

The Commonwealth of Massachusetts

Annual Report

Of The

Trustees

Of The

Danvers State Hospital

For The

YEAR ENDING NOVEMBER 30,

1937

DEPARTMENT OF MENTAL DISEASES

DANVERS STATE HOSPITAL

(Post Office Address: Hathorne. Mass.)

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EDGAR C. YERBURY, M.D., Assistant Superintendent.

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LEO MALETZ, M.D., Senior Physician.

MELVIN GOODMAN, M.D., Senior Physician.

SALVADOR JACOBS, M.D., Senior Physician, Pathologist.

DORIS M. SIDWELL, M.D., Senior Physician.

VELMA H. ATKINSON, M.D., Assistant Physician.

FLORA M. REMILLARD, M.D., Assistant Physician.

PETER B. HAGOPIAN, M.D., Assistant Physician.

SAMUEL H. MARDER, M.D., Assistant Physician.

ABRAHAM GARDNER, M.D., Assistant Physician.

GEORGE W. WHEELER, D.M.D., Dentist.

GRACE H. KENT, Ph.D., Psychologist.

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MISS MARY H. HOLLAND, Head Social Worker.

MISS MARY K. MCPHILLIPS, Principal Clerk.

MR. ARTHUR E. REED, Chief Hospital Supervisor, Male Department.

MISS OLIVE F. ESTEY R.N., Principal of School of Nursing.

MISS GRACE MANNING, R.N., Chief Hospital Supervisor, Female Dept.

MR. IRVING L. HYLAND, Maintenance Foreman.

MR. RALPH B. LITTLEFIELD, Head Farmer.

MRS. POLLY K. LOESCH, Head Occupational Therapist.

CONSULTING PHYSICIANS

S. CHASE TUCKER, M.D., Surgeon.

PHILLIP R. DWYER, M.D., Ophthalmologist.

HAROLD C. BEAN, M.D., Orthopedic Surgeon.

RALPH E. STONE, M.D., Internist.

PAUL E. TIVNAN, M.D., Roentgenologist.

BERNARD APPEL, M.D., Dermatologist.

EDWARD L. PEIRSON, JR., M.D., Urologist.

JOSEPH A. DOHERTY, D.D.S., Dental Surgeon

WILLIAM H. MCCARTHY, D.S.C., Chiropodist.

HOWARD J. FLEMING, D.S.C., Chiropodist.

TRUSTEES' REPORT

To His Excellency, the Governor and the Honorable Council:

The Trustees of the Danvers State Hospital respectfully offer the following annual report, including the report received by us from the Superintendent and the reports received by him from the various departments.

The Board has continued to hold monthly meetings at the hospital for conference with the Superintendent concerning the development of the institution and the upkeep of the plant.

We again call attention to the needs of the institution, which have been requested in previous messages:

In the previous report a request was made for an enlargement of the institution to care for approximately 200 male patients and 200 female patients. These patients were described as infirm and in need of special care. At the time of this report it was felt that additions could be built on the main building of sufficient size to look after these patients. This need still exists, and on the day this report was prepared there were over 2,350 patients, which is a larger number by far than we have adequate provisions to look after. The need to segregate the elderly and infirm patients is great and it might be more economical to provide an infirmary building rather than to attempt to build additionally on the present ward sections. It is known that the policy of the department is to keep the institutions at or about 2,000 patients, believing that they can be well handled and that this population would not be unwieldy. We believe this to be a wise

policy but in our large committing district we are of the opinion that we shall need more bed space than the 2,000 mentioned above, and that provisions will eventually have to be made for a larger population. We feel that plans should be developed and carried out whereby the elderly sick and infirm patients may be segregated and given care apart from the younger and more active ambulatory cases.

We again desire to call attention to the fact that our Chapel is too small to accommodate our patients and that it should be enlarged to three times its present capacity, and in the process of the enlargement of this Chapel it will of necessity do away with the so-called rear center section which is not fireproof and not a safe place to house employees.

A report of inspection made by the Department of Public Safety requested that certain employees living on the fourth floor be removed from this section and this recommendation was immediately carried out, but there remain still three floors where employees are quartered, numbering approximately 35 persons.

We again repeat at this time and call attention to the fact that both the front and rear sections of the administration building should have other means of egress than that which now exists. The ideal plan for the front center would be a fireproof staircase extending from the fourth floor and with an outside exit on the ground, at a cost of \$6,000. As to the rear center, plans have long been recommended to do away with the section and increase the size of the chapel with modern construction. Therefore, at this time it does seem feasible to recommend the type of staircase mentioned as desirable for the Administration Building, front section.

In the 1938 budget an amount of money to the extent of \$6,500 has been allowed to begin the process of re-roofing and it is our plan to do one building at a time.

We feel that the Danvers State Hospital has now reached a population so large that an acute reception building would be highly advisable. This building would provide facilities for the care of acute cases and we would expect that many cases given intensive treatment over a short time, separated from the more chronic cases, would

have a better opportunity to get well. This feature would, of course, again be a splendid opportunity to relieve the present congestion. The cost of the building would be \$350,000, while the equipment would cost \$50,000.

We are greatly in need of room for our employees and would request the building of a home for married couples. This would also permit of room space for the employees now quartered in the section known as rear center, and which would be removed in the event of the enlargement of the chapel. The building would cost \$150,000 and the furnishings, \$15,500.

Additional living quarters are needed for the new employees made necessary by the 48-hour week law. It will be necessary to have additional space for approximately 117 employees. This could be cared for by building an addition to the Male Home, the Female Home, and the building used by employees at the Middleton Colony group. The cost would be approximately \$225,000.

We again make the request of fireproofing the entire first floor in the main building. This would be a splendid step forward in fireproofing the institution and would serve as a preventive measure in basement fires, and, coupled with the sprinkler system in the attic, would safeguard our patients in the event of fire.

The cost would be \$153,000.

With the added number of new employees, the laundry should be enlarged and reconstructed in order to do more efficient work and to be in position to accept the greater volume which it now has to meet. This could be done at a cost of \$64,000.

In connection with the laundry, one washer and one extractor have been replaced at a cost of \$4,100. We wish to repeat that the following old equipment should be replaced with modern equipment: 1 compressor; 5 clothes presses; 1 extractor; 2 washers; and 3 drying tumblers. The cost would be \$24,033.

In reference to rewiring at the Middleton Colony, a sum of money has been granted sufficient to do this work. The present wiring is obsolete and dangerous and should be corrected.

