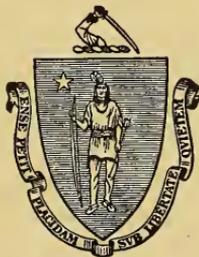

NINTH ANNUAL REPORT

OF THE

TRUSTEES OF MASSACHUSETTS HOSPITALS
FOR CONSUMPTIVES.

NOVEMBER 30, 1915.



BOSTON:
WRIGHT & POTTER PRINTING CO., STATE PRINTERS,
32 DERNE STREET.

1916.

APPROVED BY
THE STATE BOARD OF PUBLICATION.

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TRUSTEES.

ARTHUR K. STONE, M.D., *Chairman.*

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JOHN B. HAWES, 2D, M.D., *Secretary.*

STATE HOUSE, BOSTON.

The Commonwealth of Massachusetts.

REPORT OF THE TRUSTEES OF MASSACHUSETTS HOSPITALS FOR CONSUMPTIVES.

To His Excellency the Governor of the Commonwealth and to the Honorable Council.

In accordance with the act establishing this Board (chapter 474, Acts of 1907) we submit the following report:—

The four institutions under the control of this Board, the North Reading, Lakeville, Westfield and Rutland State sanatoria, caring for about 1,000 patients, have passed an active and successful year. They have provided a total of 388,052 days of treatment for 2,482 patients.

It is the intention of the trustees, in conformity with the general policy of the State with regard to tuberculosis, ultimately to conduct four sanatoria for the active treatment and arrest of early and favorable cases of pulmonary tuberculosis. This ideal can only be attained when there are enough beds in municipal tuberculosis hospitals so that the trustees no longer have to give so much consideration to the question of segregation of the open case of tuberculosis and the protection of the public as they do at present. The comprehensive plans of the State Department of Health, with its efficient, active district inspectors, give us the greatest hopes that there will develop in time an enthusiastic co-operative spirit throughout the Commonwealth in regard to all health matters, and that when this time comes the four institutions under our charge will be thus enabled to play the part assigned them, of doing real sanatorium work and that alone. Therefore we bespeak the hearty co-operation and support of all municipal hospitals, health boards, private charities and also of every practicing physician in the Commonwealth to aid us in this endeavor.

THE CLASS OF PATIENTS ADMITTED TO THE STATE SANATORIA.

In the early years of our State sanatoria, when there were comparatively few local tuberculosis hospitals, it was deemed wise to admit to each of the institutions under the charge of this Board, with the exception of the Rutland State Sanatorium, patients in whatsoever stage of the disease, whether incipient, moderately advanced or far advanced. Although it was fully realized that to carry out a strict sanatorium régime under these conditions was well-nigh impossible, yet it seemed of paramount importance to get these dangerous and most infectious cases away from their homes as soon as possible. Since that time, five or six years ago, there has been a steady increase in the number of beds in local tuberculosis hospitals, — from 330 in 1911 to 1,120 at present. During the past year, therefore, the Board has felt that more discrimination should be used in the selection of patients for the State sanatoria than has been the case in the past, and that the institutions at North Reading, Lakeville and Westfield should be sanatoria in fact as well as in name.

While the Rutland institution is the only one set apart from its opening in 1898 for incipient and early cases, at the North Reading, Lakeville and Westfield sanatoria patients in the far advanced or progressive stages are now no longer admitted except in special instances, unless there are beds actually lying vacant. The Board does not feel that any injustice will be done to any patient by making such a rule as this. From long experience it has learned that when most patients reach a far advanced stage, and are going steadily down hill, they naturally prefer to return either to their own homes or to a local institution where they can be near relatives and friends. It is right and proper, therefore, not only for the welfare of the sanatorium and for the other patients, but also for the patient himself, to decline to admit those who are manifestly in an incurable condition.

WAITING LIST.

The waiting list for the four sanatoria is a distressingly long one. At the present time there are about 400 men and women upon this list. It is necessary for a man to wait three months

and for a woman a slightly shorter time before they can be admitted. Although local accommodations in the way of municipal hospitals, etc., are constantly being increased, the demand on our State sanatoria seems in no way diminished, but rather the reverse. This does not necessarily mean that tuberculosis in this State is increasing, but it is, on the other hand, a decidedly hopeful sign, in that owing to the establishment of local dispensaries, etc., more cases than heretofore are being diagnosed and are seeking sanatorium treatment.

SANATORIUM AND HOSPITAL CLASSES.

The system of dividing the patients at our State sanatoria into two groups — the sanatorium and the hospital classes — has been continued as heretofore with equally good results as in the past. Owing to the length of our waiting list the Board feels that it is proper to be more strict in readmitting patients who have had one opportunity at the State sanatoria and who have not seen fit to co-operate with the physicians nor to take advantage of the treatment offered them there. These are the patients which comprise the hospital class. It is only in special instances, therefore, that patients who are discharged from our sanatoria as of the hospital class are readmitted. On the other hand, patients who have been in the sanatorium class, and who have co-operated in every way with their physicians and have really tried to get well, are on request discharged on parole, which means that should they suffer a relapse later on and need further treatment they can be readmitted without waiting their regular turn on the list. In this way a premium is put upon good behavior and earnestness of purpose at our sanatoria.

AFTER-CARE WORK — DISCHARGED PATIENTS.

As mentioned in previous reports the Board has felt that the responsibility of the State towards the tuberculosis patients being cared for in the State sanatoria does not altogether end when the patient is discharged from the institution. In view of this feeling, for the past three years the Board has engaged the full-time services of a special worker, Miss Bernice W. Billings, whose sole duty it is to visit, advise and assist in every way possible those patients who have been discharged

from State sanatoria. Her detailed report will be found elsewhere. As might well be supposed, this has been an arduous task and one which it is quite impossible for any one person to cope with successfully. With the help of the recently reorganized State Department of Health, however, this problem is rendered an easier one.

The law passed in 1910, requiring a local tuberculosis dispensary in every city or town of 10,000 inhabitants or over, which in most instances had been allowed to remain a dead letter, has been tactfully enforced by the present Health Department. A tuberculosis nurse on full time or part time, as local needs may require, has been looked upon as an absolutely essential part of such local dispensaries. Whereas before the existence of these local tuberculosis dispensaries it was only in rare instances that patients discharged from our State sanatoria could be referred to a place where they could be carefully followed up and kept under observation, it is now quite different. In almost every case it is possible to direct a patient leaving our sanatoria to some well-equipped tuberculosis dispensary where the best of advice and treatment can be obtained, and where the patient can be followed up during that critical period following the discharge from the sanatorium. Miss Billings' work, therefore, will be in future largely devoted to looking up patients coming from isolated country districts, where there is no local dispensary or where the dispensary is at such a distance that it is hard for the patient to make regular visits. While there will always be a large number of patients who will be in need of Miss Billings' services, the Board feels that her work will be more and more that of bringing about a closer co-operation between the State sanatoria on the one hand, and local hospitals and dispensaries on the other, than in looking after this or that individual patient. The Board feels at present, as it has always felt in the past, that a comparatively small number of patients can be actually permanently cured or arrested during their residence at our State sanatoria, and that this process of cure must be continued after the patient leaves the sanatorium. The proper care of the discharged sanatorium patient, therefore, is one of the most important problems of tuberculosis work.

After-care Work, Nov. 1, 1914, to Nov. 1, 1915.

	Number.	Per Cent.
Cities and towns,	149	-
Calls,	879	-
Histories obtained,	602	-
Histories sent to the State Department of Health (27 of these were ex-sanatoria patients and 86 were special histories),	113	-
Ex-sanatoria patients,	516	-
Patients discharged from Rutland,	169	32.75
Patients discharged from Lakeville,	122	23.64
Patients discharged from North Reading,	121	23.46
Patients discharged from Westfield,	104	20.15
Classification on admission: —		
Incipient,	83	16.08
Moderately advanced,	210	40.70
Advanced,	216	41.86
Not examined,	7	1.36
Classification on discharge: —		
Arrested,	170	32.95
Improved,	190	36.82
Unimproved,	111	21.51
Not examined,	45	8.72
Positive sputum on discharge,	217	42.00
Patients who left the State, etc.,	77	14.92
Patients who have died,	43	9.31
Patients visited,	391	75.77
Condition of patients at time of visit: —		
Good condition,	190	36.82
Fair,	90	17.44
Ill,	111	21.51
Patients working at time of visit,	175	44.76
Patients not working at time of visit,	216	55.24
Patients under medical supervision,	266	68.10
Patients not under medical supervision,	125	31.90
Out of 391 patients visited, adequate instruction by boards of health has been given to	170	43.48
Out of 516 homes visited, the local boards of health have disinfected	241	46.71

EX-PATIENTS ON THE PAY ROLL.

The Board has still continued its policy of offering employment to patients who on discharge are found to be suited for work which the sanatorium can provide. At the North Reading Sanatorium during the past year there have been 8 ex-patient employees; at Lakeville Sanatorium, 10; at Westfield, 37; and at Rutland, 91, making a total of 146 ex-patients who have been given employment and kept under proper medical supervision in the four State sanatoria.

The employment of ex-patients at our sanatoria is not without certain disadvantages. The question of segregating these

tuberculous employees, or at least those who although perfectly able to work still have bacilli in the sputum, from the nontuberculous employees is an important one and one that must be satisfactorily met. Again, although from the point of view of the individual employee it is an excellent thing for him to be given work under constant supervision, it is doubtful whether from the point of view of economy to the State this is a wise procedure. A certain number of these patients will inevitably break down and cause consequent detriment to the efficiency of the working staff; and finally, it has come to notice that there is a certain bond existing between most ex-patients staying on at the sanatorium as employees and their former friends and companions who are still patients, which does not always work to the advantage of the sanatorium management. At the same time, it must be recognized that some of our most efficient and trusted employees are ex-patients. On the whole, for the best interests of the sanatorium administration the Board is inclined to restrict rather than to extend this policy of employing ex-patients. In the meantime the whole matter will have careful consideration.

EDUCATIONAL WORK.

The educational work of the Board has been continued as in the past and has steadily increased. Many letters touching on every phase of the tuberculosis question have been written to physicians, patients and their friends, and anti-tuberculosis workers not only in Massachusetts but all over the country. The office of the Board has become an information bureau to which patients, physicians and others are constantly coming to interview the secretary of the Board in regard to the sanatoria and other questions connected with the State work. Members of the Board and the four superintendents have given many informal talks on the subject of tuberculosis to the patients in the sanatoria, and outside at women's clubs, meetings of physicians and other public meetings. In addition to this, articles of medical and scientific interest, based on work carried on in the sanatoria, have been published in medical journals from time to time. A list of such articles is appended. The "Journal of the Massachusetts State Sanatoria," a paper pub-

lished at the Rutland State Sanatorium, in addition to giving items of news from the four sanatoria, contains numerous articles of interest and value not only to patients but to their friends and to the public at large. This paper is distributed to the patients, anti-tuberculosis associations, physicians and to many others who have asked that their names be put upon the mailing list. The New England Tuberculosis Conference was held at Springfield with one day's session at the Westfield State Sanatorium. District medical society meetings have been held at the Lakeville State Sanatorium and elsewhere. His Excellency Governor Walsh appointed the superintendents as delegates to the National Tuberculosis Association and to the American Sanatorium Association. In addition to this our superintendents and members of the Board have taken active part in numerous meetings of health boards, medical societies, etc., on matters relating to tuberculosis.

The following articles, based on anti-tuberculosis work in Massachusetts, in our State sanatoria and elsewhere, have been written and published during the past year by members of the Board and the superintendents: —

Dr. Arthur K. Stone: —

The Policy of the State of Massachusetts regarding Tuberculosis.
(Massachusetts Medical Society, June, 1915.)

Dr. Elliott Washburn: —

The Rôle of the State Sanatorium in the Tuberculosis Problem.
(Boston Medical and Surgical Journal, March 25, 1915.)

Non-tuberculous Cases in the State Sanatoria. (Boston Medical and Surgical Journal, Oct. 25, 1915.)

Dr. Henry D. Chadwick: —

Discussion of paper of Dr. John L. Morse, "Tuberculosis in Children." (Massachusetts Medical Society, June, 1915.)

Dr. Sumner Coolidge: —

Four Essentials of Sanatorium Treatment. (Journal of Outdoor Life, November, 1915.)

Dr. N. B. Burns: —

Some Possibilities of Treatment among the Tuberculous Insane.
(Wm. L. Worcester Series of Danvers State Hospital Papers.)

Dr. W. B. Howes: —

Differential Diagnosis in Pulmonary Tuberculosis. (Read before Worcester County Homœopathic Medical Society. Not yet published.)

Dr. John B. Hawes, 2d:—

The Treatment of Tuberculous Cervical Adenitis. (Massachusetts Medical Society, June, 1915.)

The Responsibility of the General Practitioner for the Care and Supervision of the Discharged Sanatorium Patient. (Boston Medical and Surgical Journal, May 27, 1915.)

The Present Situation in Regard to Local Tuberculosis Hospitals. (Boston Medical and Surgical Journal, Aug. 12, 1915.)

Errors in the Diagnosis of Chronic Pulmonary Disease. (Boston Medical and Surgical Journal, Oct. 28, 1915.)

Do's and Don'ts in the Diagnosis of Early Pulmonary Tuberculosis in Adults and Children. (Boston Medical and Surgical Journal, May 20, 1915.)

Tuberculosis in the Aged. (American Journal of Medical Science, May, 1915.)

REPORT ON LARYNGEAL TUBERCULOSIS AND THE TREATMENT OF OTHER NOSE AND THROAT CONDITIONS.

Cases of tuberculosis in the region of the throat are classified as laryngeal tuberculosis when there is infiltration of a part or whole of the larynx with or without ulceration. The parts usually involved are the arytenoids, ventricular bands, cords and epiglottis; also there may be roughening and tumefaction in the interarytenoid space. Small or even moderate growth of tissue in the interarytenoid space, if not accompanied by change elsewhere, is not classified as tubercular laryngitis.

Number of Cases.

SANATORIUM.	Total.	Male.	Female.	Percentage.
Rutland,	70	46	24	7.9
North Reading,	28	16	12	11.0
Lakeville,	53	35	18	
Westfield,	18	10	8	

The smaller proportion of cases at the Rutland State Sanatorium is due to the fact that this institution is reserved for patients in the early and incipient stages of the disease, while at the other three institutions patients in all stages are accepted. At the Rutland Sanatorium there

were 9 cases with involvement of the epiglottis; at the North Reading Sanatorium, 5; at the Westfield Sanatorium, 4; and at the Lakeville Sanatorium, 3 patients with this complication.

Treatment.

Rest of the larynx by non-use of voice is of first and paramount importance. A conservative feeling is developing regarding application of medicinal agents to the larynx. Dr. Lyon of the Rutland State Sanatorium says, "We have learned that a tuberculous larynx may be overtreated; while an ulcerated cord, arytenoid or ventricular band will stand vigorous treatment for a short time, sooner or later, if strong solutions of lactic acid or formaline are used, the surrounding tissues will become badly inflamed."

Galvano-cautery has been applied in two cases at Rutland by the indirect method with cocaine anæsthesia. In each of these cases the patient was discharged six months later with the throat apparently cured.

Results of Treatment.

At the Rutland State Sanatorium, out of 70 patients with laryngeal involvement 27 are recorded as apparently cured, 14 improved, 9 unimproved, while 20 progressed unfavorably. At the North Reading State Sanatorium, out of 28 cases 6 are recorded as apparently cured or improved. At the Westfield Sanatorium, out of 18 cases 3 are recorded as apparently cured or improved.

Symptoms.

The most important symptom of laryngeal tuberculosis, and the one to which treatment is directed, is pain. This symptom is of importance not only because of the actual suffering of the patient but because it prevents the patient from taking a suitable amount of food. Of the 70 Rutland cases, 15, or 21 per cent., had pain as a prominent symptom. At the other sanatoria the percentage was still higher.

Amputation of the Epiglottis.

This, a major operation in throat work, I have performed twice with marked relief from pain. Injections into the superior laryngeal nerve for the relief from pain have been continued with good results. A solution consisting of 80 per cent. alcohol, quinine and urea hydrochloride, and 2 per cent. novocaine has been used. I am satisfied that this method is worthy of greater use than has been heretofore given to it. It is an effective method to relieve pain, and becomes more effective as one becomes more skillful in its use.

The Relation between Enlarged Tonsils and Cervical Adenitis.

This important question has been given careful study during the past year. I have reached the conclusion that there is no direct relation between the presence of enlarged healthy tonsils and cervical adenitis. The following figures from the Westfield State Sanatorium, where out of 313 patients treated 140 were children, are of interest:—

Enlarged tonsils:—		
(a) Without glands,	. . . . .	16
(b) With glands,	. . . . .	24
Enlarged glands without tonsils,	. . . . .	37
Tonsils removed before admission,	. . . . .	12
History of tonsillitis,	. . . . .	24

The sanatorium physicians have reported in addition to tuberculosis of the larynx, one case of tuberculosis of the tonsil, one of tuberculosis of the nose, and two of tuberculosis of the tongue.

ALBERT C. GETCHELL, M.D.,
Trustee.

PRISON LABOR.

In the last report it was mentioned that the Board was giving serious consideration to the subject of employing prison labor at the four State sanatoria. During the past year this matter has been the subject of prolonged study. After numerous conferences with the Prison Commission and with others the matter was finally brought to a head. His Excellency Governor Walsh, with the consent of the Council, allowed an appropriation of \$5,000 from his contingent fund to try out this experiment at the Rutland State Sanatorium. With the help and supervision of Mr. Frank H. Randall, chairman of the Prison Commission, a shack for housing and feeding the prisoners, about 30 in number, and their custodians, was erected on the Rutland grounds, and on Oct. 6, 1915, 32 prisoners began work. This work consisted in clearing up waste and swamp land at the present time quite unavailable for any purpose, and destined to remain so if labor from the sanatorium itself or a special legislative appropriation had to be depended upon. The experiment has proved a success. There seems to be no difficulty

in caring for the prisoners, and there is no opposition from outside sources. The general physical condition of the prisoners has been greatly improved.

The Board is unanimous in its feeling that the use of prison labor should be extended to the other State sanatoria, and in its requests for special appropriations presented to the State Board of Charity has included a special sum for this purpose for each institution. At the Lakeville State Sanatorium this will be a comparatively easy matter, in that the prisoners can be brought from the State Farm at Bridgewater, not over 6 miles away, in an automobile truck, bringing their lunches with them and returning at night. At the Westfield and North Reading State sanatoria the problem is more difficult, and may, as is the case with the Rutland Sanatorium, involve the erection of shacks for purposes of housing and feeding. As far as the actual cost is concerned it would seem as if this would be largely a matter of bookkeeping after certain initial expenses had been met.

The Board therefore would strongly recommend that this method of employing prison labor be encouraged and developed to its fullest extent, so that the lands belonging to the Commonwealth may be brought in the course of time into the highest state of cultivation possible, and at the same time made to present an appearance worthy of the State.

ACKNOWLEDGMENTS.

The Board hereby acknowledges its indebtedness to the State Board of Charity, the State Department of Health, the State Agricultural College, Bureau of Animal Industry, Prison Commission and others for much timely advice and assistance in matters pertaining to its work.

LOCAL TUBERCULOSIS HOSPITALS, SUBSIDY DEPARTMENT.

To the Trustees of Hospitals for Consumptives.

During the fiscal year of 1915 there were filed by the cities and towns of this Commonwealth 1,961 applications for reimbursement under the provisions of chapter 637, Acts of 1912. After investigation 1,912 of

these cases were classified as suitable subsidy cases; the remaining number of cases were disallowed for reasons as follows: —

1. Ability of patient or of kindred to pay.
2. Financial aid by friends.
3. Negligence of cities and towns to file applications for reimbursement.
4. Filing of applications too late for full consideration.

As a rule, there is a very small percentage of the patients who have the financial means to pay for their care while at the hospital; the principal reasons thereof are as follows: —

1. The small weekly wages (especially noted in the manufacturing centers).
2. Irregular employment.
3. Large families.
4. Long illness.
5. Last but not least, — intemperance.

At the Pittsfield Tuberculosis Hospital there is the largest percentage of paying patients. This is due to the fact that this hospital charges only \$7 a week, while other local tuberculosis hospitals, as a rule, charge as high as \$12 and \$14 a week.

The Boston Infirmity Department (Long Island Hospital) has no pay patients. This is owing to the fact that this is a pauper institution where only homeless and dependent patients are admitted.

Most of the tuberculosis hospitals are full and have a waiting list. Boston, New Bedford and Fall River have the longest waiting lists. The hospitals at Salem and Lynn have the largest number of vacant beds. This is probably because of the high rate of \$14 and \$12 per week charged for board, because of which neighboring cities and towns do not send patients there.

There are now 23 tuberculosis hospitals, with a total of 1,120 beds, which have been approved under the terms of the subsidy act (chapter 637, Acts of 1912).

Lowell, Brockton, Malden and Newton are the largest cities which have not yet provided local accommodations for the care of their tuberculosis cases.

Of the 35 cities in the Commonwealth, 15, or less than half, have no local tuberculosis hospitals. The majority of these, however, send their tuberculosis patients to some neighboring tuberculosis hospital or to the State sanatoria. Clinton is the only town in the State with a tuberculosis hospital, although Brookline has one nearing completion. The town of Westfield has closed its local hospital and is now sending its patients to the Hampshire County Sanatorium.

In the year 1915 three new hospitals (Carter Memorial Hospital, Clinton, 21 beds; Channing Home, Boston, 22 beds; and Tuberculosis Hospital, Everett, 24 beds) were added to the list of approved tuberculosis hospitals.

New buildings are being constructed at the Boston Consumptives'

Hospital which will provide 134 additional beds. The New Bedford Sanatorium, besides increasing the capacity for adult patients, has also just completed a children's ward and schoolhouse for 26 patients at a cost of about \$7,000. The county of Barnstable has been authorized by statute to build a county hospital. Franklin County will probably make some arrangement to send its patients to the Hampshire County Sanatorium.

The State Department of Health is formulating plans of district hospitals to provide for those cities and towns that have not at present accommodations for their patients.

Respectfully yours,

LOUIS N. PHANEUF,
Examiner.

RECOMMENDATION.

The Board would respectfully recommend the repeal of chapter 592, Acts of 1912. This bill fixes the salary of the first stenographer and clerk. The Board would favor the repeal of this bill in order that the salary of this clerk may come under chapter 605, Acts of 1914, which fixes the salaries of clerks and stenographers in State departments. At the present time, owing to this act, the salary of this particular clerk does not come under the same ruling as do the others. For the sake of uniformity it would seem better to have all the salaries of this department come under the same ruling.

OFFICE DISBURSEMENTS.

