of Year.	Number of Ward Patients Treated.	Died.	Rate of Mortality.
February 1, 1920, to January 31, 1921.....	16,406	1,215	28,896	902	17,308	1,359	.079
February 1, 1921, to January 31, 1922.....	18,844	1,915	32,377	979	19,823	1,400	.071
February 1, 1922, to January 31, 1923.....	22,174	2,601	37,419	993	23,167	1,796	.078
February 1, 1923, to January 31, 1924.....	23,181	2,485	38,690	1,097	24,278	1,861	.077
February 1, 1924, to January 31, 1925.....	23,646	2,675	45,095	1,150	24,796	1,785	.072
February 1, 1925, to December 31, 1925.....	20,349	2,149	44,750	1,130	21,479	1,627	.076
January 1, 1926, to December 31, 1926.....	21,460	1,928	45,994	884	22,344	1,759	.079
January 1, 1927, to December 31, 1927.....	24,280	1,426	49,059	919	25,199	1,882	.075
January 1, 1928, to December 31, 1928.....	24,462	1,448	52,610	1,048	25,510	1,913	.075
January 1, 1929, to December 31, 1929.....	25,843	1,694	82,483	977	26,820	1,986	.075

The total number of patients admitted to the wards since the opening of the hospital and South Department has been 734,269 and the number of out-patients has been 2,693,082.

HOSPITAL PROPER.

 APPLICANTS EXAMINED FOR ADMISSION DURING YEAR
1929.

MONTH.	Number Examined.	Number Admitted.	Number not Admitted.
January	2,262	2,236	26
February	1,914	1,896	18
March	1,989	1,958	31
April	2,001	1,987	14
May	1,946	1,929	17
June	2,014	1,999	15
July	2,060	2,048	12
August	2,120	2,100	20
September	1,979	1,958	21
October	2,031	2,004	27
November	1,942	1,915	27
December	2,067	2,041	26
Totals	24,325	24,071	254



DEVELOPMENT OF BOSTON CITY HOSPITAL

TRUSTEES

JOSEPH P. MANNING DR. HENRY S. ROWEN HON. MALCOLM E. NICHOLS
DR. GEORGE G. SEARS CARL DREYFUS MAYOR
KARL ADAMS



HOSPITAL PROPER.

PRINCIPAL STATISTICS FOR THE YEAR 1929.

Number of Patients.

Number of patients remaining in the hospital proper December 31, 1928		868
Admitted during the year 1929:		
Medical	6,851	
Surgical	8,348	
Gynecological and obstetrical	4,894	
Pediatric	915	
Ophthalmic	165	
Aural and laryngological	2,327	
Neurological	407	
Dermatological	164	
	—	24,071
Treated during the year		24,939
Discharged during the year	22,080	
Died during the year	1,915	
	—	23,995
Number of patients remaining in the hospital proper December 31, 1929		944
Number of births during year		1,550
Number of deaths		1,915
Number of deaths within forty-eight hours of admis- sion		661
Largest number of patients in hospital on any one day,		1,166
Smallest number of patients in hospital on any one day,		813
Daily average number of patients		965.7
Average number of days' stay of patients		14.1
Number of weeks' treatment given in hospital		50,354
Number of days' treatment given in hospital		352,478
Number of applicants for admission to hospital		24,325
Number of applicants rejected		254
Number of out-patients treated during year		82,483
Number of visits made by out-patients during year		294,154
Patients carried in ambulances		9,715
Number of patients accidentally injured admitted to the wards		1,694

Number of out-patients treated in the Out-Patient Department:

Clinics.	Total Patients Treated.	New Admissions.
Medical	11,058	8,616
Medical afternoon	638	576
Surgical	22,371	15,152
Fracture	10,677	8,034
Bone and joint	278	234
Genito-urinary	1,285	886
Gynecological	1,766	1,181
Pre-natal	1,772	1,085
Urological	43	43
Pediatric	3,800	2,799
Baby hygiene	103	72
Eye	4,890	3,903
Ear, nose and throat	8,437	6,546
Dermatological	4,647	3,342
Neurological	1,061	727
Immunology	1,258	775
Oral surgery	3,038	1,757
Physical therapeutics	4,988	2,344
Cardiac	162	114
Circulatory	618	380
Blood	40	16
Metabolism	537	285
Gastro-intestinal	379	332
Thyroid	52	52
X-Ray (estimated)	18,468	14,775
Accident	7,611	7,611
Totals	<u>* 82,483</u>	<u>†42,398</u>

* 82,483 is the number of individual out-patients treated (not the total of the column), many of them having been counted in more than one department.

† 42,398 is the total number of admissions, not the total of the column.

PRESENT CAPACITY OF THE HOSPITAL DEPARTMENT.

The schedule of beds is as follows:

	Beds.	Cribs.	Bassinettes.	Totals.
Hospital proper	982	40	96	1,118
South Department	115	217	6	338
Sanatorium Division	410	.....	.....	410
Haymarket Square Relief Station	27	2	.....	29
East Boston Relief Station	11	1	.....	12
Convalescent Home	34	.....	.....	34
Totals	1,579	260	102	1,941

The distribution of beds of the Main Hospital is as follows:

SERVICES.	WARDS.						PRIVATE.				Grand Totals.
	Males.	Females.	Both Sexes.	Children (Males).	Children (Females).	Children (Both Sexes).	Totals.	Males.	Females.	Both Sexes.		Totals.
Medical	142	134	9				285	2	4	6	291
Surgical	157	148	16				321	14	14	28	349
Obstetrical		65					65				65
Gynecological		56					56				56
Neurological	8		6				14				14
Ophthalmic, aural and all services	9	5					14				14
Dermatological	5	5					10				10
Pediatric and all services				24	28	29	81				81
All services	41	45	1				87	6	9	15	102
Total beds	362	458	32	24	28	29	933	14	22	13	982
Cribs						40	40				40
Bassinettes						96	96				96
Totals	362	458	32	24	28	165	1,069	14	22	13	1,118

STATISTICS OF PATIENTS ACCORDING TO SERVICES.
YEAR 1929.

SERVICES.	In Hospital January 1, 1929.	Admitted.	Discharged.	Died.	Total Discharged and Died.	In Hospital January 1, 1930.
First Surgical.....	59	1,598	1,511	98	1,609	48
Second Surgical.....	51	1,599	1,473	93	1,566	84
Third Surgical.....	38	1,482	1,382	98	1,480	40
Fourth Surgical.....	61	1,485	1,379	115	1,494	52
Fifth Surgical.....	59	1,389	1,259	125	1,384	64
Sixth Surgical.....	45	795	758	21	779	61
Gynecological and Obstetrical,	158	4,894	4,730	146	4,876	176
First Medical.....	96	1,622	1,356	295	1,651	67
Second Medical.....	46	1,715	1,445	256	1,701	60
Third Medical.....	52	1,683	1,405	264	1,669	66
Fourth Medical.....	108	1,831	1,578	246	1,824	115
Pediatric.....	31	915	782	110	892	54
Ophthalmic.....	4	165	164	1	165	4
Aural and Laryngological.....	35	2,327	2,318	17	2,335	27
Neurological.....	14	407	375	30	405	16
Dermatological.....	11	164	165	.....	165	10
Totals.....	868	24,071	22,080	1,915	23,995	944

RECEIPTS AND EXPENDITURES.

ALL DEPARTMENTS EXCEPT SANATORIUM DIVISION.

Receipts.

City appropriation	\$2,558,162 11
Interest on Trust Funds	2,506 50
	\$2,560,668 61
Add:	
Deficit	51,700 83
	\$2,612,369 44

Expenditures.

Hospital proper and its subdivisions	\$1,924,716 60
Out-Patient Department	202,460 85
South Department	311,427 50
Haymarket Square Relief Station	89,133 66
East Boston Relief Station	45,977 25
Convalescent Home	21,994 45
West Department	16,659 13
Totals	<u>\$2,612,369 44</u>

MAIN HOSPITAL.

APPLICANTS NOT ADMITTED FROM JANUARY 1, 1929,
TO DECEMBER 31, 1929, INCLUSIVE.

	At First Rejected.	Admitted Later.	Finally Rejected.
Self-rejected or deferred.....	243	.....	49
Self-rejected or deferred, but admitted within three days.....	.....	46	.....
Self-rejected or deferred, but admitted later.....	.....	148	.....
State settlement.....	180	.....	112
State settlement, but admitted within three days.....	.....	11	.....
State settlement, but admitted later.....	.....	57	.....
For want of accommodation.....	93	.....	56
For want of accommodation, but admitted within three days.....	.....	10	.....
For want of accommodation, but admitted later.....	.....	27	.....
Non-resident.....	49	.....	22
Non-resident, but admitted within three days.....	.....	10	.....
Non-resident but admitted later.....	.....	17	.....
For lack of sufficient information.....	2	.....	2
Referred to other public institutions.....	16	3	13
Totals.....	583	329	254

RECORD OF AMBULANCE WORK.
YEAR 1929.

Transportation to the Hospital.

Trips to:	
Business center	237
North End	253
West End	273
Back Bay	257
South End	957
Roxbury	1,010
West Roxbury	106
Dorchester	801
South Boston	744
East Boston	812
Charlestown	747
Jamaica Plain	427
Brighton	345
Roslindale	205
Hyde Park	138
South Department	74
	<hr/>
Total trips in	7,386
Did not come	91
	<hr/>
Patients brought	<u>7,295</u>

Transportation from the Hospital.

Convalescent Home	195
Patients' homes	141
Other hospitals	706
	<hr/>
Trips out	1,042
Carried extra	1,378
	<hr/>
Patients carried	<u>2,420</u>

Summaries.

Total number of trips	8,428
Total number of patients carried	<u>9,715</u>

CENSUS OF DAYS' BOARD OF ALL PERSONS.
YEAR 1929.

	Patients.	Officers and Em- ployees.	House Officers.	Special Nurses.	Total Days' Board.
Hospital Proper	352,478	324,699	24,082	21,214	722,473
South Department.....	57,963	45,933	4,029	1,048	108,973
Haymarket Square Relief Station...	3,614	12,327	2,224	366	18,531
East Boston Relief Station.....	228	8,129	.....	7	8,364
Convalescent Home.....	4,495	2,720	.....	.....	7,215
Totals.....	418,778	393,808	30,335	22,635	865,556
Sanatorium Division.....	123,746	46,760	.....	.....	170,506
Totals.....	542,524	440,568	30,335	22,635	1,036,062

DAILY AVERAGE OF PERSONS.
YEAR 1929.

	Patients.	Officers and Em- ployees.	House Officers.	Special Nurses.	Total All Persons.
Hospital Proper	965.7	889.6	66.0	58.1	1,979.4
South Department.....	158.8	125.8	11.0	2.9	298.5
Haymarket Square Relief Station....	9.9	33.8	6.1	1.0	50.8
East Boston Relief Station.....	6	22.3	.....	.....	22.9
Convalescent Home.....	12.3	7.5	.....	.....	19.8
Totals.....	1,147.3	1,079.0	83.1	62.0	2,371.4

MAXIMUM AND MINIMUM NUMBER OF DAYS' BOARD
GIVEN.

YEAR 1929.

	Hospital Proper.	South Department.	Haymarket Square Relief Station.	East Boston Relief Station.	Convalescent Home.	All Departments (Except Sanatorium Division).
Maximum number of days' board of patients..	1,166	214	20	3	23	1,374
Minimum number of days' board of patients..	813	101	3	0	0	960
Maximum number of days' board of persons..	2,156	363	63	26	30	2,575
Minimum number of days' board of persons..	1,803	216	39	20	9	2,149

NATIVITY OF PATIENTS ADMITTED DURING YEAR 1929.

Boston	9,116	<i>Brought forward</i>	22,032
Other cities and towns in Massa- chusetts	4,296	Greece	55
Maine	515	Portugal	54
New Hampshire	262	West Indies	45
Vermont	123	Norway	37
Rhode Island	146	Austria Hungary	30
Connecticut	129	China	26
Other states	1,264	France	24
Ireland	2,077	South America	15
British Provinces	1,547	Belgium	14
Italy	695	Denmark	13
Russia	578	Roumania	12
England	295	Finland	11
Newfoundland	215	Holland	9
Poland	204	Spain	9
Scotland	134	Turkey	6
Germany	114	Australia	3
Sweden	108	Mexico	3
Lithuania	100	Asia	2
Syria	58	Cuba	2
Armenia	56	Africa	1
		Unknown	1,668
<i>Carried forward</i>	22,032	Total	<u>24,071</u>

CONDITION OF PATIENTS DISCHARGED DURING YEAR
1929.

Well	464	<i>Brought forward,</i>	22,053
Relieved	19,114	Eloped	27
Not relieved	2,475	Died	1,915
	<hr/>		<hr/>
<i>Carried forward,</i>	22,053	Total	<u>23,995</u>

SOUTH DEPARTMENT.

PRINCIPAL STATISTICS FOR THE YEAR 1929.

Number of patients remaining in the South Department December 31, 1928	109
Admitted from January 1, 1929, to December 31, 1929, inclusive	1,772
	<hr/>
Treated during the year	1,881
Discharged during the year	1,611
Died during the year	71
	<hr/>
	1,682
	<hr/>
Number of patients remaining December 31, 1929	199
Maximum number of patients at any one time	214
Minimum number of patients at any one time	101
Daily average number of patients	158.8
Average number of days' stay of patients	30.81
Number of days' treatment given patients	57,963
Number of week's treatment given patients	8,280
Number of patients admitted over 15 years of age	337
Average age of patients	10.11
Number of patients dying within 48 hours of admission,	35
Percentage of deaths to discharges	4.22
Death rate from all diseases	3.77
Death rate from all diseases deducting deaths within	
24 hours of admission	2.55
Number of applicants examined for admission	1,806
Number of applicants rejected	34

NATIVITY OF PATIENTS ADMITTED TO THE SOUTH
DEPARTMENT FOR THE YEAR 1929.

Boston	1,065	<i>Brought forward,</i>	1,654
Massachusetts	292	Poland	3
Maine	34	Norway	2
New Hampshire	28	Sweden	3
Vermont	15	Scotland	2
Rhode Island	12	West Indies	1
Connecticut	11	Philippine Islands	1
Other states	74	Belgium	1
British Provinces	70	Albania	1
Italy	7	Portugal	1
Russia	5	Switzerland	1
Ireland	32	Holland	1
England	7	Unknown	101
France	1		
Germany	1	Total	<u>1,772</u>
<i>Carried forward,</i>	1,654		

CONDITIONS OF PATIENTS DISCHARGED FROM THE SOUTH
DEPARTMENT FOR THE YEAR 1929.