There were presented recommendations made by Mr. Harry Atkinson, Building Inspector from the Commission of Public Safety. This summary was listed in order and all such changes as were possible by the use of our own personnel have been carried out, but it has not been possible to make construction changes of a major nature. We still feel that these recommendations should be given consideration in view of additional proper fire protection.

1. The sprinkler systems in the attics of buildings B, C, D, E, F, G, H, and I, although approved in the report, are not adequate and are not up to present standards, both in spacing of heads and size of mains. The complete renewal of these systems, as requested in the last year's budget, is recommended.

2. The report states that standpipes should be re-located so as to be more accessible in buildings D, G, H, I and J. The standpipes in buildings A, B, and C are in the same relative locations as the ones mentioned in the report and should be re-located if the others are changed. If these standpipes are moved they should be located in a wall of the alcove mid-way of the ward. A flush hose cabinet should be provided. It is felt that the re-location of these pipes is of lesser importance than most of the other recommendations.

3. It is recommended that sprinklers be provided in all closets used for storage of clothing and other materials; also, the use of "Firetox" automatic tetrachloride extinguishers in the above-mentioned places. We asked for them in last year's budget but they were not granted, and we would repeat the request in this year's budget.

4. It is recommended that the open fire escapes from B and I sun porches be replaced with enclosed stairways, at least three feet, six inches wide, between hand rails. This would be desirable.

5. It is recommended that the section of D basement now used for paper storage be discontinued. This room is now equipped with water sprinklers and the ceiling is fireproofed. .

6. It is recommended that the sprinkler system be extended in the mechanical building to include all space beneath the carpenter shop. This takes in the machine-shop, plumber's shop and electrician's shop. This work should be done.

7. It is recommended that the basement in " Gray Gables ", employees' home, be equipped with sprinklers, and the front stairs enclosed on each floor with fireproof partitions and self-closing fire doors. These changes are very necessary for the safety of occupants of this building

8. It is recommended that all hardware on the exit doors at the Male Home be changed to the type which requires operation of the knob only for exit purposes; make all doors to stairways self-closing; provide hand rails on stairs in old section.

There follows in this report a complete description of the departmental activities for the previous year and, briefly, one will gain by a study of the following pages the knowledge of the work that has been done in the institution during the last fiscal year. It will be noticed that the policy of the institution has been concentrated in providing the best methods of treatment for those patients within the institution and that also preventive work in the community has been actively carried out.

Again the Superintendent, through this message of the Board of Trustees, desires to thank all of the employees for their individual efforts in the care of a large number of new admissions and a total population of over 2,350 patients.

Respectfully submitted,

MR. S. HERBERT WILKINS, Chairman

DR. ARTHUR C. NASON

MR. JAMES F. INGRAHAM

MR. H. C. MCSTAY

MR. FRANCIS T. RUSSELL

MRS. ANNIE T. FLAGG

MISS MARY T. O'SULLIVAN

SUPERINTENDENT'S REPORT

To the Board of Trustees of the Danvers State Hospital:

The sixtieth annual report of the Superintendent for the fiscal year ending November 30, 1937, is respectfully submitted:

The clinical reports and statistics relating to patients are for the period ending September 30, 1937.

MOVEMENT OF POPULATION

The hospital year opened on October 1, 1936, with 2,282 patients in the hospital, 314 on visit, 15 on escape and 10 in family care, making a total of 2,621.

The year ended on September 30, 1937, with 2,314 patients in the hospital, 333 on visit, 9 on escape and 9 in family care, making a total of 2,665.

The number of admissions during the year is: 494 male; 469 female; total 963, an increase of 13 over the preceding year.

There were 4 voluntary patients admitted during the past year: 34 patients were transferred from other institutions; 304 men and 271 women were admitted on temporary care papers and 83 men and 65 women were admitted on thirty-five day observation papers.

FIRST ADMISSIONS

There were 684 patients admitted to this or any hospital for the first time, which is an increase of 111 over the preceding year.

DAILY POPULATION

The total average population for the year ending September 30, 1937 was 2,256, an increase of 24 over last year. There were 3,584 patients treated during the year as compared with 3,450 in 1935.

Two hundred and seventy-seven patients died in the institution during the year, which is 15 more than the preceding year.

DISMISSALS

There were 919 patients discharged from the institution during the past year; 519 men and 400 women. Classified as to their condition on discharge, 67 recovered; 300 as improved; 420 as unimproved; and 110 as without psychosis. The figures for the preceding year were as follows: 61 recovered; 342 as improved; 370 as unimproved; and 116 as without psychosis.

On September 30, 1937, there were 351 patients on trial visit in care of friends or under hospital supervision as compared with 349 in 1936.

Since the organization of the hospital 35,937 patients have been admitted and 33,369 discharged.

MEDICAL ADMINISTRATION

During the year the following changes occurred in the personnel of the staff:

Appointments. Dr. Peter B. Hagopian was appointed assistant physician, February 18, 1937. Dr. Mona C. Mehan was appointed resident physician in psychiatry, July 19, 1937. Dr. Samuel H. Marder was appointed assistant physician, September 3,

1937. Dr. Abraham Gardner was appointed assistant physician, October 1, 1937. Dr. William Charles Inman was promoted from position of senior physician to director of clinical psychiatry, October 10, 1937. Dr. Melvin Goodman was promoted from position of assistant physician to senior physician, October 10, 1937. Dr. Salvador Jacobs was promoted from position of assistant physician to senior physician (pathologist), October 10, 1937.

Resignations. Dr. Lois E. Taylor resigned from the position of assistant physician July 14, 1937.

Clinical Assistants. From Tufts Medical College: Richard T. Mulvanity, John E. McCluskey, Charles V. Manganelli, James Raymond Hurley, Hyman B. Fisher, and from University of Minnesota, Myron H. Matz.

MEDICAL SERVICE

The medical service has continued to function efficiently throughout the past year under the direction of the assistant superintendent. There have been several changes in personnel due to the promotion of several of the staff members. We now have a fulltime director of clinical psychiatry, who for the past two months has taken over the supervision of the medical service. Daily ward rounds have been made by the physicians as in the past and a weekly night visit has been continued. Staff conferences have been held once daily at which the diagnosis, treatment, visits and discharges of patients have been duly considered.

The routine of making physical and x-ray examinations of nurses in training has been carried out and physical examinations of all new applicants for employment have also been made. These procedures have been very valuable to the health of our employees.