Appropriation: —	
Salaries,	\$7,669 49
Expenses,	4,700 00
	<hr/>
	\$12,369 49
Subsidy department, to pay bills incurred in 1914,	129,868 44
	<hr/>
	\$142,237 93
Expenses: —	
Salaries,	\$7,670 35
Expenses,	4,200 15
	<hr/>
	\$11,870 50
Subsidy department, to pay bills incurred in 1915,	165,651 50
	<hr/>
	\$177,522 00

NORTH READING STATE SANATORIUM.

At the North Reading State Sanatorium 5 small pavilions accommodating 22 patients have been constructed to take the place of the tents which were formerly available for only a part of the year. A cement retaining wall and flooring has been built at the railroad siding where the sanatorium coal supply can be kept until needed. Various improvements have been made about the grounds. The daily average number of patients for the year has been 198, which is an increase of nearly 2 per cent. over that of last year.

Estimates for the coming year, all of which have been approved by the State Board of Charity, are as follows:—

Salaries, wages and labor,	\$39,148 50
Religious services,	1,425 00
Travel, transportation, office expenses,	1,455 00
Food,	31,611 50
Clothing and materials,	200 00
Furnishings,	2,570 00
Medical and general care,	2,395 00
Heat, light and power,	5,645 00
Farm and stable,	3,625 00
Grounds,	705 00
Repairs, ordinary,	2,150 00
Repairs and renewals (not recurring annually),	820 00
	<hr/>
	\$91,750 00
For special appropriations:—	
Medical building,	\$4,665 00
Storehouse and root cellar,	2,000 00
Fireproofing and enlarging power plant, addition of one extra boiler and refrigerating machine,	29,997 00
Improvement of lands, prison labor,	5,000 00
	<hr/>
	\$41,662 00

LAKEVILLE STATE SANATORIUM.

At the Lakeville State Sanatorium the average number of patients per year for the year 1915 has been 256. The winter bed capacity is 246. Twenty-six patients have been cared for in tents during the summer months. By an enlargement of

one of the shacks, beds have been provided to accommodate 8 of these 26 patients, and a special appropriation for the year 1916 is asked to permanently house the remainder.

The Board is of the same opinion at the present time as in the past that the institution will be greatly benefited by having a dairy of its own. This will not only produce milk at less cost than it can be obtained at present, but it also would ensure a safe and clean supply.

Estimates for the coming year, all of which have been approved by the State Board of Charity, are as follows:—

Salaries, wages and labor,	\$47,688 00
Religious services,	1,250 00
Travel, transportation, office expenses,	2,130 00
Food,	38,832 00
Clothing and materials,	150 00
Furnishings and household supplies,	5,293 00
Medical and general care,	3,580 00
Heat, light and power,	6,953 00
Farm and stable,	8,051 00
Grounds,	1,067 00
Repairs, ordinary,	4,170 00
Repairs and renewals (not recurring annually),	2,100 00
	<hr/>
	\$121,264 00

For special appropriations:—

Land and equipment for dairy,	\$21,600 00
Coal trestle and land for same,	4,000 00
New pavilion, 20 patients,	2,000 00
Improvement of lands, prison labor,	5,000 00
	<hr/>
	\$32,600 00

WESTFIELD STATE SANATORIUM.

At the Westfield State Sanatorium certain changes have been made which have improved the grounds and made the institution more attractive. A coal trestle has been built which greatly facilitates the unloading of coal.

In accordance with an appropriation granted last year a schoolhouse of excellent design has now been completed and will be in active use in the immediate future. Two teachers

have been employed during the year, and at the completion of the school building a third teacher will then be employed as principal to supervise the school work. The daily average school attendance has been about 110. There have been on the average about 125 children under fifteen years; 80 of these have been from five to twelve years. It is a self-evident fact that the establishment and maintenance of a school of this size at this sanatorium will necessarily cause an increase in the total cost of maintenance over that of our other State sanatoria. Further details concerning the care of children will be found in the superintendent's report.

Mrs. James Crane of Westfield presented the sanatorium with a greenhouse which has been set up and has proved a distinct addition to the institution.

The daily average number of patients has been approximately 254. The total number of beds at present available is 264.

Estimates for the coming year, all of which have been approved by the State Board of Charity, are as follows:—

Salaries, wages and labor,	\$50,000 00
Religious services,	1,290 00
Travel, transportation and office expenses,	3,870 00
Food,	33,000 00
Clothing and materials,	1,130 00
Furnishings and household supplies,	6,300 00
Medical and general care,	3,195 00
Heat, light and power,	7,550 00
Farm and stable,	10,850 00
Grounds,	160 00
Repairs, ordinary,	4,455 00
Repairs and renewals,	2,200 00
	<hr/>
	\$124,000 00

For special appropriations:—

Storage and horse barn, stable for young stock and dairy room,	\$6,500 00
Barn and dairy equipment,	1,784 48
Garage, carpenter shop and root cellar,	5,000 00
Fireproof vault,	1,500 00
Improvement of lands, prison labor,	5,000 00
	<hr/>
	\$19,784 48

RUTLAND STATE SANATORIUM.

Hitherto at this institution there has been an equal number of beds for male and female patients, although the waiting list for men has invariably been longer than that for women. This year, to meet this situation, a certain number of beds hitherto reserved for women has been changed over for men, so that at present there are 198 beds for males and 157 for females, a total capacity of 355 as heretofore. This has shortened the male waiting list.

A rule limiting the duration of residence for patients at this sanatorium to two years, and another rule whereby all patients are admitted on one month's trial, has resulted in the transfer to other State sanatoria or to municipal tuberculosis hospitals of many patients who were not in any sense so-called Rutland cases, in the early and favorable stages of the disease, but who were occupying beds and in this way defeating the primary object of this particular sanatorium, namely, the care of incipient and curable cases of pulmonary tuberculosis. As more municipal hospitals are opened it is expected that there will be a more rapid interchange of patients, and that Rutland will become a true sanatorium.

As the result of conferences with the State Board of Agriculture the farm has been greatly improved and its production markedly increased. The use of prison labor is mentioned elsewhere. The average number of patients has been 349.

The estimates for the coming year, all of which have been approved by the State Board of Charity, are as follows:—

Salaries, wages and labor,	\$42,275 00
Religious services,	1,400 00
Travel, transportation, office expenses,	3,080 00
Food,	70,200 00
Clothing and materials,	102 00
Furnishings and household supplies,	7,800 00
Medical and general care,	22,150 00
Heat, light and power,	16,035 00
Farm and stable,	17,700 00
Grounds,	1,358 00
Repairs, ordinary,	9,800 00
Repairs and renewals (not recurring annually),	600 00
	<hr/>
	\$192,500 00

For special appropriations:—

New coal trestle, including land,	\$7,500 00
Traction engine and equipment for farm,	2,500 00
Fireproof vault,	2,000 00
Greenhouse,	1,500 00
Improvement of lands, prison labor,	10,000 00
	<hr/>
	\$23,500 00

Respectfully submitted,

ARTHUR K. STONE, M.D.
 CHARLES J. DOWNEY, M.D.
 GEORGE A. DUNN.
 ALBERT C. GETCHELL, M.D.
 SYLVIA B. KNOWLTON.
 DANIEL L. PRENDERGAST.
 SIMON SWIG.

NORTH READING STATE SANATORIUM.

RESIDENT OFFICERS.

CARL C. MacCORISON, M.D.,	<i>Superintendent.</i>
NEWELL B. BURNS, M.D.,	<i>Assistant Superintendent and Physician.</i>
HARRY S. NEWHART, M.D.,	<i>Physician.</i>
ALBERT E. YOUNG,	<i>Bacteriologist.</i>
<hr style="width: 20%; margin: auto;"/>	
HANNAH M. CALLAHAN,	<i>Superintendent of Nurses.</i>
MIRA B. ROSS,	<i>Matron.</i>
J. ELLIS DOUCETTE,	<i>Supervisor.</i>
EDWARD W. PERRY,	<i>Chief Engineer.</i>
WILLIAM MARGESON,	<i>Head Farmer.</i>

REPORT OF THE SUPERINTENDENT.

To the Trustees of Hospitals for Consumptives, 3 Joy Street, Boston.

I have the honor of presenting to you the report of the North Reading State Sanatorium for the year ending Nov. 30, 1915.

The records show that during the year 505 patients have been treated and 306 have been admitted, thus showing a decrease of 38 under last year. This decrease is due to longer residence of patients treated. There were 72,391 days of treatment in the year. The lowest daily census was 192, and the highest 202. The daily average number of patients was 198.33, which is 1.95 per cent. more than that of the preceding year.

There have been admitted during the year 3, or .98 per cent., incipient, 70, or 22.87 per cent., moderately advanced, and 229, or 74.83 per cent., advanced cases; 2, or .65 per cent., not tubercular, and 2, or .65 per cent., not determined. There has been a daily average of 82.7 bed cases, approximately 42 per cent. of the daily population.

Of the patients discharged, the average duration of residence in the sanatorium was 190 days, as opposed to 176 days for the preceding year; the longest residence of any person was 1,969 days, and the shortest, 1 day.

Of the 306 cases admitted, 238, or 77.77 per cent., were inside workers, and 218 were admitted from cities and towns having a population of 25,000 or more, as follows: Boston, 126; Brookline, 2; Brockton, 2; Cambridge 7; Chelsea, 12; Everett, 12; Fall River, 1; Fitchburg, 1; Haverhill, 1; Lawrence, 2; Lowell, 17; Lynn, 6; Malden, 14; Newton, 1; Quincy, 1; Salem, 3; Somerville, 8; Springfield, 1; Waltham, 1.

Thirty-nine cases have been supported from private funds, 260 by cities and towns, 124 entirely by the State, and 16 pri-

vate cases have later become either town or State charges. There were remaining, November 30, 5 private cases, 106 city or town, 52 State and 37 unknown cases.

Of the patients discharged during the year, 96 males and 85 females had gained in weight, the total gain being 1,985.75 pounds; the average male gain was 10.36 pounds, and the average female gain was 11.66; 14 patients remained stationary, 45 had lost and 65 had died.

Four patients, or 1.31 per cent., have been discharged "arrested;" 19, or 6.22 per cent., "apparently arrested;" 49, or 16.06 per cent., "quiescent;" 89, or 29.18 per cent., "improved;" 43, or 14.09 per cent., "unimproved." Sixty-five, or 21.31 per cent., have died; 31, or 10.16 per cent., were "not considered" (duration of stay being less than one month); and 5, or 1.63 per cent., were not tuberculous.

The average age was 33.93 years. One hundred and fifty-seven were foreign born, and 90 were American born, but of foreign parentage. Thirty-three patients admitted have been previously treated at this sanatorium.

The total cost for maintenance for the year ending Nov. 30, 1915, was \$90,666.48; deducting \$759.11, collected from miscellaneous sources, leaves a net amount expended for maintenance of \$89,906.62. The average per capita cost per week is \$8.687. There has been collected from private patients \$27,122.55, and from cities and towns, \$22,455.87. Further details will be found in succeeding pages of this report.

We are called on to care for an increasing number of weakened, very sick patients, who are in the last stages of the disease. The term "advanced" may include all physical conditions between an ambulatory, afebrile case, suitable to live on the open pavilions and to take exercise, and a case which is semi-moribund, requiring a maximum of nursing, care and hospital facilities.

Two years ago our sanatorium construction was modified somewhat to fit this situation by closing in and equipping with steam heat two open wings of pavilions. At that time it was hoped that the construction and opening of the municipal hospitals for advanced cases would, within a reasonable length of

time, cause a change in the class of patients sent to the sanatorium. This has not occurred, however, and although numerous municipal hospitals have been opened for the care of the advanced consumptive, the past year's experience shows a still greater need for more infirmary and hospital space.

We have cared for, on open pavilions, from 10 to 12 bed cases daily during some months. This is due to the fact that we have patients who are up and around one week and down the next, and whom we are now obliged to shift back and forth, in shuttle fashion, between hospital and pavilions, sometimes several times a month. We should have facilities to keep such patients in bed until they are able to get up and stay up.

Patients in a moribund state have been brought here only to die in a few hours or within two days. Of our 65 deaths the past year, 9 were cases who died within thirty days of the time they were admitted. Thirty-six of the deaths, or 55.4 per cent., were patients who had resided here less than five months, — patients who came here as a very last resort, having tried elsewhere for months or years some other mode of treatment. Accordingly, it seems necessary to adopt one of three policies: (1) To modify the admission of patients to the institution so that we would receive more favorable cases. (2) To construct a small hospital building, of about 30 beds, provided with a sufficient number of single rooms for the proper care of the far advanced, dying cases. (3) To decrease the capacity of the institution, especially during the winter months, thus giving us a more equal number of pavilion and hospital beds in ratio to the kind of patients we are now receiving. This latter measure, however, is wholly undesirable, as it would markedly impair the efficiency of the sanatorium.

Twelve ex-patients have been employed on our wards during the year. Great care has been taken in selecting these employees; therefore they have stood up well under the work and have rendered very efficient service to the sanatorium. These ex-patient employees are segregated from our regular employees.

On November 19, at a conference at Danvers State Hospital, Dr. Newell B. Burns read a paper entitled, "Some Possibilities in the Treatment of the Tuberculous Insane."

This paper will be published in a collection as a contribution to the "William L. Worcester Series of Danvers State Hospital Papers."

MEDICAL REPORT.

We have had many patients, during the past year, for whom isolation from the open wards was indicated. Hemorrhage cases, moribund patients, and those with terminal delirium and meningitis had to be cared for separately in our two single and two double rooms, the only separate beds available. In trying to accommodate the limited facilities to such circumstances, problems of arrangement have been frequent.

Approximately 60 per cent. of patients treated required symptomatic remedies for their relief and comfort. This treatment did not differ from the routine prescriptions for far advanced consumptives. Forty per cent. were suitable for hygienic-dietetic treatment, which required, especially, discipline and regularity in conforming to the rules of sanatorium treatment.

Five patients were treated with artificial pneumothorax. From this treatment one case of hemorrhage derived much benefit, another patient requested that it be continued to alleviate cough and to prevent recurrence of hemoptysis, and another patient suffered a severe pleural shock following his fourth treatment.

Two cases of empyema have occurred; paracentesis was tried ineffectually.

One case of typhoid fever was diagnosed in a patient soon after her admission. She was transferred to her local general hospital. No other cases of this disease occurred.

Tuberculin was given for diagnostic purposes in 4 cases subcutaneously, and in 20 other cases cutaneously. Therapeutic tuberculin was administered in the form of bacillen emulsion in 8 cases. Three of these cases, who had tuberculous adenitis, improved. In these 3 cases the local glandular disease activity increased and then lapsed into quiescence.

One patient with tuberculosis of the tongue was quite susceptible to small doses of bacillen emulsion, and the treatment was therefore discontinued. The stage of tuberculous pulmonary disease in this case was advanced.

When patients with specific histories were admitted, blood was taken and sent to the State Department of Health laboratory for the Wassermann test.

Diphtheria antitoxin was administered to one employee who was suffering from a diphtheroid condition of the throat.

LABORATORY REPORT.

The laboratory work has been carried on daily by the bacteriologist during the past year. A summary of Mr. Young's work is as follows:—

Examinations of 1,398 specimens of sputum, 510 specimens urine, 3 feces, 44 blood and 22 ascitic and pleuritic fluids; also 21 examinations of material from genitourinary sources, and the preparation of sections from one autopsy. Twenty Widal tests were made.

In 22 per cent. of the patient population of the sanatorium at the close of the present year we have been unable to demonstrate the presence of tubercle bacilli in the sputum.

The bacteriologist examines regularly specimens of milk from the several dairies whence comes the supply for the sanatorium. This examination has included the percentage of fat, specific gravity and the total solids. In this way the quality of the milk, as specified by contract, has been closely followed.

All the culture media for bacteriological work is made in the laboratory by the bacteriologist.

SANATORIUM CLASS.

The system of allowing patients to choose between the sanatorium and hospital classes still proves to be of great assistance. Its moral effect is particularly helpful in the matter of maintaining discipline.

WORK PERFORMED.

Of the work performed by patients during the year, 180 hours were devoted to the painting of screens, 50 hours to mending chairs, 282 hours to the picking and preparation of garden truck, 31,902 hours to housework, office and ward work, work about the grounds, care of animals, mending and sewing.

The following list of articles have been made up: 78 table-

cloths, 482 towels, 172 laundry bags, 2 pairs sash curtains, 6 laboratory aprons, 3 lapotomy sheets, 13 binders, 72 pillow slips, and coverings for 55 pillows.

RELIGIOUS SERVICES.

I regret to report that Rabbi J. D. Jurman, who has presided over the Jewish services for the past few years, was forced to resign in October, owing to ill health. Rabbi Jurman is succeeded by the Rev. Moses I. Robinson.

Catholic, Protestant and Jewish services have been held weekly.

IMPROVEMENTS.

Additions have been made to the concrete walks about the administration building during the year. A cement floor has been laid in the animal room at the laboratory. Extensive repairs have been made to the verandas of the wards and pavilions. Additional cinder walks have been made about the hospital buildings. A large cement cistern has been built at the power house for the collection of waste water from the boilers and heating plant.

A pair of 6-ton Fairbanks wagon scales have been installed near the coal shed. A cement flooring has been laid in the cellar of the farmhouse, and steam heat has been installed in this building; a line has been run from this system to the washstand in the stable. Improvements have been made at the stable, the more important of which are the sheathing of the inner walls and the partitioning off and closing in of the washstand.

A concrete retaining wall 133 feet long has been built, and 6,519 square feet of cement flooring, on which coal is stored, have been laid at the side track.

Work on the new summer camps, for which special appropriation was made by the Legislature of 1915, was completed about the middle of August.

FARM.

Our farming operations for the past year, in spite of the heavy rains during the summer, have been somewhat more encouraging. Although the cultivated area was reduced by

about 3 acres, the crops were heavier and the value greater than those of 1914. The bean, cucumber and melon crops, however, were almost a total failure, due to blight and rust. Owing to the lightness of our soil and the high cost of farm labor I believe it is advisable to curtail, rather than extend, our farming operations in the future.

RENDERING PLANT.

A little over a year ago a small rendering retort was installed in the room adjoining the workshop at the power plant at a cost of about \$400. The income and expense accounts of this department for the year ending Nov. 30, 1915, show a substantial balance in favor of the plant, in accordance with the following statement:—

Income Account.

155 gallons floor polish at \$0.75 a gallon, . . .	\$116 25	
1,945 pounds ground bone at \$0.01 a pound, . . .	19 45	
7,831½ pounds grease sold at \$0.055 a pound, . . .	430 74	
3,540 gallons soft soap at \$0.03 a gallon, . . .	106 20	
		\$672 64

Expense Account.

Furnishings and material used for the maintenance of the plant, as per our stock book,	\$37 12	
Material for the manufacture of floor polish,	63 33	
Labor,	273 50	
		373 95
Profit,		\$298 69

RECOMMENDATIONS.

We are very much in need of an examining, operating and sputum room, and suitable quarters in which to treat sick employees. We have a small room on either hospital ward 7½ by 9 feet which is used for the medicine room, dressing room, operating and examining room, nose and throat treatment room and confessional room. It is impossible to do good work under such conditions. Our method of collecting and handling sputum, owing to lack of proper facilities, is not at all satisfactory.

There is not a vacant room in the institution, and our employees are living from two to four in a room. In case of sickness, especially if it be an infectious or contagious disease, we have no way to care for the patient; therefore I would recommend that the sum of \$4,665 be appropriated for the erection of a suitable medical building to cover these needs.

Our facilities for the storage of supplies are very inadequate. The greater part of the goods is stored in the hayloft and sheds at the farmhouse, a distance of about 1,800 lineal feet. The vegetables are stored in a corner of the barn cellar. It is a very small room, poorly ventilated, and is unsuited to the storage of apples and vegetables. The storeroom at the administration building is already overcrowded, and it is impossible to place all our canned goods under lock and key.

As a matter of economy, as well as efficiency, I would strongly recommend that the sum of \$2,000 be appropriated for the erection of a suitable building for a storeroom and root cellar, this building to be located just beyond the power house within a short distance of the wagon scales. This building will be constructed by the institution at a saving of about \$1,000.

Our present power house, of flimsy wooden construction, located but a few feet from the hospital buildings, is undoubtedly a great fire risk, and in all probability a fire once started in this building would be impossible to control.

Our refrigerating machine has been in constant use both day and night for three years. This machine cools our ice boxes in the administration building, freezes the ice and cools the brine for use in the milk cooler in the pasteurizing room. Should an accident occur to this machine during the hot weather we would find it very costly and difficult to meet the emergency.

During the winter we are obliged to run both boilers. We have no reserve to fall back on in case of accident or trouble.

Our vacuum pump, hot-water heater for boilers, and boiler feed pump were bought second-hand in 1909. These machines are wearing out, and in all probability will have to be replaced within a year.

Therefore I would recommend that the sum of \$26,880 be

appropriated to fireproof the present plant, to make the necessary addition for an extra boiler and refrigerating machine, and for the purchase of a vacuum pump, boiler pump and hot-water heater.

We shall need, for the coming year, the sum of \$91,750 to cover the cost of our maintenance.

ACKNOWLEDGMENTS.

Mrs. Jennie Sanford, our superintendent of nurses, resigned March 27, after over five years of most acceptable service. Miss Hannah M. Callahan, head nurse on the west ward, was promoted to fill the vacancy.

To our chaplains, the Rev. Father Francis Walsh, Rev. Mr. Henry M. Goddard, Rev. J. D. Jurman, and Rev. Moses I. Robinson, I wish to extend our thanks for their unfailing attention to the spiritual needs of our patients, and for conducting weekly religious services. I also wish to thank Rev. Dr. Charles Henry for his services in behalf of the patients of the Episcopal faith.

We are indebted to Mr. Robert Saltonstall of Boston for a gift of a grand piano, which fills a long-felt want for entertainment purposes. We also wish to thank our friends who have come to the sanatorium to entertain the patients.

During the year we have received various contributions of books, magazines, flowers and clothing, for which we are very grateful. To the social service department of the Massachusetts General Hospital we are indebted for miscellaneous gifts of books and periodicals.

I deeply appreciate the services of the officers and employees of the institution throughout the year. To the trustees I wish to extend my thanks for their advice and support during the year.

Respectfully submitted,

CARL C. MACCORISON,

Superintendent.

TREASURER'S REPORT.

To the Trustees of Hospitals for Consumptives.

I respectfully submit the following report of the finances of this institution for the fiscal year ending Nov. 30, 1915:—

CASH ACCOUNT.

Balance Dec. 1, 1915, \$1,189 83

Receipts.

Institution Receipts.