Well	1,507	<i>Brought forward,</i>	1,611
Relieved	24	Died	71
Not relieved	80		
		Total	<u>1,682</u>
<i>Carried forward,</i>	1,611		

APPLICANTS EXAMINED FOR ADMISSION TO THE SOUTH
DEPARTMENT FOR THE YEAR 1929.

MONTHS.	Number Examined.	Number Admitted.	Number Not Admitted.
January	198	185	13
February	191	190	1
March	165	164	1
April	150	150	0
May	169	169	0
June	114	112	2
July	100	98	2
August	98	97	1
September	82	79	3
October	163	161	2
November	186	180	6
December	190	187	3
Totals	1,806	1,772	34

APPLICANTS NOT ADMITTED TO SOUTH DEPARTMENT FOR THE YEAR 1929.

CAUSE OF REJECTION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Self-rejected.....	1	...	...	...	...	1	2	...	1	1	4	2	12
Want of accommodation.....	4	...	...	...	...	...	...	...	...	...	...	1	5
No contagious disease.....	8	1	1	...	...	1	...	1	2	1	2	...	17
Totals.....	13	1	1	...	...	2	2	1	3	2	6	3	34

RECORD OF AMBULANCE WORK IN BRINGING PATIENTS TO SOUTH DEPARTMENT FOR THE YEAR 1929.

Trips to:

Business center	8
North End	12
West End	32
Back Bay	19
South End	224
Roxbury	223
West Roxbury	10
Dorchester	199
South Boston	68
East Boston	93
Charlestown	71
Jamaica Plain	66
Brighton	65
Roslindale	7
Hyde Park	22
Suburban towns	5
Total number of trips	1,124
Carried extra	122
Patients rejected	2
Patients self-rejected	26
Total patients carried	<u>1,218</u>

TABLE NO. 1.

TABLE NO. 2.

Table No. 2.

BOSTON CITY HOSPITAL GENERAL DIVISION, 1929. EXPENDITURES IN ACCORDANCE WITH THE UNIFORM SYSTEM OF HOSPITAL ACCOUNTING.

1929. PARTICULARS.	MAIN HOSPITAL.		OUT-PATIENT DEPARTMENT.		HAYMARKET SQUARE RELIEF STATION.		EAST BOSTON RELIEF STATION.		CONVALESCENT HOME.		WEST DEPARTMENT.		Total Expenditures.	Total Expenditures.
	Expenditures, Salaries and Expenses.	Totals.	Expenditures, Salaries and Expenses.	Totals.	Expenditures, Salaries and Expenses.	Totals.	Expenditures, Salaries and Expenses.	Totals.	Expenditures, Salaries and Expenses.	Totals.	Expenditures, Salaries and Expenses.	Totals.		
Administration:														
Salaries.....	\$138,802 10		\$37,434 46		\$14,096 73		\$7,989 79		\$2,106 18					
Expenses.....	26,868 63		2,689 48		1,090 38		349 89		129 47			\$52 43		
		\$165,670 73		\$40,123 94		\$15,187 11		\$8,339 68		\$2,235 65		\$100 81	\$231,657 92	\$231,657 92
PROFESSIONAL CARE OF PATIENTS.														
Physicians:														
Salaries.....		5,297 38												\$5,297 38
Superintendent of Nurses and Assistants:														
Salaries.....		13,830 49		1,479 34		1,635 32		1,358 00						18,303 15
Graduate Nurses:														
Salaries.....		89,889 59		11,119 93		2,450 04		75 82		1,192 30				104,727 73
Undergraduate Nurses:														
Salaries.....		33,060 82		702 00		563 43		365 14						34,691 39
Male Nurses:														
Salaries.....		14,145 75		1,255 97										15,411 72
Ward Employees:														
Salaries.....		148,142 95		4,251 20		3,359 27		2,407 26						158,160 68
Apothecaries and Assistants:														
Salaries.....		9,701 67		489 34		293 61		195 74		146 80				10,827 16
Medical and Surgical Supplies:														
Expenses.....		153,731 98		9,297 15		8,524 61		2,053 57		85 33				173,692 64
X-Ray and Photographic Department:														
Salaries.....	\$15,615 22		\$16,252 57		\$1,017 25									
Expenses.....	18,524 22		19,280 31		1,073 02		\$236 04							
		34,139 44		35,532 88		2,090 27		236 04						71,998 63
Pathological Laboratory:														
Salaries.....	96%		4%											
Expenses.....	\$34,216 43		\$1,425 58											
		45,950 02		1,914 58										47,864 60
Thorndike Memorial Laboratory:														
Salaries.....	100%													
Expenses.....	\$60,062 56													
		77,466 58												77,466 58
Clinical Laboratory:														
Salaries.....	66%		34%											
Expenses.....	\$3,419 13		\$1,761 35											
		6,826 51		3,516 68										10,343 19
Blood Laboratory:														
Salaries.....	64%		36%											
Expenses.....	\$1,393 41		\$783 79											
		1,697 82		955 03										2,652 85
Department of Immunology:														
Salaries.....	2%		98%											
Expenses.....	\$104 66		\$5,128 29											
		117 92		5,778 17										5,896 09
Department of Physical Therapeutics:														
Salaries.....	14%		86%											
Expenses.....	\$2,512 89		\$15,436 30											
		2,886 93		17,733 99										20,620 92
Department of Oral Surgery:														
Salaries.....	25%		75%											
Expenses.....	\$326 04		978 13											
		417 04		1,251 12										1,668 16
Department of Social Service:														
Salaries.....	51 1/2%		48 1/2%											
Expenses.....	\$11,303 11		\$10,644 67											
		12,265 24		11,550 76										23,816 00
Settlement Account:														
Salaries.....	100%													
Expenses.....	\$1,395 75													
		1,961 42												1,961 42
DEPARTMENT EXPENSES.														
Ambulance:														
Salaries.....	\$29,894 04				\$7,224 67		\$6,810 40		\$738 01					
Expenses.....	12,939 27				537 67		375 92		82 36					
		42,833 31					7,762 34		7,186 32		\$21 27			\$58,603 24
Training School:														
Salaries.....	\$13,414 61		\$271 33		\$157 63		\$113 70							
Expenses.....	7,289 17		74 38		37 19		37 18							
		20,703 78		345 71		194 82		150 88						21,395 19
Housekeeping:														
Salaries.....	\$124,895 45		\$18,198 22		\$5,937 29		\$2,385 59		\$2,278 50					
Expenses.....	17,392 43		952 48		364 06		79 58		47 27					
		142,287 88		19,150 70		6,301 35		2,465 17		2,325 77				172,530 87
Equipment:														
Expenses.....		101,893 14		1,881 89		2,434 82		496 08		470 13		3 95		107,180 01
Steward's Department:														
Salaries.....	\$9,525 99		\$336 21		\$560 36		\$224 14		\$224 14					
Expenses.....	557,819 05				15,170 78		3,949 62		4,234 23					
		567,345 04		336 21		15,731 14		4,173 76		4,458 37				592,044 52
Kitchen and Dining Room:														
Salaries.....		115,724 80				3,202 64		1,965 21		958 65				121,851 30
Laundry:														
Salaries.....	\$95,932 16		\$901 13		\$3,828 20		\$2,645 52		\$1,844 67					
Expenses.....	28,181 14		165 49		307 77		135 40		30 09					
		124,113 30		1,066 62		4,135 97		2,781 02		1,874 76				133,971 67
Heat, Light and Power:														
Salaries.....	\$56,858 09		\$5,149 14		\$6,514 16		\$6,647 54		\$489 94		\$4,090 92			
Expenses.....	109,394 51		9,722 59		4,658 18		1,714 37		1,662 82		6,013 75			212,916 01
		166,252 60		14,871 73		11,172 34		8,361 91		2,152 76		10,104 67		1,420,492 81
BUILDINGS AND GROUNDS.														
Buildings:														
Salaries.....	\$57,710 50		\$2,212 41		\$345 00		\$222 00		\$78 00		\$3,599 40			
Expenses.....	52,038 80		1,408 41		1,824 50		1,055 19		3,429 48		1,650 50			
		109,749 30		3,620 82		1,869 50		1,277 19		3,507 48		5,249 90		\$125,274 19
Grounds:														
Salaries.....	\$10,736 92								\$469 65		\$1,199 80			
Expenses.....	4,017 65								346 25					
		14,754 57							\$15 90		1,199 80			17,216 14
Miscellaneous:														
Salaries.....	\$10,645 97		\$35 24		\$587 19		\$256 20		\$114 99					
Expenses.....	20,688 50													
		31,334 47		35 24		587 19		256 20		114 99				\$32,328 09
Totals.....		\$2,254,192 47		\$188,271 05		\$87,621 52		\$44,465 11		\$21,160 16		\$16,659 13		\$2,612,369 44
Deduct board of employees.....		17,911 07												17,911 07
Add board of employees.....				14,052 50		1,512 14		1,512 14		834 29				\$2,594,458 37
Total operating expenses.....		\$2,236,281 40		\$202,323 55		\$89,133 66		\$45,977 25		\$21,994 45		\$16,659 13		\$2,612,369 44
Deduct for permanent improvements and extraordinary expenditures.....		55,152 21								1,680 00				56,832 21
Net total operating expenditures.....		\$2,181,129 19		\$202,323 55		\$89,133 66		\$45,977 25		\$20,314 45		\$16,659 13		\$2,555,537 23
Deduct difference in stock on hand more than January 1, 1929.....		44,755 00						84 00						44,839 00
Add difference in stock on hand less than January 1, 1929.....				132 00		2								

Table No. 3.
EXPENDITURES, CLASSIFIED, IN ACCORDANCE WITH
SEGREGATED BUDGET FOR THE YEAR 1929.

GROUP AND ITEM.	ALL DEPARTMENTS.	
	1929.	
A. PERSONAL SERVICE.....		\$1,338,195 87
Permanent employees.....	\$1,256,323 54	
Temporary employees.....	67,175 67	
Unassigned.....	14,696 66	
B. SERVICE OTHER THAN PERSONAL.....		135,556 69
Printing and binding.....	\$936 86	
Advertising and posting.....	69 30	
Transportation of persons.....	1,135 25	
Cartage and freight.....	356 75	
Light, heat and power.....	8,899 61	
Premium on surety bond.....	95 50	
Communication.....	12,631 87	
Motor vehicle repairs.....	2,607 72	
Motorless vehicle repairs.....	1,900 98	
Cleaning.....	38 61	
Removal of snow.....	1,782 00	
Expert and architect.....	952 47	
Fees, service of venires.....	113 00	
General plant.....	104,036 77	
C. EQUIPMENT.....		130,577 77
Electrical.....	\$854 98	
Motor vehicles.....	7,132 75	
Motorless vehicles.....	448 04	
Furniture and fittings.....	45,036 01	
Office.....	840 98	
Library.....	788 22	
Medical, surgical, laboratory.....	49,156 16	
Tools and instruments.....	6,044 16	
Wearing apparel.....	20,276 47	
<i>Carried forward.....</i>		\$1,604,330 33

EXPENDITURES, CLASSIFIED, IN ACCORDANCE WITH SEGREGATED
BUDGET FOR THE YEAR 1929.— *Concluded.*

GROUP AND ITEM.	ALL DEPARTMENTS.	
	1929.	
<i>Brought forward</i>		\$1,604,330 33
D. SUPPLIES.....		937,522 47
Office.....	\$24,140 77	
Food and ice.....	581,655 17	
Fuel.....	131,111 72	
Forage and animal.....	642 90	
Medical, surgical, laboratory.....	163,284 41	
Laundry, cleaning and toilet.....	19,457 25	
Educational and recreational.....	341 87	
Agricultural.....	446 02	
Motor vehicles.....	2,297 42	
Chemicals and disinfectants.....	2,051 38	
General plant.....	12,093 56	
E. MATERIALS.....		32,718 14
Buildings.....	\$19,140 74	
Machinery.....	4,641 85	
Electrical.....	6,387 84	
General plant.....	2,547 71	
F. SPECIAL ITEMS.....		10,645 97
Pensions and annuities.....	\$2,789 65	
Workingmen's compensation.....	7,856 32	
G. INCIDENTAL EXPENDITURES.....		27,152 53
Furnishing house officers' buildings.....	\$27,152 53	
Total expenditures.....		\$2,612,369 44

Table No. 4.

DISBURSEMENTS FROM JANUARY 1, 1929, TO DECEMBER 31, 1929, INCLUSIVE.

ARTICLES.	Quantity.	Average Price.	Cost.
THE MAIN HOSPITAL, SOUTH DEPARTMENT, HAYMARKET SQUARE RELIEF STATION, EAST BOSTON RELIEF STATION, CONVALESCENT HOME AND WEST DEPARTMENT.			
Beef and veal.....	286,999 lbs.	\$0.33 per lb.	\$94,579 20
Mutton and lamb.....	117,715 "	.32 "	37,759 39
Poultry.....	130,087 "	.40 "	52,131 44
Pork and ham.....	204,526 "	.293 "	59,972 80
Fish.....			13,976 12
Lard.....	11,311 lbs.	.149 per lb.	1,688 24
Milk.....	789,984 qts.	.099 per qt.	78,490 08
Butter.....	91,385 lbs.	.545 per lb.	49,774 39
Cheese.....	7,288 "	.318 "	2,316 24
Eggs.....	92,780 doz.	.51 per doz.	47,359 15
Vegetables, fresh.....			30,522 97
Vegetables, canned.....			11,459 27
Fruit, fresh.....			24,887 71
Fruit, canned.....			17,588 36
Flour.....	1,200 bbls.	6.364 per bbl.	7,636 89
Graham flour.....	18 "	7.153 "	128 76
Oatmeal.....	41½ "	6.237 "	258 86
Cornstarch and farina.....	4,063 lbs.	.071 per lb.	287 28
Rice.....	7,565 "	.045 "	343 47
Other cereals.....			5,881 73
Groceries.....			10,095 85
Coffee.....	26,456 lbs.	.353 per lb.	9,343 24
Tea.....	8,384 "	.486 "	4,077 08
Chocolate and cocoa.....	3,483 "	.138 "	481 16
Sugar.....	145,929 "	.055 "	8,086 56
Molasses and syrup.....	748½ gals.	.312 per gal.	233 91
<i>General Supplies.</i>		Cost.	
Printing.....		\$8,304 18	
Stationery.....		5,402 96	
<i>Carried forward</i>		\$13,707 14	\$569,360 15

HOSPITAL DEPARTMENT.

