

The Commonwealth of Massachusetts

**ANNUAL REPORT**

OF THE

**TRUSTEES**

OF THE

**DANVERS STATE HOSPITAL**

FOR THE

YEAR ENDING NOVEMBER 30,

**1940**

DEPARTMENT OF MENTAL HEALTH

DANVERS STATE HOSPITAL

(Post Office Address: Hawthorne, Mass.)

**TRUSTEES**

MR. S. HERBERT WILKINS, Chairman, Salem.

DR. ARTHUR C. NABON, Newburyport.

MR. JAMES F. INGRAHAM, Peabody.

MR. FRANCIS T. RUSSELL, Dorchester.

MR. H. C. McSTAY, Swampscott.

MR. ANNIE T. FLAGG, Andover.

MISS MARY T. O'SULLIVAN, Lowell.

### **RESIDENT OFFICERS**

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

WILLIAM CHARLES INMAN, M.D., Assistant Superintendent.

LEO MALETZ, M.D., Director of Clinical Psychiatry.

MELVIN GOODMAN, M.D., Senior Physician.

MYER ASEKOFF, M.D., Senior Physician.

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

DORIS M. SIDELL, M.D., Senior Physician.

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

MONA C. MEHAN, M.D., Assistant Physician.

VELMA H. ATKINS0N, M.D., Assistant Physician.

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

FRANCIS X. SULLIVAN, M.D., Assistant Physician.

PABQUALE A. BUONICONTO, M.D., Assistant Physician.

ABRAHAM GARDNER, M.D., Assistant Physician.

GEORGE W. WHEELER, D.D.S., Dentist.

GRACE H. KENT, PH.D., Psychologist.

## **HEADS OF DEPARTMENTS**

MR. ADAM D. SMITH, Steward.

MISS HULDA ARONSON, Treasurer.

MR. SAMUEL A. CLARK, Chief Power Plant Engineer.

MISS MARY H. HOLLAND, Head Social Worker.

MISS MARY K. MCPHILLIPS, Principal Clerk.

MR. MERLE D. GETCHELL, 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 Department.

MR. IRVING L. HYLAND, Maintenance Foreman.

MR. DONALD FAIRMAN, Head Farmer.

MRS. OLIVE J. CAMPBELL, Head Occupational Therapist.

## **CONSULTING PHYSICIANS**

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

CHARLES L. CURTIS, M.D., Surgeon.

RICHARD E. ALT, M.D., Surgeon.

PHILIP J. FINNEGAN, M.D., Assistant Surgeon.

PAUL R. HINCHEY, M.D., Assistant Surgeon.

ALBERT E. PARKHURST, M.D., Internist.

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

OLIN S. PETTINGILL, M.D., Tuberculosis.

PHILIP R. DEWYER., M.D., Ophthalmologist.

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

MORRIS YORBHIS, M.D., Neurologist and Psychiatrist.

PAUL E. TIVNAN, M.D., Roenigenologist.

BERNARD APPEL, M.D., Dermatologist.

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 submit their report for the fiscal year ending November 30, 1940, which includes the report received from the~ Superintendent and the heads of the various departments:

Throughout the year regular monthly reports have been rendered to the Board by the Superintendent, covering all phases of hospital activity. Most of the meetings have been held at the hospital.

At times during the last year the patient population exceeded 2,400. This patient population taxes our accommodations severely and results in overcrowding and increase in the number of accidents, making it difficult to render the type of service to the individual patient that is due him. The

Department of Mental Health early recognized this problem and worked hard and faithfully to provide a solution. Part was accomplished by a series of transfers, but the greater achievement was obtained by re-districting. After a careful study, the Department arranged that certain cities should, after October 1, 1940, send their patients to the Worcester State Hospital. This has been very beneficial to the Danvers State Hospital and the average population since October 1, 1940 has only been slightly in excess of 2,300, which means more and better care per patient, with less likelihood of accidents due to overcrowding.

In the 1938 annual report mention was made of the larger admission rate of elderly men and women. Heretofore, the largest group was of Dementia Praecox cases, usually a disease of the young. This change has continued in our figures for 1939 and 1940 and makes imperative a careful study of the old age group so far as it pertains to a numerical increase and care of this group within the hospital. We again present the need of an infirmary building for the "old age" cases, where they may receive care apart from the younger and more vigorous patients. This need has also been recognized by the Department and appears in the budgetary requests for 1941. A new infirmary would also help us to centralize the operating room, the laboratory, the morgue and the x-ray department. At the present time the operating room is at the extreme end of the female ward section and means that a male patient must be wheeled through several wards on the male service and the entire length of the female ward section when surgery is indicated. To quote from a previous report: "By housing the various medical and surgical problems in a single unit, it would seem that greater efficiency and consideration would be obtained in their care and treatment."

The matter of fire prevention may be summarized as follows: Regular fire drills are held in all parts of the institution. These are duly recorded and reported to the Department each month. Each year has seen some gain in fireproofing and in reducing fire hazards.

In this year's budgetary requests there appears an item for fireproofing two corridors at Middleton Colony. Both of these corridors lead from ward buildings to the new central dining room, which has recently been reconstructed. These corridors being fireproof would make excellent means of egress for the elderly female patients to the now fireproof dining room section, and would insure safety in the event of fire.

Again we mention the need of an enlargement of the chapel, which now accommodates but 300 patients. In the course of this reconstruction the rear center would be absorbed and another gain in fireproofing would have been made.

We believe that a dry cleaning plant would mean a great saving in clothing. At present all of the patients' suits have to be laundered, with resulting damage and shrinkage. Dry cleaning would eliminate this.

In the present budget we have requested additional help under administration, kitchen and dining room ward service and repairs; also certain changes in the rating of positions in the psychological department and on the farm.

Throughout the last year the general health of the patients was good and there were only a few cases of dysentery. The same held true for the employees.

A very careful check of food has been maintained throughout the year, both as to cost, distribution and service. By careful administration, excellent food has been served and the cost of the same has been held at an economical level. Due credit is given to the steward and his co-workers. Each week a food committee meets for discussion, handles and studies all complaints, and constantly plans to improve the food service wherever and whenever a weakness appears.

Under medical and general care, there was an increase ID the expenditure for consultation and surgical service. This reasonable increase means better medical and surgical attention and is warranted in the better results which have been obtained in patient care.

The farm is an exceedingly valuable part of the hospital equipment and probably its greatest value lies in the fact that it provides healthy out-of-door work for hundreds of male and female patients in the course of a year; more than this, it supplies the patients and employees with practically all of the fresh vegetables needed for the table, and also fresh milk, eggs, pork and poultry. The value of farm products for this last year amounted to \$65,912.42. It is planned to discontinue the henry this coming August since it does not seem feasible to attempt further to raise eggs, especially when they can be purchased for less in the market. The buildings are badly in need of repair, also, and it would hardly pay to rebuild at this time.

The piggery produces a good yield but is badly in need of reconstruction. For some time the milk production has been low. This has largely been due to mastitis and injuries to the cows by overcrowding. Plans are already underway to correct this condition by increasing the space between the stanchions.

The oil storage tanks at the powerhouse both developed leaks. They are of cement construction. The sum of \$1,000 was granted to cover the cost of emergency repair.

The high cost of travel at this hospital is due to the large community program, including child guidance clinics designed to prevent mental illness in the community.