Board of inmates:—

Private, \$27,122 55
 Cities and towns, 22,455 87

\$49,578 42

Sales:—

Food, \$4 47
 Clothing and materials, 56 09
 Furnishings, 43 73
 Heat, light and power, 5 00
 Repairs and improvements, 8 29
 Miscellaneous, 145 10

Farm, stable and grounds:—

Rabbits, \$5 85
 Vegetables, 11 77
 Sundries, 478 81

496 43

759 11

Miscellaneous receipts:—

Interest on bank balances, \$115 78
 Sundries, 65 81

181 59

50,519 12

Receipts from Treasury of Commonwealth.

Maintenance appropriations:—

Balance of 1914, \$2,055 92
 Advance money (amount on hand November 30), 6,000 00
 Approved schedules of 1915, 81,716 89

89,772 81

Special appropriations, 3,306 46

Total, \$144,788 22

Payments.

To treasury of Commonwealth, institution receipts,		\$50,519 12
Maintenance appropriations: —		
Balance November schedule, 1914,	\$3,303 50	
Eleven months' schedules, 1915,	81,716 89	
November advances,	4,626 18	
	<hr/>	89,646 57
Special appropriations: —		
Approved schedules,	\$3,306 46	
Less advances, last year's report,	57 75	
	<hr/>	3,248 71
Balance, Nov. 30, 1915: —		
In bank,	\$1,292 45	
In office,	81 37	
	<hr/>	1,373 82
 Total,		<hr/> <hr/> \$144,788 22

MAINTENANCE.

Appropriation,	\$90,890 97
Expenses (as analyzed below),	90,666 48
	<hr/>
Balance reverting to treasury of Commonwealth,	\$224 49

Analysis of Expenses.

Salaries, wages and labor: —		
Carl C. MacCorison, superintendent,	\$2,500 00	
General administration,	17,327 84	
Medical service,	3,042 58	
Ward service (male),	1,707 54	
Ward service (female),	6,188 63	
Repairs and improvements,	1,975 00	
Farm, stable and grounds,	5,117 49	
Labor not on pay roll,	44 33	
	<hr/>	\$37,903 41
Food: —		
Butter,	\$2,431 05	
Butterine,	177 68	
Beans,	321 83	
Bread and crackers,	71 81	
Cereals, rice, meal, etc.,	378 01	
Cheese,	93 97	
Eggs,	1,937 81	
Flour,	1,642 08	
Fish,	974 59	
Fruit (dried and fresh),	1,503 81	
Lard,	89 84	
	<hr/>	
Amounts carried forward,	\$9,622 48	\$37,903 41

<i>Amounts brought forward,</i>	\$9,622 48	\$37,903 41
Food — Con.		
Meats,	8,747 45	
Milk,	7,867 26	
Molasses and syrup,	71 16	
Spices, seasonings, salt, etc.,	243 19	
Sugar,	1,511 10	
Tea, coffee, broma and cocoa,	503 57	
Vegetables,	1,953 56	
Yeast and baking powder,	141 81	
Sundries,	173 03	
Macaroni and spaghetti,	36 46	
	<hr/>	30,871 07
Clothing and materials: —		
Boots, shoes and rubbers,	\$52 95	
Clothing,	127 55	
Dry goods for clothing and small wares,	8 11	
	<hr/>	188 61
Furnishings: —		
Beds, bedding, table linen, etc.,	\$643 28	
Brushes, brooms,	257 51	
Carpets, rugs, etc.,	102 91	
Crockery, glassware, cutlery, etc.,	282 50	
Furniture and upholstery,	357 25	
Kitchen furnishings,	457 41	
Materials and machinery for manufacturing,	29 11	
Wooden ware, buckets, pails, etc.,	112 71	
Sundries,	25 64	
	<hr/>	2,268 32
Heat, light and power: —		
Coal,	\$3,682 98	
Freight on coal,	757 77	
Teaming coal,	357 62	
Oil,	111 34	
Sundries,	109 73	
	<hr/>	5,019 44
Repairs and improvements: —		
Cement, lime and plaster,	\$307 60	
Doors, sashes, etc.,	65 31	
Electrical work and supplies,	330 34	
Hardware,	341 33	
Lumber,	615 07	
Machines (detached) and coal wagon,	432 25	
Paints, oil, glass, etc.,	308 57	
Plumbing, steam fitting and supplies,	736 84	
Roofing and materials,	27 72	
Stone, gravel and freight on same, used at side track,	230 44	
	<hr/>	<hr/>
<i>Amounts carried forward,</i>	\$3,395 47	\$76,250 85

<i>Amounts brought forward,</i>	\$3,395 47	\$76,250 85
Repairs and improvements — <i>Con.</i>		
Teaming at side track,	128 09	
Sundries,	97 61	
Standard Fairbanks scales,	170 00	
	<hr/>	3,791 17
Farm, stable and grounds:—		
Blacksmith and supplies,	\$127 23	
Carriages, wagons, etc., and repairs,	397 71	
Fertilizers, vines, seeds, etc.,	811 90	
Hay, grain, etc.,	1,573 03	
Harnesses and repairs,	57 68	
Horses,	100 00	
Other live stock,	140 00	
Rent,	240 00	
Tools, farm machines, etc.,	308 63	
Sundries,	176 95	
Teaming,	110 22	
	<hr/>	4,043 35
Religious services,		1,376 00
Miscellaneous:—		
Books, periodicals, etc.,	\$32 03	
Cuspidor supplies,	604 23	
Entertainments,	179 52	
Freight, expressage and transportation,	950 71	
Funeral expenses,	15 00	
Hose, etc.,	113 06	
Medicines and hospital supplies,	1,284 26	
Medical attendance, nurses, etc. (extra),	75 82	
Postage,	141 00	
Printing and printing supplies,	361 33	
Soap and laundry supplies,	402 74	
Stationery and office supplies,	352 80	
Travel and expenses (officials),	146 76	
Telephone and telegraph,	248 40	
Sundries,	297 45	
	<hr/>	5,205 11
Total expenses for maintenance,		\$90,666 48
SPECIAL APPROPRIATIONS.		
Balance Dec. 1, 1914,		\$1,920 05
Appropriations for fiscal year,		1,400 00
		<hr/>
Total,		\$3,320 05
Expended during the year (see statement annexed),	\$3,306 46	
Reverting to treasury of Commonwealth,	13 59	
	<hr/>	3,320 05
Balance Nov. 30, 1915,		—

RESOURCES AND LIABILITIES.

Resources.

Cash on hand,	\$1,373 82	
November cash vouchers (paid from advance money), account of maintenance,	4,626 18	
Due from treasury of Commonwealth, account of November, 1915, schedule,	2,949 59	
	<hr/>	\$8,949 59

Liabilities.

Schedule of November bills,		\$8,949 59
---------------------------------------	--	------------

PER CAPITA.

During the year the average number of inmates has been 198.33.

Total cost for maintenance, \$90,666.48.

Equal to a weekly per capita cost of \$8.7913.

Receipt from sales, \$759.11.

Equal to a weekly per capita of \$0.0736.

All other institution receipts, \$49,760.01.

Equal to a weekly per capita of \$4.8248.

Special Appropriations.

ОБЪЕКТ.	Act or Resolve.	Whole Amount.	Expended during Fiscal Year.	Expended to Date.	Balance at End of Year.
Addition to administration building,	Acts 1914, chap. 90	\$3,000	\$459 24	\$2,997 67	\$2 33
Building for farm implements,	Acts 1914, chap. 90	800	210 89	798 77	1 23
Coal bin,	Acts 1914, chap. 90	500	2 30	493 58	6 42
Water tank,	Acts 1914, chap. 90	2,584	1,237 50	2,583 86	14
Summer pavilion,	Acts 1915, chap. 111	1,400	1,396 53	1,396 53	3 47
		\$8,284	\$3,306 46	\$8,270 41	\$13 59 ¹

¹ Reverting to treasury of the Commonwealth.

Respectfully submitted,

CARL C. MACCORISON,
Treasurer.

Examined and found correct as compared with the records in the office of the Auditor of the Commonwealth.

ALONZO B. COOK,
Auditor.

VALUATION.

Real estate:—

Land, number of acres, 101.75,	\$4,901 30
Buildings,	94,212 44
Power plant, laundry, machinery, heating, water and sewerage systems, and improvements,	32,784 54
Total,	\$131,898 28

Personal estate:—

Food,	\$4,404 15
Clothing,	444 68
Furnishings,	23,323 40
Heat, light and power,	3,398 59
Repairs and improvements,	3,357 03
Farm, stable and grounds,	7,004 99
Miscellaneous,	5,479 17
Total,	\$47,412 01

PRODUCTS OF THE FARM AND GARDENS.

Apples, firsts, 1 $\frac{1}{4}$ barrels,	\$3 75
Beans, string, 30 $\frac{3}{4}$ bushels,	38 44
Beans, dry, 2 $\frac{1}{2}$ bushels,	6 77
Beans, shell, 7 bushels,	5 95
Beets, 40 $\frac{1}{2}$ bushels,	22 28
Beets, mangle, 45 bushels,	11 25
Beet greens, 15 $\frac{1}{8}$ bushels,	4 52
Cabbage, 6,559 pounds hundredweight,	37 71
Carrots, 207 $\frac{1}{4}$ bushels,	145 08
Chickens, roast, 812 $\frac{1}{2}$ pounds,	154 38
Clover and rye straw, 4.7 tons,	65 80
Corn, sweet, 212 bushels,	127 20
Cucumbers, table use, 13 $\frac{1}{4}$ boxes,	26 50
Cucumbers, small for pickles, 18 pecks,	6 30
Eggs, 1,733 $\frac{1}{2}$ dozen,	485 38
Fowl, 829 pounds,	124 35
Hay, meadow, 5,625 pounds,	32 34
Lettuce, 30 $\frac{1}{2}$ boxes,	8 49
Manure, hen, 57 barrels,	42 75
Manure, stable, 42 $\frac{1}{2}$ cords,	255 00
Onions, 87 $\frac{1}{2}$ bushels,	52 50
Parsley, 5 $\frac{1}{2}$ bushels,	1 96
Parsnips, 2 $\frac{1}{8}$ bushels,	1 34
Peas, green, 36 $\frac{1}{4}$ bushels,	39 88
Peppers, green, $\frac{9}{32}$ bushels,	14
Pork, 7,854 pounds,	785 40
Potatoes, 424 $\frac{1}{4}$ bushels,	318 19
Pumpkins, 1,020 pounds hundredweight,	7 65
Seed, sunflower, 4 $\frac{1}{2}$ bushels,	23 04
Spinach, 1 bushel,	30
Squash, winter, 9,470 pounds hundredweight,	71 03
Strawberries, 1,847 quarts,	184 70
Tomatoes, green or ripe, 40 bushels,	24 00
Turnips, 34 bushels,	20 40
Watermelons, 76 per 100,	11 40
Wood, 11 cords,	38 50
Logs, hard pine, 798 feet,	20 00
Total,	\$3,204 67

SPECIAL REPORT.

The following special report is prepared in accordance with a resolution of the National Conference of Charities and Corrections, adopted May 15, 1908:—

Population.

	Males.	Females.	Totals.
Number of inmates present at beginning of fiscal year,	112	87	199
Number received during the year,	167	139	306
Number discharged or died during the year,	166	139	305
Number at end of the fiscal year,	113	87	200
Daily average attendance (<i>i.e.</i> , number of inmates actually present) during the year.	112.05	86.28	198.33
Average number of officers and employees during the year,	43.62	35.54	79.16

EXPENDITURES.

Current expenses:—

1. Salaries and wages,	\$37,903 41	
2. Clothing,	188 61	
3. Subsistence,	35,890 51	
4. Ordinary repairs,	3,791 17	
5. Office, domestic and outdoor expense,	12,892 78	
	\$90,666 48	

Extraordinary expenses:—

1. Addition to administration building,	\$459 24	
2. Building for farm implements,	210 89	
3. Coal bin,	2 30	
4. Water tank,	1,237 50	
5. Summer pavilions,	1,396 53	
	3,306 46	

Total,	\$93,972 94
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Summary of Current Expenses.

Total expenditures,	\$93,972 94
Deducting extraordinary expenses,	3,306 46
	<hr/>
	\$90,666 48
Deducting amount of sales,	759 11
	<hr/>
	\$89,907 37

Dividing this amount by the daily average number of patients, 198.33, gives a cost for the year of \$453.32, equivalent to an average weekly net cost of \$8.717.

STATISTICAL TABLES.

TABLE 1. — *Admissions and Discharges.*

	Males.	Females.	Totals.
Patients in sanatorium Dec. 1, 1914,	112	87	199
Number of patients admitted Dec. 1, 1914, to Nov. 30, 1915, inclusive.	167	139	306
Number discharged Dec. 1, 1914, to Nov. 30, 1915, inclusive,	166	139	305
Number of deaths (included in preceding item),	37	28	65
Number remaining in sanatorium Nov. 30, 1915,	113	87	200
Daily average number of patients,	112.05	86.28	198.33

TABLE 2. — *Civil Conditions of Patients admitted.*

	Males.	Females.	Totals.
Married,	74	69	143
Single,	81	52	133
Widowed,	11	17	28
Divorced,	1	1	2
Totals,	167	139	306

TABLE 3. — *Age of Patients admitted.*

	Males.	Females.	Totals.
14 to 20 years,	8	12	20
20 to 30 years,	44	51	95
30 to 40 years,	48	45	93
40 to 50 years,	47	25	72
Over 50 years,	20	6	26
Totals,	167	139	306

TABLE 4. — *Nativity and Parentage of Patients admitted.*

PLACES OF NATIVITY.	MALES.			FEMALES.			TOTALS.		
	Patients.	Fathers.	Mothers.	Patients.	Fathers.	Mothers.	Patients.	Fathers.	Mothers.
United States:—									
Massachusetts,	63	11	15	52	14	14	115	25	29
Other New England States,	7	15	9	11	13	10	18	28	19
Other States,	6	1	2	9	4	8	15	5	10
Total native,	76	27	26	72	31	32	148	58	58
Other countries:—									
Austria,	2	1	2	2	2	2	4	3	4
Belgium,	-	-	-	-	1	-	-	1	-
Canada,	17	20	18	10	15	17	27	35	35
England,	4	8	8	3	3	3	7	11	11
Finland,	3	3	3	1	1	1	4	4	4
France,	-	-	-	-	-	1	-	-	1
Germany,	3	6	4	1	2	2	4	8	6
Greece,	1	1	1	-	-	-	1	1	1
Holland,	-	-	-	1	1	1	1	1	1
Ireland,	19	50	53	21	47	45	40	97	98
Italy,	5	5	5	4	6	6	9	11	11
Newfoundland,	3	4	4	5	4	5	8	8	9
Norway,	-	-	-	-	1	-	-	1	-
Poland,	-	-	-	1	1	2	1	1	2
Portugal,	-	1	1	1	2	2	1	3	3
Rumania,	2	2	2	-	-	-	2	2	2
Russia,	22	22	22	10	13	12	32	35	34
Scotland,	2	5	5	-	-	-	2	5	5
Sweden,	2	3	3	4	5	5	6	8	8
Turkey,	6	5	5	2	2	2	8	7	7
Total foreign,	91	136	136	66	106	106	157	242	242
Unknown,	-	4	5	1	2	1	1	6	6
Totals,	167	167	167	139	139	139	306	306	306

TABLE 5. — *Residence of Patients admitted.*

PLACE.	Number.	PLACE.	Number.
Amesbury,	1	Medford,	4
Arlington,	1	Melrose,	3
Athol,	1	Middleborough,	1
Attleboro,	1	Milton,	1
Belmont,	1	Nantasket,	1
Beverly,	4	Newburyport,	1
Boston,	126	Newton,	1
Brockton,	2	North Andover,	1
Brookline,	2	North Attleborough,	2
Cambridge,	7	North Reading,	1
Chelmsford,	1	Norwood,	1
Chelsea,	12	Peabody,	3
Clinton,	1	Provincetown,	1
Concord,	1	Quincy,	1
Danvers,	4	Reading,	3
Dedham,	2	Revere,	6
Everett,	12	Salem,	3
Fall River,	1	Saugus,	1
Fitchburg,	1	Somerville,	8
Framingham,	1	Springfield,	1
Franklin,	1	Stoneham,	2
Georgetown,	1	Topsfield,	1
Gloucester,	7	Wakefield,	3
Haverhill,	1	Waltham,	1
Hudson,	1	Watertown,	1
Ipswich,	1	Winchendon,	3
Lawrence,	2	Winchester,	3
Leominster,	2	Wilmington,	1
Lexington,	1	Winthrop,	1
Lowell,	17	West Acton,	1
Lynn,	6	West Boxford,	1
Malden,	14	Woburn,	4
Manchester,	1	Dover, N. H.,	1
Maynard,	2	Total,	306

TABLE 6. — *Occupation of Cases admitted.*

	Males.	Females.		Males.	Females.
Agent,	1	-	Iron worker,	3	-
Artist,	-	1	Janitor,	1	-
Baker,	1	-	Laborer,	16	-
Barber,	1	-	Laundress,	-	2
Bartender,	1	-	Lithographer,	1	-
Blacksmith,	1	-	Machinist,	6	-
Bookbinder,	1	1	Merchant,	1	-
Bookkeeper,	3	-	Milliner,	-	1
Brakeman,	1	-	Mill operative,	9	3
Brass worker,	1	-	Miscellaneous,	9	3
Brick layer,	1	-	Musician,	1	-
Butcher,	1	-	Painter,	5	-
Cap maker,	1	-	Plasterer,	2	-
Carpenter,	4	-	Peddler,	9	-
Chauffeur,	2	-	Plumber,	2	-
Cigar maker,	1	-	Printer,	3	1
Clerk,	9	6	Rubber worker,	4	1
Compositor,	1	-	Salesman,	5	-
Cooper,	1	-	Saleswoman,	-	5
Currier,	2	-	Sheet metal worker,	1	-
Domestic,	-	17	Shoemaker,	12	2
Draftsman,	1	-	Steam fitter,	2	-
Dressmaker,	-	1	Stenographer,	-	1
Druggist,	1	-	Street railroad employee,	3	-
Electrician,	2	-	Stonecutter,	2	-
Engineer,	1	-	Student,	2	3
Factory worker,	5	10	Tailor,	8	1
Farmer,	3	-	Teamster,	7	-
Furrier,	1	-	Waiter,	2	1
Gardener,	1	-	Watch maker,	1	-
Groom,	1	-	Totals,	167	139
Housewife,	-	79			

TABLE 7. — *Condition on Admission.*

	Males.	Females.	Totals.
Incipient,	-	3	3
Moderately advanced,	24	46	70
Advanced,	140	89	229
Not tubercular,	2	-	2
Not determined,	1	1	2
Totals,	167	139	306

TABLE 8. — *Condition on Discharge.*

	Males.	Females.	Totals.
Arrested,	3	1	4
Apparently arrested,	2	17	19
Quiescent,	20	29	49
Improved,	59	30	89
Unimproved,	28	15	43
Died,	37	28	65
Not considered (duration of stay less than one month),	13	18	31
Not tubercular,	4	1	5
Totals,	166	139	305

TABLE 9. — *Deaths.*

	DURATION OF DISEASE.			LENGTH OF RESIDENCE IN SANATORIUM.		
	Males.	Females.	Totals.	Males.	Females.	Totals.
Under 1 month,	-	-	-	5	4	9
1 to 2 months,	-	-	-	1	4	5
2 to 3 months,	-	-	-	4	4	8
3 to 4 months,	-	-	-	4	3	7
4 to 5 months,	-	-	-	3	4	7
5 to 6 months,	-	-	-	1	1	2
6 to 7 months,	1	1	2	1	-	1
7 to 8 months,	-	1	1	2	1	3
8 to 9 months,	1	1	2	4	-	4
9 to 10 months,	2	2	4	4	1	5
10 to 12 months,	3	3	6	3	-	3
12 to 18 months,	7	3	10	-	4	4
18 to 24 months,	4	1	5	4	1	5
Over 2 years,	19	16	35	1	1	2
Totals,	37	28	65	37	28	65

TABLE 10. — *Cause of Death.*

	Males.	Females.	Totals.
Phthisis,	34	27	61
Nephritis,	1	-	1
Intestinal tuberculosis,	1	1	2
Cerebrospinal meningitis,	1	-	1
Totals,	37	28	65

LAKEVILLE STATE SANATORIUM.

RESIDENT OFFICERS.

SUMNER COOLIDGE, M.D., . . . *Superintendent.*
EDSON W. GLIDDEN, M.D., . . . *Assistant Superintendent and Physician.*
GEORGE M. SULLIVAN, M.D., . . . *Physician.*

MRS. ELVIE F. DUPEE, . . . *Matron.*
LESTON P. GIDDINGS, . . . *Steward.*
WILLIAM R. RAY, . . . *Chief Engineer.*
WILLIAM G. ATKINSON, . . . *Farmer.*

REPORT OF THE SUPERINTENDENT.

To the Trustees of Hospitals for Consumptives.

I have the honor to submit herewith the report of the Lakeville State Sanatorium for the year ending Nov. 30, 1915.

During the year 1915 this sanatorium has provided 93,813 days of treatment.

The total number of patients treated during the year was 702, an increase of 69 as compared with 1914. Of these, 442 were discharged during the year, 260 remaining at the sanatorium on November 30. By the use of tents, accommodations were provided for 270 cases during the summer months, so that a daily average of 257 was maintained for the year. The total number admitted during the year was 457.

The classification of patients on admission shows 2 incipient cases, or less than 1 per cent.; 198 moderately advanced, or 43 per cent.; 249 advanced, or 55 per cent.; nontuberculous, 1, or less than 1 per cent.; and not examined, 7, or less than 2 per cent. The daily average number of bed cases during the year was 62, or 24 per cent. of the total daily average number of patients.

The average length of stay of 442 patients discharged was 176.9 days, — $12\frac{1}{2}$ days longer than last year. The longest stay was 1,843 days; the shortest, 1 day.

The geographical distribution of patients admitted shows an increasing proportion from Boston, — 251 cases, or 55 per cent., — while the other cities of this district of the State show slight change, the number of cases sent being approximately of the same proportion as in former years: Brockton, 24 cases, or 5 per cent.; Fall River, 22 cases, or nearly 5 per cent.; New Bedford, 14 cases, or 3 per cent.; Quincy, 12 cases, or 3 per cent.; Taunton, 12 cases, or 3 per cent.

Of the 702 cases cared for, only 34, or 6 per cent., were supported by private funds; 354, or 50 per cent., by municipalities; 227, or 32 per cent., by the Commonwealth. The settlements of 79 cases, or 11 per cent., were unknown at the end of the year.