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DISBURSEMENTS FROM JANUARY 1, 1929, TO DECEMBER 31, 1929,
INCLUSIVE.— *Cont.*

ARTICLES.	Cost.	Totals.
<i>Brought forward</i>	\$13,707 14	\$569,360 15
<i>General Supplies.— Continued.</i>		
Postage.....	992 37	
Advertising proposals, etc.....	69 30	
Telephone rentals.....	8,547 50	
Telephone, telegraph and messenger service.....	1,295 24	
House Officers' Building:		
General supplies.....	\$28,471 53	
Buildings.....	2,262 91	
Wages, housecleaning.....	575 02	
	31,309 46	
Vose House and Drown House:		
General supplies.....	\$4,855 49	
Medical supplies.....	5 56	
Building repairs.....	1,789 70	
Wages, housecleaning.....	5,121 53	
	11,772 28	
Training School for Nurses:		
General supplies.....	\$644 74	
Medical supplies.....	68 05	
	712 79	
Garage and ambulance:		
Expenses.....	\$11,147 96	
Fuel oil, 9,678.95 gallons at \$0.039 per gal.	377 28	
	11,525 24	
Garage supplies.....	165 98	
Gasoline.....	2,244 00	
Soap and cleansing stuffs.....	16,246 19	
Dry goods.....	7,239 74	
Furniture.....	5,594 20	
Furnishings.....	38,801 80	
Fixtures.....	9,112 27	
Bedsteads.....	548 29	
Mattresses.....	2,189 60	
Bedding.....	14,018 75	
Laundry supplies:		
Expenses.....	\$17,512 13	
Fuel oil, 285,851.693 gallons at \$0.039 per gal.	11,142 27	
	28,654 40	
<i>Carried forward</i>	\$204,746 54	\$569,360 15

DISBURSEMENTS FROM JANUARY 1, 1929, TO DECEMBER 31, 1929,
INCLUSIVE.— *Cont.*

ARTICLES.	Cost.	Totals.
<i>Brought forward</i>	\$204,746 54	\$59,360 15
<i>General Supplies.— Concluded.</i>		
Gas, 4,601,700 cubic feet at \$1.128 per 1,000 cubic feet.....	5,190 91	
Electric light purchased.....	2,743 85	
Electric light system.....	5,717 13	
Electrical appliances.....	8,634 42	
Kerosene, matches and candles.....	84 89	
Ice, 1,960 $\frac{350}{1000}$ tons at \$6.027 per ton.....	11,813 53	
Transportation and express.....	706 25	
Cartage and freight.....	298 85	
Insurance.....	95 50	
Clothing for patients.....	10,965 52	
Uniforms, caps, etc.....	6,476 01	
Medical library.....	1,410 45	
Clinical records:		
Expense.....	\$3,875 20	
Salaries.....	13,121 62	
	16,996 82	
Housecleaning:		
Soap.....	\$1,211 15	
Brushes, etc.....	362 43	
Uniforms, caps, etc.....	29 72	
Transportation.....	8 00	
	1,611 30	
Incidentals not otherwise classified.....	1,693 00	
		279,184 97
<i>Medical Supplies.</i>		
Surgical appliances.....	\$20,031 63	
Splints and crutches.....	1,959 30	
Surgical instruments.....	23,128 50	
X-ray apparatus.....	40 00	
X-ray supplies.....	1,485 02	
Druggists' sundries.....	5,201 57	
Laboratory ware.....	1,034 00	
Surgical dressings.....	4,977 72	
Bandage and compress materials.....	7,944 92	
Gauze.....	27,214 08	
Absorbent cotton.....	4,477 84	
<i>Carried forward</i>	\$97,494 58	\$848,545 12

HOSPITAL DEPARTMENT.

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DISBURSEMENTS FROM JANUARY 1, 1929, TO DECEMBER 31, 1929,
INCLUSIVE.— *Cont.*

ARTICLES.	Cost.	Totals.
<i>Brought forward</i>	\$97,494 58	\$848,545 12
<i>Medical Supplies.— Concluded</i>		
Medicinal gases.....	3,653 35	
Sulphuric ether.....	3,291 72	
Medicine and drugs.....	49,467 31	
Flaxseed meal.....	1,358 27	
Alcohol.....	5,482 35	
Radium.....	365 70	
Liquors.....	1,662 21	
Malt, liquors and mineral waters.....	2 929 06	165,704 55
<i>Fuel.</i>		
Coal, 1,623 $\frac{23}{100}$ tons at \$6.85 per ton.....	\$11,116 87	
Oil, 2,285,523.0218 gallons at \$0.039 per gallon.....	89,088 65	
Charcoal.....	92 00	
Wood.....	66 50	
Coke.....	57 50	100,421 52
<i>Salaries and Labor.</i>		
Salaries and wages.....	\$7,600 00	
Pay rolls.....	1,014,303 05	
Wages, house cleaners.....	30,903 93	
Pensions.....	2,789 65	
Injured employees.....	7,856 32	1,063,452 95
<i>Buildings.</i>		
General repairs.....	\$24,610 54	
Boilers and heating apparatus.....	18,622 83	
Painting.....	5,302 98	
Plumbing.....	8,108 35	
Refrigerating plant.....	457 49	
Walls and fences.....	333 37	57,435 56
<i>Grounds.</i>		
Care of grounds.....		4,809 77
Deduct for board of employees:		\$2,240,369 47
Out-Patient Department.....		14,052 50
Total expenditures for maintaining Main Departments for year ending December 31, 1929.....		\$2,226,316 97
<i>Carried forward</i>		\$2,226,316 97

DISBURSEMENTS FROM JANUARY 1, 1929, TO DECEMBER 31, 1929,
INCLUSIVE.—Cont.

ARTICLES.	Cost.	Cost.	Totals.
<i>Brought forward</i>			\$2,226,316 197
OUT-PATIENT DEPARTMENT.			
<i>General Supplies.</i>			
Printing, stationery and postage.....	\$1,644 84		
Telephone rentals.....	699 29		
Account Training School for Nurses:			
Training School for Nurses, Vose House, Drown House:			
General supplies.....	\$55 56		
Medical supplies.....	74		
Buildings.....	18 08		
Wages, house cleaning.....	51 73		
	126 11		
Soap and cleansing stuffs.....	322 20		
Dry goods, uniforms and clothing for patients.....	106 30		
Furniture, furnishings and fixtures.....	1,480 71		
Bedding.....	329 12		
Laundry supplies.....	165 49		
Gas, 38,500 cubic feet at \$1.134 per 1,000 cubic feet.....	43 65		
Electric light system.....	78 07		
Electrical appliances.....	18 10		
Kerosene, matches and candles.....	1 05		
Transportation and express.....	1 00		
Clinical records and cataloguing:			
Printing and stationery.....	\$238 35		
Incidentals.....	107 00		
Salaries.....	21,380 64		
	21,725 99		
House cleaning: Soap, \$232.85, brushes, etc., \$85.95.....	318 80		
Incidentals not otherwise classified.....	311 48		
		\$27,372 20	
<i>Medical Supplies.</i>			
Surgical instruments and appliances.....	\$1,425 81		
Splints and crutches, drug sundries and laboratory ware.....	483 78		
Dressings, gauze, bandage and absorbent cotton.....	2,057 12		
Medicinal gases, ether, alcohol, drugs.....	5,326 80		
Photographic supplies.....	3 64		
		9,297 15	
<i>Carried forward</i>		\$36,669 35	\$2,226,316 97

HOSPITAL DEPARTMENT.

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DISBURSEMENTS FROM JANUARY 1, 1929, TO DECEMBER 31, 1929,
INCLUSIVE.— *Cont.*

ARTICLES.	Cost.	Cost.	Totals.
<i>Brought forward</i>		\$36,669 35	\$2,226,316 97
OUT-PATIENT DEPARTMENT.— <i>Concluded.</i>			
<i>Fuel.</i>			
Oil, 245,814.63 gallons at \$0.039 per gallon,		9,581 72	
<i>Salaries and Labor.</i>			
Salaries and wages	\$160 00		
Pay rolls	55,500 16		
Wages, house cleaning	6,718 20	62,378 36	
<i>Buildings.</i>			
Building repairs, heating apparatus, painting and plumbing		1,408 41	
		\$110,037 84	
Add for board of Out-Patient employees		14,052 50	124,090 34
PATHOLOGICAL LABORATORY.			
<i>General Supplies.</i>			
Printing and stationery	\$414 76		
Telephone rentals	63 57		
Soap and cleansing stuffs	25 07		
Dry goods, uniforms and caps	87 92		
Bedding	12 01		
Furniture, furnishings and fixtures	570 20		
Laundry	45 13		
Gas, 206,100 cubic feet at \$1.143 per 1,000 cubic feet	235 67		
Electric light system	9 54		
Electrical appliances	19 20		
Kerosene, matches and candles	2 06		
Transportation, express, cartage, etc	9 92		
Hay, grain and straw	498 85		
House cleaning: Soap, \$24.50, brushes, etc., \$7.09, uniforms, \$0.70	32 29		
Incidentals not otherwise classified	2 51	\$2,028 70	
<i>Medical Supplies.</i>			
Surgical instruments, appliances and laboratory ware	\$3,032 15		
Micro-photographic supplies	132 75		
Gauze, bandage and compress and absorbent cotton	93 35		
<i>Carried forward</i>	\$3,258 25	\$2,028 70	\$2,350,407 31

DISBURSEMENTS FROM JANUARY 1, 1929, TO DECEMBER 31, 1929,
INCLUSIVE.— *Cont.*

ARTICLES.	Cost.	Cost.	Totals.
<i>Brought forward</i>	\$3,258 25	\$2,028 70	\$2,350,407 31
PATHOLOGICAL LABORATORY.— Concluded.			
<i>Medical Supplies.— Concluded.</i>			
Medicinal gases, ether, alcohol, chemicals, serum.....	1,528 18		
Animals.....	85 00	4,871 43	
<i>Fuel.</i>			
Oil, 92,280.50 gallons at \$0.039 per gallon.....		3,593 17	
<i>Salaries and Labor.</i>			
Salaries and wages.....	\$80 00		
Pay rolls.....	35,030 17		
Wages, house cleaning.....	531 94	35,642 11	
<i>Buildings.</i>			
Building repairs, heating apparatus, and plumbing.....		1,729 19	47,864 60
THORNDIKE MEMORIAL LABORATORY.			
<i>General Supplies.</i>			
Printing, stationery and postage.....	\$738 12		
Telephone rentals.....	127 14		
Soap and cleansing stuffs.....	24 44		
Dry goods, uniforms and caps.....	291 48		
Furniture, furnishings and fixtures.....	1,118 61		
Bedding.....	7 44		
Laundry.....	105 31		
Gas, 346,400 cubic feet at \$1.107 per 1,000 cubic feet.....	383 45		
Electric light system.....	16 74		
Electrical appliances.....	22 46		
Kerosene, matches and candles.....	91		
Cartage and freight.....	24 10		
Hay, grain and straw.....	144 05		
House cleaning: Soap, \$31.30, brushes, etc., \$9.05, uniforms, \$0.90.....	41 25		
Incidentals not otherwise classified.....	529 96	\$3,575 46	
<i>Medical Supplies.</i>			
Surgical instruments, appliances and labora- tory ware.....	\$6,236 37		
Micro-photographic supplies.....	1,060 90		
<i>Carried forward</i>	\$7,297 27	\$3,575 46	\$2,398 271 91

HOSPITAL DEPARTMENT.

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DISBURSEMENTS FROM JANUARY 1, 1929, TO DECEMBER 31, 1929.
INCLUSIVE.— *Cont.*

ARTICLES.	Cost.	Cost.	Totals.
<i>Brought forward</i>	\$7,297 27	\$3,575 46	\$2,398,271 91
THORNDIKE MEMORIAL LABORATORY — <i>Concluded.</i>			
<i>Medical Supplies.</i> — <i>Concluded.</i>			
Gauze, absorbent cotton and surgical dressings.....	56 18		
Medicinal gases, chemicals, ether and alcohol.....	1,357 95		
Animals.....	1,361 70	10,073 10	
<i>Fuel.</i>			
Oil, 61,453.61 gallons at \$0.039 per gallon.....		2,395 41	
<i>Salaries and Labor.</i>			
Salaries and wages.....	\$80 00		
Pay rolls.....	59,310 61		
Wages, house cleaning.....	671 95	60,062 56	
<i>Buildings.</i>			
Building repairs, heating apparatus and plumbing.....		1,360 05	77,466 58
X-RAY AND PHOTOGRAPHIC DEPARTMENT.			
<i>General Supplies.</i>			
Printing, stationery and postage.....	\$994 06		
Telephone rentals.....	127 15		
Soap and cleansing stuffs.....	63		
Dry goods and clothing for patients.....	15 47		
Furniture and furnishings.....	732 82		
Bedding.....	90 20		
Laundry.....	30 09		
Electric power purchased.....	300 00		
Electrical appliances.....	44 94		
Cartage and freight.....	27 86		
House cleaning: Soap, \$2.72, brushes, etc., \$0.87.....	3 59	\$2,366 81	
<i>Medical Supplies.</i>			
Instruments and appliances and drug sundries.....	\$224 70		
X-ray and photographic apparatus.....	5,329 05		
X-ray and photographic supplies.....	24,041 26		
<i>Carried forward</i>	\$29,595 01	\$2,366 81	\$2,475,738 49

DISBURSEMENTS FROM JANUARY 1, 1929, TO DECEMBER 31, 1929,
INCLUSIVE.— *Cont.*

ARTICLES.	Cost.	Cost.	Totals.
<i>Brought forward</i>	\$29,595 01	\$2,366 81	\$2,475,738 49
X-RAY AND PHOTOGRAPHIC DEPARTMENT — <i>Concluded.</i>			
<i>Medical Supplies.</i> — <i>Concluded.</i>			
Dressings, gauze, absorbent cotton and bandage material.....	36 24		
Chemicals.....	1,919 07	31,550 32	
<i>Fuel.</i>			
Oil, 92,180.29 gallons at \$0.039 per gallon.....		3,593 15	
<i>Salaries and Labor.</i>			
Salaries and wages.....	\$80 00		
Pay rolls.....	31,720 36		
Wages, house cleaning.....	67 43	31,867 79	
<i>Buildings.</i>			
Building repairs, heating apparatus and plumbing.....		294 25	69,672 32
DEPARTMENT OF PHYSICAL THERAPEUTICS.			
<i>General Supplies.</i>			
Printing and stationery.....	\$82 54		
Telephone rentals.....	31 79		
Soap and cleansing stuffs.....	8 16		
Dry goods.....	77 16		
Laundry.....	45 14		
Furniture and furnishings.....	244 17		
Bedding.....	2 00		
Electric light system.....	7 55		
Electrical appliances.....	118 48		
House cleaning: Soap, \$7.38; brushes, etc., \$2.50.....	9 88	\$626 87	
<i>Medical Supplies.</i>			
Instruments, appliances and splints and crutches.....	\$1,155 74		
Dressings, bandage, gauze and absorbent cotton.....	812 26		
Chemicals, ether and alcohol.....	76 86	2,044 86	
<i>Carried forward</i>		\$2,671 73	\$2,545,410 81