During the past year the pathological laboratory service has been reorganized so that we once again have a full-time pathologist who is directing the work of the laboratory. For the past five months we have been fortunate in having the services of a

full-time resident physician who has been of great assistance to the regular staff members.

Several of the schools of nursing in Essex County have been given a course of lectures by various staff members at their respective schools. Only one school sent nurses to the institution for their didactic work and these nurses were given a full course of lectures at the hospital. Besides the lectures to our own training school students there were courses given to four classes of affiliating nurses, two classes of occupational therapy students and sixteen fourth year medical students from Tufts Medical School. The various staff members supplied as speakers for over a hundred various engagements at different clubs and organizations throughout the year.

During the first three weeks of July, Dr. Edgar C. Yerbury spent time at the Department of Mental Diseases in Boston assisting with the work in that department.

Dr. M. Gene Black continued her intensive study of tuberculosis problems up through November. There being no additional appropriation for this special type of work, it was planned to discontinue her services. This study will be carried on by our own staff members.

The members of the consulting board of physicians and surgeons have been very faithful during the past year and have continued to render very valuable assistance. To them I wish to express my very deep appreciation for their continued faithfulness and invaluable assistance.

The following report indicates the major work accomplished by the consulting board during the past year:

Appendectomies, 3; bone operations, 7; colostomies, 1; cystoscopies, 4; cystotomies, 3; excision of ganglion, 1; excision of perineal fistula, 1; excision of wen, 1; herniotomy, 3; incision and drainage, 24; laparotomies (exploratory), 5; mastoidectomies, 1; oophorectomies, 2; proctoscopies, 1; reductions (fractures), 6;

resections (trans urethral prostate), 1; resections (nasal septum), 1; salpingectomies, 2; tonsillectomies, 6; transfusions, 3, urethotomies (external), 1.

HYDROTHERAPY DEPARTMENT

The hydrotherapy buildings, which were opened last year with complete new equipment, have proved to be an important aid in the treatment of our patients. Additional personnel is needed so that they may be utilized to a greater extent. The separation of the patients from the main group during the time of treatment has increased the efficiency of the treatments to a great extent.

Dr. Rebekah Wright of the Department has closely supervised the work and has held several clinics here.

The number of treatments given during the past year is shown in the following table:

	<i>Men</i>	<i>Women</i>	<i>Total</i>
<i>Wet sheet packs:</i>			
Number of patients treated	306	522	828
Number of packs given	7,760	10,422	18,182
Number of hours of treatment	20,432	31,199.24	51,631.24
<i>Continuous baths:</i>			
Number of patients treated	139	69	208
Number of baths given	3,574	7,017	10,591
Number of hours of treatment	6,714	28,879.14	35,593.14
<i>Tonic baths:</i>			
Number of patients treated	187	291	478
Number of baths given	9,853	5,210	15,063
<i>Colonic irrigations:</i>			
Number of patients treated	30	137	167

Number of treatments given	53	708	761
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PHYSIOTHERAPY DEPARTMENT

During the greater part of the year a trained therapist has divided her time between the physiotherapy and x-ray departments. In addition to giving the active treatments, the therapist has instructed the student nurses in massage. The results obtained from her treatments are of great aid in improving both the physical and mental conditions of our patients.

A total of 5,946 treatments were given during the year ending November 30, 1937. They were as follows: Infra led, 2,458; massage, 495; sine wave, 1,420; ultra violet, 243; diathermy, 975; exercises, 345.

PERSONAL HYGIENE DEPARTMENT

This department has continued to stress the treatment of the untidy and deteriorated patient, in some cases with marked response on the part of the patient. All patients on the female side are given treatment when time permits. The work is carried on by a fulltime hygienist who has trained several patients to become her assistants. The work has reached its maximum with the present equipment, as is shown in the following report:

Hair cuts, 5,169; shampoos, 2,294; manicures, 2,263; waves, 1,999; massages, 1,674; scalp treatments, 2,066; making a total number of 15,465 treatments.

VENEREAL CLINIC

This clinic has functioned throughout the year. At present tryparsamide and malarial therapy are used exclusively, except in old cases, with satisfactory results. The clinic is not being used by the general public except a few cases of follow-up work by staff.

Monday morning is set aside by the male service and Wednesday female service. A weekly average of 40 men and 20 women have treated regularly

DENTAL SERVICE

A full-time resident dentist and dental hygienist have carried on the work of this department.

All new patients admitted to the hospital have been given a thorough oral examination and careful records have been made on dental charts, with recommendations, which have been carried out. Acute cases are taken care of at once, while other cases are indexed or charted and taken care of in their turn.

A new system is in working order, on all wards, in regard to the care and use of toothbrushes and teeth cleaning. A regular teeth-cleaning period has been instituted on each ward, each patient has a toothbrush with his or her name on it, and tooth powder, which is made in the hospital pharmacy, is distributed to all wards for the patients. All patients are instructed to clean their teeth daily and those that are unable to do so have it done for them by the nurses in charge. The dentist and dental hygienist visit all wards at least once a week and see that this is carried out. Each ward has a rack to put the patients' toothbrushes in, and these racks are put out in the fresh air in the sun, so that the toothbrushes may be sterilized.

The consultant dental surgeon, Dr. Joseph Doherty, has visited the hospital 5 times in connection with 2 cellulitis cases and 1 direct wiring of the mandible.

December 1, 1936 to December 1, 1937. -Gleanings, 456; extractions, 1,195. Fillings: silver amalgam, 469; porcelain, 236; zinc oxide and eugenol, 273; kryptex 1; silver cement, 5. cement, 2; total, 986. Oral treatments in general: Vincent infections, canker sores, gingivitis, toothache, abscesses, total 495. Prosthetics: Full plates completed, 14; partial plate completed, 11; bridges completed, 3; gold crown completed, 1; plates repaired, 10; false plates marked for identification, 189; miscellaneous corrections, 89; fractured jaw, 1; removal of ring from finger, 1, cellulitis, 2; Dr. Doherty,

consultant, visited hospital 5 times; referred to x-ray, 83; new patients examined, 840; re-examined patients, 267; total number of patients, 2,871; lectured 6 hours to student nurses.

PSYCHIATRIC CLINICS

The after-care clinics for patients on visit have completed a very successful year. This service is of especial value in guiding the patients and at times recommending their return to the institution for further treatment if needed. They are held at Gloucester, Haverhill, Lawrence, Salem, Newburyport, Lynn and Malden. Two of the clinics are so large that plans are underway to open two new clinics in different locations. The opportunity to refer patients to these clinics is infrequently taken by the physicians of the community.