Of the patients discharged during the year, 251 gained in weight an average of 11.44 pounds, the greatest gain for a man being $49\frac{1}{4}$ pounds, and for a woman, 44 pounds. There were 156 patients who lost in weight, of whom 99 died.

The condition of patients on discharge shows a slight improvement over the record of 1914, the arrested and apparently arrested cases representing 5 per cent., the quiescent cases 5 per cent., while the percentage of deaths in 1915 shows an increase of 4 per cent. over 1914. The percentage of cases discharged quiescent, or better, is double that of last year. The condition of 11 patients discharged was not considered, as they did not remain in the institution one month.

MEDICAL REPORT.

The words "medical report" seem almost a misnomer when used by an institution in which less and less medical treatment is used each year, and always as little as possible. The only departure from the generally accepted hygienic treatment has been the use of tuberculin in a few selected cases.

Our chief reliance in the way of treatment is a strict compliance with the prescribed daily program for each patient, which obliges him to account for each hour of the day by some specified voluntary act on his part which he is taught has a bearing on his recovery.

This printed program for each patient has had a beneficial effect upon the mental attitude of the patients toward treatment, and consequently upon the discipline of the institution.

LABORATORY REPORT.

The routine clinical laboratory work has involved 1,713 sputum examinations, of which 70 per cent. were positive and 30 per cent. negative; also 275 urinalyses, of which 4 showed renal complications, sugar being found in 2 cases.

I am pleased to report that the physicians of Middleborough are consulting us frequently, or sending us sputum for examination; 25 specimens have been examined for outside physicians, or for patients themselves, and 28 out-patients have been examined.

SANATORIUM AND HOSPITAL CLASSES.

The division of the patients into the sanatorium and hospital classes acts as a feeble reminder that conscientious attention to treatment brings better results than carelessness, and should be considered a help to good discipline. There has been a noticeable improvement in the general behavior of patients during the year, which I attribute largely to the enforced compliance with a definite individual program of treatment, and also to the splendid co-operation of our chaplains in promoting contentment and good feeling.

WORK PERFORMED.

As in former years, considerable employment has been provided for patients throughout the year in the wards and dining room; and in the summer, the preparation of 151 bushels of string beans, 69 bushels of lima beans, 162 bushels of green peas and 289 bushels of tomatoes, besides peaches, currants, strawberries and raspberries, for cooking or canning, and the harvesting of 1,606 bushels of potatoes, has considerably relieved the monotony of treatment.

RELIGIOUS SERVICES.

As in former years, religious services have been held regularly by Catholics and Protestants, the former on Friday mornings, the latter on Wednesday evenings. The former Jewish chaplain, Rev. Israel Faber, was prevented by ill health from coming to the sanatorium through the early summer, and asked to be relieved. In June his duties were assumed by Rev. M. Silverman of Brockton.

By a change in the Catholic pastorate at Middleborough, Rev. Father Regan was succeeded by Rev. Father Timothy A. Curtin who with his curate, Rev. Father Eli Barnaud, is taking a lively interest in the welfare of the sanatorium.

IMPROVEMENTS.

Permanent improvements were undertaken reluctantly, if at all, in the early part of the year, on account of the cut in our appropriation for maintenance and the large number of patients we were caring for, not knowing how much could be spared for improvements.

Several were undertaken later in the order of their importance.

A one-story building 15 by 30 feet was erected near the power plant, one-half to be used for canning fruits and vegetables, the other half for a rendering plant; a wagon shed has been built, at one end of which is a root cellar 30 by 35 feet, and a paint shop; the main driveway has been steam rolled and surfaced with Tarvia and pea stone; the piggery has been enlarged by a feed room at one end and four pens at the other end; 3,325 square yards of new walks and drives have been thoroughly made, and about 3 acres of land about the buildings have been reclaimed and landscaped. Two-fifths of the total labor spent on farm, stable and grounds has been spent on improving the grounds.

The north shack has been enlarged to contain 8 additional beds and 12 additional lockers.

A beginning has been made in setting all water-closets in patients' toilet rooms on slate slabs, 15 having already been finished.

The exposed steam piping, flues, etc., in the power plant have been insulated with asbestos covering; our poultry plant has been improved by the installation of electric brooders for 1,800 chicks, and 7 summer houses for growing chickens; and a new floor of 2-inch maple has been laid in the stable.

A White auto-truck of 1-ton capacity has been purchased for the double service of ambulance and express duty.

FARM.

The farm has had a fairly successful year considering the widespread damage to farm crops caused by excessive rainfall and high humidity which promote the development of fungous

diseases. We did not escape these entirely, but we did not lose any crop on account of them except cantaloupes.

The poultry department has had a favorable year, also, and shows a small balance of profit. The institution has used 5,236 dozen of eggs, and $4\frac{3}{4}$ tons of poultry, beside selling 680 pullets and cockerels.

RECOMMENDATIONS.

Land and Equipment for Dairy.

I wish again to make an urgent appeal for the establishment of a dairy at the sanatorium. Our present source of milk supply has been inadequate all summer. The bacterial count has varied from 200,000 to 800,000 per cubic centimeter. This shows a lack of system in handling, and occasional carelessness, which would seem to make pasteurization necessary if we are to continue on the present plan. This would involve a considerable expenditure for the installation of pasteurizer, and a continual additional expense of some 10 cents per can. I feel sure that the production of milk at the sanatorium would effect a saving of \$3,000 or \$4,000 per year over the cost of pasteurized milk. The Bunton Farm has been inspected by your Board, by Professor Ford of the Massachusetts Agricultural College and by three legislative committees on charitable institutions, all of whom have approved our request for this purchase.

In addition to the Bunton Farm I request this year the purchase of an adjoining piece of land of 36 acres, all tillable, with a right of way to the main street, opposite our administration building. This land was purchased recently by the present owner for approximately \$2,300. He has set out an orchard, and has cultivated a part of it, and has plans made to build a home upon it next spring if the sanatorium does not buy it. This means that if this land is not purchased this coming year we cannot buy it at all. I urge the purchase of this piece of land, not only for its value in connection with the dairy farm, but because it is the only available location within our reach for sewage disposal. The engineering department of the State Department of Health has looked carefully into this matter, and recommends the purchase for the reason that our

present system of sewage disposal will become exhausted in a few years, and we should have in our possession the only available piece of land in the vicinity for this purpose. The price for this piece of land is \$3,300. A representative of the State Board of Charity has inspected this land, and has urged me to make a request for its purchase this year. The only building on this property is a medium-sized barn for the storage of hay.

Coal Trestle.

I wish, also, to repeat my request of last year for a coal trestle. The need of it has been felt this year, in that we have been unable to purchase a winter's supply of coal for the reason that we had no place to store it. The purchase of our entire year's supply in one purchase would have effected a saving this year approaching the entire cost of the trestle; and to have our coal pile on the proposed site would reduce the cost of hauling by more than half. I make these two requests because I think they are both good business propositions for the Commonwealth, and would effect an appreciable economy in maintenance, and increase the efficiency of the institution.

I should like to bring to your attention, also, the advisability of constructing permanent housing of simple design and construction for 26 patients who have been cared for in tents during the past two years. The tents are wearing out, and a considerable expenditure would be necessary next year to renovate them. Twenty of these patients can be cared for in a small pavilion, which can be erected for \$2,000, and the other 6 have been provided for by a small addition to one of our present shacks. If your Board wishes permanent accommodations for these tent patients, in view of the long waiting list of applicants for admission, the sum mentioned above should be asked for this year for the pavilion.

MEDICAL SERVICE.

The medical staff remains as in 1914, and only a few changes have been made in the ward service.

ACKNOWLEDGMENTS.

The hearty co-operation of medical staff, chaplains, heads of departments and subordinate employees, the kindly thought of many friends who have contributed books, periodicals, clothing and entertainments, and the unfailing moral support of your Board, are gratefully acknowledged as very pleasant features of a harmonious and prosperous year.

Respectfully submitted,

SUMNER COOLIDGE,
Superintendent.

TREASURER'S REPORT.

To the Trustees of Hospitals for Consumptives.

I respectfully submit the following report of the finances of this institution for the fiscal year ending Nov. 30, 1915:—

CASH ACCOUNT.

Balance Dec. 1, 1914, \$2,865 07

Receipts.

Institution Receipts.

Board of inmates:—

Private,	\$2,072 53
Cities and towns,	72,944 41
Other reimbursements, charitable (collected by State Treasurer),	281 14

\$75,298 08

Sales:—

Food,	\$537 57
Clothing and materials,	62 80
Furnishings,	18 62
Heat, light and power,	28
Repairs and improvements,	5 60
Miscellaneous,	6 53

Farm, stable and grounds:—

Pigs and hogs,	\$98 00
Vegetables,	30 98
Sundries,	674 80

803 78

1,435 18

Miscellaneous receipts:—

Interest on bank balances,	\$160 15
Sundries,	91 28

251 43

76,984 69

Receipts from Treasury of Commonwealth.

Maintenance appropriations:—

Balance of 1914,	\$1,218 82
Advance money (amount on hand November 30),	7,000 00
Approved schedules of 1915,	\$104,485 43
Less returned,	1 05

104,484 38

112,703 20

Special appropriations,

11,056 80

Total,

\$203,609 76

Payments.

To treasury of Commonwealth, institution receipts,		\$76,984 69
Maintenance appropriations:—		
Balance November schedule, 1914,	\$4,083 89	
Eleven months' schedules, 1915,	104,484 38	
November advances,	6,343 62	
	<hr/>	114,911 89
Special appropriations:—		
Approved schedules,		11,056 80
Balance, Nov. 30, 1915:—		
In bank,	\$467 61	
In office,	188 77	
	<hr/>	656 38
Total,		<hr/> <hr/> \$203,609 76

MAINTENANCE.

Appropriation,	\$114,788 81
Expenses (as analyzed below),	114,787 76
	<hr/>
Balance reverting to treasury of Commonwealth,	\$1 05

Analysis of Expenses.

Salaries, wages and labor:—		
Sumner Coolidge, M.D., superintendent,	\$2,500 00	
General administration,	21,655 26	
Medical service,	2,700 00	
Ward service (male),	3,245 99	
Ward service (female),	4,372 08	
Repairs and improvements,	2,650 21	
Farm, stable and grounds,	8,917 42	
	<hr/>	\$46,040 96
Food:—		
Butter,	\$2,228 30	
Butterine,	2 20	
Beans,	132 83	
Bread and crackers,	94 43	
Cereals, rice, meal, etc.,	377 64	
Cheese,	76 84	
Eggs,	1,330 93	
Flour,	1,219 23	
Fish,	1,013 44	
Fruit (dried and fresh),	1,205 92	
Lard,	227 52	
Meats,	11,016 43	
Milk,	11,108 36	
Molasses and syrup,	61 56	
Spices, seasonings, salt, etc.,	243 91	
Sugar,	1,384 86	
Tea, coffee, broma and cocoa,	398 83	
Vegetables,	1,350 02	
	<hr/>	
Amounts carried forward,	\$33,473 25	\$46,040 96

<i>Amounts brought forward,</i>	\$33,473 25	\$46,040 96
Food — <i>Con.</i>		
Yeast,	50 42	
Sundries,	276 85	
	<hr/>	33,800 52
Clothing and materials:—		
Boots, shoes and rubbers,	\$26 32	
Clothing,	58 20	
Dry goods for clothing and small wares,	1 25	
	<hr/>	85 77
Furnishings:—		
Beds, bedding, table linen, etc.,	\$1,699 80	
Brushes, brooms,	168 84	
Carpets, rugs, etc.,	39 38	
Crockery, glassware, cutlery, etc.,	479 00	
Furniture and upholstery,	399 41	
Kitchen furnishings,	711 82	
Materials and machinery for manufacturing,	134 60	
Wooden ware, buckets, pails, etc.,	51 27	
Sundries,	278 47	
	<hr/>	3,962 59
Heat, light and power:—		
Coal,	\$5,658 58	
Electricity,	45 00	
Oil,	167 95	
Sundries,	247 65	
	<hr/>	6,119 18
Repairs and improvements:—		
Brick,	\$44 15	
Cement, lime and plaster,	154 67	
Doors, sashes, etc.,	89 12	
Electrical work and supplies,	689 08	
Hardware,	442 18	
Lumber,	1,960 52	
Machines (detached),	42 75	
Paints, oil, glass, etc.,	461 61	
Plumbing, steam fitting and supplies,	1,504 01	
Roofing and materials,	405 35	
Sundries,	541 63	
	<hr/>	6,335 07
Farm, stable and grounds:—		
Blacksmith and supplies,	\$206 95	
Carriages, wagons, etc., and repairs,	383 49	
Fertilizers, vines, seeds, etc.,	2,807 90	
Hay, grain, etc.,	2,993 55	
Harnesses and repairs,	228 16	
Horses,	507 92	
Other live stock,	623 38	
Rent,	447 13	
Tools, farm machines, etc.,	513 13	
Sundries,	1,515 16	
	<hr/>	10,226 77
Religious services,		1,194 00
		<hr/>
<i>Amount carried forward,</i>		\$97,764 86

<i>Amount brought forward,</i>		\$97,764 86
Miscellaneous:—		
Books, periodicals, etc.,	\$149 64	
Cuspidor supplies,	488 52	
Entertainments,	139 40	
Freight, expressage and transportation,	1,128 93	
Funeral expenses,	170 90	
Refrigeration,	398 45	
Ice,	15 70	
Medicines and hospital supplies,	2,046 30	
Medical attendance, nurses, etc. (extra),	32 00	
Postage,	210 00	
Printing and printing supplies,	383 97	
Soap and laundry supplies,	494 65	
Stationery and office supplies,	342 62	
Travel and expenses (officials),	528 14	
Telephone and telegraph,	265 00	
Tobacco,	9 87	
Sundries,	218 81	
		7,022 90
Total expenses for maintenance,		\$114,787 76
SPECIAL APPROPRIATIONS.		
Balance Dec. 1, 1914,		\$1,915 16
Appropriations for fiscal year,		9,287 50
Total,		\$11,202 66
Expended during the year (see statement annexed),	\$11,056 80	
Reverting to treasury of Commonwealth,	90	
		11,057 70
Balance Nov. 30, 1915,		\$144 96

RESOURCES AND LIABILITIES.

Resources.

Cash on hand,	\$656 38
November cash vouchers (paid from advance money), account of maintenance,	6,343 62
Due from treasury of Commonwealth, account of November, 1915, schedule,	3,303 38
	\$10,303 38

Liabilities.

Schedule of November bills,	\$10,303 38
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PER CAPITA.

During the year the average number of inmates has been 257.02.

Total cost for maintenance, \$114,787.76.

Equal to a weekly per capita cost of \$8.5887.

Receipt from sales, \$1,435.18.

Equal to a weekly per capita of \$0.1074.

All other institution receipts, \$75,549.51.

Equal to a weekly per capita of \$5.6527.

Special Appropriations.

OBJECT.	Act or Resolve.	Whole Amount.	Expended during Fiscal Year.	Expended to Date.	Balance at End of Year.
Laboratory,	Res. 1913, chap. 133	\$1,000 00	\$266 49	\$855 04	\$144 96
Bakery, porch, etc.,	Res. 1914, chap. 89	3,500 00	1,163 46	3,500 00	—
Screens,	Res. 1914, chap. 89	200 00	27 80	200 00	—
Sewerage system,	Res. 1914, chap. 148	1,000 00	312 10	999 65	35 ¹
Water supply,	— — ²	9,287 50	9,286 95	9,286 95	55 ¹
		\$14,987 50	\$11,056 80	\$14,841 64	\$144 96

¹ Reverting to treasury of the Commonwealth.

² Transferred from extraordinary expenses.

Respectfully submitted,

SUMNER COOLIDGE,
Treasurer.

Examined and found correct as compared with the records in the office of the Auditor of the Commonwealth.

ALONZO B. COOK,
Auditor.

VALUATION.

Real estate:—

Land, number of acres, 87,	\$9,965 25
Buildings,	119,029 50
Power plant, laundry, machinery, heating, sewerage system and improvement,	34,917 46
Total,	<u>\$163,912 21</u>

Personal estate:—

Food,	\$3,088 02
Clothing,	266 13
Furnishings,	25,899 96
Heat, light and power,	802 11
Repairs and improvements,	3,592 65
Farm, stable and grounds,	13,779 07
Miscellaneous,	4,202 18
Total,	<u>\$51,630 12</u>

FARM PRODUCE.

Eggs, 5,236½ dozen, at \$0.28,	\$1,466 22
Asparagus, 17½ bushels, at \$3.05,	59 59
Beans, lima, 69 bushels, at \$1.60,	110 40
Beans, string, 153½ bushels, at \$1.25,	192 05
Beets, 254 bushels, at \$0.55,	139 70
Cabbage, Drumhead, 21,600 pounds, at \$11.50 per ton,	118 80
Cabbage, greens, 9 bushels, at \$0.25,	2 25
Cabbage, Savoy, 165½ barrels, at \$0.60,	99 30
Cauliflower, 5 bushels, at \$0.55,	2 75
Carrots, 166½ bushels, at \$0.70,	116 38
Celery, 155 boxes, at \$0.75,	116 25
Chard, Swiss, 131¾ bushels, at \$0.40,	52 70
Corn, sweet, 412 bushels, at \$0.50,	206 00
Corn, yellow, 238½ bushels, at \$0.85,	202 73
Cucumbers, 29½ bushels, at \$2,	58 50
Kohlrabi, 14½ bushels, at \$0.45,	6 53
Lettuce, 286½ boxes, at \$0.28,	76 88
Onions, 153½ bushels, at \$0.60,	92 10
Parsley, 2 bushels, at \$0.35,	70
Parsnips, 69 bushels, at \$0.65,	44 85
Peas, 162½ bushels, at \$1.10,	178 75
Peas, seed, 1 bushel, at \$5.25,	5 25
Peppers, 28½ bushels, at \$0.50,	20 75
Potatoes, 1,608½ bushels, at \$0.75,	1,206 38
Pumpkins, 2,370 pounds, at \$0.75 per hundredweight,	17 78
Radishes, 93 bushels, at \$0.50,	46 50
Rhubarb, 723½ pounds, at \$0.01,	7 24
Spinach, 538 bushels, at \$0.30,	161 40
Squash, summer, 45 ⁴¹ / ₁₀₀ barrels, at \$0.60,	27 25
Squash, winter, 11,700 pounds, at \$0.75 per hundredweight,	87 75
Tomatoes, 290¾ bushels, at \$0.60,	175 05
Turnips, 120 bushels, at \$0.60,	72 00
Apples, 3½ barrels, at \$1.50,	5 25
Apples, 1 barrel, at \$3,	3 00
Cantaloupes, 11¼ crates, at \$1,	11 25
Cherries, 266 quarts, at \$0.12,	31 92
Currants, 701 quarts, at \$0.05,	35 05
Grapes, 383 pounds, at \$0.04,	15 32
Pears, 1 peck, at \$0.19,	19
Peaches, 78½ bushels, at \$1,	78 25
Plums, 8 bushels, at \$1,	8 00
Quince, 1½ bushels, at \$1.75,	2 63
Raspberries, 983 pints, at \$0.07½,	73 73
Strawberries, 1,334½ boxes, at \$0.10,	133 45

Watermelons, 62, at \$0.15,	\$9 30
Hay, No. 1, 40 tons, at \$23,	920 00
Hay, meadow, 4 tons, at \$11.50,	46 00
Rye, straw, 4 tons, at \$14,	56 00
Rye, 18 bushels, at \$1.25,	22 50
Pigs,	917 30
Poultry,	3,590 36
Manure, pigs, 23 cords, at \$6,	138 00
Manure, horse, 33 $\frac{1}{3}$ cords, at \$6,	200 00
Manure, hens, 181 barrels, at \$0.75,	135 75
Sand dressing, 44 loads, at \$1,	44 00
Manure (outside stock), 5.742 cords,	34 45
	<hr/>
Total,	\$11,683 48

SPECIAL REPORT.

The following report is prepared in accordance with a resolution of the National Conference of Charities and Corrections, adopted May 15, 1906:—

Population.

	Males.	Females.	Totals.
Number of patients present at beginning of fiscal year,	157	88	245
Number received during the year,	282	175	457
Number discharged or died during the year,	264	178	442
Number at end of fiscal year,	175	85	260
Daily average attendance (<i>i.e.</i> , number of inmates actually present) during the year.	173	84	257
Average number of officers and employees during the year,	56	25	81

Expenditures.

Current expenses:—

1. Salaries and wages,	\$46,040 96
2. Clothing,	85 77
3. Subsistence,	33,800 52
4. Ordinary repairs and improvements,	6,335 07
5. Office, domestic and outdoor expenses,	28,525 44
Total,	\$114,787 76

Extraordinary expenses:—

1. New buildings, land, etc.,	\$9,286 95
2. Permanent improvements to existing buildings and grounds,	1,769 85
Total,	\$11,056 80

Grand total, \$125,844 56

Summary of Current Expenses.

Total expenditures,	\$125,844 56
Deducting extraordinary expenses,	11,056 80
	<hr/>
	\$114,787 76
Deducting amount of sales,	1,435 18
	<hr/>
	\$113,352 58

Dividing this amount by the daily average number of patients, 257.02, gives a cost for the year of \$441.03, equivalent to an average weekly net cost of \$8.48.

STATISTICAL TABLES.