DISBURSEMENTS FROM JANUARY 1, 1929, TO DECEMBER 31, 1929,
INCLUSIVE.— *Cont.*

ARTICLES.	Cost.	Cost.	Totals.
<i>Brought forward</i>		\$2,671 73	\$2,545,410 81
DEPARTMENT OF PHYSICAL THERAPEUTICS.			
<i>— Concluded.</i>			
<i>Salaries and Labor.</i>			
Pay rolls.....	\$17,763 81		
Wages, house cleaning.....	185 38	17,949 19	20,620 92
DEPARTMENT OF IMMUNOLOGY.			
<i>General Supplies.</i>			
Stationery.....	\$15 70		
Soap and cleansing stuffs.....	3 72		
Furnishings.....	22 41		
House cleaning: Soap, \$4.66; brushes, etc., \$1.62.....	6 28	\$48 11	
<i>Medical Supplies.</i>			
Surgical instruments, appliances and labora- tory ware.....	\$374 87		
Bandage, gauze and absorbent cotton.....	52 23		
Chemicals, ether and alcohol.....	152 82		
Serum.....	35 11	615 03	
<i>Salaries and Labor.</i>			
Pay rolls.....	\$5,101 12		
Wages, house cleaning.....	131 83	5,232 95	5,896 09
CLINICAL LABORATORY.			
<i>General Supplies.</i>			
Telephone rentals.....	\$31 78		
Fixtures.....	103 70		
Uniforms, caps, etc.....	9 00	\$144 48	
<i>Medical Supplies.</i>			
Surgical instruments, appliances, laboratory ware.....	\$979 97		
Bandage material and gauze.....	10 93		
Chemicals and sulphuric ether.....	4,027 32	5,018 22	
<i>Salaries and Labor.</i>			
Pay rolls.....		5,180 49	10,343 19
<i>Carried forward</i>			\$2,582,271 01

DISBURSEMENTS FROM JANUARY 1, 1929, TO DECEMBER 31, 1929,
INCLUSIVE.— *Cont.*

ARTICLES.	Cost.	Cost.	Totals.
<i>Brought forward</i>			\$2,582,271 01
BLOOD LABORATORY.			
<i>General Supplies.</i>			
Uniforms, caps, etc.....	\$3 50		
Furnishings and fixtures.....	6 25		
Incidentals not otherwise classified.....	30 00	\$39 75	
<i>Medical Supplies.</i>			
Surgical instruments, appliances, laboratory ware.....	\$359 03		
Bandage materials and gauze.....	33 11		
Chemicals, ether and alcohol.....	43 76	435 90	
<i>Salaries and Labor.</i>			
Pay rolls.....		2,177 20	2,652 85
DEPARTMENT OF ORAL SURGERY.			
<i>General Supplies.</i>			
Dry goods.....	\$2 14		
Furniture.....	7 20	\$9 34	
<i>Medical Supplies.</i>			
Surgical instruments, appliances and appa- ratus.....	\$263 57		
Bandage materials and gauze.....	13 46		
Medicine and drugs.....	77 62	354 65	
<i>Salaries and Labor.</i>			
Pay rolls.....		1,304 17	1,668 16
DEPARTMENT OF SOCIAL WORK.			
<i>General Supplies.</i>			
Printing, stationery and postage.....	\$357 07		
Furniture and furnishings.....	192 65		
Telephone rentals.....	762 86		
Telephone, telegraph and messenger service,	140 64		
Transportation.....	415 00	\$1,868 22	
<i>Salaries and Labor.</i>			
Pay rolls.....		21,947 78	23,816 00
<i>Carried forward</i>			\$2,610,408 02

HOSPITAL DEPARTMENT.

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DISBURSEMENTS FROM JANUARY 1, 1929, TO DECEMBER 31, 1929,
INCLUSIVE.— *Concl.*

ARTICLES.	Cost.	Cost.	Totals.
<i>Brought forward</i>			\$2,610,408 02
SETTLEMENT ACCOUNT.			
<i>General Supplies.</i>			
Printing, stationery and postage.....	\$408 38		
Telephone rentals.....	143 04		
Furniture and furnishings.....	14 25		
<i>Salaries and Labor.</i>			
Pay rolls.....		\$565 67	
		1,395 75	1,961 42
Total disbursements.....			\$2,612,369 44
STOCK ON HAND JANUARY 1, 1929.			
<i>All Departments.</i>			
General supplies.....		\$55,267 32	
Fuel.....		2,969 55	
Medical supplies.....		27,079 13	85,316 00
Total expenditures for all purposes.....			\$2,697,685 44
DEDUCT.			
STOCK ON HAND JANUARY 1, 1930.			
General supplies.....		\$99,850 00	
Fuel.....		3,434 00	
Medical supplies.....		26,292 00	129,576 00
Total maintenance expenses.....			\$2,568,109 44
DEDUCT REVENUE.			
Income from paying patients:			
Collected by hospital.....	\$171,961 83		
Collected by City Collector for contagious cases.....	26,023 78		
		\$197,985 61	
Revenue on account of maintenance:			
Interest on trust funds.....		2,506 50	
Sundry revenue:			
Sale of bones, trimmings, bread crumbs and old material.....		2,388 62	
Commission on automatic telephones.....		545 39	
Birth fees.....		338 00	
Interest on bank deposit.....		104 64	
Rent of booth — West Department.....		100 00	203,968 76
Net cost to the City for maintaining all departments from January 1, 1929, to December 31, 1929, inclusive.....			\$2,364,140 68

Table No. 5.

COMPARISON OF THE CENSUS AND EXPENDITURES AT THE BOSTON CITY HOSPITAL FOR THE ELEVEN MONTHS ENDING DECEMBER 31, 1925, AND YEARS ENDING DECEMBER 31, 1926, 1927, 1928, AND 1929.

POPULATION.	ALL DEPARTMENTS EXCEPT SANATORIUM DIVISION.				
	11 Months 1925.	1926.	1927.	1928.	1929.
Number of patients at beginning of year.....	1,155	905	931	1,065	1,003
Number admitted during year.....	23,796	24,855	27,088	27,249	28,715
Number discharged during year, including deaths.....	24,046	24,818	26,954	27,321	28,556
Number remaining at end of year..	905	942	1,065	993	1,162
DAILY AVERAGE OF DAYS' BOARD GIVEN.					
Patients.....	944.6	953	1,087.2	1,127.3	1,147.3
Officers and employees.....	806.9	815.8	885.3	948.3	1,079
House officers and special nurses...	132.9	130.9	144.8	149.1	145.1
Totals.....	1,884.4	1,899.7	2,117.3	2,224.7	2,371.4
EXPENDITURES.					
Ordinary expenditures:					
Personal service.....	\$849,124 52	\$996,022 51	\$1,083,918 94	\$1,149,994 68	\$1,338,195 87
Service other than personal.....	66,759 49	69,627 23	69,640 90	82,380 63	107,404 52
Equipment.....	104,967 67	112,783 49	107,373 18	118,256 92	129,392 52
Supplies.....	577,263 85	668,096 85	712,680 09	784,783 84	937,519 22
Materials.....	33,530 60	30,831 94	29,623 00	30,676 61	32,379 13
Special items.....	7,859 98	6,174 45	7,597 70	10,178 37	10,645 97
Incidental expenditures.....		300 00			
Extraordinary expenditures (per- manent improvements, etc.):					
Service other than personal.....	14,221 97	17,029 94	31,141 35	8,824 46	28,152 17
Equipment.....			6,475 00	533 00	1,185 25
Supplies.....					3 25
Materials.....					339 01
Special items.....	8,160 37		625 00		
Incidental expenditures.....					27,152 53
Totals.....	\$1,661,888 45	\$1,900,866 41	\$2,049,075 16	\$2,185,628 51	\$2,612,369 44

PER CAPITA COSTS YEAR 1929.

	Per Visit.	Per Day.	Per Week.
Hospital proper:			
Per ward patient (after deducting cost of permanent improvements and extraordinary expenditures).....		\$5 18	\$36 25
Per person, for uncooked food supplies.....		65	4 53
Per out-patient, per visit.....	\$0 69		
South Department:			
Per patient (after deducting cost of permanent improvements).....		5 37	37 60
Per person, for uncooked food supplies.....		73	5 12
Hospital proper and South Department, together:			
Per ward patient (after deducting cost of permanent improvements and extraordinary expenditures).....		5 21	36 44
Haymarket Square Relief Station:			
Per ward patient.....		5 21	36 44
Per out-patient, per visit.....	2 77		
East Boston Relief Station:			
Per ward patient.....		5 21	36 44
Per out-patient, per visit.....	1 65		
Convalescent Home:			
Per patient.....		4 54	31 79
All departments except Sanatorium Division:			
Per person for uncooked food supplies.....		66	4 60

The tables of disbursements in this report show the expenditures of the Hospital Department for the year 1929. Tables No. 1 and No. 2 show the disbursements in various subdivisions with per capita costs. Table No. 2 shows the Hospital proper combined with South Department to form the main Hospital. Table No. 3 shows the expenditures according to the budget classification. Table No. 4 shows the detailed disbursements in various subdivisions. Table No. 5 is a comparison of the census and expenditures for the past five years. Table No. 6 is a statement of the revenue received from all sources during the year.

The total expenditures for the fiscal year for Hospital Department, in the various branches, excepting the Sanatorium Division, have been \$2,185,628.51. The disbursements have been made as follows:

	All Departments, except Sanatorium Division.
For personal service	\$1,338,195 87
Service other than personal	135,556 69
Equipment	130,577 77
Supplies	937,522 47
Materials	32,718 14
Special items	10,645 97
Incidental expenditures	27,152 53
	<hr/>
Total	<u>\$2,612,369 44</u>

The Hospital proper has eleven subdivisions, the Hospital (wards) proper, Out-Patient Department, Pathological Laboratory, Thorndike Memorial, X-Ray Department, Department of Physical Therapeutics, Department of Immunology, Blood Laboratory, Clinical Laboratory, Department of Oral Surgery, Department of Social Work.

The expenditures for the South Department for infectious diseases; the Haymarket Square Relief Station, the East Boston Relief Station, the Convalescent Home and the West Department are kept in separate tables.

The average weekly expenditure per ward patient in the Hospital proper was \$36.25; at South Department, \$37.60; at the main Hospital (Hospital proper and South Department combined), \$36.44. At the Convalescent Home the average weekly expenditure per patient was \$31.79.

The expenditure per visit per out-patient at the Hospital proper was 69 cents; at the Haymarket Square Relief Station, \$2.77; at the East Boston Relief Station, \$1.65.

The expenditure per person for uncooked food supplies in all the Hospital Departments, excepting the Sanatorium Division, was \$4.60 per week or 66 cents per day.

The total expenditures of the Hospital Department, excepting the Sanatorium Division, have been \$2,612,369.44, but the net cost to the city for maintaining it was only \$2,364,140.68.

The maximum number of patients in the Hospital proper on any one day was 1,166 as against 1,054 in the previous year. The minimum number was 813 in comparison with 757 for the previous year. The daily average during the year was 965.7 and the average length of stay was 14.1 days.

There have been treated in the various out-patient departments at the Hospital proper 82,483 patients. Other statistics may be found elsewhere, including the visits of out-patients, rate of mortality, work of ambulances, census of days' board for all persons, the nativity of patients admitted, and physical condition of patients when discharged.

The total number of deaths during the year was 1,915. This includes only the statistics of the Hospital proper.

Of the deaths, there occurred within

48 hours of admission	661 or 2.7 per cent
Other deaths	1,254 or 5 per cent
Total	<u>1,915 or 7.7 per cent</u>

the rate of mortality for the year 1929.

This percentage of deaths is for the total number of patients treated in the Hospital. The deaths occurring within forty-eight hours of admission, 661, were 35 per cent of the whole number of deaths (1,915).

During the past year 24,939 patients were treated in the wards of the Hospital proper, 82,483 as out-patients; 316 at the Convalescent Home, 1,881 at the South Department; at the Haymarket Square Relief Station 2,442 were treated in the wards and 25,478 as out-patients, and at the East Boston Relief Station, 140 were treated in the wards and 9,202 as out-patients, making a total of 146,565 who have received the bene-

fits of the hospital in all departments. The 316 Convalescent Home patients are not included in the total treated because they are transfers from the other hospital departments and have already been counted.

During the past year 24,325 persons applied for admission at the Hospital proper. Of this number 24,071 were admitted and 254 rejected. This number rejected was one per cent of all persons applying and the causes of rejection appear in the table of applicants not admitted on page 85.

There were 243 self-rejected or deferred. Of these, 46 were admitted within three days and 148 were admitted later. There were 180 denied admission because they had a state settlement but of these 11 were admitted within three days and 57 were admitted later. Ninety-three were rejected for lack of accommodation but of these 10 were admitted within three days and 27 still later. Forty-nine were refused admission because they did not reside within the city limits, but 10 of these were admitted within three days and 17 later. Two were denied admission on account of lack of information that they were suitable applicants. Sixteen were referred to other public institutions on account of the nature of their diseases but of these 3 were admitted later.

HAYMARKET SQUARE RELIEF STATION.