ADULT MENTAL HYGIENE CLINIC

A substantial increase in patients treated was reported over the preceding year. The Lynn Hospital has continued to offer its clinics and laboratory facilities and this clinic is being utilized more and more in consultation service by the other clinics.

Patients are seen by appointment on one afternoon a week. Occasionally neurological conditions are treated. However, most of the conditions are psychiatric and consist largely of the psychoneuroses, including all types. Patients are given thorough physical and laboratory studies and somatic complaints are not dismissed as psychogenic until organic disease has definitely been ruled out.

Personality studies have been undertaken and problems in adjustment carefully investigated. The social service workers, Mrs. Darling and Miss Mason, contributed valuable assistance in investigating home circumstances. Whenever possible, other members of the family have been contacted so as to better understand the problems at hand. There is a growing conviction that psychoneuroses represent an inability to satisfactorily solve life's problems. The clinic endeavored to re-educate patients in the art of living. The response to psychotherapy in general was quite satisfactory. Students

from Tufts Medical School are assigned to this clinic as part of their month's clinical training and are given instruction in psychotherapy.

X-RAY DEPARTMENT AND LABORATORY SERVICE

During the past year the x-ray department was moved from the basement of the male attendants' home to a central location in the administration building, providing more space and facilitating the transportation of patients to the department.

The x-ray equipment that was old has been replaced and new equipment added. Two new cassettes, a shockproof x-ray tube, a new, more accurate timer, and a new, more efficient wiring are needed. The physiotherapist has been doing most of the exposures since June 1937.

The department has cooperated with Dr. M. Gene Black in her study of incidence of tuberculosis among the patients by fluoroscoping all patients with positive Mantoux tests.

The autopsy rate this year has increased and has stimulated the members of the staff to more accurate physical and mental diagnoses. A nucleus for a pathological museum has been started. A male attendant nurse has been assigned to help the pathologist. The microscopic apparatus has been renovated for future use and new equipment ordered.

More new examinations and bacterial studies have been done but the basal metabolism tests have decreased because of lack of space.

The student nurses have been instructed in pathology, bacteriology and urinalyses, by the pathologist.

The amount of work completed during the year is as follows:

Analyses: ice cream, 3; gastric, 2; milk, 5; water, 5.

Autopsies: 73.

Bacterial cultures, 17; bacteriological smears, 18; basal metabolic rate determinations, 6.

Blood chemistry: blood sugars, 45; N.P.N., 18; blood cultures, 1.

Blood examinations: platelet count, 1; red blood counts, 1,140; white blood counts, 1,148; differentials, 178; hemoglobin determinations, 1,140; coagulation time, 11; blood typing, 3; sedimentation tests, 3; fragility tests, 2; bleeding time, 11.

Gynecological smears, 171; phenolsulphonthalein tests, 6; pleural fluid examinations, 6; pneumococcus typing, 2.

Spinal fluids: Gold sols, 129; cell counts, 129.

Sputum examinations, 169; stool examinations, 38; urinalyses

X-rays exposed: 1,056; teeth, 100.

PUBLICATIONS

This year there was one paper presented and three were published, as follows:

1. " A Study of Accidents in a Mental Hospital ", by Clarence A. Bonner, M.D., Lois E. Taylor, M.D., and Alice W. Schoenfuss, A.B. Read before the American Psychiatric Association in June 1936, at St. Louis, Missouri.
2. " The Value of a Mental Hospital Training to the Occupational Therapy Student", by Edgar C. Yerbury, M.D. Published in the Bulletin of the Massachusetts Association for Occupational Therapy, Vol. 11, No.2, March 1937.
3. " Spinal Fluid Reaction in General Paresis as Modified by a Combination of Therapeutic Malaria and Tryparsamide ", by Leo Maletz, M.D. and H. C. Solomon, M.D., Boston, Mass. Published in the American Journal of Syphilis, Gonorrhoea and Venereal Diseases, Vol. 21, No.3, May, 1937.

4. " Suggestions for the Next Revision of the Binet-Simon Scale ", by Grace H. Kent, Ph.D. Published in The Psychological Record, Vol. 1, No.25, November 1937.

CONSTRUCTION REPORT

During the year this department took care of the usual repairs and maintenance of the hospital buildings. The organization of the department includes five carpenters, two masons, three painters and one blacksmith, one roofer or sheet metal worker and two construction handymen. Some help is obtained from patients who derive occupational treatment by working with the mechanics.

The buildings of the hospital group, with the exception of the new kitchen building, Nurses' Home, Male Employees' Home, male and female hydrotherapy buildings, power plants and Farm Hall, are not modern type buildings. They are all finished, including the floors, with a great deal of wood. The walls are generally finished in lime and hair plaster. The main group of buildings comprising eight ward buildings of three wards each, and the administration building, were erected more than sixty years ago.

It may be readily seen that considering the number of men in the repair department, the age and type of construction of the buildings, with the number of people quartered therein, a continual amount of maintenance work must be done each day to keep in repair and in a presentable appearance. Any great amount of renewal or modernization depends upon the amount of extra labor obtainable.

During the past year we have been fortunate in obtaining the services of WPA painters and carpenters. By using this labor, together with our own mechanics, we have completed the painting of the exterior of all the buildings on the grounds, including cottages, with the exception of main ward buildings and the buildings at the Colony. Within the past year and a half the interiors of all buildings housing patients and employees have been painted, with the exception of the Colony group.

During the year three new wood silos were erected for the farm. A brick building of approximately 20,000 cubic feet was erected for the use of the poultry division of the farm. The department laid approximately 600 squares of new asphalt roof shingles, 90 squares of asbestors wall shingles, and about 60 squares of tar and gravel roofs including flashings. Cottage N 0.4 was completely renovated and Cottages No.8 and No.9 are now in the process of complete renovation and alteration. The interior of the surgical building has also been renovated and painted. The walls and ceilings of the older portion of the Male Employees' Home were re-plastered and a number of ceilings re-lathed with expanded metal. During the year the old kitchen portion of the Administration Building was altered to take care of the pharmacy and x-ray laboratory.

All mechanics of the department were engaged in the above-mentioned work and in some cases were assisted by WPA labor.

