

**Twenty-sixth annual report of the Trustees of the State Lunatic Hospital at Northampton, for the year ending September 30, 1881.**

**Contributors**

State Lunatic Hospital (Northampton, Mass.)  
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TWENTY-SIXTH ANNUAL REPORT  
OF  
THE TRUSTEES  
OF THE  
STATE LUNATIC HOSPITAL  
AT NORTHAMPTON,  
FOR THE YEAR ENDING SEPTEMBER 30, 1881.

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## OFFICERS OF THE NORTHAMPTON LUNATIC HOSPITAL.

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### TRUSTEES.

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EDWARD B. NIMS, M.D.	. . . . .	FIRST ASSISTANT PHYSICIAN.
DANIEL PICKARD, M.D.	. . . . .	SECOND ASSISTANT PHYSICIAN.
WALTER B. WELTON	. . . . .	CLERK.
ASA WRIGHT	. . . . .	FARMER.
DANFORD MORSE	. . . . .	ENGINEER.

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### TREASURER.

PLINY EARLE	. . . . .	NORTHAMPTON.
OFFICE AT THE HOSPITAL.		

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DEPARTMENT OF THE INTERIOR

UNITED STATES

REPORT OF THE  
COMMISSIONER OF THE  
GEOLOGICAL SURVEY  
FOR THE YEAR 1894

CONTENTS

ANNUAL REPORT OF THE  
COMMISSIONER OF THE  
GEOLOGICAL SURVEY  
FOR THE YEAR 1894

UNITED STATES


REPORT OF THE  
COMMISSIONER OF THE  
GEOLOGICAL SURVEY  
FOR THE YEAR 1894

CONTENTS

ANNUAL REPORT OF THE  
COMMISSIONER OF THE  
GEOLOGICAL SURVEY  
FOR THE YEAR 1894

## TABLE OF CONTENTS.

	PAGE
TRUSTEES' REPORT . . . . .	7
LIST OF PERSONS EMPLOYED IN THE HOSPITAL . . . . .	12
INVENTORY OF STOCK AND SUPPLIES . . . . .	13
TREASURER'S REPORT . . . . .	14
SUPERINTENDENT'S REPORT . . . . .	17
General Statistics . . . . .	17
Status of Patients . . . . .	19
Recoveries . . . . .	20
Deaths . . . . .	22
Worship and Entertainment . . . . .	25
The Farm . . . . .	27
How the Hospital is supported . . . . .	30
The Finance of the last Sixteen Years . . . . .	31
Studies relative to the Curability of Insanity . . . . .	32
DIETARY OF THE HOSPITAL . . . . .	45
APPENDIX. STATISTICAL TABLES . . . . .	50



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# Commonwealth of Massachusetts.

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## TRUSTEES' REPORT.

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*To his Excellency the Governor of the Commonwealth and the Honorable Council.*

AGREEABLY to the provisions of the statute law, the undersigned, Trustees of the Northampton Lunatic Hospital, lay before you the results of another official year, making the Twenty-sixth Annual Report of the institution with the general direction of which they are intrusted.

A brief abstract of the results of the operations of the hospital in its medical department is as follows:—

At the beginning of the official year, Oct. 1, 1880, the number of patients in the house was, of men, 223; women, 223; total 446,—the numbers of the two sexes being, by a noteworthy coincidence, equal. During the official year the number admitted was, of men, 57, and of women, 66; making a total of 123. The aggregate of these numbers, representing the whole number under care in the course of the year, is, of men, 280; of women, 289; total, 569. The number discharged from the hospital during the same period was, of men, 51, and of women, 55; a total of 106. Twenty-six patients were removed by death. Of these, 16 were men and 10 women.

The number of patients remaining in the house at the end of the official year, Sept. 30, 1881, was 464; of whom 229 were men and 234 women. The daily average number for the year was a fraction less than 452; the largest number on any day was 466, on four days in August; and the least number 439, on five days in January and February.

## 8 LUNATIC HOSPITAL AT NORTHAMPTON. [Oct.

The results of treatment, as shown by the recorded mental condition of the 80 patients who left the hospital, are as follows: recovered, 20; much improved, 13; improved, 30; unimproved, 16; not insane, 1.