The following are the principal statistics of the Haymarket Square Relief Station for the year 1929:

Number of patients remaining in Haymarket Square Relief Station December 31, 1928	16
Admitted during year 1929	2,426
	<hr/>
Treated during year	2,442
Discharged during year	2,308
Died during year	126
	<hr/>
Total discharges and deaths	2,434
	<hr/>
Number of patients remaining in Haymarket Square Relief Station December 31, 1929	8
Number of out-patients treated during year	25,478
Largest number of out-patients treated on any one day	113
Number of major surgical operations	35
Number of deaths following surgical operations	2

Number of deaths within twenty-four hours of admission	125	
Number of days' treatment given patients in wards	3,614	
Largest number of ward patients in any one day	20	
Smallest number of ward patients in any one day	3	
Average stay of ward patients in days	1.48	
Daily average in wards	9.9	
Number of Relief Station ambulance calls	673	
Number of ambulance trips for transfer of patients to Hospital Proper	541	
Miscellaneous ambulance trips	4	
	—	1,218
Patients carried on ambulance calls	619	
Ward patients transferred to Main Hospital,	616	
Out-patients transferred to Main Hospital	76	
	—	1,311
Number of trips made by ambulance (no patients carried)	54	
Total number of miles run by Relief Station ambulances	5,084	
Number of cases brought in by police ambulances or patrol wagons	1,682	
Number of cases brought in by automobiles	1,747	
Number of alcoholics admitted during year	347	
Number of accident cases treated during year in Out-Patient Department and in wards	25,694	
Medical cases admitted during the year	674	
Surgical cases admitted during the year	1,752	
	—	2,426
Number of births during year	1	
Number of females admitted during the year,	453	
Number of males admitted during the year,	1,972	
	—	2,426
Number of X-rays taken during the year	3,330	
Number of patients treated in the X-Ray Department during the year	1,311	

EAST BOSTON RELIEF STATION.

The following are the principal statistics for the year 1929:

Number of patients remaining in the East Boston Relief Station December 31, 1928	3
Admitted during year 1929	137
	—
Treated during year	140
Discharged during year	110
Died during year	29
	—
	139

Number of patients remaining in East Boston Relief Station December 31, 1929		1
Number of out-patients treated:		
Medical	510	
Surgical	8,692	
	<hr/>	9,202
Number of visits of out-patients:		
Medical	510	
Surgical	26,592	
	<hr/>	27,102
Largest number of out-patients on any one day		163
Number of major surgical operations during year		0
Number of deaths within twenty-four hours of admission		29
Number of days' treatment given patients in wards,		228
Largest number of ward patients on any one day		3
Average stay of ward patients in days		1.6
Daily average in wards		0.6
Number of ambulance trips:		
By Main Hospital ambulance (transferring patients to Main Hospital)	48	
By Relief Station ambulance	276	
	<hr/>	324
Patients carried in ambulances		276
Miles run by East Boston Relief Station ambulances,		1,228
Number of cases brought in by police ambulances		273
Number of cases brought in by automobiles, etc.		321
Number of cases receiving ward treatment although not admitted		209

CONVALESCENT HOME.

The statistics of the Convalescent Home which has just completed its thirty-eighth year are as follows:

Number of patients remaining in Convalescent Home December 31, 1928		7
Admitted during year		309
	<hr/>	
Total treated during year		316
Discharged during year		306
	<hr/>	
Number of patients remaining December 31, 1929		10
Largest number of patients on any one day		23
Smallest number of patients on any one day		0
Daily average number of patients		12.3
Average length of patients' stay in days		14.2
Number of days' board given patients		4,495

MEDICAL LIBRARY.

Number of books in library, January 1, 1929	4,605
Number of books added to library during year 1929:	
By donation	20
By binding	226
	—
	246
Number of books in library, December 31, 1929	<u>4,851</u>

There have been received during the year 101 monographs, 236 reprints, 274 Annual Hospital and Health Reports and 1,186 periodicals.

CLINICAL RECORD ROOM — HOUSE RECORDS.

Number of volumes indexed and prepared for binding,	346
Cards written:	
For clinical catalogue	30,112
For name catalogue	24,071
	—
	54,183

TRAINING SCHOOL FOR NURSES.

The Training School for Nurses has now completed its fifty-second year. The change in the nursing staff has been as follows:

SUMMARY FOR THE YEAR 1929.

January 1, 1929, the number of nurses was	371
---	-----

During the year nurses came as follows:

Superintendent of Nurses	1
Day Supervisor	1
Night Supervisor	1
Instructor	1
Graduate nurses employed first time	12
Graduates re-employed	8
Graduates re-instated	2
Graduates retained	11
Graduates employed for half-time	2
Probationers came	71
Probationers re-instated	9
Pupils reinstated	4
Male graduates employed	2
Male graduate re-employed	1
Graduate floor nurses employed (male and female)	48
Special nurses employed	3,874
	—
<i>Carried forward</i>	4,048
	371

Brought forward 4,048 371

Affiliated pupils as follows:

Portsmouth Hospital	8	
Lawrence General Hospital	24	
Bath City Hospital	4	
Long Island Hospital	33	
Charlesgate Hospital	8	
Massachusetts General Hospital	3	
Chelsea Soldiers' Hospital	7	
St. Margaret's Hospital	10	
Cambridge Hospital	55	
Cambridge City Hospital	10	
Chelsea Memorial Hospital	7	
Worcester Memorial Hospital	16	
Quincy City Hospital	18	
New England Hospital	13	
Worcester State Hospital	11	
Taunton State Hospital	4	
Danvers State Hospital	10	
Medfield State Hospital	3	
Leonard Morse Hospital	11	
Beth Israel Hospital	2	
Paine Hospital	2	
Franklin County Public Hospital	13	
Grafton State Hospital	6	
Emerson Hospital	6	
		<hr/>
Total		4,332

During the year nurses left as follows:

Superintendent of Nurses	1	
Assistant transferred to Superintendent of Nurses	1	
Instructor transferred to Supervisor	1	
Supervisor died	1	
Graduates resigned	17	
Graduate transferred Instructor	1	
Graduate transferred Supervisor	1	
Graduate dropped	1	
Graduates (half time) resigned	4	
Pupils graduated	27	
Pupils left for various reasons	3	
Pupils resigned	4	
Probationers left	11	
Probationers dropped for various reasons	21	
Pupil died	1	
		<hr/>
<i>Carried forward</i>	95	4,703

<i>Brought forward</i>	95	4,703
Graduates (male) left	2	
Graduate floor nurses left	38	
Special nurses left	3,855	

Affiliated pupils have completed course
as follows:

Bath City Hospital	4	
Lawrence General Hospital	22	
Chelsea Memorial Hospital	9	
Long Island Hospital	23	
Charlesgate Hospital	8	
Massachusetts General Hospital	2	
Chelsea Soldiers Hospital	6	
Emerson Hospital	3	
St Margaret's Hospital	11	
Cambridge Hospital	58	
Cambridge City Hospital	9	
Portsmouth Hospital	8	
Worcester Memorial Hospital	16	
Quincy City Hospital	15	
Quincy City Hospital (dropped)	1	
New England Hospital	11	
New England Hospital (dropped)	2	
Worcester State Hospital	9	
Taunton State Hospital	3	
Danvers State Hospital	6	
Medfield State Hospital	3	
Leonard Morse Hospital	9	
Beth Israel Hospital	2	
Paine Hospital	1	
Franklin County Hospital	13	
Grafton State Hospital	1	
Total	—	4,245

Total number remaining January 1, 1929 458

NURSES CONNECTED WITH THE SCHOOL JANUARY 1, 1930.

<i>Main Hospital:</i>		
Superintendent of Nurses	1	
Assistants	5	
Instructors	4	
Graduate nurses	45	
Floor nurses, male and female	29	
Special nurses	65	
Male graduate nurses	7	
Boston City Hospital nurses	100	
<i>Carried forward</i>	256	

<i>Brought forward</i>	256	
Probationers	48	
Affiliated pupils as follows:		
Worcester State Hospital	12	
Danvers State Hospital	10	
Cambridge Hospital	10	
Leonard Morse Hospital	5	
Chelsea Soldiers' Home	2	
Long Island Hospital	16	
Paine Hospital	2	
Bath City Hospital	2	
Medfield State Hospital	4	
Taunton State Hospital	3	
New England Hospital	2	
Grafton State Hospital	5	
Franklin County Hospital	2	
Chelsea Memorial Hospital	1	
Lawrence General Hospital	2	
Emerson Hospital	3	
Charlesgate Hospital	1	
St. Margaret's Hospital	5	
	<hr/>	
Total		391
 <i>Out-Patient Department:</i>		
Supervisor	1	
Graduates	9	
Graduates (half time)	1	
Graduate male	1	
	<hr/>	
Total		12
 <i>South Department:</i>		
Matron	1	
Assistants	2	
Graduate nurses	7	
Floor nurses	6	
Boston City Hospital nurses	6	
Affiliated pupils as follows:		
Portsmouth Hospital	2	
Cambridge City Hospital	3	
Long Island Hospital	4	
Quincy City Hospital	5	
Worcester Memorial Hospital	4	
Massachusetts General Hospital	1	
Franklin County Hospital	1	
	<hr/>	
Total		42
	<hr/>	
<i>Carried forward</i>		445

<i>Brought forward</i>		445
<i>Haymarket Square Relief Station.</i>		
Matron	1	
Graduate nurses	2	
Boston City Hospital pupils	4	
	<hr/>	
Total		7
<i>East Boston Relief Station:</i>		
Matron	1	
Boston City Hospital pupils	2	
New England Hospital pupil	1	
	<hr/>	
Total		4
<i>Convalescent Home:</i>		
Matron	1	
Graduate nurse	1	
Total	<hr/>	2
		<hr/>
Total, entire hospital		<u>458</u>

TRAINING SCHOOL FOR NURSES.

In October Miss Ellen C. Daly, Superintendent of Nurses for the past ten years, resigned, much to the regret of the Hospital Administration and the whole Training School. Miss Della M. Currier, First Assistant, was then appointed Superintendent of Nurses. The following promotions were made: Miss Rose M. Foster from the position of Second Assistant to that of First Assistant; Miss Eliza Williams from the position of Third Assistant to that of Second Assistant; Miss Margaret B. Welch from the position of Instructor of Probationers to that of Third Assistant; Miss Patricia Curran, Graduate Head Nurse, was made Instructor of Probationers.

Miss Della M. Currier, Superintendent of Nurses, writes as follows of the year's work in the Training School for Nurses:

Seventy-one pupils entered the preliminary class. Thirty-nine became members of the school.

Two hundred and eighty-four pupils were admitted from affiliating schools for special courses ranging from two months to one year. Two hundred and fifty-five received certificates. Twenty-three different schools

send their pupils here to complete courses which will qualify them for registration in their respective states.

We have added a Physical Instructor, Miss Anna Lomasney, to our force. This part of the nurse's education is not well enough organized as yet to give a full report, but we hope to improve this as time goes on.

Supervised case study on Maternity has been given a beginning and before the year closes we are anticipating its inauguration in the Pediatric, Medical and Surgical Departments as well as South Department.

Graduate nurses have been installed at Vose House and South Department in the capacity of House Mothers. Mail and packages are now given out in Lobby of the Vose House relieving somewhat the congestion of work in the office of the Assistant Superintendent of Nurses.

We are greatly in need of additional housing for nurses as our capacity is taxed to the limit now, which may make it necessary to have our graduate head nurses live outside the Hospital before the year is ended.

All our positions are filled at present both at Main Hospital and South Department.

An additional graduate nurse has been installed in the Eye Department to assist in refraction of eyes.

CHANGES IN THE STAFF OF EXECUTIVES AND MEDICAL ASSISTANTS.

In June, Edmund Winfred Wilson, M. D., Assistant Superintendent since 1915, and previously Interne and Executive Assistant, left, to the regret of the Administration, Visiting Staff and other Hospital associates.

Charles Hamlin Pelton, M. D., formerly in charge of St. Luke's Hospital in Chicago, was appointed to the position of Assistant Superintendent.

With sorrow we record the death of Donald S. McKinnon, M. D., Executive Assistant, who passed away in June, after a long illness. Alfred M. Roscoe, M. D., was appointed to succeed him.

The position of Fourth Executive Assistant was created in May. In November this position was filled by the appointment of Charles A. Knowles, M. D. Doctor Knowles filled the position until the close of the year, when he became Assistant Resident Surgeon.

Panos Dukakis, M. D., Night Executive Assistant, left early in January, and George R. Murphy, M. D., was appointed to fill the vacancy thus caused.

Alexander J. A. Campbell, M. D., Resident Surgeon, left the last of February, and Herbert G. Dunphy, M. D., Assistant Resident Surgeon, was promoted to the position of Resident Surgeon. Edward A. Cooney, M. D., was then appointed Assistant Resident Surgeon. Doctor Dunphy and Doctor Cooney left at the close of the year and William S. Justice, M. D., was appointed Resident Surgeon and Charles A. Knowles, M. D., was appointed Assistant Resident Surgeon.

In the Pathological Department, Harold E. MacMahon, M. D., First Assistant in Pathology, resigned the first of January. He then served as Teaching Assistant until July. Douglas M. Gay, M. D., Third Assistant in Pathology, was promoted to be First Assistant in Pathology in January, Thomas D. Spies, M. D., being then appointed Third Assistant in Pathology.

Robert A. H. MacKeen, M. D., Second Assistant in Pathology and Visiting Pathologist at Sanatorium Division, left in August and Douglas M. Gay, M. D., First Assistant in Pathology, succeeded to Doctor MacKeen's position, his title being changed to Pathologist at Sanatorium Division. Thomas D. Spies, M. D., Third Assistant in Pathology, was then promoted to the position of First Assistant in Pathology. G. Kenneth Mallory, M. D., was then promoted to the position of Second Assistant in Pathology,—the position of Fourth Assistant then going out of existence. Thomas T. Walker, M. D., Resident Assistant in Pathology, was then made Third Assistant in Pathology.

Allan G. Rewbridge, M. D., Resident Assistant in Pathology, left in May, Thomas T. Walker, M. D., succeeding him as Resident until his promotion to the position of Third Assistant, when Williams Cochran, M. D., was appointed Resident Assistant.

Edward A. Burkhardt, Jr., M. D., Resident Assistant in Pathology, left the last of May, David K. Miller, M. D., succeeding him.

Joseph T. Wearn, M. D., Associate Director of the Thorndike Laboratory, left the first of September.

Dr. Soma Weiss was then made Associate Physician, Doctor Minot being given power to appoint Doctor

Weiss to act as Director of the Thorndike Laboratory during his absence, without change of title. At this time the title of the following Assistants in the Thorndike Laboratory was changed to that of Associate Physician: Robert N. Nye, M. D., Henry Jackson, Jr., M. D., William B. Castle, M. D. Stacey R. Mettier, M. D., was promoted from the position of Assistant Resident Physician to that of Assistant Physician and Wheelan D. Sutliff, M. D., was appointed Assistant Physician. John S. Lawrence, M. D., Assistant Physician in Thorndike Laboratory, resigned in July.