One new truck has been requested for the use of the maintenance and engineering divisions. Heretofore the workmen have used their own cars and this has resulted in many complaints.

For well over a year an intensive campaign to prevent clothing destruction has been carried on under the leadership of the clinical director, with excellent results; also, every effort has been made to secure clothing for the patients from their relatives and homes. This procedure has also been very successful.

During the last two years, the repair force, by necessity, has engaged in certain large reconstruction projects in the administration building and at Middleton Colony, thus other parts of the hospital have correspondingly suffered in upkeep. It is planned to refer, as far as possible, the larger projects to repairs and renewals and specials rather than to have an accumulation of minor repairs go unattended over a long period of time. Repair and renewal items to the extent of \$27,986 have been requested by the hospital and approved by the Department.

We also desire to commend the staff and employees of the institution for another year of efficient and conscientious service.

Respectfully submitted,

S. HERBERT WILKINS, Chairman

JAMES F. INGRAHAM

ANNIE T. FLAGG, Secretary

H. C. McSTAY

ARTHUR C. NASON, M.D.

FRANCIS T. RUSSELL

MARY T. O'SULLIVAN

#### **SUPERINTENDENT'S REPORT**

*To the Board of Trustees of the Danvers State Hospital:*

The sixty-third annual report of the Superintendent for the fiscal year ending November 30, 1940, is respectfully submitted:

The clinical reports and statistics relating to patients are for the period including September 30, 1940.

## MOVEMENT OF POPULATION

The hospital year opened on October 1, 1939 with 2,385 patients in the hospital, 347 on visit, 9 on escape and 36 in family care, making a total of 2,777.

The year ended on September 30, 1940 with 2,391 patients in the hospital, 342 on visit, 5 on escape and 33 in family care, making a total of 2,771.

The number of admissions during the year were: 574 male; 483 female; total, 1,057, an increase of 167 over the preceding year.

There were 9 voluntary patients admitted during the past year; 15 patients were transferred from other institutions; 134 men and 50 women were admitted on temporary care papers and 92 men and 68 women were admitted on thirty-five day observation papers.

## FIRST ADMISSIONS

There were 736 patients admitted to this or any hospital for the first time, which is an increase of 149 over the preceding year .

## DAILY POPULATION

The total average population for the year ending September 30, 1940 was 2,347, a decrease of 33 over last year. There were 3,834 patients treated during the year as compared with 3,703 in 1939.

Two hundred forty-four patients died in this institution during the year, which is 34 less than the preceding year.

## DISMISSEALS

There were 1,063 patients discharged from this institution during the past year; 572 men and 491 women. Classified as to their condition on discharge: 96 as recovered; 357 as improved; 467 as unimproved; and 143 as without psychosis. The figures for the preceding year were as follows: 86 recovered; 382 as improved; 305 as unimproved; and 90 as without psychosis.

On September 30, 1940, there were 380 patients on trial visit, in care of friends or under hospital supervision as compared with 392 in 1939.

Since the organization of the hospital, 38,843 patients have been admitted and 36,175 have been discharged.

#### MEDICAL ADMINISTRATION

The following changes were made during the year in the personnel of the staff:

*Appointments:* Willy Oppler, M.D. was appointed resident physician in psychiatry on April 4, 1940 for the period of one year. On May 16, 1940, Abraham Gardner, M.D., returned to the service of the hospital as assistant physician. Velma H. Atkinson, M.D., returned from a year's leave of absence on July 16, 1940 and resumed her duties as assistant physician.

*Resignations:* On May 11, 1940, Samuel H. Marder, M.D., resigned to accept a position as senior physician at the Westborough State Hospital. Louise H. Jacob, M.D., assistant physician, completed her temporary appointment on June 15, 1940, following which she accepted a position at the Westborough State Hospital.

*Clinical assistants:* Dr. Lois M. Hammond, graduate of the University of Vermont College of Medicine, and Dr. Frederick K. Poulin, of the Harvard Dental School, accepted appointments at this institution during the months of July and August 1940.

## MEDICAL AND PSYCHIATRIC SERVICE

The general plan of the medical and psychiatric service has remained essentially unchanged during the past year .The two services are combined and under one head. Because of limited personnel, it is impossible at the present time to separate them. It is recognized that better psychiatric and medical service would be provided by their separation, but on the other hand there might be a narrowing of interest on the part of the medical staff and a consequent tendency to lose sight of important psychosomatic relationships. The need for new medical and surgical infirmaries has been mentioned in previous annual reports, and we are resubmitting this request.

The number of medical and surgical problems has increased during the past year. Weekly medical and surgical rounds have been continued with the addition of monthly tuberculosis rounds with Dr. Pettingill and Dr. Boyle of the Essex Sanatorium. The care of our tubercular patients approximates, as far as possible, the general plan of care offered at the sanatorium. It is hoped that the new medical and surgical units will contain a division for these patients, and also an isolation wing.

In the past we have had periodic outbreaks of dysentery, which have been difficult to control because facilities for isolation are not entirely adequate. Dysentery appears to be endemic in our population, and we may expect outbreaks in the future. During the past year the incidence has been low. All cases have had stool cultures, and isolation has been maintained until three negative cultures have been obtained.

Monthly neurological clinics, conducted by Dr. Kurt Goldstein, Professor of Neurology at Tufts Medical School, have been instituted this fall.

In the infirmaries, prompt and extensive use of sulfanilimide and its derivatives has appreciably lowered the mortality rate in pneumonia. We are using these chemicals also in erysipelas, cellulitis, septicemia and other

infections, with good results. We have continued our study in the use of drugs of the atropine series in Parkinsonism. Rabellon, a proprietary preparation, has been tried out but has not been found superior to other preparations. At the present time we are using a Wine of Belladonna tablet, the results of which treatment are not yet available.

Monthly clinical-pathological conferences have been held during the year, and have been well attended by physicians in Essex County. The meetings have been held in the Nurses' Home. The following physicians were invited as guest speakers: Dr. Richard E. Alt, Dr. Siegfried Thannhauser, Dr. Walter Wegner, Dr. Nathan Sidel, Dr. Leo Alexander, Dr. Lyman Richards, Dr. Paul Yakovlev and Dr. Richard Wadsworth.

On the psychiatric service, several changes have occurred. The total push program was discontinued July 1, 1940, having been in operation one year. The results were somewhat encouraging but not sufficiently good to warrant the time and effort expended on so small a group of chronic patients. Principles derived from the total push methods are being employed in our general therapeutic program.

The use of shock therapy has been limited to carefully selected cases. There has been a gradual loss of enthusiasm for this type of treatment. It seems to be more effective in the affectoid than in the schizophrenic states.

The recreational program has expanded considerably, especially with reference to outdoor activities. Soft ball games have been arranged for backward patients on the lawns. The "big detail", composed of 125 or more backward patients, continues to be highly successful. These patients spend their day in a field, a mile from the main hospital, from May to November. They have been engaged in leveling off the field, and have made considerable progress in this task. It is hoped that several recreation fields will eventually be made available. (These activities were described in a recent paper presented by Dr. Clarence A.

Bonner, at the Administrative Institute held at the Department of Mental Health.) The removal of aggressive, over-active and disturbed patients from the close confines of the institutional wards to large outdoor areas is extremely beneficial in curbing these tendencies and in developing productive and useful interests.