TABLE 1. — *Admissions and Discharges.*

	Males.	Females.	Totals.
Number of patients admitted, Dec. 1, 1914, to Nov. 30, 1915, inclusive.	282	175	457
Number of patients discharged, Dec. 1, 1914, to Nov. 30, 1915, inclusive.	264	178	442
Number of deaths (included in preceding item),	63	36	99
Number remaining in sanatorium Nov. 30, 1915,	175	85	260
Daily average number of patients,	173	84	257
Daily average number of bed patients, Dec. 1, 1914, to Nov. 30, 1915.	35	27	62

TABLE 2. — *Civil Condition of Patients admitted.*

	Males.	Females.	Totals.
Married,	128	103	231
Single,	140	62	202
Widowed,	10	9	19
Divorced,	4	1	5
Totals,	282	175	457

TABLE 3. — *Age of Patients admitted.*

	Males.	Females.	Totals.
14 to 20 years,	25	19	44
20 to 30 years,	79	67	146
30 to 40 years,	75	59	134
40 to 50 years,	71	21	92
Over 50 years,	32	9	41
Totals,	282	175	457

TABLE 4. — *Nativity and Parentage of Patients admitted.*

PLACES OF NATIVITY.	MALES.			FEMALES.			TOTALS.		
	Patients.	Fathers.	Mothers.	Patients.	Fathers.	Mothers.	Patients.	Fathers.	Mothers.
United States:—									
Massachusetts,	107	25	29	52	12	13	159	37	42
Other New England States,	10	7	9	8	5	4	18	12	13
Other States,	16	11	14	10	6	6	26	17	20
Total native,	133	43	52	70	23	23	203	66	75
Other countries:—									
Albania,	1	1	1	-	-	-	1	1	1
Austria,	3	5	5	6	6	6	9	11	11
Azores,	-	-	-	-	2	2	-	2	2
Belgium,	1	1	1	-	-	-	1	1	1
Brazil,	1	-	-	-	-	-	1	-	-
Canada,	12	24	24	22	28	26	34	52	50
Denmark,	1	2	2	-	1	-	1	3	2
England,	7	14	15	8	8	11	15	22	26
Finland,	1	2	2	3	3	3	4	5	5
France,	-	1	-	1	2	1	1	3	1
Germany,	3	7	6	1	3	2	4	10	8
Greece,	2	2	2	1	1	1	3	3	3
Holland,	2	2	2	-	1	-	2	3	2
Ireland,	33	82	79	27	50	52	60	132	131
Italy,	15	17	17	4	4	4	19	21	21
Newfoundland,	3	3	4	6	5	8	9	8	12
Norway,	1	1	1	2	2	2	3	3	3
Poland,	1	1	1	1	1	-	2	2	1
Portugal,	-	-	-	-	2	2	-	2	2
Prince Edward Island,	2	2	4	3	7	5	5	9	9
Russia,	39	40	38	15	16	17	54	56	55
Scotland,	6	9	5	2	4	4	8	13	9
Spain,	1	1	1	-	-	-	1	1	1
Sweden,	5	8	7	1	3	3	6	11	10
Switzerland,	1	1	1	-	-	-	1	1	1
Syria,	3	3	3	1	1	1	4	4	4
Turkey,	3	3	3	-	-	-	3	3	3
West Indies,	-	1	-	-	1	1	1	1	1
Western Islands,	-	-	-	-	-	-	-	1	-
Total foreign,	147	233	224	105	151	151	252	384	375
Unknown,	2	6	6	-	1	1	2	7	7
Totals,	282	282	282	175	175	175	457	457	457

TABLE 5. — *Residence of Patients admitted.*

CITIES AND TOWNS.	Number.	CITIES AND TOWNS.	Number.
Acushnet,	1	Maynard,	1
Arlington,	2	Medway,	2
Attleboro,	10	Middleborough,	3
Barnstable,	1	Milford,	4
Belmont,	2	Natick,	1
Beverly,	1	Needham,	1
Boston,	251	New Bedford,	14
Braintree,	1	Newburyport,	2
Bridgewater,	1	Newton,	7
Brockton,	24	North Attleborough,	2
Brookline,	6	Norton,	1
Cambridge,	3	Norwood,	2
Chelsea,	9	Plainville,	1
Dartmouth,	1	Plymouth,	2
Dennis,	1	Provincetown,	1
Everett,	4	Quincy,	12
Fairhaven,	1	Readville,	1
Fall River,	22	Rutland,	1
Foxborough,	1	Somerville,	4
Franklin,	1	Stoneham,	1
Gloucester,	1	Stoughton,	1
Hampden,	1	Taunton,	12
Hanson,	1	Walpole,	2
Hingham,	1	Waltham,	3
Hopedale,	1	Watertown,	1
Hopkinton,	1	Webster,	1
Hudson,	1	Wellfleet,	1
Lexington,	1	West Bridgewater,	1
Lowell,	3	Weymouth,	4
Lynn,	3	Whitman,	1
Malden,	3	Wilmington,	1
Manchester, N. H.,	1	Woonsocket, R. I.,	1
Marlborough,	1	Worcester,	2
Mattapoissett,	1	Totals,	457

TABLE 6. — Occupations.

	Males.	Females.	Totals.		Males.	Females.	Totals.
Asbestos worker, . . .	1	-	1	Freight handler, . . .	3	-	3
Baker,	2	-	2	Freight tender, . . .	1	-	1
Bartender,	1	-	1	Gardener,	1	-	1
Barber,	4	-	4	Gas fitter,	1	-	1
Bell boy,	1	-	1	Hostler,	1	-	1
Boiler maker,	2	-	2	Hotel work,	2	-	2
Bookbinder,	1	-	1	Housekeeper,	-	3	3
Bookkeeper,	3	2	5	Housewife,	-	78	78
Brass finisher,	1	-	1	Insurance agent,	2	-	2
Brewer,	1	-	1	Janitor,	3	-	3
Building cleaner,	1	-	1	Jeweler,	3	-	3
Butcher,	1	-	1	Junk collector,	1	-	1
Candy maker,	3	1	4	Labeler,	-	1	1
Car conductor,	1	-	1	Laborer,	19	-	19
Car inspector,	1	-	1	Laundress,	-	3	3
Carpenter,	4	-	4	Laundryman,	1	-	1
Cashier,	1	2	3	Lineman,	1	-	1
Chauffeur,	6	-	6	Liquor dealer,	1	-	1
Chocolate packer,	-	1	1	Locksmith,	1	-	1
Cigar maker,	4	-	4	Machinist,	12	-	12
Civil engineer,	1	-	1	Manicurist,	-	1	1
Clerk,	20	5	25	Marker,	-	1	1
Cook,	2	2	4	Meat cutter,	1	-	1
Coppersmith,	1	-	1	Merchant,	2	-	2
Domestic,	-	40	40	Motorman,	2	-	2
Dressmaker,	-	2	2	Moving picture operator,	1	-	1
Electrician,	4	-	4	Musician,	1	-	1
Electrotyper,	1	-	1	None,	-	2	2
Elevator man,	1	-	1	Nurse,	-	2	2
Engineer,	1	-	1	Nurse girl,	-	2	2
Errand boy,	1	-	1	Operative,	37	14	51
Farmer,	3	-	3	Orderly,	1	-	1
Fireman,	4	-	4	Painter,	10	1	11
Fish boner,	-	2	2	Paper box maker,	1	-	1
Fisherman,	4	-	4	Peddler,	6	-	6
Foreman,	1	-	1	Penmaker,	1	-	1

TABLE 6. — *Occupations — Concluded.*

	Males.	Females.	Totals.		Males.	Females.	Totals.
Photographer,	2	-	2	Steel grinder,	1	-	1
Plasterer,	1	-	1	Steward,	1	-	1
Plumber,	3	-	3	Stone cutter,	3	-	3
Porter,	3	-	3	Student,	1	3	4
Printer,	4	-	4	Tailor,	14	-	14
Restaurant manager,	1	-	1	Tanner,	1	-	1
Roofer,	1	-	1	Teamster,	14	-	14
Salesman,	5	3	8	Telephone operator,	-	1	1
School teacher,	-	1	1	Tinsmith,	2	-	2
Sculptor,	1	-	1	Tire maker,	1	-	1
Seaman,	1	-	1	Unknown,	2	-	2
Ship fitter,	1	-	1	Waiter,	6	2	8
Shipper,	1	-	1	Weaver,	8	-	8
Silver designer,	1	-	1	Wool sorter,	1	-	1
Solderer,	1	-	1	Totals,	282	175	457
Steam fitter,	2	-	2				

TABLE 7. — *Condition on Admission.*

	Males.	Females.	Totals.
Incipient,	2	-	2
Moderately advanced,	128	70	198
Advanced,	145	104	249
Nontuberculous,	1	-	1
Not examined,	6	1	7
Totals,	282	175	457

TABLE 8. — *Condition on Discharge.*

	Males.	Females.	Totals.	Per Cent.
Arrested,	2	-	2	5
Apparently arrested,	15	6	21	
Quiescent,	20	3	23	5
Improved,	104	83	187	42
Unimproved,	38	25	63	14
Died,	63	36	99	23
Not considered,	22	25	47	11
Totals,	264	178	442	100

TABLE 9. — *Deaths.*

	DURATION OF DISEASE.			LENGTH OF RESIDENCE IN SANATORIUM.		
	Males.	Females.	Totals.	Males.	Females.	Totals.
Under 1 month,	-	-	-	7	5	12
1 to 2 months,	-	-	-	9	4	13
2 to 3 months,	-	-	-	4	7	11
3 to 4 months,	-	1	1	5	4	9
4 to 5 months,	-	2	2	4	3	7
5 to 6 months,	-	2	2	1	4	5
6 to 7 months,	1	1	2	6	3	9
7 to 8 months,	1	-	1	9	-	9
8 to 9 months,	1	-	1	3	-	3
9 to 10 months,	4	4	8	1	1	2
10 to 12 months,	4	3	7	2	1	3
12 to 18 months,	14	11	25	7	1	8
18 to 24 months,	11	1	12	4	3	7
Over two years,	27	10	37	1	-	1
Unknown,	-	1	1	-	-	-
Totals,	63	36	99	63	36	99

TABLE 10. — *Cause of Death.*

	Males.	Females.	Totals.
Phthisis pulmonalis,	62	36	98
Tubercular meningitis,	1	-	1
Totals,	63	36	99

WESTFIELD STATE SANATORIUM.

RESIDENT OFFICERS.

HENRY D. CHADWICK, M.D.,	.	.	.	<i>Superintendent.</i>
ROY MORGAN, M.D.,	.	.	.	<i>Assistant Superintendent and Physician.</i>
J. J. COSGROVE, M.D.,	.	.	.	<i>Physician.</i>
CARRIE A. BAILEY,	.	.	.	<i>Head Nurse.</i>
ANNIE S. RATHBONE,	.	.	.	<i>Head Nurse.</i>
EMILY B. POLLARD,	.	.	.	<i>Head Nurse.</i>
HERBERT W. SMITH,	.	.	.	<i>Steward.</i>
RALPH L. HIGGINS,	.	.	.	<i>Chief Engineer.</i>
FRANK J. CLEGG,	.	.	.	<i>Farmer.</i>

REPORT OF THE SUPERINTENDENT.

To the Trustees of Hospitals for Consumptives.

I have the honor to submit the sixth annual report of the Westfield State Sanatorium for the year ending Nov. 30, 1915.

DAYS OF TREATMENT.

The sanatorium has provided 94,465.65 days of treatment this past year, which is an increase of 4,976.4 days over the preceding year.

NUMBER TREATED.

There have been 328 patients admitted. This is 24 more than last year. These admissions plus the number in the institution Dec. 1, 1914, make a total of 582 patients that have been under treatment during the year. The daily average number of patients has increased from 245.45 last year to 258.81 this year.

CLASSIFICATION.

Of the 328 patients admitted, 82, or 25 per cent., were incipient cases; all but 12 of these were children. There were 87, or 26 per cent., who were moderately advanced; of these, 48 were children. There were 158, or approximately 49 per cent., who were patients in an advanced stage; only 21 of these were children. One patient was found to have a nontuberculous pulmonary abscess. There has been a daily average of 23.5 male and 40 female patients who were so ill that they had to be cared for in bed; 12 per cent. of the children under twelve years old, 37 per cent. of the women and 21 per cent. of the men have been bed patients.

LENGTH OF RESIDENCE.

There has been a marked increase each year in the average length of stay of each patient. In 1911, 145 days; in 1912, 185 days; in 1913, 229 days; in 1914, 247 days; and in 1915, 306 days. This is an encouraging record because a year's residence at least is usually required in even the more hopeful cases to obtain an apparent arrest of the disease, while to protect the community the open, progressive cases should have institutional care as long as they live. To persuade them to remain until the end is often very difficult. At such a time home and friends make a strong appeal to the invalid. Good nursing and tactful handling are required to keep them contented, and so prevent them from going home to die.

GEOGRAPHICAL DISTRIBUTION OF PATIENTS.

Table 5 gives this in detail. It is interesting to note that of the 7 largest cities, each of which has a local tuberculosis hospital, only 2, Boston and Holyoke, have admitted a less number of patients to Westfield than during the preceding year. Furthermore, these cities, although they are expected to care for all their advanced cases, sent us such patients as follows: Springfield, 17; Worcester, 13; Fitchburg, 4; Boston, 8; Fall River, 4; New Bedford, 3; Holyoke, 4, — a total of 53 patients that should have been cared for in local hospitals. These patients occupied beds that rightfully belonged to the many hopeful cases on the waiting lists.

SUPPORT OF PATIENTS.

Of the 328 admitted, 27 paid their own board, 196 were supported by cities and towns, 88 were State charges and the status of 17 has not yet been determined. The following figures are worthy of attention, showing as they do that each succeeding year since 1911 the receipts from patients who paid their own board have been lessening, notwithstanding the fact that the average daily number of patients has steadily increased. At the same time, the amount paid by cities and towns for settled cases is larger in the aggregate. It should be

noted that the marked increase in receipts for 1915 under this heading was because of the settlement by the city of Boston of bills that had been accumulating during the preceding five years.

YEAR.	Average Number of Patients.	Paid by Patients.	Paid by Cities and Towns.	Total.
1910, ¹	128.4	\$6,650 61	\$3,860 06	\$10,510 67
1911,	156.8	8,457 70	13,511 92	28,969 62
1912,	176.3	6,209 85	18,520 10	24,729 95
1913,	182.6	4,599 74	19,876 01	24,475 75
1914,	234.5	3,949 39	20,569 84	23,519 23
1915,	258.8	3,551 05	59,242 41	62,793 46

¹ Ten months.

GAIN IN WEIGHT OF DISCHARGED PATIENTS.

The number of patients who gained weight is 215. Each made an average gain of $10\frac{1}{2}$ pounds; 99 failed to gain, or lost weight.

CONDITION ON DISCHARGE.

The number in each class is given in Table 8. The following gives the percentages:—

Apparently arrested, . . . . .	.369	Unimproved, . . . . .	.113
Quiescent, . . . . .	.149	Died, . . . . .	.168
Improved, . . . . .	.111	Not considered, . . . . .	.066

The apparently arrested cases were nearly all admitted in the incipient to moderately advanced stages. This shows the necessity of making an early diagnosis and the early institution of suitable treatment if we expect to obtain favorable results.

SANATORIUM SCHOOL.

The school work has continued under the same conditions as last year. The primary grade teacher, Miss Winslow, used the girls' play room in the children's ward. Mrs. Carlson has taught the grammar grades in the recreation room. They have done the best work possible under many adverse circumstances.

The teachers and pupils are looking forward with eager anticipation to the opening of the new school building in December.

The number of patients of school age has greatly increased and now averages nearly 140. On account of lack of room we have not been able to accommodate all those that should have attended school. This next year, besides the regular grade studies for the children, classes in craft work and domestic science will be formed for the older patients. Excellent facilities for such instruction have been provided in the new building.

The daily average attendance for all school grades has been as follows: —

Grade 1,	20.58
Grade 2,	14.80
Grade 3,	9.87
Grade 4,	13.97
Grade 5,	12.47
Grade 6,	4.77
Grade 7,	9.78
Grade 8,	2.6
A total daily average attendance of	88.66
Per cent. of attendance in primary grades,	90.88
Per cent. of attendance in grammar grades,	94.13

IMPROVEMENTS.

School Building. — The school building for which an appropriation was granted last year has been erected and will be ready for pupils soon after December 1. The building provides on the first floor two classrooms for grade work, a workshop, domestic science room, and a library and reading room for the patients' use.

In the second story there is a four-room apartment for the farm foreman, besides two rooms for teachers. The heating and lighting come from the central power plant. As the children attend but half-day sessions the building supplies accommodations for 170 pupils.

New Boiler. — A new 150 horse power boiler has been installed. With the new school building and greenhouse in use this addition to the power plant was an absolute necessity.

Coal Trestle. — After much delay work was begun on the construction work of the trestle in June, and it was ready for use the 1st of December. We can now store about 1,000 tons of coal at the siding besides 300 tons in the coal pocket at the power house.

RECOMMENDATIONS.

The following special appropriations for improvements are requested: —

Storage and horse barn, stable for young stock, and dairy room,	\$6,500 00
Barn and dairy equipment,	1,784 48
Garage, carpenter shop and root cellar,	5,000 00
Fireproof vault,	1,500 00

Storage and Horse Barn, Stable for Young Stock, and Dairy Room. — The large barn which was on the property when purchased by the Commonwealth was of a tobacco barn type of construction and in very poor repair. The sum of \$1,600 was expended in shingling the sides and fixing one end of one floor so that it could be used for a horse stable and carriage room. On account of the light timbers used in framing the barn the upper floors are of little use for storage purposes. We are obliged to store the baled hay and straw in the basement. For this reason a great deal of waste room is left, which is of little use. The barn will soon need reshingling and other extensive repairs made if we continue to use it. The trustees consider that it is unwise to expend more money for this purpose. Therefore plans have been made for a storage and horse barn, and stable for young stock, to be built in connection with our new dairy barn.

The plan submitted for the dairy room is similar to the one asked for last year. We have at present no suitable place in which to cool milk or care for it in a proper way. The cost of construction is estimated at \$6,500.

Garage, Carpenter Shop and Root Cellar. — The room now used for a carpenter and repair shop is badly needed for an additional storeroom for groceries and household supplies.

We need a garage, as the touring car and automobile truck are now kept in what was intended for a carriage room, close

by the horses. We cannot heat this room except by the use of electric radiators. By this means we can keep the temperature above the freezing point, but cannot make the room warm enough to wash the cars in winter weather. The new building as planned, beside serving as a garage and carpenter shop, will have a roomy loft which will be useful for storage of lumber and other supplies, and the basement under the carpenter shop will make an excellent root cellar. The estimated cost is \$5,000.

Fireproof Vault. — The plan submitted has been approved by the Commissioner of Public Records. The construction of this vault is necessary to enable us to comply with the law, which requires specified records to be left under fireproof conditions. The estimated cost is \$1,500.

Improvement of Lands by Prison Labor. — We could use such labor to good advantage in improving the grounds about our buildings and in reforestation. There are about 40 acres suitable for planting with white pine that could be cleared of brush and prepared for seedlings. Road building and general farm work could be carried on much more extensively if we had prison labor available. We ask for \$5,000 to be expended in this way.

ACKNOWLEDGMENTS.

The weekly services have been continued by the Catholic, Protestant and Jewish clergymen. The patients and employees are very appreciative of the special efforts made in their behalf by these clergymen, who come to them on Sunday, their busiest day, for sanatorium services. They also cheerfully answer calls at any time to visit, and to offer consolation to the sick and dying. I especially appreciate their co-operation and assistance in maintaining discipline.

We have been favored as in other years with gifts of many magazines and some books. At Christmas especially toys, games and useful articles have been generously donated by kind friends in the neighboring cities and towns for distribution to the patients.

This year we had a valuable gift from Mrs. James Crane of Westfield of a very handsome greenhouse. She also contributed many beautiful palms and other valuable plants. We have

needed a greenhouse very much in past years to enable us to start early vegetables and flowers. Mrs. Crane's gift will prove a very valuable asset to the institution.

Another noteworthy gift was an upright piano presented to us for the use of the school by Mr. Andrew Wallace of Forbes & Wallace, Springfield.

There has been one change in our medical staff. Dr. John Pinckney resigned in November to accept the position of assistant superintendent at the Rhode Island State Sanatorium. This vacant position has been filled by the appointment of Dr. J. J. Cosgrove of Hopkinton, Mass.

Whatever measure of success has been attained by the institution during the year has in a large measure been due to the efficient work done by the officers and employees. To them I wish to express my appreciation for their co-operation and loyalty. I am also deeply grateful for the advice and support given me, and for the continued confidence that you, the trustees, have shown in my earnest efforts to carry on the work of the sanatorium.

Respectfully submitted,

HENRY D. CHADWICK,

Superintendent.

TREASURER'S REPORT.

To the Trustees of Hospitals for Consumptives.

I respectfully submit the following report of the finances of this institution for the fiscal year ending Nov. 30, 1915:—

CASH ACCOUNT.

Balance Dec. 1, 1914,		\$734 86
<i>Receipts.</i>		
<i>Institution Receipts.</i>		
Board of inmates:—		
Private,	\$3,551 05	
Cities and towns,	59,242 41	
	62,793 46	
Sales:—		
Food,	\$698 34	
Clothing and materials,	21	
Miscellaneous,	39 40	
Farm, stable and grounds:—		
Cows and calves,	\$130 25	
Pigs and hogs,	607 81	
Hides,	14 50	
Vegetables,	67 65	
Use of teams,	1 00	
Sundries,	37 30	
	858 51	
		1,596 46
Miscellaneous receipts:—		
Interest on bank balances,	\$144 86	
Sundries,	70 36	
	215 22	
		64,605 14
<i>Receipts from Treasury of Commonwealth.</i>		
Maintenance appropriations:—		
Balance of 1914,	\$2,791 78	
Advance money (amount on hand November 30),	10,000 00	
Approved schedules of 1915,	\$112,318 36	
Less returned,	13 00	
	112,305 36	
		125,097 14
Special appropriations,		16,774 48
		\$207,211 62
Total,		

Payments.

To treasury of Commonwealth, institution receipts,		\$64,605 14
Maintenance appropriations: —		
Balance November schedule, 1914,	\$3,526 64	
Eleven months' schedules, 1915,	112,305 36	
November advances,	6,161 95	
	<hr/>	121,993 95
Special appropriations: —		
Approved schedules,		16,774 48
Balance, Nov. 30, 1915: —		
In bank,	\$3,342 78	
In office,	495 27	
	<hr/>	3,838 05
Total,		<hr/> <hr/> \$207,211 62

MAINTENANCE.

Appropriation,		\$123,290 00
Expenses (as analyzed below),		123,289 51
		<hr/>
Balance reverting to treasury of Commonwealth,		\$0 49

Analysis of Expenses.