Albert W. Bromer, M. D., Resident Physician in the Thorndike Laboratory, left early in September and Lawrence B. Ellis, M. D., Assistant Resident Physician, became Resident Physician.

Samuel S. Ellis, M. D., Assistant Resident in Thorndike Memorial, left early in the year to become House Officer. Eugene C. Glover, while serving as House Officer, also served as Research Assistant.

The following appointments were made as Research Fellows in Thorndike Memorial, beginning in January: James M. Faulkner, M. D., Percy B. Davidson, M. D., F. H. L. Taylor, M. D., Albert G. Young, M. D., Frank Fremont-Smith, M. D.; Doctor Taylor and Doctor Young having also the added title of Assistant Resident Physician.

The following appointments were made as Assistant Resident Physicians, Thorndike Laboratory, beginning in September: Maxwell Finland, M. D., George E. Lewis, M. D., Richard T. Beebe, M. D., Arthur A. Marlow, M. D. Greene S. FitzHugh, M. D., was appointed Assistant Resident Physician, Thorndike Laboratory, and Resident Physician to Medical Out-patient Clinic.

Wilmot C. Townsend, M. D., Resident Physician for Tropical Diseases, until September, and then Research Fellow, Thorndike Memorial, until November 1, left, being succeeded in the position of Resident Physician for Tropical Diseases by Clark Heath, M. D.

Ben Arbor, M. D., Resident Physician for Pediatric Service, left in July, when Samuel H. Segool, M. D., succeeded him.

Richard Berg, M. D., Resident Surgeon for Sixth Surgical Service, left in September. William E. Grieve, M. D., and Edward J. Marshall, M. D., then succeeded

to this position for short terms. In November, Harold Ragolsky, M. D., was appointed Resident Surgeon for this service.

Maxwell Finland, M. D., Resident Physician, Second Medical Service, left this position in September to become Assistant Resident in Thorndike Memorial.

A third position for an Assistant Roentgenologist was created and Albert M. Moloney, M. D., was appointed thereto.

At the close of the year, H. Houston Merritt, M. D., Resident Physician for Neurological Service, resigned and Jacob E. Finesinger, M. D., was appointed his successor.

At the South Department, there have been the following changes in the position of Assistant Physician: Charles T. Hinshaw, M. D., left in February and Charles E. Dyer, M. D., left in September. John B. Lynch, M. D., was appointed Assistant Physician in August. Lawrence E. Thompson, M. D., served as Assistant Physician, from February 7 to March 16. Harold Dale Pyle, M. D., was appointed Assistant Resident Physician, to begin January 1, 1930.

At the East Boston Relief Station the position of Assistant Resident Surgeon has been filled for short terms by the following: Harry L. Dougherty, M. D., James K. Bragger, M. D., LeRoy Goodman, M. D., Edward J. Reynolds, M. D. James V. Sacchetti, M. D., was appointed to the position in November.

To the Trustees I extend my renewed appreciation of their continued support and confidence.

My gratitude is due the Heads of Departments and all others who have faithfully cooperated with me in the Hospital work.

JOHN J. DOWLING, M. D.,
Superintendent and Medical Director.

BEQUESTS.

FUNDS WITH INTEREST ONLY AVAILABLE.

All Departments Except Sanatorium Division.

<i>Ball Fund.</i> — For the benefit of patients leaving the hospital poor and destitute of proper clothing	\$1,000 00
<i>Albert N. Blodgett Fund.</i> — To be used for employment of special nurses:	
In savings bank	6,438 04
<i>William T. Bolton Fund.</i> — For the benefit of The Boston City Hospital	500 00
<i>Herbert L. Burrell Ether Prize Fund.</i> — For a money prize to be given to the house officer who administers ether or other anesthetic in the most skilful and humane manner	1,000 00
<i>Martha Howard Thurston Carter Fund.</i> — For books for the benefit of the Training School for Nurses	2,000 00
<i>Cheever Fund.</i> — To purchase and present to each house surgeon when his service expires a pocket case of surgical instruments, as a gift from Dr. David W. Cheever	3,500 00
<i>Patrick A. Collins Memorial Library Fund.</i> — For the purchase of new books for the use of hospital patients and for the replacing of those that have become damaged, lost or destroyed	530 00
<i>Silas Durkee Fund.</i> — For the benefit of The Boston City Hospital	15,050 00
<i>Charles F. Folsom Fund.</i> — “Income to be paid to Martha W. Folsom during her life, and, after her death, to be used toward maintenance of a free bed in memory of the late Dr. Charles Follen Folsom”	5,000 00
<i>Daniel S. Ford Fund.</i> — For the benefit of The Boston City Hospital	6,000 00
<i>Ann Maria Fosdick Fund.</i> — To be used for employment of special nurses:	
In savings bank	\$13,791 98
Stocks received from executor in hands of City Treasurer	672 00
	14,463 98
<i>Carried forward</i>	\$55,482 02

<i>Brought forward</i>	\$55,482 02	
<i>Goodnow Fund.</i> — For the support of free beds	26,000 00	
<i>Goodnow Library Fund.</i> — For replenishing the library of the hospital with books and pamphlets suitable for the reading of the patients during convalescence	1,000 00	
<i>Charles P. Hemenway Fund.</i> — For a free bed, to be known as the Charles P. Hemenway Memorial Bed	5,000 00	
<i>Dr. George S. Hyde Fund.</i> — For the support of a free bed	5,000 00	
<i>Nichols Fund.</i> — For the establishment and endowment of a City Hospital	2,000 00	
<i>Norcross Fund.</i> — For the benefit of patients leaving the hospital poor and destitute of proper clothing	2,000 00	
<i>Nurses' Fund.</i> — To be used under direction of superintendent and staff for employment of special nurses:		
Invested	\$13,630 00	
Cash in hands of City Treasurer,	4 87	
		13,634 87
<i>Perkins Fund.</i> — For books for the Medical Library, and for the purchase of artificial limbs and surgical appliances for the use and relief of patients leaving the hospital	7,500 00	
<i>Shaw Fund.</i> — For the purchase of flowers and fruit for the use and comfort of the patients in the hospital	2,000 00	
<i>Hettie Lang Shuman Memorial Library Fund.</i> — To be expended in perpetuity by the Trustees for new books for the use of hospital patients and for replacing volumes that have become damaged, lost or destroyed	2,000 00	
<i>Timothy Smith Fund.</i> — For the purpose of maintaining and conducting The Boston City Hospital; by vote of Trustees to be expended for special nurses	5,000 00	
<i>Joseph Thompson Fund.</i> — To be used for employment of special nurses:		
Invested	\$3,775 00	
Cash in hands of City Treasurer,	1 41	
		3,776 41
<i>Catherine Watson Fund.</i> — \$6,000 for a free bed, to be known as the William F. Watson Free Bed. (Interest to be allowed to accumulate until fund reaches \$25,000.)	7,721 26	
<i>Carried forward</i>		\$138,114 56

<i>Brought forward</i>	\$138,114 56
<i>Mchitable C. C. Wilson Fund.</i> — For the benefit of Medical Library	500 00
Total	<u>\$138,614 56</u>

FUNDS WITH BOTH PRINCIPAL AND INTEREST AVAILABLE.

<i>Julia M. Robey Fund.</i> — To be used for improve- ment at Convalescent Home	\$2,988 82
<i>Shuman Memorial Building for Convalescent Men.</i> — To erect on City land a building to be known as the A. Shuman Building for Con- valescent Men	102,174 18
	<u>\$105,163 00</u>

HOUSE RULES.

WITH RULES FOR ADMISSION, GOVERNMENT AND DIS-
CHARGE OF PATIENTS; ALSO RULES FOR VISITORS.

HOUSE RULES.

The doors and gates of the Hospital will be closed at 10 o'clock in the evening, at which time all inmates, excepting Head Nurses (who are permitted to remain out until 12 o'clock midnight), shall be quiet, and all not on duty shall be in their rooms, unless otherwise specifically permitted.

All officers, nurses and employees of the Hospital when going and coming to and from the Hospital, shall enter and go out by the Entrance Office, and by no other entrance. Such officers and employees as are required shall use the time register and method of booking that the Hospital rules require.

A record shall be kept of all persons entering the Hospital between the hours of 10 o'clock in the evening and 7.30 o'clock in the morning.

No employee shall be absent from the Hospital except when permitted by special rules or by the Superintendent.

When requesting leave of absence for health reasons, an employee must present a recommendation from some member of the Hospital Visiting Staff, certifying to the necessity for such absence.

No discharged employee shall be reinstated without the consent of the Board of Trustees.

No officer, nurse, male nurse or other employee shall, directly or indirectly, receive money or other gifts from or in behalf of patients, except with the approval of the Superintendent.

The use of tobacco, wine and intoxicating liquors is prohibited within the Hospital, unless prescribed by the Visiting Physicians or Surgeons.

All profane and improper language, loud talking and incivility are prohibited.

All employees shall observe such further rules and directions for their conduct as may from time to time be established.

ADMISSION OF PATIENTS.

No person having acute venereal disease or alcoholism shall be admitted, unless his condition is urgent, except as a paying patient.

No person shall be admitted to the Hospital whose case is judged to be incurable, unless there be urgent symptoms which are deemed capable of being relieved.

Persons with state settlements, unless they stand in need of immediate relief, are to be referred to the State Hospitals.

Patients settled in other cities and towns in Massachusetts are to be referred to their own city or town for treatment, Boston cases being given the preference.

Unsettled cases, if resident in Boston, may be admitted as paying patients.

Patients may be admitted to the privileges of the Hospital at such rates of board as the Trustees, may from time to time by vote determine, payment for such cases being secured by the friends of the patient or by the authorities of the city or town in which the patient is legally settled.

Whenever, in the opinion of the Trustees, the circumstances of the patient will warrant it, the whole or a part of the board shall be paid.

If separate apartments or articles not usually furnished at the Hospital are furnished, such payment shall be made therefor as the Trustees shall deem reasonable.

Persons non-resident and not settled in Boston are to be admitted only as private patients, *i. e.*, paying patients in private rooms.

All accident or emergency cases shall be received at all hours, night or day, irrespective of settlement.

In all cases where any question arises as to the treatment of newly admitted or other patients, it shall be the duty of the House Officer to consult with the Executive on duty in regard to such treatment until the arrival of the Visiting Physician or Surgeon.

If, in the judgment of the Admitting Physician, the condition of a newly admitted patient is sufficiently urgent to demand the attention of the visiting staff, he

shall so notify the House Officer and shall direct him to call his Visiting Physician or Surgeon.

In case alcoholic drink is administered to a patient before or after placing him in the ambulance, or by any other than Hospital employees before the arrival of the ambulance, the same is to be promptly reported to the Admitting Physician, and a record of the fact made in the clinical record book. This rule covers cases brought by conveyances other than Hospital ambulances.

GOVERNMENT OF PATIENTS.

Patients shall implicitly observe all the rules of the Hospital.

Patients shall be in their proper places in the wards during the visits of the Visiting Physicians and Surgeons, and always before 7.30 o'clock in the evening, unless specially excused by the Superintendent.

Such free patients as are able shall assist in nursing and perform such other services as may be reasonably required of them.

No patient shall leave the Hospital grounds without a pass from the Superintendent, nor leave his ward without the consent of the Nurse in charge.

No patient shall purchase, or cause to be purchased for him, any article of food whatsoever, nor any other article, without the consent of the Superintendent.

Profane and obscene language, loud talking and incivility are prohibited.

Patients may be visited by clergymen of their own selection, and any wish for the performance of a particular religious rite shall be granted when practicable.

Complaints, for whatever cause, may be made to the Superintendent, and whenever requested shall be by him reported to the Trustees.

DISCHARGE OF PATIENTS.

Patients shall be discharged by the Superintendent.

Upon the request of patients discharged on the recommendation of the Visiting Physicians or Surgeons, they shall be provided with a certificate stating their condition at the time of discharge, whether cured, relieved or not relieved, which certificate shall be signed by the Superintendent.

Whenever a patient is removed from the Hospital without the approval of the Superintendent, a written

statement to that effect shall be required from any person assuming the responsibility of the removal.

VISITORS.

No person shall visit any part of the premises except on business, or at such times as may be fixed for the reception of visitors, without the permission of the Superintendent or of some one of the Trustees.

Daily, from 2 to 3 o'clock in the afternoon, friends may be permitted to visit patients, though no patient shall receive more than two visitors at that hour; and from 6 to 6.30 o'clock on each week day friends may be permitted to visit patients, though no patient shall receive more than one visitor at that hour. Children under sixteen years of age are prohibited from visiting the Children's Wards. In all cases, however, the Trustees and the Superintendent may exercise discretionary powers as to excluding or admitting visitors.

When visitors are admitted outside the regular visiting hours they shall not be permitted to remain more than half an hour, unless a special permission to remain longer is granted.

All visitors shall leave the Hospital when the bell rings at the expiration of the visiting hour.

No visitor shall take any meal in the Hospital, or pass the night therein, without permission of the Superintendent or one of the Trustees.

No visitor shall be allowed to give any article of food or drink to a patient except by permission of the Nurse; and any article sent to a patient shall be left at the Entrance Office.

SPECIAL RULES FOR THE GOVERNMENT OF THE SOUTH DEPARTMENT.

The department of The Boston City Hospital located on the westerly side of Massachusetts avenue shall be designated as the South Department of The Boston City Hospital. It shall receive patients who require treatment for diphtheria, scarlet fever, measles, whooping cough, and other contagious diseases as may be determined from time to time by the Trustees.

The Superintendent and Medical Director of the Hospital shall, under the direction of the Trustees, have the general control and management of this department in the same manner as of other departments of the Hospital.

The rules of the Hospital shall, so far as applicable, and except as hereinafter provided, apply to the various officers and employees and to the conduct and management of this department.

SPECIAL RULES FOR THE GOVERNMENT OF
THE HAYMARKET SQUARE AND THE EAST
BOSTON RELIEF STATIONS.

The Boston City Hospital Relief Stations are established not as hospitals, but as departments of The Boston City Hospital for temporary relief, and the rules and methods prevailing now in the Hospital shall, so far as applicable, and not inconsistent with special rules, apply to the Relief Stations.

The Stations shall afford temporary relief in all classes of accident and disease. They shall be open at all hours for patients requiring treatment or attention. Patients requiring ward treatment whether received at the Stations or taken up in ambulances, shall, so far as is consistent with their welfare, be forthwith transferred or carried to the Hospital for extended treatment, but ward accommodations shall be afforded patients whose condition is such that they cannot properly be transferred. Patients may, however, if it is deemed desirable, be transferred by the ambulances to other hospitals or to their homes. First treatment may be afforded at the Stations although the applicants are not such as require ward treatment.