The B-4 occupational therapy class for disturbed female patients has worked out well. It is hoped in the near future to have a similar class organized in the J-4 attic. Increased occupational therapy activities are planned for backward patients.

The family care program has continued under the direction of the clinical director and a social worker. Family care has proved to be an important feature of the plan to return patients to the community. The program has continued to be active and progressive, and the turnover has been satisfactory. It is recommended that the number of beds available for this purpose be increased from 33 to 50. The present medical and social service facilities appear to be adequate for handling the larger number.

The number of escapes during the past year has reached a new low, namely, nineteen. Standard practice procedures have been elaborated for prevention of escapes, including rigid selection of parole patients, improved methods of supervision, and the development of thorough methods of search. In accomplishing this reduction in the escape rate, we have not reduced the number of parole patients.

Conferences for the review of one-year cases are held weekly by the staff. In this manner it is possible to re-evaluate a patient's progress and to make additional recommendations. The diagnosis is reconsidered in the light of the year's study.

A paper on "Care of Aged Patients in the Danvers State Hospital", by Dr. Maletz and Dr. Kent, was presented at a symposium held on October 11, 1940 at Taunton State Hospital.

A Journal Club has been organized this fall, and monthly meetings are held at the homes of the various physicians.

The mental hygiene program in the community has been quite active. Many groups of students have been invited to visit the hospital. National Hospital Day was observed on May 13, 1940. The various newspapers and local radio stations contributed generously in publicizing this event.

The Massachusetts Mental Hygiene Society held a successful conference at Hotel Hawthorne on November 15, 1940, with Dr. Bonner as chairman of the arrangements committee. The participating organizations included:

Massachusetts Society for Mental Hygiene, Massachusetts Department of Mental Health, Massachusetts Department of Education, Massachusetts Child Council, Massachusetts Conference of Social Work, Massachusetts District IV State Nurses' Organization, Essex County Health Association, Essex County Teachers' Association of the Massachusetts Federation of Teachers, South Essex County Medical Society. The various sessions were attended by over 400 persons, and the interest which was stimulated by the conference offers promise for the success of future conferences of like nature.

The adult mental hygiene clinics at the Lynn and Beverly Hospitals have continued under the direction of Drs. Myer Asekoff and Melvin Goodman, respectively. A cordial relationship has been maintained with both institutions. Clinics are held weekly, and patients are seen by appointment. The clinic also offers neuropsychiatric consultation service for the hospital patients of these two hospitals.

Teaching affiliations with Tufts Medical School have been maintained, and two fourth year students have been received each month for training in clinical psychiatry. The teaching plan provides 16 hours of lectures and daily ward rounds with the clinical director. Each student works up three acute cases and

writes notes on a number of chronic cases. Visits to the extra-mural clinics complete the program.

The following figures represent the amount of surgical work performed during the fiscal year: Closed reduction of fractured nose, 1; incision and drainage, 7; closure of rupture of gastric ulcer, 1; laparotomy, 2; biopsy of cervix, 3; mastectomy, 1; biopsy of rectum, 1; repair of femoral hernia, 2; hysterectomy, 2; dilation and curettage, 6; thyroidectomy, 1; amputation of right nipple, 1; enterostomy, 1; multiple saphanous ligation, 1; right nephrectomy, 1; removal of mole, side of face, 1; tonsillectomy, 3; suturing of tendons and laceration of hand, 4; septum, 1; closed reduction of hand, 1; reduction of incarcerated hernia, 1; excision of pigmented mole, below scrotum, 1; rib resection, 1; amputation of leg, 1; closed reduction of shoulder, 1; amputation of cervix, repair of perineum, 1; exploration of bullet wound, ligation of bleeding, 1; esophagotomy for removal of foreign body, 1; cecostomy, 1; excision of ovarian cyst, left, 1; salpingectomy, 1; bilateral ligation of vas, 1; supra-pubic cystotomy, 1; cystoscopy, 1; posterior gastro-enterostomy, 1; excision of epithelioma, 1; closure of colostomy, 1; right salpingo-oophorectomy, 1; excision of right axillary gland, 1; release of adhesion, obstructive jejunum, 1; appendectomy, 1; transfusions, indirect, 2; bilateral salpingo-oophorectomy, 1; drainage of intraperitoneal abscess, 1; removal of cervical polyp, 1; plaster casts applied, 21.

The venereal clinic reports the following treatments for the year: Male patients, 50 in number. Tryparsamide, 1,373; mapharsen, 349; lyso-bismol, 564; sodium thiosulphate, 7; Deckolin, 17. Female patients, 35 in number. Tryparsamide, 490; mapharsen, 484; lyso-bismol, 474.

#### **HYDROTHERAPY DEPARTMENT**

This department is an active and important aid in the treatment of patients, supplying stimulation to the inactive and sedation to the overactive. In direct response to the sedation of patients there is a lessening of destruction and

disturbance on the wards. With an increased personnel much of the valuable equipment could be used more extensively. In addition to the number of treatments listed below, 669 lessons were given to student nurses and attendants:

<i>Tonic Baths</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
Number of patients treated	436	436	872
Number of new patients	208	280	488
Number of baths	6,180	4,989	11,160
<i>Continuous baths</i>			
Number of patients treated	283	694	977
Number of new patients	134	317	451
Number of baths	4,001	13,664	17,665
Number of hours	27,956	66,691	94,647
<i>Wet sheet packs</i>			
Number of patients treated	227	400	677
Number of new patients	125	205	330
Number of packs	7,885	11,121	19,006
Number of hours	20,873	30,851	51,724
<i>Colonic irrigations</i>			
Number of patients treated	12	25	37
Number of enemas	128	456	584
Number of irrigations	27	59	86
Number of hours	23	62	85

## PHYSIOTHERAPY AND X-RAY DEPARTMENTS

Conditions remain unchanged in these departments. One technician is endeavoring to operate both the physiotherapy and x-ray departments to the detriment of the work accomplished. The amount of x-rays has increased over last year and the amount of work in the physiotherapy department has decreased.

The following is a record of the work accomplished during the year; Infra red, 877; sine wave, 143; diathermy, 584; galvanic, 0; massage, 517; exercise, 636; ultra violet, 488; total number of patients, 1,873; total number of treatments, 3,195.

In the x-ray department there were 1,241 patients x-rayed during the year.

### **PERSONAL HYGIENE DEPARTMENT**

The full-time hygienist has continued the work in this department for two purposes: first, to assist patients in developing interest in their appearance, thus improving their mental outlook; secondly, for the training of suitable patients in the technique of the beauty parlor operation. Following is the record of work accomplished: Hair cuts, 3,398; hair trims, 947; scalp treatments, 1,119; shampoos, 1,378; finger and iron waves, 1,345; facials, 1,931; eye brow arch, 364; superfluous hair removed, **1,737**; **manicures, 1,197**; **total, 13,416**.

### **DENTAL DEPARTMENT**

The dental department has continued to care for the examinations of new patients and also the chronic cases in the hospital. Careful supervision has been maintained for the cleaning of patients' teeth.

The practice of having a dental intern for two months during the summer has continued. .