In our report for the official year 1879-80, it was shown that, although for many years the hospital was dependent upon the other similar State institutions of the Commonwealth for a very considerable part of the patients admitted, the time had at length arrived at which there was a release from that dependence, and our numbers were kept up by direct commitments from the four western counties of the State. Judging from the experience of the official year just closed, the hospital will in future not only be kept full by these direct admissions, but the time is not far distant at which it must be enlarged, or find relief from overcrowding by the transfer of its surplus patients to some other receptacle.

The official year began Oct. 1, 1880, with 446 patients in the house; it closed with 463; an increase of 17 in the course of the year. The increase would have been still greater if no inmates had been discharged excepting such as were in condition to resume their duties in society, or to be cared for among their relatives, friends, or guardians. In the course of the last winter a department for chronic insane was opened in the almshouse of Springfield, to which nineteen of the wards of that city who were here, but who had ceased to require hospital treatment, were removed. Having been assured that physically they would be made as comfortable as they were here, and that they would be under the surveillance of the State authorities, we consented to their removal. To the excess of patients (17) now in the house over the number one year ago, the number (19) thus removed to another receptacle should be added, in order to obtain the true increase within the year of insane persons in this part of the State who require the care of the public institutions.

The most important, as well as the most expensive, improvement of the hospital in the course of the year is the introduction of a steam fire-pump, as an additional precaution against destruction by conflagration. The building was already supplied with six portable fire-extinguishers; it also

had four hydrants on the outside, and sixteen within, directly connected with the town water-pipes, which are fed from a pond, the surface of which is about thirty feet higher than the top of the hospital cupola. There is not a patient's room in the house which cannot be reached by the nozzle of the hose attached to some one of the interior hydrants.

The pump is one of Knowles's patent, with a four-way hose connection. It has a sixteen-inch steam-cylinder, and a seven-inch water-cylinder, with twelve-inch stroke, throwing  $1\frac{9}{10}$  gallons at each stroke, and able to bear a rapidity of two hundred and fifty strokes per minute. To supply the old hydrants, there were 843 feet of four-inch, and 208 feet of two-and-a-half and two-inch iron pipe. Four double out-of-door and six in-door hydrants, with 789 feet of five-inch, 754 feet of four-inch, and 37 feet of three-inch pipe, have been added. The old and the new system of pipes are connected, so that all of the hydrants, both new and old, can be used either with the pressure from the town water-works or with that of the pump.

The ice-house heretofore used is on Mill River, near the north-east corner of the farm, distant very nearly a mile from the hospital by the nearest route suitable for loaded teams; and the water of the river has recently been rendered more impure by the opening into it of sewers. For the purpose of obtaining very pure ice, an artificial pond has recently been made by Wright and Rust, on a small stream about a mile south-west of the hospital. Under these circumstances, and for these reasons, we caused a new ice-house to be erected in the autumn of 1880. It is of the same size as the old one, and stands quite near the hospital. The ice stored in it came from Wright and Rust's pond, and is used only for drinking and table purposes. The house at Mill River was filled, and the ice is used in the refrigerators.

As before mentioned, the north-easterly part of the farm can be reached by teams only by a round-about road. The land in that section has recently been brought under cultivation, and the frequency of passing between it and the buildings, already not inconsiderable for the transportation of ice, has thus been largely increased; consequently a shorter route is much to be desired. By grading a precipitous hill on the southerly bank of the river, a road saving nearly

## 10 LUNATIC HOSPITAL AT NORTHAMPTON. [Oct.

half the distance can readily be made. It was decided, in the early part of the official year, that this should be done, and a contract for the work was made with Mr. Samuel Parsons. The earth removed in grading is used to fill the gulch washed out by the freshet which carried away the ice-house nearly three years ago. The severity of the winter was such as to prevent the prosecution of the work; but it is hoped that it will be finished before the close of the current calendar year.

The grading of the eastern extremity of the lot on the south side of the county road was mentioned in our last year's report. After it was finished, and late in the calendar year, the lot was enclosed upon that side by an iron fence nearly eight hundred feet in length.