Salaries, wages and labor: —		
Henry D. Chadwick, superintendent,	\$2,500 00	
General administration,	21,083 21	
Medical service,	2,777 71	
Ward service (male),	2,365 07	
Ward service (female),	8,072 49	
Repairs and improvements,	3,774 98	
Farm, stable and grounds,	9,870 67	
	<hr/>	\$50,444 13
Food: —		
Butter,	\$2,967 36	
Butterine,	117 30	
Beans,	147 74	
Bread and crackers,	160 39	
Cereals, rice, meal, etc.,	406 41	
Cheese,	221 09	
Eggs,	3,344 57	
Flour,	1,473 35	
Fish,	1,316 40	
Fruit (dried and fresh),	1,671 81	
Lard,	474 34	
Meats,	15,460 16	
Milk,	207 00	
Molasses and syrup,	126 49	
Spices, seasonings, salt, etc.,	629 92	
Sugar,	1,323 88	
Tea, coffee, broma and cocoa,	591 55	
Vegetables,	1,990 27	
Yeast,	77 95	
Sundries,	168 79	
	<hr/>	32,876 77
Amount carried forward,		<hr/> <hr/> \$83,320 90

<i>Amount brought forward,</i>		\$83,320 90
Clothing and materials:—		
Boots, shoes and rubbers,		\$243 35
Clothing,		307 19
Dry goods for clothing and small wares,		230 93
Furnishing goods,		23 15
Hats and caps,		13 00
Leather and shoe findings,		71 07
Materials and machinery for manufacturing,		27 84
		<hr/>
		916 53
Furnishings:—		
Beds, bedding, table linen, etc.,	\$1,779 68	
Brushes, brooms,	374 17	
Carpets, rugs, etc.,	285 74	
Crockery, glassware, cutlery, etc.,	362 14	
Furniture and upholstery,	603 48	
Kitchen furnishings,	542 29	
Materials and machinery for manufacturing,	2 95	
Wooden ware, buckets, pails, etc.,	29 07	
Sundries,	92 47	
		<hr/>
		4,071 99
Heat, light and power:—		
Coal,	\$2,456 45	
Freight on coal,	4,549 42	
Oil,	412 41	
Sundries,	62 62	
		<hr/>
		7,480 90
Repairs and improvements:—		
Cement, lime and plaster,	\$452 11	
Doors, sashes, etc.,	319 28	
Electrical work and supplies,	564 96	
Hardware,	897 64	
Lumber,	896 26	
Machines (detached),	752 64	
Paints, oil, glass, etc.,	1,065 99	
Plumbing, steam fitting and supplies,	1,621 57	
Roofing and materials,	402 68	
Sundries,	1 20	
		<hr/>
		6,974 33
Farm, stable and grounds:—		
Automobiles, gasoline, oil and tires,	\$1,565 28	
Blacksmith and supplies,	140 68	
Carriages, wagons, etc., and repairs to automobiles,	614 07	
Fertilizers, vines, seeds, etc.,	197 55	
Hay, grain, etc.,	7,745 97	
Harnesses and repairs,	57 70	
Other live stock,	82 00	
Rent,	18 00	
Tools, farm machines, etc.,	350 01	
Sundries,	95 73	
		<hr/>
		10,866 99
Religious services,		1,247 40
		<hr/>
<i>Amount carried forward,</i>		\$114,879 04

<i>Amount brought forward,</i>		\$114,879 04
Miscellaneous:—		
Books, periodicals, etc.,	\$93 05	
Cuspidor supplies,	441 37	
Entertainments,	167 38	
Freight, expressage and transportation,	1,840 45	
Funeral expenses,	15 50	
Hose, etc.,	7 35	
Ice,	107 07	
Medicines and hospital supplies,	1,934 24	
Medical attendance, nurses, etc. (extra),	245 65	
Postage,	201 70	
Printing and printing supplies,	337 13	
Return of runaways,	6 67	
Soap and laundry supplies,	1,357 58	
Stationery and office supplies,	334 47	
School books and school supplies,	129 24	
Travel and expenses (officials),	360 02	
Telephone and telegraph,	485 54	
Tobacco,	3 75	
Sundries,	342 31	
		<u>\$8,410 47</u>
Total expenses for maintenance,		\$123,289 51

SPECIAL APPROPRIATIONS.

Balance Dec. 1, 1914,	\$4,076 68
Appropriations for fiscal year,	15,725 00
Total,	<u>\$19,801 68</u>
Expended during the year (see statement annexed),	16,774 48
Balance Nov. 30, 1915,	<u>\$3,027 20</u>

RESOURCES AND LIABILITIES.

Resources.

Cash on hand,	\$3,838 05
November cash vouchers (paid from advance money), account of maintenance,	6,161 95
Due from treasury of Commonwealth, account of November, 1915, schedule,	984 15
	<u>\$10,984 15</u>

Liabilities.

Schedule of November bills,	\$10,984 15
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PER CAPITA.

During the year the average number of inmates has been 258.81.
 Total cost for maintenance, \$123,289.51.
 Equal to a weekly per capita cost of \$9.16.
 Receipt from sales, \$1,596.46.
 Equal to a weekly per capita of \$0.1185+.
 All other institution receipts, \$63,008.68.
 Equal to a weekly per capita of \$4.6818.

Special Appropriations.

OBJECT.	Act or Resolve.	Whole Amount.	Expended during Fiscal Year.	Expended to Date.	Balance at End of Year.
Grading, concrete walks, lighting,	Acts 1914, chap. 131	\$2,500 00	\$69 45	\$2,419 20	\$80 80
Coal trestle,	Acts 1914, chap. 131	3,926 43	3,284 26	3,284 26	642 17
School building,	Acts 1915, chap. 117	13,725 00	12,235 69	12,235 69	1,489 31
Purchase and installation of boilers,	Acts 1915, chap. 110	2,000 00	1,185 08	1,185 08	814 92
		\$22,151 43	\$16,774 48	\$19,124 23	\$3,027 20

Respectfully submitted,

HENRY D. CHADWICK,

Treasurer.

Examined and found correct as compared with the records in the office of the Auditor of the Commonwealth.

ALONZO B. COOK,

Auditor.

VALUATION.

REAL ESTATE.

Land:—

Used for tillage, $56\frac{7}{8}$ acres,	\$4,265 63
Used for pasture, 4 acres,	40 00
Used for grounds, 32 acres,	6,613 96
Used for mowing, $6\frac{3}{4}$ acres,	506 25
Used for woodland, 40 acres,	2,000 00
Waste and miscellaneous, $38\frac{3}{8}$ acres,	236 88

Buildings:—

Administration,	40,493 36
Inmates,	55,609 00
Farm, stable and grounds,	11,375 00
Employees,	5,100 00
Heat, light and power,	14,370 00
Miscellaneous purposes,	19,300 00

Miscellaneous:—

Sewerage system,	1,948 80
Equipment for heat, light and power,	16,362 34
Water system,	2,481 34
Heating system,	2,376 15
Hot-water system,	729 55
Telephone system,	75 00

Total valuation of real estate, \$183,883 26

PERSONAL PROPERTY.

East ward,	\$4,471 78
West ward,	4,341 80
Children's ward,	3,986 71
Laboratory,	804 13
Administration building,	1,084 99
Service building,	1,863 44

Amounts carried forward, \$16,552 85 \$183,883 26

<i>Amounts brought forward,</i>	\$16,552 85	\$183,883 26
Annex,	726 35	
Day farmhouse,	256 61	
Superintendent's apartment,	1,027 90	
Staff camp,	52 63	
Office,	1,672 76	
Schoolrooms,	1,000 19	
Kitchen,	3,362 01	
Bakery,	639 01	
Storeroom,	2,745 21	
Power house, second floor,	590 16	
Laundry,	517 85	
Engine room,	742 20	
Paint shop,	215 13	
Farm,	15,435 15	
	<hr/>	\$45,536 01
Total valuation,		<hr/> \$229,419 27

PRODUCE OF FARM.

Apples, 11 barrels, at \$1.50,	\$16 50
Asparagus, 7 boxes, at \$3.50,	24 50
Beans, string, 8½ bushels, at \$1.25,	10 63
Beets, 702¼ bushels, at \$0.55,	386 26
Cabbage, 8½ tons, at \$11.50,	97 75
Carrots, 147 bushels, at \$0.70,	102 90
Celery, 917 boxes, at \$0.75,	687 75
Corn, sweet, 174 bushels, at \$0.60,	104 40
Cucumbers, table use, 127½ boxes, at \$2,	225 00
Cucumber pickles, 56 pecks, at \$0.35,	19 60
Dandelions, 41 bushels, at \$0.35,	14 35
Egg plants, 10 barrels, at \$3.75,	37 50
Lettuce, 667⅕ boxes, at \$0.25,	166 80
Onions, 180½ bushels, at \$0.60,	108 30
Parsley, 18 bushels, at \$0.35,	6 30
Parsnips, 21 bushels, at \$0.65,	13 65
Peas, green, 13 bushels, at \$1.10,	14 30
Potatoes, 186⅞ bushels, at \$0.75,	138 80
Potatoes, small, 17 bushels, at \$0.25,	4 25
Peppers, red, 15 bushels, at \$0.50,	7 50
Peppers, green, 20 bushels, at \$0.50,	20 00
Pumpkins, 7.32 hundredweight, at \$0.75,	5 49
Radishes, 21 bushels, at \$0.50,	10 50
Rhubarb, 3,468 pounds, at \$0.01,	34 68
Scullions, 155¼ bushels, at \$0.25,	38 82
Spinach, 56½ bushels, at \$0.30,	16 95
Squash, summer, 11 barrels, at \$0.60,	6 60
Squash, winter, 44.50 hundredweight, at \$0.75,	33 37
Swiss chard, 14 bushels, at \$0.40,	5 60
Tomatoes, 435 bushels, at \$0.60,	261 00
Turnips, 174½ bushels, at \$0.60,	104 55
Ensilage, 183⅓ tons, at \$5,	916 50
Mangel-wurzel, 1,395 bushels, at \$0.25,	348 75
Rape, 13 tons, at \$5,	65 00
Millet, 26½ tons, at \$5,	132 50
Oats and cow peas, 15½ tons, at \$5,	76 00
Rye, straw, 1 ton, at \$14,	14 00
Rye, 6 bushels, at \$1.25,	7 50
Corn, whole, 102 bushels, at \$0.85,	86 70
Manure, 351 cords, at \$6,	2,106 00
Hay, 500 pounds, at \$23 per ton,	5 75
Total,	\$6,482 52
Received from the sale of pigs and hogs,	642 16
Received from the sale of vegetables,	67 65
Received from the sale of hides,	14 50
Received from the sale of calves,	135 25
Pork used by sanatorium, 7,759 pounds, at \$0.10 a pound,	775 90
Milk produced, 169,117 quarts, at \$0.05½ a quart,	9,583 30
Total value of farm products,	\$17,701 28

SPECIAL REPORT.

The following special report is prepared in accordance with a resolution of the National Conference of Charities and Corrections, adopted May 15, 1906:—

Population.

	Males.	Females.	Totals.
Number received during the year,	157	171	328
Number passing out of the institution during the year,	153	161	314
Number at the end of the fiscal year in the institution,	133	132	265
Daily average attendance (number of inmates actually present) during the year.	129.27	129.54	258.81
Average number of employees and officers during the year,	69	29	98

Expenditures.

Current expenses:—

1. Salaries and wages,	\$50,444 13
2. Clothing,	916 53
3. Subsistence,	32,876 77
4. Ordinary repairs,	6,974 33
5. Office, domestic and outdoor expenses,	32,077 75
Total,	\$123,289 51

Extraordinary expenses:—

1. Permanent improvements to existing buildings and new construction,	16,774 48
Grand total,	\$140,063 99

Summary of Current Expenses.

Total expenditures,	\$140,063 99
Deducting extraordinary expenses,	16,774 48
	\$123,289 51
Deducting amount of sales,	1,596 46
	\$121,693 05

Dividing this amount by the daily average number of patients, 258.81, gives a cost for the year of \$470.20, equivalent to an average weekly net cost of \$9.04.

STATISTICAL TABLES.

TABLE 1. — *Admissions and Discharges.*

	Males.	Females.	Totals.
Number of patients admitted Dec. 1, 1914, to Nov. 30, 1915, inclusive.	157	171	328
Number of patients discharged Dec. 1, 1914, to Nov. 30, 1915, inclusive.	153	161	314
Number of deaths (included in preceding item),	24	29	53
Number in sanatorium Dec. 1, 1914,	-	-	254
Number remaining Nov. 30, 1915,	-	-	268

TABLE 2. — *Civil Condition of Patients admitted.*

	Males.	Females.	Totals.
Married,	36	35	71
Single,	116	129	245
Widowed,	5	7	12
Totals,	157	171	328

TABLE 3. — *Ages of Patients admitted.*

	Males.	Females.	Totals.
1 to 13 years,	48	57	105
14 to 20 years,	35	38	73
21 to 30 years,	28	46	74
31 to 40 years,	31	19	50
41 to 50 years,	12	8	20
51 to 60 years,	3	3	6
Totals,	157	171	328

TABLE 4. — *Nativity and Parentage of Patients admitted.*

PLACES OF NATIVITY.	MALES.			FEMALES.			TOTALS.		
	Patients.	Fathers.	Mothers.	Patients.	Fathers.	Mothers.	Patients.	Fathers.	Mothers.
United States:—									
Massachusetts,	89	23	17	94	21	24	183	44	41
New England States,	8	6	13	15	14	8	23	20	21
Other States,	10	5	9	12	13	14	22	18	23
Total native,	107	34	39	121	48	46	228	82	85
Other countries:—									
Austria,	—	—	—	—	2	4	—	2	4
Belgium,	—	—	—	—	1	1	—	1	1
Canada,	6	18	15	11	21	21	17	39	36
Denmark,	1	1	1	—	—	—	1	1	1
England,	3	5	7	2	8	11	5	13	18
Finland,	2	4	4	3	6	6	5	10	10
France,	—	—	—	—	1	—	—	1	—
Germany,	2	4	3	1	4	4	3	8	7
Greece,	—	—	—	1	1	1	1	1	1
Ireland,	4	33	29	4	23	28	8	56	57
Italy,	4	5	5	5	9	7	9	14	12
Poland,	1	2	1	3	3	3	4	5	4
Portugal,	3	6	6	1	1	1	4	7	7
Russia,	10	14	15	11	10	11	21	24	26
Scotland,	1	2	3	1	3	3	2	5	6
Sweden,	1	2	1	1	3	1	2	5	2
Syria,	2	3	4	1	1	1	3	4	5
Turkey,	2	2	1	—	1	1	2	3	2
West Indies,	1	—	—	—	—	—	1	—	—
Total foreign born,	43	101	95	45	98	104	88	199	199
Unknown,	7	22	23	5	25	21	12	47	44
Totals,	157	157	157	171	171	171	328	328	328

TABLE 5. — *Residence of Patients admitted.*

PLACE.	Number.	PLACE.	Number.
Acushnet,	2	Hingham,	1
Adams,	1	Holliston,	1
Allston,	3	Holyoke,	5
Ashland,	1	Hopedale,	1
Athol,	1	Hyde Park,	1
Attleboro,	6	Indian Orchard,	1
Auburndale,	1	Jamaica Plain,	1
Baldwinsville,	1	Leominster,	5
Beverly,	3	Lowell,	3
Billerica,	2	Lynn,	4
Boston,	30	Malden,	8
Brimfield,	1	Marlborough,	1
Brockton,	8	Mattapan,	1
Brookfield,	1	Medford,	3
Brookline,	3	Melrose,	1
Cambridge,	3	Millbury,	2
Canton,	1	Milford,	1
Charlestown,	2	Millville,	1
Chelsea,	6	Neponset,	1
Danvers,	1	New Bedford,	6
Dedham,	1	Newburyport,	3
Dorchester,	8	Newton Upper Falls,	1
East Braintree,	1	North Adams,	1
Everett,	1	Northampton,	1
Fairview,	1	Northbridge,	1
Fall River,	15	North Dana,	1
Farnumville,	1	Northfield,	1
Fisherville,	1	North Oxford,	2
Fitchburg,	7	North Stoughton,	1
Franklin,	1	Otter River,	1
Gardner,	6	Pigeon Cove,	2
Gloucester,	2	Pittsfield,	1
Granby,	1	Plymouth,	1
Great Barrington,	4	Provincetown,	1
Greenfield,	1	Quincy,	1
Haverhill,	1	Revere,	1

TABLE 5. — *Residence of Patients admitted* — Concluded.

PLACE.	Number.	PLACE.	Number.
Roslindale,	3	Templeton,	1
Roxbury,	6	Three Rivers,	2
Rutland,	1	Wakefield,	1
Salem,	2	Waltham,	3
Shrewsbury,	1	Waterville,	1
Somerville,	4	Webster,	3
Southampton,	1	Westfield,	11
Southbridge,	3	Westminster,	1
South Framingham,	1	West Springfield,	1
South Hadley Falls,	1	West Warren,	1
South Lancaster,	1	Whitingsville,	1
Spencer,	1	Winchester,	1
Springfield,	27	Worcester,	27
State minor wards,	23	Total,	328
Stockbridge,	2		

TABLE 6. — *Occupations.*

	Males.	Females.	Totals.		Males.	Females.	Totals.
At home,	-	5	5	Mail carrier,	1	-	1
Basket maker,	1	-	1	Mason,	1	-	1
Bell boy,	2	-	2	Merchant,	2	-	2
Bookbinder,	-	1	1	Mill hand,	3	14	17
Bookkeeper,	-	1	1	Nurse,	-	3	3
Box maker,	-	1	1	Painter,	1	-	1
Butcher,	1	-	1	Plasterer,	3	-	3
Cabinet maker,	1	-	1	Plumber,	1	-	1
Carpenter,	2	-	2	Presser,	1	-	1
Carriage maker,	1	-	1	Printer,	1	-	1
Chair maker,	3	-	3	Rubber bcot maker,	1	-	1
Chauffeur,	1	-	1	Salesman,	3	-	3
Clerk,	7	4	11	Sashmaker,	1	-	1
Compositor,	-	1	1	School,	61	87	148
Dishwasher,	1	-	1	Shoe cutter,	1	-	1
Dressmaker,	-	1	1	Shoemaker,	3	-	3
Errand boy,	2	-	2	Spinner,	1	1	2
Farmer,	5	-	5	Spooler,	-	1	1
Gardener,	2	-	2	Stenographer,	-	4	4
Hostler,	1	-	1	Tailor,	1	1	2
Hotel clerk,	1	-	1	Teacher,	-	2	2
Housewife,	-	46	46	Teamster,	4	-	4
Ice man,	1	-	1	Telephone girl,	-	1	1
Laborer,	11	-	11	Waiter,	3	-	3
Laboratory assistant,	1	-	1	Waitress,	-	4	4
Machinist,	8	-	8	Weaver,	4	1	5

TABLE 7. — *Condition on Admission.*

	Males.	Females.	Totals.
Incipient,	39	43	82
Moderately advanced,	38	49	87
Advanced,	79	79	158
Nontuberculous,	1	-	1
Totals,	157	171	328

TABLE 8. — *Condition on Discharge.*

	Males.	Females.	Totals.
Apparently arrested,	67	49	116
Quiescent,	27	20	47
Improved,	11	24	35
Unimproved,	16	26	42
Died,	24	29	53
Nontuberculous,	1	1	2
Not considered,	7	12	19
Totals,	153	161	314

TABLE 9. — *Deaths.*

	DURATION OF DISEASE.			SANATORIUM RESIDENCE.		
	Males.	Females.	Totals.	Males.	Females.	Totals.
Under 1 month,	-	-	-	-	3	3
1 to 3 months,	-	-	-	2	6	8
3 to 6 months,	-	3	3	4	5	9
6 to 9 months,	2	2	4	4	4	8
9 months to 1 year,	1	-	1	5	2	7
1 to 2 years,	5	8	13	4	7	11
2 to 5 years,	8	12	20	3	2	5
5 to 10 years,	8	2	10	2	-	2
Over 10 years,	-	2	2	-	-	-
Totals,	24	29	53	24	29	53

RUTLAND STATE SANATORIUM.

CONSULTING LARYNGOLOGIST.

A. C. GETCHELL, M.D.

RESIDENT OFFICERS.

ELLIOTT WASHBURN, M.D., . . . *Superintendent.*
 JAMES A. LYON, M.D., . . . *Assistant Superintendent and Physician.*
 WILLARD B. HOWES, M.D., . . . *Physician.*
 O. C. B. MASON, M.D., . . . *Physician.*
 NISHAN HAMPSON, M.D., . . . *Bacteriologist.*

CHARLES E. CARROLL, . . . *Steward.*
 Miss M. B. FLOYD, . . . *Superintendent of Nurses.*
 WALTER C. BROWN, . . . *Chief Engineer.*
 CHARLES E. CHAPMAN, . . . *Farmer.*

REPORT OF THE SUPERINTENDENT.

To the Trustees of Hospitals for Consumptives.

I have the honor to submit the report of the Rutland State Sanatorium for the year ending Nov. 30, 1915.

There were under treatment 887 patients. This number includes 349 patients who were in the sanatorium on Dec. 1, 1914, plus 538 who were admitted during the year. The number admitted was 69 more than in 1914, the increase being due to the establishment by the trustees of two important rules, namely, one which limits the residence of patients at Rutland to two years, the other, placing all new patients on a month-trial basis. These rules increased the number of discharges by transfer to other State sanatoria, to municipal tuberculosis hospitals and to the patients' homes and thus increased the number of new patients admitted to fill the vacancies thus created. There were 535 discharges as against 476 in 1914. This increase of 59 was principally due to the aforesaid causes, but to some extent to the opening of the Worcester tuberculosis hospital, to which a number of our patients were transferred.

The total number of days of treatment provided to patients was 127,385.

The daily average of patients was 349, which was 1 less than in 1914. This loss was due to the numerous transfers and discharges made for the reasons just stated, to the fact that at intervals the waiting list for women was exhausted, and to the changes incidental to rearranging our ward service so that more men than women may be cared for instead of an equal number of each sex as heretofore.

Patients admitted from Dec. 1, 1914, to Nov. 30, 1915, were classified on admission as shown on the accompanying table. For purposes of comparison there is also shown the classification of the same patients as stated on their application blanks.

	Classifica- tion on Application Blanks.	Classifica- tion on Admission.
Incipient,	413	207
Moderately advanced,	118	250
Far advanced,	4	66
Nontuberculous,	-	8
Not classified,	3	7
Totals,	538	538

According to our classification on admission, 38.47 per cent. were incipient, 46.46 per cent. were moderately advanced, 12.27 per cent. were far advanced, 1.49 per cent. were non-tuberculous and 1.31 per cent. were unclassified.

At the close of the year we had in the sanatorium 352 patients, of whom 107, or 30.40 per cent., were deemed to be incipient; 184, or 52.27 per cent., were moderately advanced; 54, or 15.34 per cent., were far advanced; and 7, or 1.99 per cent., were unclassified. During the year the daily average number of bed patients was approximately 100, or 28.65 per cent. of the daily total average number of patients.

The average length of stay of discharged patients who stayed in the sanatorium at least one month, or long enough to be "considered" on our records, was ten months and one day, which was eight days less than in the preceding year. Under the two-year rule above referred to a large number of patients who had been here for long periods were discharged. This should result in 1916 in a decreased average length of stay at this sanatorium. In view of the fact that there is a long waiting list of male applicants for admission, and in view of the fact that few patients show further gain after they have been in the sanatorium for one and one-half years, it is recommended that the limit of residence at this sanatorium be reduced to one and one-half years.