Following is a record of the work accomplished in this department: Cleanings, 788; extractions: local anesthesia, 900; general anesthesia, 80; fillings: silver amalgam, 314; porcelain, 74; zinc oxide and eugenol, 429; cement, 4; oral treatments in general: Vincent's angina, toothache, canker sores, gingivitis, abscesses, 449; prosthetics: full plates completed, 31; partial plates completed, 2; bridges completed, 2; plates repaired, 22; gold bridges removed, 14; re-cemented bridges, 4; re-cemented gold inlay, 5; re-cemented tooth, 3;

false plates marked for identification, 178; miscellaneous corrections, 140; removed ring from patient's finger, 1; provided drainage on bruised fingernail, 5; referred to x-ray, 20. Dr. Joseph Doherty, consulting dental surgeon, operated on one patient who had osteomyelitis.

New patients examined, 806; patients re-examined, 447; total number of patients, 1,363; total number of treatments, 3,134; lectured 6 hours to student nurses and 5 hours to attendant nurses.

### **PATHOLOGICAL AND MEDICAL LABORATORY SERVICE**

The monthly clinico-pathological conferences have been well attended and very instructive. Many interesting cases have also been presented before a group of State hospital pathologists. This hospital also contributed to the exhibits shown at the first meeting held in Taunton by the recently formed Massachusetts Society for Research in Psychiatry. Some help was extended also to the seminar held at the Metropolitan State Hospital. A series of cross sections of the brain have been prepared which may serve as a review of neuro-anatomy for those seeking certification in neurology and psychiatry.

The basement of the Male Home has been re-organized to serve as part laboratory and part classroom for students in bacteriology and pathology. The medical school students also attended once a month in the neuropathology class.

If possible, the interesting neuropathological cases will be prepared for publication this coming year.

Following is a record of the work performed during the fiscal year: There were 116 autopsies performed out of 258 deaths, or a percentage of 45.3. Asheim-Zondek, 1; bacteriological smears, 97; blood chemistry: blood sugars, 106; non-protein nitrogen, 82; sugar tolerance, 1; blood examination: bleeding time, 16; coagulation, 18; differential counts, 1,300; fragility test, 1; hemoglobin

estimation, 2,125; platelet counts, 3; red blood counts, 2,125; reticulocyte count, 1; sedimentation index, 17; white blood counts, 2,149; cultures: bacteriological, 54; blood, 6; gastric analysis, 36; gynecological smears, 388; icterus index, 30; milk, 17; pleural fluids, 4; spinal fluids: cell counts, 184; chlorides, 4; gold sol, 184; sugars, 3; sputum examination, 163; stool examination (including cultures), 75; typing: blood, 33; cross-matching, 14; pneumococcic, 7; urinalysis, 4,256; renal function tests (P. S. P. ), 17.

## PUBLICATIONS

The following articles by members of the staff were accepted for publication during the year:

1. "A Follow-up Study of Non-Luetic Psychotic Patients with Abnormalities in the Spinal Fluid", by Philip Solomon, M.D., Robert S. Schwab, M.D. and Leo Maletz, M.D., published in the American Journal of Psychiatry, March, 1940, Vol. 96, No.5, page 1035.
2. Book Review - "The Measurement of Adult Intelligence" by David Wechsler, reviewed by Grace H. Kent, Ph.D., published in Psychological Bulletin, April, 1940, Vol. 37, No.4.
3. "Total Push Treatment at Danvers State Hospital", by Leo Maletz, M.D., published in the Archives of Neurology and Psychiatry, July, 1940, Vol. 44, No.1, page 231.
4. "Pharmacy in Psychiatric Institutions", by Robert I. Liberfarb, R Ph., published in American Professional Pharmacist, September, 1940, Vol. 6, No.9, page 576.
5. "Personalita" by Salvador Jacobs, M.D., published in Sons of Italy Magazine, October, 1940, Vol. 13, No.9.
6. "Mental Health" by Salvador Jacobs, M.D., published in Sons of Italy Magazine, November, 1940, Vol. 13, No.10.

## **RELIGIOUS SERVICES**

Religious Services are conducted every Sunday in the chapel by both Catholic and Protestant clergymen. At Middleton Colony, Catholic and Protestant Services are held once a month for those unable to travel to the main hospital. During this year, Rev. Allen W. Clark has had Episcopalian communion Service for the patients once a month in the chapel. The Jewish patients met with Rabbi Moses L. Sedar once a month. The following clergymen conducted services throughout the year: Rev. Remi B. Schuver (Catholic), Rev. Albert F. Bramble (Methodist), Rev. William Grimes (Baptist), Rev. Kenneth Henley, Rev. Adrian T. June (Congregational), Rev. Carlton Feener (Unitarian), Rev. Allen W. Clark (Episcopal), Rabbi Moses L. Sedar (Jewish).

## **SOCIAL SERVICE DEPARTMENT**

There were 922 histories taken, 518 in the hospital and 404 in the community. Eighty-one investigations were made; these include possible homes for family care patients. One outside court case was investigated. Supervision visits were made in the cases of 162 patients; these include family care patients.

During the year, 59 patients went out in family care, making a total of 95 for the year; 35 of these were transferred to visit status and 18 were returned to the hospital. At the end of the year 33 were out in family care.

Much of our work, especially in the field of family care, is difficult to record statistically-conferences with members of the staff and patients about going out, correspondence with, and visits to relatives and prospective caretakers, and all the details relating to effecting the patient's adjustment in the community, visits to the patients with doctors to make physical examinations, returning patients to the hospital to have their eyes or teeth checked, changing of their status from family care to visit or discharge.

One hundred eighty-eight child guidance clinics were held and 272 histories were obtained for these clinics. Many of the cases were carried afterwards by the social service department for supervision in the community.

Sixty-seven adult mental hygiene clinics were held in Beverly and Lynn. Seventy-four histories were obtained in these cases. The social service department continued to function after the histories were taken, helping to effect a better social adjustment in the community for the patients, interpreting their difficulties to their relatives, social agencies and others interested.

The changing of the hospital district in October, decreasing the number of hospital admissions, has already had an effect in relieving us of the pressure of history taking, which in the past has had to take precedence over other work, to the exclusion of home investigations of patients prior to release from the hospital and to their supervision in the community while on visit.

Mrs. Grace Raynes resigned in February and in April Mrs. Hildur Ekdahl succeeded her as family care social worker. Mrs. Ekdahl had had previous experience in family care work at the Worcester State Hospital.

In June, Miss Betty Rosenbaum resigned to enter Smith College School for Social Work. In September her position was filled by Mrs. Constance Hanson, a former student here in the Department of Mental Health training course for social service students.

Miss Clark and Miss Toomey completed their field work with us. For her thesis, Miss Clark undertook a study of etiological factors in a small group of alcoholics.

Miss Florence Ravin, a student from Simmons College School for Social Work, was here for two months in the summer, between her first and second years in the school.

This fall we have three students: Miss Margaret Zimmer, from Boston University School of Social Work, Miss Esther Peace, from Simmons College School of Social Work, and Mr. Benjamin Chiampa, from Boston College School of Social Work.

### **TRAINING SCHOOL FOR NURSES**

Following is the 51st annual report of the training school for nurses:

*Personnel, November 30, 1940:*

Principal of the school of nursing, 1; assistant principal of the school of nursing, 1; chief hospital supervisor, 1; day supervisors, 2; night supervisors, 1; head nurses (graduates of Danvers State Hospital), 17; hydro-therapists, 3; charge attendants, graduates 5; attendant nurses, graduates, 2.