ENGINEERING DEPARTMENT

The main power plant new boiler installation was completed. The use of fuel oil in place of bituminous coal has resulted in a very clean and fine appearance of the boiler room. The efficiency of operation has been excellent.

The automatic oil-fired plant at Middleton Colony has been equipped with secondary air control and over fire draft regulation, resulting in a marked increase in operating efficiency. The results of two months' operation show an 18% increase in the amount of water evaporated for each pound of oil burned. Saving in fuel oil should run well over \$1,000 per year. The equipment to accomplish this saving cost \$600.

The accomplishments in the maintenance departments are as follows:

Electrical division: Wiring and lighting fixtures were installed in the space formerly used as the main kitchen.

The x-ray equipment was moved from the employees' home to the new space in E building.

Individual motor drive was installed for the vent fan in the laundry washroom, also for the clothes drier.

Three new 100 K. V .A. transformers were installed in the head house transformer room, taking the place of three 50 K. V .A. units. The 50 K. V .A. units were moved across the room and re-connected to produce 220 volt-3 phase current for motors. Three 25 K. V .A. units replaced by the three 50 K. V .A. units were moved to the power plant and put in place of three 10 K. V .A. units on the power service. These 10 K. V .A. units were set up at Middleton Colony to supply lighting current, replacing two old-style transformers which were considered unfit for further service.

A 15 h.p. A.C. motor was installed in the laundry to run 5 belt-driven washers, and the use of the 25 h.p. D.C. motor was discontinued. We are working toward the elimination of all D.C. equipment.

A 25 h.p. D.C. motor was taken out of the machine and carpenter shops and was replaced by two A.C. motors, one for each shop. A lot of unnecessary use of power is avoided by this two-motor arrangement. These three A.C. motors were obtained from other hospitals' surplus stocks at \$1.00 each. .

Cottage No. 4 was completely re-wired and several new lighting fixtures were installed.

New wiring was installed for a new drinking water cooler in the basement of building D, also in the new building at the henery.

In the laundry new wiring was installed for a new washer and extractor, and the 3 sewing rooms were equipped with new wiring and lighting fixtures.

Wiring was installed for the secondary air controls and over the fire draft controls on the Middleton Colony boilers.

This division was allowed an additional electrician's helper last summer, and this extra man is a great help. Part of the work listed was done with the aid of WPA labor. It would not have been possible to accomplish so much except with outside help.

Machine division: The old belt-driven clothes drier in the laundry washroom was completely overhauled. Many new parts were installed.

New bearings were installed on the fan shaft of the NO. 3 clothes drier.

The removal of the old D.C. drive made possible the removal of a large amount of shafting, pulleys and belts from the laundry washroom.

The Tollhurst extractor in the laundry was given a complete overhauling, new parts being installed where needed. A new foundation was built for this machine, needed. The engine on the power lawn mower was completely overhauled.

The Autosan dishwasher was equipped with new gears in the main drive unit. The bumpers on food trucks were widened, to prevent damage to walls in the wards.

Several pieces of stainless steel equipment in the kitchen were repaired by electric welding.

One hundred-ten Firetox extinguishers were installed. An automatic weight-shifting mechanism was built for the Carrick over fire draft controller for No.1 boiler.

Counter shafts with levers were built, for hooking up the new draft control system on the Middleton Colony boilers.

Plumbing and fixtures were installed in the space formerly used as the main kitchen.

A 1,000-gallon tank was installed at Middleton Colony for hot water storage. This tank was obtained at a cost of \$1 from the surplus equipment stock of another hospital.

A hot water circulating pump was installed. The hot water main at the Colony were replaced with copper tubing and all lines were covered with 4-ply air cell covering.

A new aluminum steam jacketed kettle and a new vegetable steamer were installed in the Middleton Colony kitchen. Several pieces of worn-out equipment were scrapped.

All the hot water distribution mains in the main hospital group were replaced with copper tubing, including mains to the 3 employees' home, Air cell 4-ply covering was installed on the 3 mains.

New cold water risers of copper tubing were installed to replace lead lined iron pipe risers in buildings C, D, G and H. The old lines removed were on very poor condition. Materials on hand to replace the risers in building, A and J.

Two extra water closets, greatly needed, were installed in the women's toilet on the first floor in the F building.

A new sink, gas range and refrigerator were installed at Cottage No.4, and most of the old brass water lines were replaced with copper tubing.

The water cooler in the basement of building D was piped up. This cooler supplies a drinking fountain in each of the three wards of this building.

Five sets of automatic washer valves were installed in the laundry. Piping for a new washer was installed in the laundry.

A complete heating system was installed in the new henery.

Hot water radiation was installed in the two sunrooms at Cottage No.5. Radiation to the second floor of Cottage No.4 was re-piped.

A new sprinkler system of irrigation for the vegetable garden was set up and piped.

New lines were laid in the ground between Cottage No.9 and the boiler house at Middleton Colony. These lines supply the cottage with hot and cold water and with steam heat.

A considerable amount of WP A labor was used in completing these jobs. This division does not have enough regular men to do this amount of new work.

FARM REPORT

The farm suffered a great loss in May 1937, when Mr. William Gordon, who so efficiently managed it, retired. Mr. Gordon through long experience on this farm was well acquainted with all the different peculiarities of its entire system. However, the farm as a whole came through with nearly an average production. Some of the worst losses could be well attributed to the very wet spring which stimulated root growth very near the surface of the soil. This was followed by a period of extreme dry weather which the root systems were not prepared for, causing the plants to stop growing. The sweet corn was one of the best examples of this loss.

The tomato crop was one of the largest ever produced at this institution, the total production being 115,580 lbs. Of this amount 4,946 N O. 10 cans were preserved. The turnip crop was also very gratifying with a total production of 230,150 lbs., including both yellow and white turnips; Cabbage, 138,659 lbs. ; onions, 44,214 lbs. ; squash, 128,099 lbs. ; beets, 34,253 lbs. and 28,389 lbs. of chard were about average crops. This year the installation of about 500 ft. of overhead irrigation served to show how very practical irrigation is on small crops such as lettuce, spinach, chard and celery.

The hay crop was normal with 262.62 tons. The quality of this hay was not all it should be from the standpoint of milk production. It is hoped that this quality will be partially corrected by the re-seeding of 35 acres of grassland with a seed mixture containing a very high percentage of clover.

During the summer the old silo was torn down and rebuilt; all the old staves that were in fit condition were used. Then each silo was wrapped with "Crane I wrapping".