The geographical distribution of admitted patients is shown in a special table later in this report. A résumé is of interest as showing especially that of the total number of admissions, — namely, 538, — 229, or 42.56 per cent., were residents of Boston at the time they filed their applications, although of course a large number had no legal settlement in that city. Worcester sent 32, which was less than usual owing to the opening of its own tuberculosis hospital; Brockton sent 21, Somerville 17, Lynn 14, Attleboro 13, Springfield 11, Malden 10, Lowell 9, Brookline, Cambridge and Everett 8 each, Arlington 7, Chelsea, Lawrence, Marlborough and Waltham 6 each. The large city of Fall River sent only 4 cases, while New Bedford sent none. Undoubtedly the large number who came from Boston was due to the work of the tuberculosis clinics maintained by the Boston Consumptives' Hospital and by the Massachusetts General Hospital.

Of the 538 patients who were admitted during the year, 100 paid their own bills during their entire sanatorium residence or up to the end of the time covered by this report; 38 others paid for varying periods and then announced that they were unable to continue, and their bills were thus thrown upon their city or town in 17 of these instances, upon the State in 9 instances, not yet determined as to settlement in 12 instances; 400 patients, or 74.36 per cent. of all patients admitted during the year, contributed nothing toward their own support. These 400 were paid for by the city or town of legal settlement in 194 instances, by the State in 91, not yet determined by State Board of Charity as to whether municipal or State cases in 114 instances. Thus we see that 18.58 per cent. paid their bills, 7.06 per cent. paid a part, and the balance, 74.36 per cent., paid nothing. In this connection it is of interest to note that the amount received from patients themselves in 1906 was \$47,868, while in 1915 it had gradually dropped to \$10,890. On the other hand, the amount paid by cities and towns in 1906 was \$3,818, while in 1915 it was \$93,452. (Of this latter amount, however, \$60,506.08 was recovered in one lump for back bills due from a city, leaving \$32,946 as the real amount for 1915.) The chief factor in the decreased amount received from patients themselves is the fact that in 1907, by a decision of the State Board of Health, which had the force of law,

after August 1 of that year patients receiving aid from their cities and towns on account of tuberculosis were no longer considered as paupers. Prior to the decision of the State Board of Health at that time, which put tuberculosis in the class of diseases deemed to be dangerous to the public health, any person who received aid from his city or town on account of tuberculosis was deemed a pauper; he lost certain civic rights, and often the names of such persons were published in the annual city and town reports. The patients knew these facts, they did not wish to be paupers, and accordingly they tried hard to pay their own bills. With the change came an immediate decrease in the amount paid by patients. Patients were willing and have been increasingly willing ever since to let their cities and towns pay for them, provided that they themselves escaped the stigma of "pauper." Furthermore, the fact that they would not be pauperized has been urged upon tuberculous patients to insure their willingness to go to the State Sanatoria. While this is without doubt to the advantage of the public health, the fact remains that it has markedly decreased the amount paid by patients themselves. Again, since 1910, when a change in the method of admitting patients to Rutland was put into effect, we have had many more unfavorable and far advanced cases who had exhausted their finances before coming to the sanatorium. The jump in the number of deaths from 12 in 1910 to 52 in 1911 shows at a glance the change in the class of patients admitted. The citizenship clause as a requisite for admission kept out many indigent noncitizens; this has now been modified, and we receive as a result many more patients who are noncitizens and who have no legal settlement in any city or town in the Commonwealth. These are the reasons for the constant and steady decrease in amounts received from patients since 1906. To them should be added the lamentable fact that patients already in the sanatorium pass the word around to new comers that their city or town or the State is bound to pay for them, with the result that some who come honestly meaning to pay their own bills pay a few times and then stop payment. Although I have no means at my disposal, either legal or financial, by which to ascertain the financial ability of the patients, there

is no doubt in my own mind that a number are well able, either themselves or through those legally bound to support them, to pay their own bills. The settlements of all who do not pay their own bills are determined by the State Board of Charity. It would appear that it would be a profitable expenditure of money for the State to employ an agent whose entire time would be devoted to looking up the question of the ability of all admitted patients to pay their own bills. Upon the report of such an agent the Attorney-General, when requested by the trustees to collect, would have an adequate basis for suits to recover for board and treatment at the sanatorium. During the past year a number of bills for treatment were, at the request of the trustees, given to the Attorney-General for collection in the name of the Treasurer and Receiver-General, and substantial sums were thus recovered to the use of the sanatorium. Other such bills are still in process of collection.

The average gain in weight of discharged patients was 11.87 pounds; average gain for women, 11.93 pounds, for men, 11.81; the largest gain in a woman was 54½ pounds, in a man, 43.

There were discharged with their disease considered to be arrested, 208 patients; apparently arrested, none; quiescent, none; improved, 177; not improved, 87; progressive, none; dead, 32; nontuberculous, 9; not considered, owing to brevity of sanatorium residence, 22.

OFFICERS.

Dr. Stanhope B. Berkley, third assistant physician, resigned in July and returned to Virginia. He was succeeded by Dr. O. C. B. Nason of Cambridge.

Dr. Nishan Hampson was elected bacteriologist in June.

Miss Sarah C. Crawford resigned as superintendent of nurses in October after three years of satisfactory service, to take up private sanatorium work. She was succeeded by Miss M. B. Floyd, formerly of the New Bedford Tuberculosis Sanatorium at Sassequin.

Frederick H. Drury, head farmer since practically the opening of the sanatorium, resigned in March. Mr. Drury labored hard with discouraging soil and climate for many years. Charles E. Chapman, formerly of Ludlow, succeeded him.

EXPENSE OF OPERATING.

The treasurer's report shows the income and expense accounts for the year. The income was much increased over a normal year by the satisfactory results of suits against a municipality which was heavily in arrears to the sanatorium. From this source alone \$60,500 was recovered. Our expense of operating was less than in 1914, owing to economies in purchasing and a constant and careful supervision of the pay roll. At the close of the fiscal year a small balance reverted to the State Treasurer.

FARM ACTIVITIES.

With the advent of a new farmer in April it was deemed to be an opportune time to conduct an investigation into the whole question of the productive possibilities of our farm. An attempt was made to ascertain whether the farm is yielding all that may reasonably be expected, and to find out by soil analyses and otherwise to the production of what crops the farm is especially adapted, and, on the other hand, to the production of what crops it is especially unsuited. To that end the visiting committee of trustees for this sanatorium appointed a subcommittee who acted with a subcommittee of the State Board of Agriculture and its secretary and with myself. Several conferences of this joint committee were held at Rutland; investigations were made of the farm relative to its topography and the nature and needs of its soils. Numerous samples of the soils were collected and subjected to expert chemical analyses. At the request of the superintendent the State Board of Agriculture laid down a "farm policy" for our farm which was based upon the results of the aforesaid examinations and analyses. Under the supervision of the superintendent the farmer is doing his best to carry out this definite farm policy. Already, in less than one year, the productivity and actual production of the farm have been considerably increased. We are assured that a few years' strict adherence to this policy will without reasonable doubt markedly increase the value of our farm.

PRISON LABOR.

The investigation into the problems of the farm brought to the attention of the trustees the question as to whether or not prison labor might advantageously be used in connection with the improvement of waste land which thereby might be reclaimed, made productive and a source of increased farm products for our table and for the cattle, thus decreasing the amount of money heretofore paid out for such essentials.

As a result of conferences between the trustees, the Prison Commissioners and the Governor and his Executive Council, the latter body set aside from its contingent fund the sum of \$4,000 for the use of the sanatorium in employing prison labor for the improvement of waste land at the Rutland State Sanatorium. The plan proposed and carried out was to bring to Rutland a number of prisoners from Concord Reformatory and lodge them in a camp. The expenses of building the camp were borne by the Concord Reformatory from a sum set aside for that purpose from the contingent fund by the Governor and Council, separate from the sum set aside for our own use. The reformatory provided the camp buildings, the beds, bedding, stoves, cooking and eating utensils and other sundries such as brooms, lanterns, etc. The sanatorium provided light, water, coal, wood, working tools, such as shovels, picks, plows, hoes, etc., and the actual food used but not the cooking of it; all cooking was done at the camp by a prisoner who acted as chef. The sanatorium paid to the Prison Commission 75 cents per prisoner per day excluding Sundays, holidays and half a day on Saturdays. The sanatorium also provided whatever horses and wagons were needed.

The prisoners, at first 25 and later 32, with their guards in charge, commenced actual work early in October and worked until December 7, when cold and snow put a stop to the work for this season at least. The drainage of a piece of swamp meadow, 18.22 acres in area, was commenced. The actual work consisted in cutting maple trees, pulling a large number of stumps and digging a main drain or ditch. When stress of weather drove the men from the swamp meadow they worked upon a piece of rough, unimproved land, 3.37 acres in extent,

right in the center of our farm, which was so very rough that it is likely that it would never have been cleared in any other way than by prison labor, and yet when put in shape it will be an especially valuable bit of farm land on account of its accessibility to the farm buildings. When work stopped for the winter there remained an unexpended balance of approximately \$1,100 with which to resume the work in the spring of 1916. Although at first the prisoners were physically soft, and many of them were unaccustomed to work of this nature, yet in their eight weeks they accomplished about one-seventh of the reclaiming of the swamp land and three-quarters of the work necessary upon the smaller area of rough farm land. At all times the prisoners were under the immediate control of reformatory officers, and so far as the sanatorium and the patients were concerned no trouble or bother resulted, as the camp was located out of sight of the sanatorium, and of course there was no mingling of patients and prisoners. The whole work is more or less of an experiment, which must be continued longer before it will be safe to give an opinion of any value as to its efficiency, economy and expediency. The *necessity* of the work to be done, its *expediency* if not actual necessity, its cost, the return made to the Commonwealth in increased land value and productivity, the value of the work to the prisoners themselves from a sociological viewpoint, — all these as well as other data must be carefully determined. Just now the work has not been established long enough to afford sufficient data. From time to time as the work has progressed detailed reports have been made to your honorable Board and to the State Board of Charity which it is unnecessary to repeat here.

MEDICAL SERVICE.

The medical work has not markedly varied from that of preceding years. No new method of treatment, no new detail of any old method of sufficient interest to rehearse, has been tried during the year.

An account of the throat work appears in the report of Dr. A. C. Getchell, consulting laryngologist, in the annual report of the trustees.

Treatment by the production of artificial pneumothorax in

certain cases has been continued this year. There is absolutely no doubt that this treatment has prolonged the life of some. Whether it has permanently arrested the disease in a few others, sufficient time has not yet elapsed for us to say, nor are we yet in a position to say how long the treatment must be continued. Perhaps after ten years more we may be able to say more definitely. All tuberculosis problems, whether in connection with the policy of the public health or with the medical treatment of those afflicted with the disease, require time, time and again more time, for their even partial solution. This is true of tuberculosis to a much greater degree than of any other communicable disease.

Owing to the very long waiting list for male patients, and the very short waiting list for female patients, at the request of the trustees a rearrangement was made of the accommodations for men and women so that we now care for 198 men and 157 women instead of an even number of each sex as heretofore, the total number of beds remaining the same. It would be advisable to still further reduce the beds for women and increase those for men were it not for the fact that our building arrangements are such that further changes may not be made without bringing about a mingling of ambulatory patients of both sexes, which is not desirable.

The adoption by the trustees of the two-year limit of residence rule and the one-month trial rule will, it is hoped and expected, increase the per cent. of incipient and favorable although moderately advanced cases in the sanatorium, and correspondingly decrease the per cent. of moderately advanced but unfavorable and far advanced cases with bad prognoses. To some extent this change is already noticeable. When the physicians of the State thoroughly understand that Rutland is intended for early and favorable cases only, and that unfavorable and advanced cases will be transferred to another State sanatorium or to a municipal tuberculosis hospital at the end of a suitable period of observation, we shall be able to get back to the original intent of this sanatorium.

A list of medical papers published and of lectures and talks given by members of the medical staff during the year appears in the annual report of your secretary.

REPAIRS AND IMPROVEMENTS.

A fire escape was provided for the upper infirmary, wide enough to permit the removal of a bed patient either on a bed or on a stretcher. A fire escape was provided for the second floor of the nurses' home.

A large amount of painting and general repairing has been done. To keep the sanatorium up to a desirable standard requires constantly two painters and two carpenters, and also, for varying periods, extra men; usually there is at least one month's work on repairs of plaster and stucco work. The very large amount of steam, heat, plumbing, water and sewerage pipes, as well as our large number of electric lights, necessitates constant repairs and replacements.

NEEDS.

We need a new coal trestle to replace the present trestle which is of insufficient size, has a dirt bottom, is nearly worn out, and is reached from the sanatorium over what is admittedly at certain seasons of the year one of the worst roads in the State. We are informed on competent authority that the life of this trestle is not over four years; we expend upon it about \$250 per year in repairs. There is now available a site for a coal trestle which is two miles distant from the sanatorium, but is reached by the new Worcester pike, a fine State road without objectionable grades, and hauling over which is easily possible on any week in the year. At this site there is room for a coal trestle of ample size; the construction should be with cement piers and cement bottom. The estimated cost for this trestle in this proposed location would be \$7,200; to this should be added \$300 for a small piece of land and for the right of way over a short private road about 400 feet in length; total estimate, \$7,500. We now pay about \$2,100 annually to have our coal hauled from the present trestle. Our bunkers are small, the trestle is small, the road is bad, — all factors which act to decrease efficiency.

The State Board of Agriculture recommended to me the purchase of a farm tractor as a material aid in farm cultivation, and as peculiarly fitted to do the work of our stony,

hillside farming land. The use of such an engine would do away with men and horses now employed. With it we could cut our own silage instead of hiring it done; could cut our own wood instead of hiring a man and power saw as now; could put in our ice by power instead of by horses; and finally, could haul our own coal and heavy freight. As stated, we pay out \$2,100 per annum for hauling our coal. When the tractor was not at work on the farm it could be employed in hauling coal. The estimated cost of such tractor and necessary tools is \$2,500.

The other State sanatoria have greenhouses. Rutland, the largest sanatorium in New England, needing one as much as if not more than the others has never had a greenhouse. We need one as a place in which to start our early plantings and to insure lettuce and other green stuff for our patients. One of the greatest faults of our winter and early spring dietary is the lack of such materials. The cost of a greenhouse 100 feet long by 30 feet wide, in three sections, if we do the work ourselves, would be \$1,500.

The Commissioner of Public Records requests us to comply with the law requiring that public records, including those of State institutions, shall be kept in a fireproof vault approved by said commissioner. In order to comply with his request and the law I have caused to be made plans for such a vault and have secured an estimate of such cost. It is proposed to place the vault on the present unused west veranda of the administration building; the estimated cost is \$2,000.

For the purpose of continuing the prison labor in improving waste lands the sum of \$10,000 is requested.

These several needs of the sanatorium have been explained in complete detail to your honorable Board, and special appropriations for the several purposes will, with your approval, be asked of the Legislature of 1916.

CONCLUSION.

I especially desire to express my thanks to Rev. Father O'Connor, Rev. John Coppystone and Dr. Joseph Suffrin, the regular chaplains of the sanatorium, who by their faithful ministrations have so greatly comforted my people.

To various kind friends and organizations who have given books, flowers, entertainments and of their valuable time I proffer my appreciation. The relations between officers and employees have continued harmonious. To you, the trustees, I express my thanks for your constant and ever ready support in all things for the best interests of the sanatorium, without which my efforts would have been wholly useless.

Very respectfully submitted,

ELLIOTT WASHBURN,

Superintendent.

RUTLAND, Dec. 1, 1915.

TREASURER'S REPORT.

To the Trustees of Massachusetts Hospitals for Consumptives.

I respectfully submit the following report of the finances of this institution for the fiscal year ending Nov. 30, 1915:—

CASH ACCOUNT.

Balance Dec. 1, 1914, \$8,707 29

Receipts.

Institution Receipts.

Board of inmates:—

Private,	\$10,890 94
Cities and towns,	93,452 94
Other reimbursements, charitable (collected by State Treasurer),	70 86

\$104,414 74

Sales:—

Food,	\$1,198 65
Repairs and improvements,	21 25
Miscellaneous,	345 54
Farm, stable and grounds:—	
Cows and calves, \$422 50	
Pigs and hogs, 616 21	
Hides, 5 00	
Ice, 4 18	
	1,047 89

2,613 33

Miscellaneous receipts:—

Interest on bank balances,	\$383 06
Sundries,	166 79

549 85

107,577 92

Receipts from Treasury of Commonwealth.

Maintenance appropriations:—

Balance of 1914,	\$653 08
Advance money:—	
Amount on hand November 30,	15,000 00
1914 deficiency,	6,944 93
Approved schedules of 1915,	\$174,922 86
Less returned,	59 48

174,863 38

197,461 39

Special appropriations,

1,174 19

Total,	\$314,920 79
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<i>Payments.</i>		
To treasury of Commonwealth, institution receipts,		\$107,577 92
Maintenance appropriations: —		
Balance November schedule, 1914,	\$16,332 72	
Eleven months' schedules, 1915,	174,863 38	
November advances,	7,448 36	
		198,644 46
Special appropriations: —		
Approved schedules,	\$1,174 19	
Less advances, last year's report,	27 42	
		\$1,146 77
November advances,	15 70	
		1,162 47
Balance, Nov. 30, 1915: —		
In bank,	\$6,780 79	
In office,	755 15	
		7,535 94
Total,		\$314,920 79

MAINTENANCE.		
Appropriation,		\$193,000 00
Expenses (as analyzed below),		192,930 84
Balance reverting to treasury of Commonwealth,		\$69 16

<i>Analysis of Expenses.</i>		
Salaries, wages and labor: —		
Elliott Washburn, superintendent,	\$2,500 00	
General administration,	42,545 29	
Medical service,	4,553 19	
Ward service (male),	1,777 12	
Ward service (female),	7,924 26	
Repairs and improvements,	3,511 88	
Farm, stable and grounds,	8,134 26	
		\$70,946 00
Food: —		
Butter,	\$7,410 40	
Butterine,	238 47	
Beans,	237 38	
Bread and crackers,	169 06	
Cereals, rice, meal, etc.,	665 57	
Cheese,	155 88	
Eggs,	8,276 29	
Flour,	2,541 72	
Fish,	2,076 43	
Fruit (dried and fresh),	3,171 87	
Meats,	27,322 68	
Amounts carried forward,	\$52,265 75	\$70,946 00

<i>Amounts brought forward,</i>	\$52,265 75	\$70,946 00
Food — <i>Con.</i>		
Milk,	9,252 30	
Molasses and syrup,	49 52	
Spices, seasonings, salt, etc.,	497 56	
Sugar,	2,449 35	
Tea, coffee, broma and cocoa,	1,278 80	
Vegetables,	3,476 12	
Yeast,	153 43	
Sundries,	208 46	
	<hr/>	69,631 29
Clothing and materials: —		
Clothing,		42 50
Furnishings: —		
Beds, bedding, table linen, etc.,	\$3,388 58	
Brushes, brooms,	339 72	
Carpets, rugs, etc.,	343 35	
Crockery, glassware, cutlery, etc.,	579 71	
Furniture and upholstery,	596 42	
Kitchen furnishings,	1,360 40	
Wooden ware, buckets, pails, etc.,	130 10	
Sundries,	3 91	
	<hr/>	6,742 19
Heat, light and power: —		
Coal,	\$14,328 25	
Teaming coal,	2,249 91	
Wood,	30 10	
Tools,	10 00	
Oil,	216 85	
Sundries,	105 41	
	<hr/>	16,940 52
Repairs and improvements: —		
Coal trestle,	\$184 10	
Cement, lime and plaster,	156 41	
Doors, sashes, etc.,	90 03	
Electrical work and supplies,	489 39	
Hardware,	552 08	
Lumber,	610 42	
Machines (detached),	72 70	
Paints, oil, glass, etc.,	666 03	
Plumbing, steam fitting and supplies,	858 14	
Roofing and materials,	317 60	
Sundries,	26 00	
	<hr/>	4,022 90
Farm, stable and grounds: —		
Labor, not on pay roll,	\$87 38	
Auto supplies,	20 30	
Blacksmith and supplies,	269 50	
	<hr/>	
<i>Amounts carried forward,</i>	\$377 18	\$168,325 40

<i>Amounts brought forward,</i>	\$377 18	\$168,325 40
Farm, stable and grounds — <i>Con.</i>		
Carriages, wagons, etc., and repairs,	142 15	
Fertilizers, vines, seeds, etc.,	924 17	
Hay, grain, etc.,	6,614 56	
Harnesses and repairs,	51 15	
Veterinary,	35 00	
Cows,	2 75	
Other live stock,	1,082 10	
Surveying,	135 00	
Automobile,	1,300 00	
Tools, farm machines, etc.,	681 86	
Sundries,	117 85	
	<hr/>	11,463 77
Religious services,		1,358 27
Miscellaneous: —		
Books, periodicals, etc.,	\$124 05	
Cuspidor supplies,	700 81	
Entertainments,	147 20	
Freight, expressage and transportation,	999 64	
Funeral expenses,	20 00	
Medicines and hospital supplies,	2,667 70	
Medical attendance, nurses, etc. (extra),	3 00	
Manual training supplies,	53 10	
Postage,	546 71	
Printing and printing supplies,	272 17	
Soap and laundry supplies,	1,148 68	
Stationery and office supplies,	1,004 29	
Travel and expenses (officials),	543 03	
Telephone and telegraph,	850 56	
Tobacco,	7 15	
Water,	2,255 99	
Sundries,	439 32	
	<hr/>	11,783 40
		<hr/>
Total expenses for maintenance,		\$192,930 84
SPECIAL APPROPRIATIONS.		
Balance Dec. 1, 1914,		\$538 90
Appropriations for fiscal year,		5,000 00
		<hr/>
Total,		\$5,538 90
Expended during the year (see statement annexed),	\$3,685 56	
Reverting to treasury of Commonwealth,	20 56	
	<hr/>	3,706 12
		<hr/>
Balance Nov. 30, 1915,		\$1,832 78

RESOURCES AND LIABILITIES.

Resources.

Cash on hand,	\$7,535 94	
November cash vouchers (paid from advance money): —		
Account of maintenance,	\$7,448 36	
Account of special appropriations,	15 70	
	<hr/>	7,464 06
Due from treasury of Commonwealth, account of November, 1915, schedule,	3,067 46	
	<hr/>	\$18,067 46

Liabilities.

Schedule of November bills,	\$18,067 46
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PER CAPITA.

During the year the average number of inmates has been 349.

Total cost for maintenance, \$192,930.84.

Equal to a weekly per capita cost of \$10.63.

Receipt from sales, \$2,613.33.

Equal to a weekly per capita of \$0.144.

All other institution receipts, \$104,964.59.

Equal to a weekly per capita of \$5.783.

Special Appropriations.