There were 75 requests for information in regard to the training school. There were 18 responses to the information sent out. One changed her mind; one, too late for the class entering October, 1940; eight could not meet educational requirements; eight reported for duty October 7, 1940.

On November 30, 1940, our students were as follows: Seniors, 7; intermediates, 3; probationers, 8.

The affiliated nurses for the year were as follows:

*Chelsea Memorial Hospital:* Ruth Carrigan, Evelyn Hicks, Katherine J. Mostacci, Barbara Connolly, Grace E. Rich, Lillian F. Quirk, Wanda Chesun, Esther Crockett.

*Leominster Hospital:* Helen Collins, Rose DiPietro, Clajre Hartwell, Anita M. Driscoll, Virginia I. Hebert, Raphaela A. Picucci, Mary J. McCaffrey, Patricia Credit, Helen I. Lahti, Gladys Mercier, Doris A. Pray, Isabel Wilson.

*Melrose Hospital:* Mary L. Eekhoff, Mabel Caswell, Pauline McOu1loch, Goldie M. Russell, Virginia Eekhoff, Esther Maxwell, Dorothy Connorton, Catherine Titus.

*New England Sanitarium:* Earl H. Greeley, Carl Cady.

*Lowell General Hospital:* Bertha E. Cross, Lucille M. Hope, Pauline K. Sheperd, Louise E. Perron, Barbara Mason, Helen Peabody, Mary F. Slowik, Mary E. Dows.

*Somerville Hospital:* Sophie Kozacka, Ruth True, Anna Curran, America Gregor, Frances M. Smith, Mary V. Leonard.

*Addison Gilbert Hospital:* Ruth F. Steer, Harriet C. McIsaac, Constance Eldred, Dorothy L. Tibbetts, Geneva Fairbanks, Doris Thomas, Marion L. Bell, Ethel F. Mosse.

Miss Bernice L. Demone, graduate of Somerville Hospital, and Mrs. Esther Dufford, graduate of the J. B. Thomas Hospital, will complete a three months' post-graduate course December 31, 1940.

The graduation exercises were held September 26, 1940. The following nurses received diplomas: Lois Richardson Crane, Rose Alice Kazekonis, Lucille Georgianna LaPlante, Sally Helen Makie, Mary Frances Welch, Margaret Mary Wilson.

Lois Richardson Crane was awarded the Alumnae Prize of \$10.00 for the highest rank for three years.

The following nurses resigned during the year: Misses Rose A. Kazekonis, Lucille G. LaPlante, Sally H. Makie, Margaret M. Wilson, class of 1940. Miss Mary P. McCarthy, class of 1938; Misses Marcella McLean and Calnille Hennessey, class of 1939; Mrs. Eva Callahan Holland, class of 1934; Miss Dorothy M. Mullen, class of 1938.

Mildred Leonard Luscomb, class of 1938, and Marjorie Harvey Wallcott, class of 1931, Middleton Colony, resigned.

Evelyn G. Crosscup, class of 1939, has accepted a position as head nurse at Middleton Colony.

Helen McDonald Lynch, class of 1927, returned April 25, 1940. Ruth Dayon Palm, class of 1939, returned March 28, 1940.

*Attendant Nurse instruction, seventy-five hour course:* Middleton Colony: completed course, 9. Male ward service: completed course, 10; did not complete course, 3. Female ward service: completed course, 9; did not complete course, 7.

#### **EXTRA-MURAL DEPARTMENT**

Full time is given to the conduct of this department by one senior and one junior physician. This is the first year since 1930 that the summer has not been given over to the supervision of the several clinical assistants in making the annual mental and physical examinations on the resident patients at the Danvers State Hospital. This department was also relieved at two different periods during tile year of after-care clinics for adult patients on indefinite visit in the community. The figures in this report will be concerned only with work involving cases in the community and a few seen by appointment at this hospital. These include the 9 after-care adult and the 6 child guidance clinics, the traveling school clinic, the juveniles in 10 district courts, and the examination of children by appointment for summer camps, children's placing agencies, boarding institutions and similar types of referrals. The total figure of 1,337 individuals seen or studied is therefore smaller than previous years.

Except for changes in the Lawrence clinic all child guidance clinics are continued as in the past. Since the Habit Clinic, which was held at the Lawrence General Hospital under the auspices of the Division of Mental Hygiene, withdrew

from the community, March 1, 1940, our clinic inherited a number of its cages as well as its speech clinic. The speech clinic was carried on by a volunteer worker through June, 1940. When this clinic opened in September, 1940, however, no volunteer worker for remedial speech instruction was available. This phase of the work was necessarily dropped. The cases inherited from the Habit Clinic are tabulated under new cases for want of a better classification. This makes a great contrast between this year's report on this clinic data and previous years. In the 6 child guidance clinics we saw a total of 412 individual cases. Of these 295 were new cases and 117 were cages carried over from the preceding year. New speech cases comprised 102 cases and 35 were old ones carried over from previous years. Our regular speech teacher continues her remedial speech instruction in the Haverhill, Salem, and Lynn Clinics. The following table shows the distribution of child guidance clinic cases in the several cities:

City	All new	All old	New	Old speech
	cases	cases	cases	cases
Salem	43	17	21	7
Lynn	67	51	16	12
Beverly	54	18	--	--
Newburyport	16	17	--	--
Lawrence	60	9	32	--
Haverhill	55	5	33	16
Subtotal	295	117	--	--
Total		412		

This year 38 cases were examined in our classification "Outside Cases", which are those examined largely during the summer when the Child Guidance Clinics are closed. Of these, two cases were examined under "Section 99".

In the 10 District Courts at their request 181 Juveniles were examined.  
 This represents the lowest annual figure in several years.

**Table I**

Age	Total			Lawrence			Peabody			Gloucester			Newburyport		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
	89	3	92	37	0	37	4	0	4	6	0	6	2	1	3
Over 15	73	16	89	25	7	32	3	0	3	1	0	1	4	0	4
Total	162	19	181	62	7	69	7	0	7	7	0	7	6	1	7

Age	Amesbury		Haverhill		Ipswich		Salem		Lynn		Chelsea				
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.			
0 - 15	4	0	4	2	0	2	2	0	2	11	1	12	14	1	15
Over 15	1	0	1	2	5	7	1	0	1	7	2	9	18	1	19
Total	5	0	5	4	5	9	3	0	3	18	3	21	32	2	34

**Table II**

Age	Total		Normal		Sub-	Deferred		Feeble-		Psychosis		Psychosis			
	M.	F.	T.	M.	F.	N.	M.	F.	T.	M.	F.	T.	M.	F.	T.
0 - 15	89	3	92	31	1	32	42	1	43	--	--	--	16	1	17
Over 15	73	16	89	21	3	24	35	8	43	2	0	2	15	5	20
Total	162	19	181	52	4	56	77	9	86	2	0	2	31	6	37

The traveling school clinic visited 23 towns with a total of 609 children examined of whom 398 were new referrals and 211 were re-examinations.