This gives the institution three silos of very rigid construction with capacity of about 580 tons. This year the total weight of the corn that went into the silos was 750,935 lbs., which was nearly the poundage reached the year before.

The pork production for this year was 60,289 lbs., which was the amount called for in our 1937 budget. This year marks the beginning of a change from Duroc Jerseys to Chester White swine. We have procured two Chester White boars from Massachusetts State College at Amherst, and also eleven Chester White sows from the same source. There have also been two Chester White boars purchased from the Midwest. All of this breeding stock is apparently very outstanding.

The head house at the poultry plant has been replaced with a brick veneer building, which contains a slaughter room, a grain-grinding room, besides ample space to pack eggs, sprout oats and do other necessary functions connected with the care of poultry. The production this year was 17,098 dozen eggs, 6,049 lbs. of fowl, 4,902lbs. broilers. The institution was supplied with broilers in sufficient quantity to make it possible to serve them in the patients' dining room.

There were 919,905.59 lbs. of milk produced during the year, and 19,528 lbs. of beef. Whereas our hay was not of sufficient quality to stimulate high individual production, the cows held an average of 10, 707 lbs. of milk. By continually eliminating the undesirable individuals of the herd, raising the quality of hay, and following strict rules of sanitation, it is hoped that the production can be materially increased.

This year there were 265 young apple trees set out, completing one block orchard on the side hill to the north of the hospital entrance. The quantity of apples picked and put into storage was 16,239 lbs. This poundage does not represent the total production as the patients have the privilege of picking and eating apples directly from the trees. This privilege is greatly enjoyed by the patients.

The farm equipment and machinery has been maintained at a high standard through the purchase of new and the repair of old. One of the most outstanding purchases was that of a one and one-half ton truck. This truck is used to transport

patients to more distant fields. Another very important part of its work is the transportation of vegetables from the fields to the storage as soon as possible after they are picked, thus bringing them to the consuming point in a much better condition. It has been found that the tractors more than replace the horses, especially on this farm, because of the distance between the fields and the barn which is the start of all operations. There has also been an addition of several pieces of tractor equipment, such as a three-bottom plow, double disc harrow, two-row corn planter, two-row cultivator, and a bush and bog harrow. This equipment helps to speed up the work and to take care of some of the time lost by the forty-eight hour week.

The lawns and shrubbery have been kept at their usual high standard, although suffered seriously from the drouth which required the renewing of about 2,000 square feet of lawn. There was about 1,500 square feet of new lawn made surrounding the shuffleboard court, which is used by patients only. The plantings in front of the administration buildings were thinned and renewed where necessary. The plantings in the rear center area were changed to some extent by the addition of some new trees and shrubs.

One of the most valuable assets to the grounds was the starting of a nursery in which to start and grow new shrubbery which consists of both evergreen and deciduous plants. This nursery now contains about 8,000 plants of several different varieties, which were for the most part propagated at the institution.

The tennis court between the G wards and the laundry was resurfaced with clay, making it very desirable to both patients and employees.

RELIGIOUS SERVICES

The religious services have been held every Sunday during the year. They have been a factor in the treatment and guidance of our patients. The following Catholic, Protestant and Jewish clergymen have held their services during the past year: Rev. Remi B. Schuver, Rev. Arthur Wright, Rev. Charles M. Charlton, Rev. William Grimes,

Rev. Kenneth Henley, Rev. RuBBe11 T. Loesch, Rev. Alfred F. Ferguson, Rev. Adrian T. June, Rev. Carlton Feener, and Rev. Moses L Sedar.

ACKNOWLEDGEMENTS

As the year ends I wish to express my deep appreciation of the time, talent, and money expended for the patients by our friends in the community. To the many organizations that have entertained our patients I wish to express my thanks. To the officers and employees who have carried on the work I extend my appreciation. I am grateful also for the cooperation and assistance extended to me by the Department of Mental Diseases and the Board of Trustees.

Respectfully submitted,

CLARENCE A. BONNER, M.D.,
Superintendent.

REPORT OF TRAINING SCHOOL FOR NURSES

To the Superintendent of the Danvers State Hospital:

It is my privilege and pleasure to submit the forty-eighth annual report of the training school for nurses:

There were 64 requests for information in regard to the training school. Twenty-two applications were received. Five failed to meet the requirements; 1 was under eighteen; 2 were financially unable to enter; 1 lived in Indiana; 3 changed their minds; 4 were too late for entrance, and 6 reported for duty October 1, 1937.

On November 30, 1937, our students were as follows: Seniors, 7; intermediates, 8; probationers, 6.

The affiliated nurses for the year ending November 30, 1937 were as follows: -

Chelsea Memorial Hospital: Helen Dorothy Kelly, Ursula Mary Cronin, Olga Evsiechick, Mary Cunningham, Ruth Elizabeth Miles, Mary Sweeney, Mary Valdimir, Murielle Moon, Celia Caruso, Celeste Conza, Gertrude Mugford, Ruth Martin Reed.

Leominster Hospital: Cecile Rheault, Ruth Louise Peterson, Sylvia Lacombe, Doris Moore, Eunice Brierley, Mary Cahalon, Dorothy Morin, Helen Gerzadowicz.

Melrose Hospital: Evelyn Wall, Charlotte Proctor. *Somerville Hospital:* Elizabeth Pretty, Doris Mary Wiswell, Margaret Gilchrist, Mary Rose, Inez Govoni, Mona Gourley, Eleanor Finley, Inez James, Mary Morlian.

The graduating exercises were held September 23. The following nurses received diplomas:

Anna Ellen Baldwin

Margaret Irene Christoun

Elizabeth Anne Collopy

Ruth Veronica Flynn

Mary Nock Gill

Alice Rachell Goodell

Muriel Hazel Greeley

Mary Catherine Lillis

Sophie Elizabeth Sadowska

Grace Simpson Savedge

Anella Anna Shuman

Mary Anselm Trainor

Mary Nock Gill was awarded the Alumnae Prize of \$10 for the highest rank for three years:

New equipment consists of a skeleton and a disarticulated skull. The following nurses resigned during the year: Mary Boyko, Lucille Charest, Eileen Virginia Eaton, Anne Shanahan Olsen, Muriel Paul Zellen, Class of 1936; Loretta Madden Lynch, Class of 1928; Margaret Copely Seagle, Class of 1933; Anna Casale O'Handley, Class of 1933. Mildred Catherine Jarosz and Dorothy Lovell Briggs were transferred to the male service.