OBJECT.	Act or Resolve.	Whole Amount.	Expended during Fiscal Year.	Expended to Date.	Balance at End of Year.
Repairs, 1913,	Acts 1913, chap. 119	\$5,222 01	\$301 41	\$5,218 59	\$3 42 ¹
New poultry houses,	Acts 1914, chap. 85	1,000 00	145 53	997 76	2 24 ¹
Watchman's clock,	Acts 1914, chap. 85	150 00	71 40	135 10	14 90 ¹
Improvement of land, prison labor account,	- - - ²	{ 4,000 00	2,200 57 ³	2,200 57	1,799 43
		{ 1,000 00	966 65 ⁴	966 65	33 35
		\$11,372 01	\$3,685 56	\$9,518 67	\$1,832 78

¹ Reverting to treasury of the Commonwealth.

² Transferred from extraordinary expenses.

³ \$1,544.72 of this amount was paid by State Treasurer.

⁴ \$966.65 paid direct by State Treasurer.

Respectfully submitted,

ELLIOTT WASHBURN,

Treasurer.

Examined and found correct as compared with the records in the office of the Auditor of the Commonwealth.

ALONZO B. COOK,

Auditor.

VALUATION.

Land: ¹ —		
Garden, 5.51 acres,	\$1,377 50	
Field crops, 44.75 acres,	4,475 00	
Orchard and fruit, 6.75 acres,	1,350 00	
Meadow, 89.68 acres,	7,896 00	
Pasture, 10.67 acres,	266 75	
Lawns and buildings, 31.21 acres,	11,866 30	
Permanent woodland, 69 acres,	2,553 00	
Rough pasture, 90.47 acres,	1,609 05	
Other lands (roads and sewer beds), 15.98 acres,	6,149 50	
Sewerage system,	15,508 32	
Total, 364.227 acres,	<u>53,072 02</u>	\$53,072 02
Buildings:—		
Institution buildings,	\$443,300 00	
Farm, stable and grounds,	26,200 00	
Miscellaneous,	2,425 00	
Total,	<u>471,925 00</u>	471,925 00
Grand total,		<u>\$524,997 02</u>
Present value of all personal property as per inventory of		
Dec. 1, 1915,		\$49,318 98

¹ Classification of State Auditor.

FARM ACCOUNT.

The yearly farm account under the system recommended by the State Auditor is an exhaustive and bulky detail, too large for reproduction in this report. A copy is filed with the trustees and one with the State Auditor. The more interesting part in connection with the farm produce is here given. The prices are those fixed by the State Auditor for comparative purposes. The extraordinarily large amount of rain diminished some of our crops, notably, beans and potatoes. Owing to changes in the hennery the number of eggs was reduced. The hennery is now in good shape, and we expect a marked increase in hennery products in 1916.

Farm Produce.

Apples, 61 $\frac{3}{10}$ barrels, at \$1.50,	\$91 95
Apples, 1 barrel, at \$3,	3 00
Beets, 242 bunches, at \$0.04,	9 68
Beets, 97 bushels, at \$0.55,	53 35
Beet greens, 64 $\frac{1}{2}$ bushels, at \$0.30,	19 35
Beans, shell, 15 $\frac{1}{2}$ bushels, at \$0.85,	13 18
Beans, string, 25 $\frac{3}{4}$ bushels, at \$1.25,	32 19
Carrots, 108 bushels, at \$0.70,	75 60
Chard, swiss, 21 bushels, at \$0.40,	8 40
Cabbage, 5 $\frac{1}{2}$ $\frac{7}{10}$ tons, at \$11.50,	67 70
Corn, sweet, 169 $\frac{1}{2}$ bushels, at \$0.60,	101 88
Cucumbers, 28 $\frac{1}{10}$ boxes, at \$2,	56 87
Ensilage, 101 $\frac{1}{2}$ $\frac{3}{10}$ tons, at \$5,	508 83
Fodder:—	
Barley, 31 $\frac{7}{10}$ tons, at \$5,	156 93
Buckwheat, 9 $\frac{6}{10}$ tons, at \$5,	47 41
Hay, 36 $\frac{1}{10}$ $\frac{3}{10}$ tons, at \$5,	184 14
Hungarian, 8 $\frac{5}{10}$ tons, at \$5,	41 89
Millet, 27 $\frac{7}{10}$ tons, at \$5,	136 90
Miscellaneous, 7 $\frac{1}{10}$ $\frac{1}{10}$ tons, at \$5,	39 61
Oat, 40 $\frac{1}{10}$ tons, at \$5,	203 50
Fowl, dressed, 2,578 pounds, at \$0.15,	386 70
Eggs, 3,023 $\frac{1}{2}$ dozen, at \$0.29,	902 51
Hay, No. 1, 117 $\frac{7}{10}$ tons, at \$23,	2,699 49
Hay, meadow, 4 $\frac{1}{10}$ tons, at \$11.50,	48 36
Hay, oat, 6 $\frac{9}{10}$ tons, at \$10,	64 85
Mangels, 93 $\frac{3}{8}$ bushels, at \$0.25,	23 40

Lettuce, 248 $\frac{2}{3}$ boxes, at \$0.28,	\$69 55
Manure, 222 $\frac{1}{4}$ cords, at \$6,	1,337 25
Manure, hen, 83 barrels, at \$0.75,	62 25
Milk, 134,078 quarts, at \$0.05 $\frac{2}{3}$,	902 51
Parsley, 2 bushels, at \$0.35,	70
Parsnips, 6 bushels, at \$0.65,	3 90
Pears, 4 $\frac{1}{4}$ barrels, at \$0.75,	3 19
Peas, 31 $\frac{3}{4}$ bushels, at \$1.10,	34 93
Peppers, green, 3 $\frac{1}{2}$ bushels, at \$0.50,	1 75
Potatoes, 478 $\frac{3}{4}$ bushels, at \$0.75,	359 06
Radishes, 20 $\frac{17}{10}$ bushels, at \$0.50,	10 28
Rhubarb, 1,470 pounds, at \$0.01,	14 70
Squash, summer, 23 $\frac{77}{100}$ barrels, at \$0.60,	14 26
Squash, winter, 7,080 pounds, at \$0.75 per hundredweight,	53 10
Tomatoes, green, 67 bushels, at \$0.60,	40 20
Tomatoes, ripe, 73 $\frac{1}{2}$ bushels, at \$0.60,	44 30
	<hr/>
Total,	\$16,628 99
Ice, 1,100 tons, at \$3,	3,300 00
	<hr/>
	\$19,928 99
Received from sale of calves, cows,	\$427 50
Received from sale of pork,	616 21
	<hr/>
Total,	\$1,043 71

SPECIAL REPORT.

The following special report is prepared in accordance with a resolution of the National Conference on Charities and Correction, adopted May 15, 1906:—

Population.

	Males.	Females.	Totals.
Number of patients at beginning of fiscal year,	180	169	349
Number received during the year,	286	252	538
Number of discharges during the year,	269	266	535
Number of deaths included in preceding item,	16	16	32
Number present at end of fiscal year,	197	155	352
Daily average attendance (<i>i.e.</i> , number of inmates actually present) during the year,	187	162	349
Average number of officers and employees during the year,	130.9	77.6	208.5

Expenditures.

Current expenditures:—

1. Salaries and wages,	\$70,946 00	
2. Clothing,	42 50	
3. Subsistence,	69,631 29	
4. Ordinary repairs,	4,022 90	
5. Office, domestic and outdoor expenses,	48,288 15	
Total,	\$192,930 84	

Extraordinary expenses:—

1. Permanent improvements to existing buildings,	518 34
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Grand total, \$193,449 18

STATISTICAL TABLES.

TABLE 1. — *Admissions and Discharges.*

	Males.	Females.	Totals.
Number of patients in sanatorium Dec. 1, 1914,	180	169	349
Number admitted Nov. 30, 1914, to Dec. 1, 1915,	286	252	538
Number discharged Nov. 30, 1914, to Dec. 1, 1915,	269	266	535
Number remaining in sanatorium Nov. 30, 1915,	197	155	352
Daily average number of patients,	187	162	349
Died (included in number discharged),	16	16	32

TABLE 2. — *Civil Condition of Patients admitted.*

	Males.	Females.	Totals.
Single,	158	147	305
Married,	124	91	215
Widowed,	4	12	16
Divorced,	—	2	2
Totals,	286	252	538

TABLE 3. — *Age of Patients admitted.*

	Males.	Females.	Totals.
Under 14 years,	—	—	—
14 to 20 years,	30	37	67
20 to 30 years,	135	144	279
30 to 40 years,	79	44	123
40 to 50 years,	34	22	56
Over 50 years,	8	5	13
Totals,	286	252	538

TABLE 4. — *Nativity of Patients admitted.*

PATIENTS BORN IN —	Males.	Females.	Totals.	FATHERS BORN IN —	Males.	Females.	Totals.
United States,	152	154	306	United States,	71	76	147
Ireland,	26	21	47	Ireland,	68	63	131
Russia,	33	19	52	Russia,	39	21	60
Canada,	23	30	53	Canada,	38	43	81
Italy,	8	5	13	Italy,	10	5	15
England,	6	4	10	England,	15	9	24
Germany,	5	2	7	Germany,	6	4	10
Sweden,	4	2	6	Sweden,	6	4	10
Austria,	5	1	6	Austria,	6	1	7
Greece,	3	1	4	Greece,	3	1	4
Finland,	5	3	8	Finland,	6	3	9
Norway,	2	-	2	Norway,	2	1	3
Syria,	2	1	3	Syria,	2	1	3
Armenia,	2	-	2	Armenia,	2	1	3
West Indies,	1	-	1	West Indies,	2	-	2
Portugal,	1	-	1	Portugal,	2	-	2
Hungary,	1	-	1	Hungary,	1	-	1
Switzerland,	1	-	1	Switzerland,	1	-	1
Belgium,	1	-	1	Belgium,	1	-	1
Holland,	1	-	1	Holland,	1	1	2
Newfoundland,	-	4	4	Newfoundland,	-	6	6
Rumania,	1	2	3	Rumania,	1	1	2
Poland,	1	1	2	Poland,	1	1	2
Sectland,	1	1	2	Scotland,	1	5	6
Turkey,	1	-	1	Turkey,	1	-	1
Saint Pierre,	-	1	1	Saint Pierre,	-	1	1
France,	-	-	-	France,	-	2	2
Unknown,	-	-	-	Unknown,	-	2	2
Totals,	286	252	538	Totals,	286	252	538

TABLE 5. — *Residence of Patients admitted.*

CITIES AND TOWNS.	Males.	Females.	Totals.	CITIES AND TOWNS.	Males.	Females.	Totals.
Abington,	1	-	1	Leominster,	-	1	1
Adams,	1	-	1	Lowell,	7	2	9
Amesbury,	-	1	1	Lunenburg,	-	1	1
Arlington,	4	3	7	Lynn,	6	8	14
Athol,	2	-	2	Malden,	3	7	10
Attleboro,	5	8	13	Manchester,	-	1	1
Barnstable,	2	-	2	Mansfield,	-	1	1
Beverly,	3	-	3	Marlborough,	2	4	6
Boston,	133	96	229	Maynard,	1	-	1
Braintree,	2	-	2	Medford,	2	1	3
Brockton,	13	8	21	Medway,	1	-	1
Brockline,	5	3	8	Melrose,	-	2	2
Cambridge,	2	6	8	Methuen,	1	-	1
Canton,	1	-	1	Middleborough,	1	-	1
Chelsea,	4	2	6	Milford,	-	2	2
Danvers,	-	1	1	Milton,	-	1	1
Everett,	3	5	8	Needham,	3	-	3
Fall River,	4	-	4	Newton,	2	4	6
Fitchburg,	2	1	3	Northbridge,	1	2	3
Framingham,	1	2	3	Norwood,	1	-	1
Franklin,	2	-	2	Peabody,	2	-	2
Gloucester,	2	-	2	Pittsfield,	1	-	1
Grafton,	-	1	1	Plymouth,	-	1	1
Hardwick,	-	1	1	Provincetown,	1	-	1
Haverhill,	-	5	5	Quincy,	2	5	7
Hingham,	1	1	2	Reading,	2	1	3
Hinsdale,	-	1	1	Revere,	2	-	2
Holden,	1	1	2	Rockland,	1	-	1
Holyoke,	1	3	4	Rockport,	1	-	1
Hopkinton,	1	-	1	Rutland,	4	1	5
Hubbardston,	1	1	2	Salem,	-	1	1
Hudson,	-	2	2	Sharon,	1	-	1
Ipswich,	1	-	1	Shrewsbury,	-	1	1
Kingston,	-	1	1	Somerset,	-	1	1
Lawrence,	4	2	6	Somerville,	6	11	17
Lee,	-	1	1	Springfield,	3	9	12

TABLE 5. — *Residence of Patients admitted* — Concluded.

CITIES AND TOWNS.	Males.	Females.	Totals.	CITIES AND TOWNS.	Males.	Females.	Totals.
Swampscott,	-	1	1	Westwood,	1	-	1
Taunton,	2	1	3	West Springfield,	1	-	1
Waltham,	2	4	6	Weymouth,	1	-	1
Warwick,	1	-	1	Whitman,	-	1	1
Watertown,	-	1	1	Winchester,	-	2	2
Waverley,	-	1	1	Winthrop,	-	1	1
Webster,	-	1	1	Worcester,	18	14	32
Wellesley,	1	-	1	Totals,	236	252	538
Westborough,	-	1	1				

TABLE 6. — *Occupations.*

	Males.	Females.	Totals.		Males.	Females.	Totals.
Attendant,	1	1	2	Cutter, meat,	1	-	1
Automobile repairer,	1	-	1	Cutter, shoe,	4	-	4
Baker,	2	-	2	Cutter, stencil,	-	1	1
Ball player,	1	-	1	Cutter, stone,	2	-	2
Barber,	1	-	1	Dentist's assistant,	1	-	1
Bell boy,	1	-	1	Domestic,	-	27	27
Bookbinder,	1	-	1	Draftsman,	1	-	1
Bookkeeper,	1	2	3	Dressmaker,	-	4	4
Bootblack,	1	-	1	Druggist's assistant,	1	-	1
Bottler,	3	-	3	Egg inspector,	1	-	1
Canvasser,	2	-	2	Electrician,	5	-	5
Carpenter,	5	-	5	Elevator man,	3	-	3
Cashier,	1	-	1	Engineer, stationary,	1	-	1
Chauffeur,	6	-	6	Factory,	44	40	84
Cigar maker,	2	-	2	Farmer,	1	-	1
Clerk,	25	14	39	Fireman, railroad,	1	-	1
Coachman,	2	-	2	Fireman, stationary,	3	-	3
Cobbler,	1	-	1	Fisherman,	2	-	2
Conductor, street railway,	4	-	4	Floor layer,	1	-	1
Cutter, card,	1	-	1	Florist,	2	-	2

TABLE 6. — *Occupations* — Concluded.

	Males.	Females.	Totals.		Males.	Females.	Totals.
Freight handler, . . .	1	-	1	Peddler,	2	-	2
Fuel tester,	1	-	1	Physician,	1	-	1
Gardener,	1	-	1	Plasterer,	1	-	1
General work,	4	1	5	Police officer,	3	-	3
Glazier,	1	-	1	Printers,	10	-	10
Hatter,	2	-	2	Rodman,	1	-	1
Hoseman,	1	-	1	Salespeople,	8	4	12
Housewife,	-	88	88	Sawyer,	2	-	2
Housework,	-	16	16	Seamstress,	-	1	1
Insurance agent,	1	-	1	Sheet metal worker,	1	-	1
Interior decorator,	1	-	1	Shipper,	3	-	3
Iron worker,	1	-	1	Station agent,	1	-	1
Janitor,	6	-	6	Steam fitter,	1	-	1
Laborer,	14	-	14	Stenographer,	2	6	8
Lamp repairer,	1	-	1	Steward,	1	-	1
Laundress,	-	1	1	Stock broker,	1	-	1
Lawyer,	1	-	1	Stone mason,	1	-	1
Leather worker,	1	-	1	Stone setter,	1	-	1
Machinist,	13	-	13	Student,	14	10	24
Manicurist,	-	1	1	Tailor,	7	-	7
Merchant,	1	-	1	Teacher, piano,	-	1	1
Messenger boy,	1	-	1	Teacher, school,	-	2	2
Motorman,	2	-	2	Teamster,	14	-	14
Night watchman,	2	-	2	Telephone operator,	-	9	9
No work,	3	7	10	Tinsmith,	2	-	2
Nurse maid,	-	2	2	Waiter,	3	6	9
Nurse, student,	-	5	5	Wood carver,	2	-	2
Nurse, trained,	1	3	4	Wire designer,	1	-	1
Painter,	6	-	6	Totals,	236	252	538
Pattern maker,	1	-	1				

TABLE 7. — *Stage of Disease at Admission.*

	Males.	Females.	Totals.	Per Cent.
Incipient,	101	106	207	38.47
Moderately advanced,	135	115	250	46.46
Far advanced,	43	23	66	12.27
Unclassified,	2	5	7	1.31
Nontuberculous,	5	3	8	1.49
Totals,	286	252	538	-

TABLE 8. — *Condition on Discharge.*

	Males.	Females.	Totals.
Arrested,	116	92	208
Improved,	77	100	177
Unimproved,	46	41	87
Died,	16	16	32
Nontuberculous,	5	4	9
Not considered,	9	13	22
Totals,	269	266	535

TABLE 9. — *Deaths, Duration of Disease, Length of Stay in Sanatorium and Cause of Death.*

No.	DURATION.	Length of Stay.	Cause of Death.
9648	1 year, . . .	11 months, 7 days, .	Pulmonary tuberculosis.
9439	1½ years, . . .	17 months, 4 days, .	Hæmoptysis, pneumonia and pulmonary tuberculosis.
9901	3 months, . . .	5 months, 8 days, .	Laryngeal and pulmonary tuberculosis.
9195	6 months, . . .	23 months, 29 days, .	Tuberculous enteritis and pulmonary tuberculosis.
9798	8 years, . . .	8 months, . . .	Pneumonia and pulmonary tuberculosis.
9592	1 year, . . .	14 months, 20 days, .	Pneumonia and pulmonary tuberculosis.
8051	4 years, 4 months,	51 months, 20 days, .	Hæmoptysis and pulmonary tuberculosis.
9950	1 year, . . .	6 months, 11 days, .	Pneumonia and pulmonary tuberculosis.
9649	6 years, . . .	13 months, 26 days, .	Pulmonary tuberculosis.
9837	1 year, . . .	9 months, 7 days, .	Miliary tuberculosis.
9565	4 years, . . .	17 months, . . .	Pulmonary tuberculosis.
7962	1 year, . . .	54 months, 3 days, .	Pulmonary tuberculosis.
10033	8 months, . . .	5 months, 20 days, .	Miliary tuberculosis.
10204	years, . . .	1 month, 22 days, .	Pulmonary tuberculosis.
9751	5 years, . . .	12 months, 15 days, .	Pulmonary tuberculosis.
10246	3 months, . . .	1 month, 4 days, .	Tuberculous meningitis and pulmonary tuberculosis.
9783	3 years, . . .	12 months, 6 days, .	Pulmonary tuberculosis.
9517	1 year, . . .	19 months, 27 days, .	Empyema and pulmonary tuberculosis.
9835	10 months, . . .	11 months, 7 days, .	Pneumothorax and pulmonary tuberculosis.
9249	5 years, . . .	27 months, 10 days, .	Miliary tuberculosis.
10271	2 months, . . .	2 months, 13 days, .	Pulmonary tuberculosis.
9968	12 years, . . .	10 months, 3 days, .	Pulmonary tuberculosis.
10150	6 months, . . .	5 months, 16 days, .	Pulmonary tuberculosis.
10401	8 months, . . .	1 month, 3 days, .	Tuberculous meningitis and pulmonary tuberculosis.
10468	2 years, . . .	1 month, 8 days, .	Laryngeal and pulmonary tuberculosis.
9894	10 months, . . .	15 months, 4 days, .	Pulmonary tuberculosis.
10042	9 months, . . .	11 months, 21 days, .	Miliary tuberculosis.
10504	3 months, . . .	1 month, . . .	Endocarditis and pulmonary tuberculosis.
10409	years, . . .	4 months, 8 days, .	Pulmonary tuberculosis.
10002	2 months, . . .	13 months, 20 days, .	Pulmonary tuberculosis.
9818	6 years, . . .	17 months, 18 days, .	Laryngeal and pulmonary tuberculosis.
10144	1 year, . . .	2 months, 18 days, .	Pulmonary tuberculosis.

Climatological Data, Rutland State Sanatorium, Altitude, 1,160 Feet, for the Official Year beginning Dec. 1, 1914, and ending Nov. 30, 1915.

DATE.	TEMPERATURE (DEGREES).		Clear Days.	Partly Cloudy Days.	Cloudy Days.	Days with Rain or Snow.	PRECIPITATION.			WIND (MILES).			Mean Relative Humidity (Per Cent.).	
	Mean.	Departure from Normal.					Rain.	Departure from Normal.	Snow.	Total.	Average per Hour.	Departure from Normal.		
1914.														
December,	22.4	-3.5	10	9	9	11	4.23	+0.69	6.5	7,860.5	10.8	+0.2	73.9	
1915.														
January,	26.1	+3.0	13	6	12	15	6.96	+3.13	8.5	7,450.0	10.0	-1.7	80.4	
February,	27.3	+6.8	12	8	8	11	3.60	+0.55	4.7	6,773.1	10.1	-2.1	76.6	
March,	29.6	-1.9	20	9	2	4	.091	-3.70	0.8	7,267.2	9.8	-1.3	62.5	
April,	48.0	+4.7	13	11	6	11	1.85	-2.05	8.8	7,459.9	10.4	-0.6	67.3	
May,	53.1	-1.7	16	10	5	10	1.84	-1.48	-	6,843.8	9.2	-0.8	67.6	
June,	62.2	-0.2	14	12	4	14	3.98	+0.41	-	5,855.9	8.1	-0.6	76.4	
July,	67.6	-0.9	14	10	7	19	6.89	+3.14	-	5,240.5	7.0	-1.4	83.0	
August,	64.4	-1.0	16	7	8	16	6.54	+2.10	-	5,900.5	7.9	-0.1	85.8	
September,	63.9	+3.8	20	8	3	5	1.77	-1.98	-	5,921.7	8.2	-0.1	80.6	
October,	51.0	+1.0	19	4	8	8	2.92	-0.71	-	7,053.3	9.5	+0.4	80.9	
November,	38.6	+1.3	16	6	8	9	3.50	+0.57	0.7	7,265.8	10.1	-0.4	64.7	
Totals,	554.2	-	183	100	80	133	44.17	-	30.0	80,892.2	111.1	-	899.7	
Averages,	46.2	+1.0	15+	8+	7-	11+	3.64	+0.05	5.0	6,741.0	9.3	-0.7	75.0	

¹ Minimum amount of any month on record.