There were 46 after-care clinic sessions held in rotation in nine cities. These are for the convenience of patients out on indefinite visit. A total number of 676 visits were made to these clinics by 227 patients, exclusive of numerous interviews with relatives. This department attended 23 of the clinics, saw 97 patients and had 397 interviews with these patients.

The department gave several talks on child guidance and mental hygiene subjects throughout the year to community groups and agencies and one radio talk. In addition to the usual monthly lectures to clinical assistants a series of 4 lectures is now given to each new group of affiliate nurses every three months. This includes our own senior nurses in the Danvers State Hospital training school as well. Each clinical assistant visits a child guidance clinic during his month at our institution.

### **PSYCHIATRIC CLINICS**

The clinic program has remained unchanged during the past year .These clinics are directed by the out-patient physician, aided by members of the hospital staff. All patients on visit are requested to report at regular intervals in order that progress may be noted and advice given as needed. Even though two clinics were added last year, the load in three of the busy centers is heavy. The general community is invited to make use of these facilities at any time. These out-patient clinics are conducted at Newburyport, Haverhill, Lawrence, Salem, Lynn, Chelsea, Malden, Gloucester and Boston.

### **OCCUPATIONAL THERAPY DEPARTMENT**

*Personnel:* The department consists of 5 Occupational therapists (4 graduates of the Boston School of Occupational Therapy, 1 graduate of the School of Handicraft and Occupational Therapy); 1 male attendant, who is a registered Occupational Therapist; and 1 physical educational instructor, a graduate of Posse-Nissen. The other members of the department include 1

industrial worker, 1 recreational worker and two groups of students, affiliating from the Boston School of Occupational Therapy for a six months' period.

*Changes in personnel:* Mrs. Olive Campbell, acting director, was appointed director, and Miss Jane Mulheron joined the department in April. Mr8. Ina Hardy McLeod replaced Miss Constance Fuller, who left to accept a position in Peoria, Illinois. Miss Alison Chapple was transferred to the Metropolitan State Hospital, and Miss Gertrude Ball has taken her place.

*Department activities:*

I. Reception service.

There were 934 patients who received reception service. This consists of interviewing the patients within three days after admission; explaining the purpose and aims of the hospital, answering any questions which the patients may care to ask and to help the patient adjust to the hospital. As a result of these interviews, patients may be recommended for Occupational Therapy or for hospital industry.

II. Occupational therapy classes.

There were 920 female patients and 658 male patients treated during the year, making a total of 1,578 individual patients treated.

1. Male classes.

- a. Acute-class is conducted on ward H-3 for acute and recently admitted patients. The purpose of this class is to orient and adjust the patient. There were 650 treatments during the year.
- b. Pre-industrial class conducted in the occupational therapy shop. There were 352 treatments given in this class, the purpose of which is to prepare the

patient to adjust to industry. From the two male classes, 212 patients were transferred to hospital industry.

- c. A newly organized class for disturbed male patients has been organized on J-4. The purpose of this class is for habit training and to direct energies in a more productive channel.

## 2. Female Classes.

- a. Acute-class is conducted on B-4 and admission ward for acute and newly admitted patients. The purpose of these classes is to orient and adjust the patient. There were 682 treatments given in this class.
- b. Pre-industrial classes are conducted on wards C-2 and C-3; B-2 and B-3; A-2 and A-3. These classes consist of deteriorated and disturbed patients. These classes aid in habit training and are an aid to the economic set-up of the hospital by preparing these patients in useful production. There were 2,969 treatments given in these six classes.

## III. Educational Library:

As an aid to the distribution of books to the different wards, a library book truck has been constructed in the occupational therapy shop. This has greatly increased the number of books distributed each week. The hospital library now consists of 3,039 books; an increase of 395 books for the year. Some of these books have been received by donation and some have been purchased. The library is open daily to parole patients. Once a week groups of non-parole patients are brought to the library and are aided in selecting their reading material by the occupational therapist.

Interesting exhibits arranged by the occupational therapy students were shown in the library each month.

Topsfield Fair: The hospital exhibit has proven to be an attraction at the annual fair and an aid in educating the public to the mental hospital. The patients look forward to visiting the fair each year and this year it was possible to increase the number of patients to 180.

Correspondence courses: State correspondence courses are open to any patient expressing an interest in them.

Hill Topics (the hospital newspaper): A bi-weekly publication of four sheets. The circulation has increased from 500 copies to 625. The contributions from the patients to the paper have increased greatly during the past year. As the aim of the newspaper is to be a patients' organ, we hope this will continue.

#### IV. Physical education.

All candidates for physical education classes are prescribed by the physicians on weekly trips, with the exception of backward groups (male and female), where as many patients as possible are contacted daily. These ward groups are supervised by the charge nurse or attendant. The program varies from group singing, marching, dancing, to beanbag, horseshoes and ping-pong. In this way the acute as well as chronic patients participate in some form of physical education. The chapel serves as the center where regular "gym" classes and music therapy groups are conducted throughout the winter. Activities have been newly organized on the admission wards where patients may participate in ping-pong, group singing, dancing, horseshoes, etc. A varied program is carried on out of doors during the summer months, which includes tennis, shuffleboard, horse-shoes, badminton, ping-pong, croquet, deck tennis and hikes. Newly organized classes are carried out twice a week with the deteriorated females out of doors where they may participate in group games, basketball, volleyball, beanbag, horseshoes, etc.

Physical education classes include:

Male acute and improved-average monthly attendance 50-60.

Male deteriorated-includes "big detail" and back yard, 70-75.

Female acute and improved-average attendance, 102.

Female deteriorated-wards average attendance, 124.

Female deteriorated back yard-average attendance, 146.

A horseshoe tournament was started and proved very interesting for the male patients, with an attendance of 21. Annual pool tournaments are also held.

#### V. Recreational therapy.

Ward classes are conducted twice daily, cards, checkers, beano, bowling and other games are played for the purpose of stimulating and socializing the patient. Weekly choir rehearsals are conducted and this year we have been fortunate in having a weekly W. P. A. band concert. This orchestra also plays for the regular Monday night dance. An innovation during the summer was the weekly picnics for groups of industrial workers. Bus trip tours were arranged, three in number, to the Fellsway Zoo and the North Shore, and were greatly enjoyed and were beneficial in the patient treatment.

A class in recreation has been started in ward 1-3 for deteriorated patients; cards, checkers and beanbags have proved most stimulating.

During January rehearsals were held for a minstrel show which was produced in March with a cast of 65 patients.

In July a carnival was sponsored by the department, at which games and competitive sports were participated in and prizes awarded.

## **PSYCHOLOGY DEPARTMENT**

At the opening of the year our three assistants were Josphine Tinsley of Tufts College, Marjorie Burnham, also of Tufts, and Barbara Foster, of New Hampshire University. During the year there was a turnover in the personnel, and the assistants for the latter part of the year were Eleanor Brill of Wheaton College, Jane Parker of Tufts College, and Annette Gireliua of Tulane University.

The psychometric work for the year included 1,634 individual examinations, grouped as follows: Hospital patients, newly admitted cases, 443; children studied in the various clinics, 260; juvenile court cases, under Section 215, 171; routine "school clinic" examinations, 588; examinations of hospital attendants, 99; patients studied in adult clinics, 12; children examined for school entrance, 20; Unclassified psychometric examinations, 41. Total individually presented examinations, 1,634.