I wish to thank the members of the medical and hospital staff for their kind cooperation and help with the teaching.

Respectfully submitted,

OLIVE F. ESTEY, R.N.,
Principal, School of Nursing.

OCCUPATIONAL THERAPY DEPARTMENT

To the Superintendent of the Danvers State Hospital:

The report of the activities and treatments of the occupational therapy department is as follows:

Personnel: One director and instructor, registered occupational therapist.* Four graduates of the Boston School of Occupational Therapy. One physical education instructor. Three attendant under department supervision.

*Registration is according to the requirements established by the American Medical Association.

Affiliating students from the Boston School of Occupational Therapy.

January - July 1937 - Margaret Davis, Constance Fuller, Charlotte Newcomb, Mary Patch.

July-January, 1938- Evelyn Cowles, Marion Guelman, Mary McNutt, Mary Raymond, Florence Smith, Bertha Skou.

Instruction: The students' program at this hospital has included lectures in advanced psychiatry, neurology, psychiatric nursing and psychology as well as instruction and practice in the principles and theory of occupational therapy as applied to mental hospitals. Full semester credits have been given to the following subjects not included above: hospital library management and therapeutic book selection; educational guidance in correspondence courses, lectures, art classes and music appreciation; physical education; recreational activities for individuals and groups;

assisting in the instruction of elementary occupational therapy to the student nurses; the application of music and dramatics to mental adjustment; and one semester of industrial therapy theory, observation and some practice. Four groups of affiliating nurses from general hospitals and one class of senior nurses of the training school have received twenty to thirty hours of lecture and instruction in the application of elementary occupational therapy. The annual exhibit at the Essex County fair was a miniature set-up of a patient receiving occupational therapy from his entrance to discharge from the hospital and was commended for its educational value by members of the fair committee. Lectures have been given to the community and to interested nurses' alumnae groups in Lynn and Gloucester by the director, as there seems to be a growing interest in the responsibilities of club groups to the question of mental adjustment.

Changes in Personnel: Ruth Bjorson, 1936, graduate of Boston School of Occupational Therapy, with experience in Ypsilanti State Hospital, Michigan, and the Boston Psychopathic Hospital, replaced Elizabeth Hayden, February 1937. Mary Patch, 1937, graduate, a new appointment, August 1937.

Treatment Program: (statistics and reports). Reports are made on any patient contacted or treated in occupational therapy who is being examined at staff conference; bi-weekly conferences are held with the senior physicians of each service and monthly notations and summary of the department's activities are prepared for the entire medical staff for study. Therapeutic activities of the department have included the use of the following projects:

1. Reception service	6. Music and dramatics
2. Adjustment classes	7. Pre-vocational and pre-industrial instruction (in individual cases)
3. Physical education	8. Education to nurses and other groups.
4. Recreational therapy	
5. Educational therapy groups.	

Of the total admissions of 1937 the therapists have visited 89% female and 86% male patients as a part of the readjustment program. This reception interview consists of a reassuring message from the superintendent, a review of available resources - diversional, educational, and industrial, and is for the distinct purpose of assisting in the orientation and adjustment of the fearful patient by therapeutic information regarding the hospital and its facilities. Those not interviewed were too disturbed, on the danger list or discharged before contact was possible. Analyzed activity has been prescribed by the doctors and guided in daily classes by the therapists: 2 male, 3 female and 4 physical education; classes weekly in music appreciation, art instruction and library. Group treatment and social readjustment have been supervised in ward recreational classes, community singing, dramatics, dances and miscellaneous parties. Several acute patients requiring individual attention were treated by the occupational therapists. The library has been used extensively in the re-educational program-supplying patients with books, magazines and occasional lectures to interested audiences of 25-30 patients. Book repair has been used to stimulate depressed patients of superior intelligence and book choice supervised when therapeutic. The 5th year of the hospital newspaper, Hill Topics, produced 25 issues of 500 copies each. Industrial placement is suggested in the doctor's conferences for those patients in adjustment classes when they have reached a plateau in their recovery and are ready for advanced activity. Some vocational guidance has been developed: typewriting, janitor training, furniture repair, etc. Over 2,000 articles have been made as bi-products of the adjustment classes. Within the last 2 years 8 wards have been interior-decorated by the female patients under occupational therapy supervision in order to stimulate interest in the environment. An average of 700 patients (80% of total population) are receiving treatment during the month in the organized classes; others are contacted in the group treatment activities.

Entertainment and Donations: Entertainments have been supplied by the WPA; choirs, plays, minstrel shows and donations of books by local organizations and churches. The employees of the hospital presented a minstrel show for the patients.

Added features of 1937: An appointment of an additional therapist was made and an art class as a result of the annual patients' exhibit is held weekly with an average

attendance of 15 patients. The choir has been reorganized and now visits the Colony monthly to sing at the church services.

The department has been handicapped by a lack of suitable environment for the treatments: the noisy industrial looms and machinery next to the shop are not conducive to relaxation in the patients during treatment and it is not possible to segregate the ward adjustment classes entirely from the patients not receiving industrial or occupational therapy because of the lack of space. For the same reason the ironing room which was referred to in the last report has not been completed.

Respectfully submitted,

POLLY K. LOESCH, O.T. Reg.,
Director of Occupational Therapy.

SOCIAL SERVICE REPORT

To the Superintendent of the Danvers State Hospital:

I have the honor to present the following as the report of the social service department of the Danvers State Hospital for the year ending November 30, 1937:

The total number of cases was 1,619. Of these, 1,271 were hospital cases, 270 child guidance cases, 74 adult mental hygiene clinic cases, and 4 outside cases. Eleven hundred and thirty-six were new; 881 of these were hospital cases, 198 child guidance, and 57 adult mental hygiene.

The work of the department is almost entirely confined to history taking. Owing to the limited personnel, we do practically no supervision work of patients on visit in the community. As reported last year, 8 additional trained psychiatric social workers are needed to carry on adequately the work of the department.

Our child guidance clinics have been operating for nine years. A total of 1,424 patients have been studied in these clinics. It is time we took stock of the wealth of

material accumulated in the individual records of our child guidance clinics. What has our treatment been able to accomplish in individual cases? What conclusions can we draw from nine years' experience in clinics operated by the Danvers State Hospital? With these questions in mind I recommend that a study be undertaken of our child guidance clinic records. Such a study should make a real contribution to the whole field of mental hygiene. Whether or not such a study can be undertaken we should have the services of a statistician to enable us to record material so that it may be available for the purposes of study.