The Superintendent of the Hospital shall have the general administration, management and control of the Stations, the same as of other departments of the Hospital.

The Superintendent shall, once a year, nominate for confirmation by the Trustees a Resident Surgeon and one or more Assistant Resident Surgeons for each Station; and shall appoint and employ or detail for service in each department, from time to time, as may be necessary, subject to the approval of the Trustees or of the proper committees, a Matron, a Supervisor, Nurses, Male Nurses and such other minor employees as may be required for the proper conduct of the Station, who shall be subject to his supervision.

The various officers and employees of the Stations shall perform such duties other than those specified as may be required by the Trustees or the Superintendent, according to the nature of their respective duties. The Resident Surgeons, the Matrons, Supervisors, and such other officers as may be so required, shall reside at the Stations.

PATIENTS.

Alcoholic and insane patients shall not be received unless there is surgical or medical complication making hospital treatment absolutely necessary.

No patient, after being admitted to the wards, shall leave the Station until his discharge without a pass from the proper officer, nor shall he visit other parts of the Station without permission.

Ward patients shall be discharged by the Superintendent or the Resident Surgeon.

AMBULANCE SERVICE AT THE HAYMARKET SQUARE RELIEF STATION.

The ambulance service of the Station shall be under the direct control of the Resident Surgeon, and shall cooperate with that of the Hospital with which it shall form one general system. Ambulances shall, in response to calls, be dispatched from the Station or the Hospital as the exigency may require. The utmost dispatch shall be exercised in the ambulance service, so far as is consistent with a regard for the welfare of the patient and the interests of the public.

Ambulances shall in general be sent from the Station or the Hospital, at least upon a general alarm, to all fires occurring in the City Proper and in such further districts as may be determined upon.

An ambulance shall be held during the hours of the day in complete readiness to make immediate response to calls, and shall be kept in condition to make prompt response to calls at any time of the night.

A House Officer shall accompany the ambulance, shall direct its course and shall have direction of the care and treatment of the patient until received at his destination.

The foreman of the ambulance service at the Hospital Station shall visit and inspect the Ambulance Depart-

ment of the Station from time to time, but the immediate carrying out of directions shall be under the Assistant Foreman at the Station.

AMBULANCE SERVICE AT THE EAST BOSTON RELIEF STATION.

The rules and methods prevailing in the Haymarket Square Relief Station ambulance service shall, so far as applicable, be effective in the East Boston Relief Station ambulancé service.

SPECIAL RULES FOR THE GOVERNMENT OF THE CONVALESCENT HOME.

The department of The Boston City Hospital located on Dorchester avenue, in Dorchester, shall be known as the Convalescent Home, and shall receive such patients recovering from acute diseases as shall be transferred to it from the Main Hospital for treatment during convalescence.

The Superintendent of the Hospital shall, under the direction of the Trustees, have the control and management of the Convalescent Home in the same manner as of other departments of the Hospital.

The Superintendent shall appoint, subject to the approval of the Trustees, a Matron, and shall employ, under their direction, such further assistants as may be necessary for the proper conduct and service of the home.

The Matron, under the direction of the Superintendent, shall have the immediate charge of the home and the control of all nurses and other employees and patients. She shall reside at the Home.

VISITORS.

Friends may be permitted to visit patients daily between three and four o'clock in the afternoon. In all cases the Trustees, Superintendent and Matron may exercise discretionary powers as to excluding or admitting visitors.

Visitors shall leave the Home and grounds at the expiration of the visiting hour, and shall visit no part of the Home or grounds other than the reception room, except by permission from the proper authority.

No person shall give any article of food or drink to a patient unless by permission of the Matron.

HOSPITAL DEPARTMENT.

OFFICERS AND STAFF.

TRUSTEES.

JOSEPH P. MANNING, <i>President</i>	Term expires in 1931.
HENRY S. ROWEN, M. D., <i>Secretary</i>	Term expires in 1932.
GEORGE G. SEARS, M. D.	Term expires in 1933.
CARL DREYFUS	Term expires in 1930.
KARL ADAMS	Term expires in 1934.

MEDICAL AND SURGICAL STAFF.

Consulting Physicians and Surgeons.

Abner Post, M. D.	George G. Sears, M. D.
H. W. Cushing, M. D.	John Bapst Blake, M. D.
Francis S. Watson, M. D.	Paul Thorndike, M. D.
George H. Monks, M. D.	John L. Ames, M. D.
Elliott P. Joslin, M. D.	Fred B. Lund, M. D.
Henry Jackson, M. D.	Joshua B. Hubbard, M. D.

Consulting Pathologists.

W. T. Councilman, M. D.	F. B. Mallory, M. D.
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Consultant in Tropical Diseases.

Richard P. Strong, M. D.

Consultant in Ophthalmology.

Allen Greenwood, M. D.

Consulting Aural Surgeon.

Rockwell A. Coffin, M. D.

Consulting Physicians in Neurology.

Arthur W. Fairbanks, M. D.	John J. Thomas, M. D.
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Curator of the Hospital Museum.

Dwight O'Hara, M. D.

Senior Physician.

Francis H. Williams, M. D.

Visiting Physicians.

William H. Robey, M. D. †	Edwin A. Locke, M. D.
Ralph C. Larrabee, M. D.*	George R. Minot, M. D. ‡
Franklin W. White, M. D.	Francis W. Palfrey, M. D.
Cadis Phipps, M. D.	

Assistant Visiting Physicians.

Harold W. Dana, M. D.	William R. Ohler, M. D.
Thomas J. O'Brien, M. D.	Edmund F. Walsh, M. D.

Junior Visiting Physicians.

Burton E. Hamilton, M. D.	Maurice Fremont-Smith, M. D.
Joseph M. Lynch, M. D.	Percy B. Davidson, M. D.
Joseph E. Hallisey, M. D.	Henry Baker, M. D.
John A. Foley, M. D.	George P. Reynolds, M. D.
George C. Shattuck, M. D.	James Faulkner, M. D.
Louis J. Ullian, M. D.	James C. Healy, M. D.
Dwight O'Hara, M. D.	Greene Fitzhugh, M. D.
Henry Jackson, Jr., M. D.	William B. Stevens, M. D.
Frank S. Cruickshank, M. D.	Nathan Sidel, M. D.
Daniel J. Hogan, M. D.	William T. O'Halloran, M. D.
Louis F. Curran, M. D.	Soma Weiss, M. D.

Senior Surgeon.

George W. Gay, M. D.

Surgeons-in-Chief.

Frederic J. Cotton, M. D.	Halsey B. Loder, M. D.
David D. Scannell, M. D.	Irving J. Walker, M. D.
Horace Binney, M. D.	Arthur R. Kimpton, M. D.

Visiting Surgeons.

Robert C. Cochrane, M. D.	Herbert H. Howard, M. D.
Otto J. Hermann, M. D.	James J. Hepburn, M. D.
Somers Fraser, M. D.	Donald Munro, M. D.
Francis F. Henderson, M. D.	Joseph H. Shortell, M. D.

Associate Professor of Surgery.

Edward D. Churchill, M. D.

Assisting Visiting Surgeons.

Augustus Riley, M. D.	Thomas K. Richards, M. D.
William R. Morrison, M. D.	Thomas W. Wickham, M. D.
Edward Harding, M. D.	George W. Papan, M. D.
Charles C. Lund, M. D.	

* Physician-in-Chief, First Medical Service.

† Physician-in-Chief, Second Medical Service.

‡ Physician-in-Chief, Fourth Medical Service.

Junior Visiting Surgeons.

Joseph H. Burnett, M. D.	|	Howard A. Bouvé, M. D.
E. Everett O'Neil, M. D.	|	Gerald L. Doherty, M. D.
William F. Cotting, M. D.	|	John J. Lucy, M. D.

Assistants to Visiting Surgeons.

John A. Seth, M. D.	|	William A. White, Jr., M. D.
Richard I. Smith, M. D.	|	Allan L. Davis, M. D.
Newton C. Browder, M. D.	|	Daniel J. Duggan, M. D.
		Winchester W. Everett, M. D.

Surgeon-in-Chief for Gynecology and Obstetrics.

Nathaniel R. Mason, M. D.		Robert M. Green, M. D.
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Visiting Surgeons for Gynecology and Obstetrics.

John T. Williams, M. D.		Frederick L. Good, M. D.
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Assistant Visiting Surgeons for Gynecology and Obstetrics.

Joseph P. Cohen, M. D.		Frederick J. Lynch, M. D.
Harold V. Hyde, M. D.	|	Reginald D. Margeson, M. D.

Junior Visiting Surgeons for Gynecology and Obstetrics.

Pierce J. Dunphy, M. D.	|	Carmi R. Alden, M. D.
Abraham S. Troupin, M. D.	|	G. Elliott May, M. D.

Assistants to Visiting Surgeons for Gynecology and Obstetrics.

William J. McDonald, M. D.	|	Emilio D'Errico, M. D.
Benedict F. Boland, M. D.	|	Kenneth G. Farnsworth, M.D.

Ophthalmic Surgeon-in-Chief.

Jeremiah J. Corbett, M. D.

Visiting Ophthalmic Surgeons.

L. Colby Rood, M. D.		Samuel H. Wilkins, M. D.
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Assistant Visiting Ophthalmic Surgeons.

Harry Schwartzman, M. D.		Robert W. French, M. D.
Thomas J. Hagan, M. D.	|	Frederick H. Salls, M. D.
Paul G. Haire, M. D.	|	Joseph H. McLaughlin, M. D.

Surgeon-in-Chief for Diseases of Ear and Throat.

Harry P. Cahill, M. D.

Visiting Surgeon for Diseases of Ear and Throat.

Louis M. Freedman, M. D.

Visiting Surgeon for Oral and Plastic Surgery.

Varaztad H. Kazanjian, M. D.

Assistant Visiting Surgeons for Diseases of Ear and Throat.

William T. Haley, M. D. | Edward J. Monahan, M. D.

Junior Visiting Surgeons for Diseases of Ear and Throat.

Philip E. A. Sheridan, M. D.	Francis G. Minter, M. D.
William F. Regan, M. D.	Fred Heimlich, M. D.
Philip R. Dwyer, M. D.	Charles W. DeWolf, M. D.
Chester R. Mills, M. D.	Philip G. Berman, M. D.
Vincent J. Kelley, M. D.	

Oral Surgeon-in-Chief.

Stephen P. Mallett, D. M. D.

Visiting Oral Surgeons.

William H. Canavan, D. M. D. | Thomas Hennessey, D. M. D.

*Assistant Visiting Oral Surgeons.*Douglass M. Baker, D. M. D. | George F. Winchester, D. M. D.
Austin T. Williams, D. M. D.*Visiting Anesthetists.*

Frank L. Richardson, M. D. | Nathaniel N. Morse, M. D.

Assistant Visiting Anesthetists.

William A. Noonan, M. D. | Sidney C. Wiggin, M. D.

Visiting Physicians for Neurology.

Stanley Cobb, M. D. | Abraham Myerson, M. D.

Assistant Visiting Physicians for Neurology.

Miner H. A. Evans, M. D. | Frank Fremont-Smith, M. D.

Junior Visiting Physicians for Neurology.

Maxwell E. MacDonald, M. D.	Tracy J. Putnam, M. D.
William G. Lennox, M. D.	William Herman, M. D.

Physician-in-Chief for Physical Therapeutics.

Joseph Resnik, M. D.

Assistant Visiting Physicians for Physical Therapeutics.

Girdie W. Dickinson, M. D. | Arthur J. Cole, M. D.

Physician-in-Chief for Diseases of the Skin.

William P. Boardman, M. D.

Visiting Physician for Diseases of the Skin.

Walter T. Garfield, M. D.

Assistant Visiting Physicians for Diseases of the Skin.

John G. Downing, M. D. | Bernard Appel, M. D.

Junior Visiting Physician for Diseases of the Skin.

Francis P. McCarthy, M. D.

Physician-in-Chief for Contagious Diseases.

Edwin H. Place, M. D.

Roentgenologist-in-Chief.

P. F. Butler, M. D.

*Visiting Roentgenologists.*Max Ritvo, M. D. | Frederick W. O'Brien, M. D.
Albert M. Moloney, M. D.*Physician-in-Chief for Immunology.*

George P. Sanborn, M. D.

Assistant Visiting Physicians for Immunology.

Edmund F. Walsh, M. D. | LeRoy A. Luce, M. D.

Pediatrician-in-Chief.

Martin J. English, M. D.

Visiting Pediatricians.

Augustine W. McGarry, M. D. | Eli Friedman, M. D.

Assistant Visiting Pediatrician.

John J. Dunphy, M. D.

*Junior Visiting Pediatricians.*George Kahn, M. D. | John P. Treanor, Jr., M. D.
James W. Redmond, M. D. | Chester L. Glenn, M. D.*Physicians to Convalescent Home.*

John P. Treanor, M. D. | Joseph J. O'Brien, M. D.

ASSISTANTS TO THE VISITING STAFF.

(December 31, 1929.)

Terms of one year.

Assistants in Medicine.

William B. Castle, M. D.	Beginning January 1, 1929.
Soma Weiss, M. D.	Beginning January 1, 1929.
Wilmot C. Townsend, M. D.	Beginning January 1, 1929.
Albert W. Bromer, M. D.	Beginning January 1, 1929.
Lawrence B. Ellis, M. D.	Beginning January 1, 1929.
Stacey R. Mettier, M. D.	Beginning January 1, 1929.
Clark Heath, M. D.	Beginning January 1, 1929.
David Stern, M. D.	Beginning January 1, 1929.
Hyman B. Goldberg, M. D.	Beginning January 1, 1929.
Edward J. Leonard, M. D.	Beginning January 1, 1929.
I. R. Jankelson, M. D.	Beginning January 1, 1929.
Samuel Morein, M. D.	Beginning January 1, 1929.
Lloyd D. Felton, M. D.	Beginning January 1, 1929.
Abraham Rudy, M. D.	Beginning March 8, 1929.
Herbert S. Saver, M. D.	Beginning April 5, 1929.
Bernard I. Goldberg, M. D.	Beginning December 13, 1929.
Hyman Goldberg, M. D.	Beginning December 13, 1929.
H. Louis Kramer, M. D.	Beginning December 13, 1929.
David Stern, M. D.	Beginning December 13, 1929.
Norman A. Welch, M. D.	Beginning December 13, 1929.

Assistants in Surgery.