In addition to the formal examinations, the work of the year included 91 ward notes concerning newly admitted patients who were not well enough to come to our office; and 80 "re-admission notes" on patients who had already been examined by the department.

The members of the department have presented 61 lectures on psychology and psycho- metrics in the nurses' training school. The medical internes and the social service students working in the hospital during the year have received informal instruction concerning the use of psychometric tests.

## **CONSTRUCTION DEPARTMENT**

During the past year this department has taken on an unusual amount of new construction work. The second floor of the front center section has been remodeled into small apartments for members of the staff. The former staff dining room has been remodeled into an office for the Superintendent and the beginning of a new medical library is underway in this section.

At Middleton Colony, the basement and first floor of the old kitchen have been practically reconstructed, with considerable work remaining to be done. The dining room wall at Middleton Colony has been replaced with brick.

The necessary work on the new incinerator was completed.

There has been considerable work done at Cottage No.5 in order to make this house suitable for residence.

In the barn, a new farm office was completed, new scales installed, mastic flooring placed in the cow barn and foundation was installed for the new silo, which was also painted.

The roof on the industrial and occupational therapy shops was entirely replaced. The roof of the "A" building sunparlor was replaced.

Cottages No.4 and No.5 were repainted on the outside.

During the first part of the year, considerable aid was given by W. P. A. labor, but later, because of difficulty in obtaining skilled labor, much of the work was performed by our maintenance department, which personnel was unchanged in numbers since last year's report.

In addition to the above report, the routine repairs necessary in the hospital were carried out.

#### **ENGINEERING DEPARTMENT**

One of the most urgent needs of the year was that of an incinerator. It was designed and built by the hospital maintenance men. It has been located in the vacant coalbunker at Middleton Colony. The reasons for this location are as follows:

Paid labor is available there to operate the equipment.

Plenty of chimney capacity is evident beyond the requirements of the boiler plant.

There is excellent opportunity to install an overhead feed.

The flue arrangement is such that the necessary equipment can be added later to make use of the waste heat if there proves to be enough combustible refuse to make it profitable.

New machinery installed in the laundry: One washing machine and three garment presses. All of the old presses were rearranged for more convenient operation and all piping was renewed. One old washing machine was moved to a new location to make room for the new washer.

A three-compartment vegetable steamer and a large gas-fired broiler were set up in the diet kitchen.

An automatic, electrically heated doughnut machine was installed in the bakery. Goldsmith No.3 dayroom and dormitory were each equipped with one unit ventilator. This was a much needed addition and is a big help to the comfort and health of the patients there.

The "A" and "1" buildings were equipped with drinking water coolers. These are greatly appreciated by everyone as the taste of the water is much better when it is cold.

A spot welding machine and a new lathe were added to the machine shop. The welder is most essential in the repair of wire dish baskets and sheet metal articles. The lathe replaces one which was worn to the point where accurate work was impossible.

A new toilet room was built next to the farmer's office at the barn, and plumbing fixtures consisting of toilet and lavatory were installed.

The old cable connecting our city fire alarm boxes was found to be in very poor condition. This was replaced with a new one of the latest type for such work.

A used steam boiler was obtained from another institution in this department and was set up in our piggery. Heating lines were installed beneath the piggery floors so that newborn pigs are kept warm and dry. This reduces the mortality to a great extent.

A new water heater was also installed so that now there is a plentiful supply of hot water for use in the slaughterhouse.

A small start has been made on our program of street lighting. The main cables and transforming equipment for 25 lights have been installed; however six lights are all that could be installed this year. We expect to continue this program in 1941.

Grove Hall has been equipped with automatic heat control apparatus. This will prevent overheating, with a resulting saving in fuel expense, and a more comfortable and healthful atmosphere for the patients.

Two pieces of equipment were repaired by the metal spraying process. Both jobs have proved to be satisfactory and showed a large saving over other methods of repair. The shaft of one of our extractors was repaired in this way, saving \$200.00 over the cost of a new shaft.

New electric motors and V-belt drives were purchased this year to give individual drive to each machine in the carpenter shop. These have not been installed yet, but will be as soon as the more urgent jobs are completed.

A large amount of the labor of the maintenance department has gone into the rebuilding of the Middleton Colony kitchen and dining room, and the changes made in the administration building at the main hospital. None of these jobs are as yet completed.

We have on hand 15 hot water mixers and 21 large unit-ventilators which we have not been able to install because of the rebuilding jobs mentioned.

The concrete fuel oil storage tanks at the main power plant have developed cracks and leaks so that repairs had to be made at once.

One tank has been oil-proofed. Our electric generating equipment is still operating without serious trouble, but we wish to point out the fact that it is overloaded at times far in excess of the manufacturer's guarantee. Under such treatment most anything can happen to this equipment.

## FARM AND GROUNDS

*Field crops:* The meadows and strip adjacent to the former railroad track, comprising about twenty acres, have been seeded to mixed grasses and clovers and promise a substantial yield for the Bummer of 1941. The Bide hill on Route 1 has been plowed in contours and seeded to alternate strips of Rosen rye and grasses. This rye will be plowed under in the spring, the strips used for annual crops until fall, when they will be seeded to permanent grass mixtures. This contour plowing and strip cropping has been carried on in cooperation with the United States Soil Conservation Service, which has given us much valuable assistance in controlling erosion. The program of this service aims at the gradual and partial elimination of corn as silage and its replacement with clovers and grasses to be used as hay ensilage.

The corn crop was slightly under normal in tonnage, although of excellent quality due to the large number of well developed ears. There was sufficient silage (both corn and grass) to fill all the silos including the one erected this year.

The hay crop was somewhat light but will furnish sufficient stock hay to last until late in the winter.

About seven acres were seeded to Ladino clover and appear to be coming through the winter satisfactorily.

An unusually large acreage was seeded to winter rye this fall. This serves the dual purpose of somewhat limiting water erosion and gives a quick, vigorous growth to be turned under in the spring.

A considerable tonnage of oats and peas was raised, which was put into the silos.

*Gardens:* The garden crops suffered to some degree this season, both from drought and the unseasonable and unprecedented frost in August. This last affected the squash with particular severity and, with the drought, resulted in a partial failure of the crop.

The yield of the green bean areas was excellent and an unusually large number were canned. The Swiss chard acreage was expanded and a large amount of this was also canned.

The tomato yield was less than normal, as was the cucumber production. The rutabaga turnips ran somewhat small but were of excellent quality. Both beets and carrots yielded sufficiently to fill the needs of the institution.

Green peas were eliminated from the garden as an unprofitable crop and the plantings of sweet corn were sharply curtailed because of the prevalence of the corn borer and corn worm.

*Cattle:* During the year 1940 the milk production decreased 181 lbs. per cow. This demonstrates most forcibly the heavy losses incurred through the ravages of mastitis and further proves the necessity of remodeling the cow barn. This would eliminate, partially at least, the incalculable damage suffered from crushed teats and injured udders. Practically all the decrease mentioned may be attributed directly to this cause.

A rearrangement of the milk processing equipment has resulted in a sharply lowered bacteria count and a more complete sterilization of milk cans and utensils.

*Swine:* This department has enjoyed a most successful year, despite the discouraging reverses suffered in the spring from disease. This resulted in a heavy mortality among the little pigs, which has been partly compensated for by fall farrowings. These were made possible by the installation of a heating system in the piggery which appears to be functioning most satisfactorily.