Mrs. Pearl Darling resigned in April, having given many years of satisfactory service. Miss Edith Mason was promoted to take her place. Miss Barbara Redden, a former student in the department, was appointed to fill the vacancy caused by Miss Mason's promotion. Miss Eleanor Elms, a master student at Simmons College School of Social Work, is doing her fieldwork in our department this year.

Respectfully submitted,

MARY HENDERSON HOLLAND,
Head Social Worker.

SECTION 58-A CASES, CHILD GUIDANCE AND SCHOOL CLINICS

To the Superintendent of the Danvers State Hospital:

It is my pleasure to submit the following report for the extra mural department in its work with children for the year ending November 30, 1937:

The total number of cases (1.128) studied does not vary greatly from last year's report. The saturation point in caseload with the present personnel appears to have arrived -or nearly so at least. The personnel remains essentially the same as last year, also, both in numbers and in individuals, except the few months when Miss

Dorothy Leach took Miss Georgie Brimigion's place. No changes occurred in clinics or their locations except the Melrose Clinic which did not reopen in September. Because of the demand for clinic services, we have found it necessary on several occasions to hold both the Lynn and the Newburyport Clinics for an entire day instead of the half day assigned to them. Waiting lists have been long and only in this way have we been able to accept new cases for study within a reasonable time. We examined a total of 198 new child guidance cases and we carried over for further study 72 of the cases from previous years. In addition to this, there were 21 so-called 'outside' cases which were examined during the summer while clinics were closed. This does not include several cases first seen as outside cases and later referred to our regular clinics.

This department has been making routine examinations of all children admitted to the Carpenter Street Home for Children in Salem as well as the cases under the supervision of the Child Welfare House in Lynn.

Miss Agnes Reardon, our speech teacher, had 15 cases in Lynn and 39 cases in the Salem Clinic. Two more speech cases were brought in for her advice but these were not put on our files as regular cases.

We examined 250 juvenile cases for the District Courts of Essex County and for the Chelsea Court under the old Chapter 215 of the General Laws, now Chapter 119, Section 58-A. The following table was compiled for the annual report of the court work for the year ending October 1, 1937. This does not quite coincide with our present report', but 11 months are identical.

NOTE: Due to the time consuming process involve in reproducing the tables they will not be included until a later date.

Several courtesy examinations were made for the courts and are reported under "outside cases". These were chiefly adolescents over the legal age for Juvenile Court, but on whom the court requested the '58-A' report.

Our School Clinic examined 587 children in 25 towns or cities this year as opposed to 23 towns last year. There were 461 new cases and 126 re-examinations in this group. Reports to the Superintendents of the various schools are often considerably delayed. This is a great handicap, especially to the school visited in the latter part of the spring term. This delay is easily explained: it is impossible for one stenographer, unaided, to handle adequately the greatly increased number of cases since 1933. Our stenographer is now attempting to do the clerical and stenographic work for two full time physicians and the typing for the adult mental hygiene clinic as well. This represents at least a third more work than she can possibly handle successfully in a given time.

A survey during the year discloses the fact that child guidance clinic workers traveled approximately 13,000 miles in their duties.

The usual informal lectures and addresses were given to groups in the community.

Respectfully submitted,

DORIS M. SIDWELL, M.D.

PSYCHOLOGICAL REPORT

To the Superintendent of the Danvers State Hospital:

I have the honor to present the annual report of the Department of Psychology for the year ending November 30 1937.

At the opening of this fiscal year the three junior members of the department were Rosemary Mehan, Barbara Redden and Margaret Kelly. Miss Redden returned in May to the Department of Social Service, leaving a vacancy which was taken by Marjorie Priest. Miss Mehan and Miss Kelly left in July to take positions in other state institutions, and their places were taken by Mildred von der Sump of Wheaton College and Norma Monroe of New Hampshire University. Miss Priest left in September and her place was taken by Elaine Kelleher of Tufts College.

The psychometric work of the year has included 1,479 examinations administered individually, grouped as follows:

Hospital patients, recently admitted	416
Cases in child guidance clinics	196
Juvenile court cases, Section 58 A	236
Retarded children in public schools	587
Unclassified cases	47
Total	1,479

In September a group examination was administered to the newly enrolled students of the Essex County Agricultural School, numbering 146. The records were scored and the report was given to the school, to aid in the classification of the students.

Our routine work has included a ten-hour course of lectures, repeated every three months, for the visiting nurses. Each month during the academic year we have given a four-hour course in psychometrics for the medical interneers. The social service students also have received informal instruction in psychometrics.

This year has seen the completion of an undertaking which was started in 1932 with the assistance of Dorothy McLeod. Since that year we have been collecting test records obtained from hospital patients examined by us, for the purpose of establishing "autogenous norms" for the use of this institution. Seven language tests have been standardized for the hospital, the norms being compiled from the records of 1,000 literate patients between 16 and 60 years of age. Within these limits the cases included in the study are essentially unselected, and it is believed that this group of patients is fairly representative of the English-speaking population of the hospital. With the aid of these self-derived norms, we are now able to state that a score of 40 in a given test places a patient in the upper 20% of the hospital population. For a patient in early life who is not too far removed from school days, we may still report that same score as indicating a 13-year achievement in the test; but the rating which involves comparison

with the achievement of school children is unfair to subjects who have reached middle life, and for all such patients a rating based upon comparison with the hospital population is more significant than the "mental age " rating. It remains to be seen whether the norms derived from this hospital will be useful also for other institutions of like nature. In any event, our method of establishing "autogenous norms " can be recommended to other institutions.

One paper has come to publication this year, entitled: " Suggestions for the next revision of the Binet-Simon scale". This paper is intended for wide circulation among students who are engaged in researches upon the development of mental tests.

We have in progress other studies of long standing which should be brought to completion, but inevitably the routine duties keep our time well filled. We are in need of an additional worker and additional office space.

In the fall of 1931 this department took over full responsibility for the psychometric work of the hospital, with the understanding that the appointments for outside work should be given preference over any work done inside the hospital. In 1932, the first year in which our duties included the school clinic testing, our extra-mural caseload was 745 cases. Since that time it has been increasing, reaching the figure 1,066 cases for the year 1937. This increase of 43 per cent in our most urgent work would seem to justify an increase in our working force.

Respectfully submitted,

CLARENCE A. BONNER, M.D.
Superintendent.