Daniel C. Goldfarb, M. D.	Beginning January 1, 1929.
Philip S. Foisie, M. D.	Beginning January 1, 1929.
Aaron Thurman, M. D.	Beginning January 1, 1929.
David D. Berlin, M. D.	Beginning January 1, 1929.
Allan L. Davis, M. D.	Beginning January 1, 1929.
Alexander J.A. Campbell, M. D.	Beginning January 1, 1929.
A. Bedell Shoemaker, M. D.	Beginning January 1, 1929.
Gordon R. Atkinson, M. D.	Beginning January 1, 1929.
George R. Murphy, M. D.	Beginning January 1, 1929.
Israel Edelstein, M. D.	Beginning April 18, 1929.
Henry R. Gilbert, M. D.	Beginning May 6, 1929.
Joseph W. Tiede, M. D.	Beginning August 1, 1929.
Gordon M. Morrison, M. D.	Beginning August 1, 1929.
Leonard P. Landry, M. D.	Beginning August 1, 1929.
Michael E. McGarty, M. D.	Beginning August 1, 1929.
Roger T. Doyle, M. D.	Beginning August 1, 1929.
John V. McMackin, M. D.	Beginning August 1, 1929.
Edward A. Cooney, M. D.	Beginning December 6, 1929.
Daniel J. McSweeney, M. D.	Beginning December 6, 1929.
Arthur T. Ronan, M. D.	Beginning December 6, 1929.
Harold A. Spaulding, M. D.	Beginning December 6, 1929.

Assistants in Gynecology and Obstetrics.

- Harold I. Cohen, M. D. . . . Beginning January 1, 1929.
P. Francis Weiss, M. D. . . . Beginning October 1, 1929
(for three months).

Voluntary Assistants.

- Abraham Blumenfield, M. D.
Dermatological Department. Beginning December 13, 1929.
Samuel S. Ellis, M. D., Voluntary Assistant, Fourth Medical
Service, ended this service in March, 1929, when he became
House Officer.

HOUSE OFFICERS.

The following-named house officers have completed service during the year 1929:

Abraham Nathan Caplan, M. D., Medical Service	16 months.
Herbert Spencer Saver, M. D., Medical Service	20½ months.
James Clarke Healy, M. D., Medical Service	20½ months.
Walter Reese Berryhill, M. D., Medical Service,	20½ months.
Maurice Oscar Belson, M. D., Medical Service	16½ months.
Julius Abramson, M. D., Medical Service	20 months.
Abraham Louis Pierson, M. D., Medical Service	20 months.
Jacob Lerman, M. D., Medical Service	20½ months.
Nathan Bresnick, M. D., Medical Service	18 months.
William Edwin Davis, M. D., Medical Service	16 months.
Benedict Ramin, M. D., Medical Service	20½ months.
Franklin Rush Miller, M. D., Medical Service	20½ months.
Louis Edmund Hathaway, M. D., Surgical Service	5½ months.
Roger Thomas Doyle, M. D., Surgical Service	20½ months.
Charles Augustus Knowles, M. D., Surgical Service	20 months.
LeRoy Goodman, M. D., Surgical Service	20½ months.
John William Burke, M. D., Surgical Service	20½ months.
John William Strieder, M. D., Surgical Service	17 months.
Maurice Joseph Langsam, M. D., Surgical Service	8 months.
Edward Mack Smith, M. D., Surgical Service	19½ months.
Edward Hanlin Taylor, M. D., Surgical Service,	20½ months.
Arthur Thomas Ronan, M. D., Surgical Service,	20 months.
Raymond Kellogg Farnham, M. D., Surgical Service	20 months.
Irving Wright Parkhurst, M. D., Surgical Service	20½ months.
Edward Joseph West, M. D., Surgical Service	9½ months.
Alexander Philip Aitken, M. D., Surgical Service,	8 months.
Frank Browne Easley, M. D., Surgical Service	20 months.
Edward James Marshall, M. D., Surgical Service,	8 months.
James Vincent Sacchetti, M. D., Surgical Service	20½ months.
John Verner Leech, M. D., Surgical Service	20½ months.
Herbert Bristol Nelson, M. D., Surgical Service	20 months.
Paul Frederick Doege, M. D., Surgical Service	20½ months.
Harold Ragolsky, M. D., Surgical Service	8 months.

Edward Henry Linnehan, M. D., Gynecological and Obstetrical Service	16½ months.
James Joseph Meehan, M. D., Gynecological and Obstetrical Service	16½ months.
Daniel Joseph McSweeney, M. D., Gynecological and Obstetrical Service	16½ months.
Vincent John Kelley, M. D., Ophthalmic and Aural Service	20½ months.
Frederick Hedderman Salls, M. D., Ophthalmic and Aural Service	20½ months.
William Wallace Haley, M. D., Ophthalmic and Aural Service	19 months.
Roderick Heffron, M. D., Neurological Service	6 months.
Leopoldo Pardo, M. D., Neurological Service	4 months.
Foster Lane Vibber, M. D., Neurological Service	6 months.
Jacob Ellis Finesinger, M. D., Neurological Service	6 months.
Lawrence Arthur Martineau, M. D., X-Ray Service	13½ months.
Charles Augustine Galligan, Jr., M. D., X-Ray Service	14½ months.
John Charles Faherty, M. D., Pediatric Service	11 months.
Samuel Hirsh Segool, M. D., Pediatric Service	10 months.
John Bernard Lynch, M. D., Pediatric Service	10 months.
Eugene Francis Gorman, M. D., Pediatric Service	10 months.
Abraham Nathan Caplan, M. D., Pediatric Service	8½ months.
Irving Kushner, M. D., Pneumonia Service	5 months.

HOUSE OFFICERS ON DUTY.

January 1, 1929.

Medical Service.

House Physicians.

Maurice B. Strauss.	Hugh C. Donahue.
Israel Steinberg.	James M. Bethea.

Assistant House Physicians.

Harry Hyman.	Paul D. Rosahn.
Max I. Vinnecour.	Eugene C. Glover.

Externes.

David Littman.	Morton Arnold.
David Hurwitz.	Howard G. Bruenn.

Junior Internes.

Paul J. Fouts.	Harry Bittle.
John Adams, Jr.	John E. Brown, Jr.

SURGICAL SERVICE.

House Surgeons.

James L. Golden.	Theodore C. Bramhall.
Sanford H. Moses.	Helmer P. Howd.
Abraham E. Hiebert.	Edward B. Kelly.

Senior Internes.

Edward A. Edwards.	Carl J. DePrizio.
Chauncy V. Perry.	Leo R. Desmond.
Lewis R. Dretler.	Victor Baer.

Accident Floor House Officers.

Jacob F. Belin.	William F. Finnegan.
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Externes.

Leslie C. Dodson.	Alexander P. Aitken.
John P. Reardon.	John S. Rhodes.
Charles A. Robinson.	Philip O. Pelland.

Junior Internes.

Robert H. Goodwin.	Dorset L. Spurgeon.
Jackson Flanders.	Lawrence J. McCarthy.
Weston T. Buddington.	

GYNECOLOGICAL AND OBSTETRICAL SERVICE.

House Surgeon.

Christopher J. Duncan.

Senior Interne, Obstetrical Service.

Lewis P. James.

Senior Interne, Gynecological Service.

Samuel Sidell.

Externe, Gynecological and Obstetrical Service.

Philip R. McGovern.

Junior Interne, Obstetrical Service.

Jacob F. Deich.

Etherizer, Gynecological and Obstetrical Service.

Edwin G. Hebb.

OPHTHALMIC AND AURAL SERVICE.

Resident Surgeon.
Thomas E. Dinan.

House Surgeon.
John P. Tierney.

Senior Interne.
James M. Ward.

Externe.
Samuel J. Hartmere.

Junior Interne.
Joseph Nerbonne.

NEUROLOGICAL SERVICE.

House Physician.
Merrill Moore.

Senior Interne.
Thomas R. Howen.

Externe.
Arnold W. Hackfield.

Junior Interne.
William W. Rucks, Jr.

PEDIATRIC SERVICE.

Senior Out-Patient House Officer.
Theodore Bennett.

House Physician.
Earl B. Wheeler.

Senior Interne.
Arthur W. Clancy.

Externe.
Morris Ingall.

Junior Interne.
Robert Lavrakas.

X-RAY SERVICE.

William S. Altman.

George W. Rafferty.

PNEUMONIA SERVICE.

Henry J. Stanford.

Julius G. Kelley.

HOUSE OFFICERS AT THE SOUTH DEPARTMENT.

Gottlieb Langner, Jr.

Israel Kopp.

Arch Avary, Jr.

Samuel S. Ellis.

HOUSE OFFICERS AT THE HAYMARKET SQUARE RELIEF STATION.

Nicholas A. Mastroianni.

Walter M. O'Brien.

Louis E. Hathaway, Jr.

HOSPITAL OFFICERS.

John J. Dowling, M. D., *Superintendent and Medical Director.*
 Charles H. Pelton, M. D., *Assistant Superintendent.*
 James W. Manary, M. D., *Executive Director of the Out-Patient Department.*
 Francis W. Brodrick, M. D., *Executive Assistant.*
 M. Winthrop O'Connell, M. D., *Executive Assistant.*
 Alfred M. Roscoe, M. D., *Executive Assistant.*
 Charles A. Galligan, M. D., *Executive Assistant.*
 George R. Murphy, M. D., *Night Executive Assistant.*
 William S. Justice, M. D., *Resident Surgeon.*
 Charles A. Knowles, M. D., *Assistant Resident Surgeon.*
 Frank B. Mallory, M. D., *Pathologist.*
 George R. Minot, M. D., *Director of the Thorndike Laboratory.*
 P. F. Butler, M. D., *Roentgenologist-in-Chief.*
 A. T. Kirk, Ph. G., *Chief Pharmacist.*
 Miss Emma M. Nichols, *Counselor to the Training School.*
 Miss Della M. Currier, *Superintendent of Nurses and Matron.*
 Miss Gertrude L. Farmer, *Director of Social Work.*
 Miss Joanna E. Sweeney, *Registrar.*
 Miss Ruth T. Church, *Out-Patient Registrar.*
 Miss Margaret McGovern, *Dietitian.*

SOUTH DEPARTMENT.

John J. Dowling, M. D., *Medical Director.*
 Edwin H. Place, M. D., *Physician-in-Chief.*
 Miss Edith M. Grant, *Assistant Superintendents of Nurses and Matron.*

HAYMARKET SQUARE RELIEF STATION.

Bernard F. Devine, M. D., *Resident Surgeon.*
 George Robbins, M. D., *Assistant Resident Surgeon.*
 Miss Agatha P. McKenna, *Matron.*

EAST BOSTON RELIEF STATION.

Arthur G. Holland, M. D., *Resident Surgeon.*
 James V. Sacchetti, M. D., *Assistant Resident Surgeon.*

CONVALESCENT HOME.

Miss E. C. Fairbanks, *Matron.*

MEDICAL AND ADMINISTRATIVE ASSISTANTS.

- Joseph Resnik, M. D., *Physician-in-Chief for Physical Therapeutics.*
- Edmund F. Walsh, M. D., *Clinical Bacteriologist.*
- Stanley J. G. Nowak, M. D., *Resident Surgeon, Fifth Surgical Service.*
- Harold Ragolsky, M. D., *Resident Surgeon, Sixth Surgical Service.*
- Samuel A. Segool, M. D., *Resident Physician, Pediatric Service.*
- Clark Heath, M. D., *Resident Physician for Tropical Diseases.*
- Jacob E. Finesinger, M. D., *Resident Physician, Neurological Service.*
- Frederic Parker, Jr., M. D., *Assistant Pathologist.*
- Thomas D. Spies, M. D., *First Assistant in Pathology.*
- George K. Mallory, M. D., *Second Assistant in Pathology.*
- Thomas T. Walker, M. D., *Third Assistant in Pathology.*
- Douglas M. Gay, M. D., *Pathologist at Sanatorium Division.*
- William R. Ohler, M. D., *Assistant in Clinical Pathology.*
- Williams Cochrane, M. D., *Resident Assistant in Pathology.*
- William A. Winn, M. D., *Resident Assistant in Pathology.*
- Soma Weiss, M. D., *Assistant Director and Associate Physician in Thorndike Laboratory.*
- Robert N. Nye, M. D., *Associate Physician in Thorndike Laboratory.*
- William B. Castle, M. D., *Associate Physician in Thorndike Laboratory.*
- Henry Jackson, M. D., *Associate Physician in Thorndike Laboratory.*
- Wheelan D. Sutliff, M. D., *Assistant Physician in Thorndike Laboratory.*
- Gulli Lindh Muller, M. D., *Assistant Physician in Thorndike Laboratory.*
- Stacey R. Mettier, M. D., *Assistant Physician in Thorndike Laboratory.*
- Laurence B. Ellis, M. D., *Resident Physician in Thorndike Laboratory.*
- Maxwell Finland, M. D., *Assistant Resident Physician in Thorndike Laboratory.*
- George E. Lewis, M. D., *Assistant Resident Physician in Thorndike Laboratory.*
- Arthur Ashley Marlow, M. D., *Assistant Resident Physician in Thorndike Laboratory.*
- Richard T. Beebe, M. D., *Assistant Resident Physician in Thorndike Laboratory.*
- Greene S. FitzHugh, M. D., *Assistant Resident, Thorndike Laboratory, and Resident Physician, Medical Afternoon Out-Patient Clinic.*

- Percy B. Davidson, M. D., *Research Fellow, Thorndike Laboratory.*
James M. Faulkner, M. D., *Research Fellow, Thorndike Laboratory.*
F. H. L. Taylor, M. D., *Research Fellow, Thorndike Laboratory.*
Albert G. Young, M. D., *Research Fellow, Thorndike Laboratory.*
Frank Fremont-Smith, M. D., *Research Fellow, Thorndike Laboratory.*
Eugene C. Glover, M. D., *Research Fellow, Thorndike Laboratory.*
William G. Lennox, M. D., *Research Fellow, Thorndike Laboratory.*
Janet Vaughan, M. D., *Research Fellow, Thorndike Laboratory.*
Max Ritvo, M. D., *Assistant Roentgenologist.*
Albert M. Moloney, M. D., *Assistant Roentgenologist.*
Frederick W. O'Brien, M. D., *Assistant Roentgenologist.*

SOUTH DEPARTMENT.

- Morris Prizer, M. D., *Assistant Physician.*
John B. Lynch, M. D., *Assistant Physician.*
Harold Dale Pyle, M. D., *Assistant Physician.*