We now have a total of thirty new houses of the modified "A" type. These are to be used for Bummer shelters and considerable progress has been made in preparing a permanent place for them in a shady and well-drained location.

*Orchards:* The orchards have been carefully pruned and, sprayed with highly satisfactory results. The apple yield was larger than any in recent years and the fruit was mainly of good size and quality.

*Grounds and roads:* The roads have been maintained in their usual good condition. The road from Farm Hall by the piggery was heavily graveled and later treated with asphalt. The main road to the Colony was likewise patched and asphalt applied. These treatments have resulted in a greatly improved highway.

The road around "The Hill" was scarified, some new gravel applied and treated with asphalt, which will serve to maintain a much more stable surface on this much-traveled way.

Snow markers have been made and painted in contrasting colors which constitute an aesthetic improvement over the rough, unpainted markers of previous years.

Work goes forward on the parking lot as time and circumstances permit. The filling removed is used in various ways as required.

Considerable landscaping was carried out about Cottage No.9. Trees and shrubbery were set and the entire area before the house was re-surfaced with loam. This was partially seeded and will be completed as soon as weather permits.

All brush was cut along the Ipswich River and burned; also, the plantings of spruce on the "River Road" ledges were cleaned of brush and weeds. This treatment was carried out along all stone walls, pig yards and other places where brush and unsightly weeds had taken root.

The old and dilapidated pig-pasture fence beside the Colony road has been removed and replaced with new wire strung on new posts.

The section of the "River Road" which was removed for filling is in process of repair and will be replaced with a stone and gravel fill.

A qualified tree Burgeon was employed for several weeks and performed excellent work in trimming and repairing hurricane damage along Hathorne Avenue.

The greenhouse has continued to fill the institution's floral requirements in its usual efficient manner. Easter lilies, poinsettias, etc. are produced in abundance according to seasonal and holiday demands. Cut flowers and potted plants have been produced in sufficient amounts to keep the wards supplied. Enough tomato, egg-plant and pepper plants were produced to fill the farm requirements.

### **Acknowledgements**

The care of a large institution involves the assistance and co-operation of many persons, both inside and outside. I recognize with hearty gratitude the efforts of our own working force; the support received from the Board of Trustees and the Department of Mental Health; the voluntary services of those who have

provided entertainment for out patients; and the contributions received during the year from our friends in the community.

### **Valuation**

November 30, 1940

Real Estate --	Land, 517.68 acres	\$90,565.00
	Buildings and betterments	2,832,823.85
		\$2,923,388.85

### **Financial Report**

*To the Department of Mental Health:*

I respectfully submit the following report of the finances of this institution for the fiscal year ending November 30, 1940.

### **Statement of Earnings**

Board of Patients	\$99,544.44
Personal Services	314.47
Sales:	
Travel, transportation and office expenses	\$30.29
Food	959.05
Clothing and materials	186.95
Furnishings and household supplies	25.36
Medical and general care	109.59
Heat and other plant operations	39.83
Garage and grounds	6.99
Repairs, ordinary	661.71
Farm (livestock, \$400.93; hides, \$144.86; bags and barrels, \$290.32; wood, \$68.75; sundries, \$118.18)	1,023.04
Total sales	3,042.81

Miscellaneous:

Interest on bank balances	\$35.00
Rents	535.28
Total miscellaneous	570.28
Total earnings for the year	\$103,472.00
Total cash receipts reverting and transferred to the State Treasurer	\$103,469.25
Accounts receivable outstanding December 1, 1939	\$58.42
Accounts receivable outstanding November 30, 1940	61.17
Accounts receivable increased	\$2.75

**Maintenance Appropriation**

Balance from previous year, brought forward	\$4,916.44
Appropriation, current year	986,270.22
Total	\$991,186.66

Expenditures as follows:

Personal services	\$545,367.08
Food	141,861.87
Medical and general care	24,097.49
Religious instruction	1,992.90
Farm	31,407.30
Heat and other plant operation	109,956.23
Travel, transportation and office expenses	8,817.17
Garage \$5,406.47; grounds \$1,837.66	7,244.13
Clothing and materials	22,828.26
Furnishings and household supplies	31,673.73
Repairs ordinary	17,958.02
Repairs and renewals	18,809.05
Total maintenance expenditures	962,013.23
Balances of maintenance appropriation, November 30, 1940	\$29,173.43
	\$29,173.43

### **Special Appropriations**

Balances December 1, 1939, brought forward	\$6,691.97
Appropriations for current year	
Total	\$6,961.97
Expended during the year	\$1,896.60
Reverting to Treasury of Commonwealth	19.83
	-----
	1,916.43
Balances November 30, 1940, carried to next year	\$5,045.54

Appropriations	Act or Resolve Chap. Year	Total Amount Appro- priated	Expended during fiscal year	Total Expended to date	Balance at end of year
Renovation electric wiring	356-1938	\$17,600.00	\$1,896.60	\$13,962.93	\$3,637.07
Re-slating roof	356-1938	6,500.00		5,694.11	805.89
Hurricane and flood damage	507-1938	37,800.00		37,197.42	602.58
Linoleum	356-1938	5,00.00		4,990.60	9.40
Renovation and improvement of cottage	497-1938	1,500.00		1,489.57	10.43
		\$68,400.00	\$1,896.60	\$63,334.63	\$5,065.37

### **Per Capita**

During the year the average number of patients has been, 2,374.

Total cost of maintenance, \$962,013.23.

Equal to a weekly per capita cost of \$7.7929.

Total receipts for the year, \$103,469.25.

Equal to a weekly per capita of \$.8382.

Total net cost of maintenance for year, \$858,543.98.

Net weekly per capita, \$6.9547.

Respectfully submitted,

Hulda Aronson,  
*Treasurer*  
 Walter S Morgan  
*Comptroller*

**Statistical Tables**  
**As Adopted by the American Psychiatric Association, Prescribed by**  
**The Massachusetts Department of Mental Health**

Table 1 *General Information*

(Data correct at end of institution year November 30, 1940)

Date of opening as a hospital for mental diseases : May 12, 1878

Type of hospital: State

Hospital plant:

Value of hospital property:

Real estate, including buildings	\$2,923,388.85
Personal property	101,040.00
Total	<hr/> \$3,024,428.85

Total acreage of hospital property owned, 517.68044

Total acreage under cultivation during previous year, 364.5

Officers and employees:

	Actually in Service at End of Year			Vacancies at End of Year		
	M.	F.	T.	M.	F.	T.
Superintendents	1	-	1	-	-	-
Assistant physicians	9	-	1	-	-	-
Clinical assistants	1	-	1	1	-	1
Total physicians	11	4	15	1	-	1
Stewards	2	-	2	-	-	-
Resident dentist	1	-	1	-	-	-
Pharmacists	1	-	1	-	-	-
Graduate nurses	2	48	50	-	-	-
Other nurses and attendants	143	164	307	1	1	2
Occupational therapists	-	5	5	-	-	-
Social workers	-	5	5	-	-	-
All other officers and employees	106	70	176	3	-	3
Total officers and employees	266	296	562	5	1	6

\*Including excess quota and 30 student nurses filling 15 positions.