Concrete walks to the extent of several hundred yards have been laid on the west side of the hospital.

According to our estimate, the actual average current expense for each patient during the official year was \$169.04, or \$3.242 per week.

During the same period our charges for board were —

For State patients . . . . .	\$30,676 28
town patients . . . . .	36,055 16
private patients . . . . .	15,516 38
Total . . . . .	<u>\$82,247 82</u>

The Treasurer has presented his Annual Report, and it is herewith transmitted for your examination. It contains the accustomed details, under specific heads, of all money received and money disbursed; and bears the approval of the auditing committee of our Board.

It appears from the balances of the accounts that, at the end of the official year, Sept. 30, 1881, there were —

Reserve fund . . . . .	\$10,000 00
Cash assets available for future use . . . . .	26,681 26
Total . . . . .	<u>\$36,681 26</u>
And liabilities (bills payable) . . . . .	5,711 05
Balance in favor of the hospital . . . . .	<u>\$30,970 21</u>

Aside from these *cash* assets, we had on hand a quantity of *purchased* provisions and supplies valued at \$15,456.20,



### CORRECTIONS.

The figures near the bottom of page 10 should be as follows :

Reserve fund,	\$10,000 00
Cash assets available for future use,	26,597 10
	<hr/>
Total,	\$36,597 10
And liabilities, (bills payable)	5,711 05
	<hr/>
Balance in favor of the hospital,	\$30,886 05

There are errors of the same amount, (\$84.16) on page 31, as follows :

22d line from bottom, instead of \$30,970.21, *read* \$30,886.05 ; and instead of \$30,668.17, *read* \$30,584.01.

6th line from bottom, instead of \$30,668.17, *read* \$30,584 01.

3d line from bottom, instead of \$263,936.75, *read* \$263,852.59.

together with all the productions of the farm which have been garnered for future use.

No change has taken place in the staff of principal resident officers. Of the subordinate officers of one year ago, J. E. Shufelt, supervisor, and Nell Russell, laundress, have left. They had both performed their duties satisfactorily, the former during the long period of more than sixteen years, and the latter more than four years.

Our regular meetings have been held, as heretofore, at the Hospital; and, as the result of inspection at these and at other times, we are of the opinion that the institution was never in a better condition, or more completely adapted to its work, than it is at the present time.

L. D. JAMES, *Chairman*,  
WM. M. GAYLORD,  
S. M. SMITH,  
A. C. DEANE,  
HENRY W. TAFT.

NORTHAMPTON, Oct. 6, 1881.

# 12 LUNATIC HOSPITAL AT NORTHAMPTON. [Oct.

## LIST OF PERSONS

REGULARLY EMPLOYED AT THE NORTHAMPTON LUNATIC HOSPITAL,  
SEPT. 30, 1881.

Superintendent and Physician . . . . .	per year	\$2,500 00
First Assistant Physician . . . . .	"	1,500 00
Second Assistant Physician . . . . .	"	900 00
Treasurer . . . . .	"	300 00
Treasurer, for clerk-hire and paid to a clerk . . . . .	"	200 00
Clerk . . . . .	"	900 00
Farmer . . . . .	"	900 00
Engineer . . . . .	"	900 00
Assistant clerk . . . . .	per month	30 00
Supervisor (male) . . . . .	"	35 00
Supervisor (female) . . . . .	"	25 00
Assistant supervisor (female) . . . . .	"	20 00
Seamstress . . . . .	"	20 00
Assistant seamstress . . . . .	"	13 00
Laundress . . . . .	"	16 00
Assistant laundress . . . . .	"	16 00
Baker . . . . .	"	46 00
Assistant baker . . . . .	"	20 00
Steward . . . . .	"	54 17
Attendants (male) (6) . . . . .	"	30 00
Attendant (male) (1) . . . . .	"	28 00
Attendants (male) (2) . . . . .	"	25 00
Attendants (male) (3) . . . . .	"	21 00
Attendants (female) (13) . . . . .	"	16 00
Attendant (female) (1) . . . . .	"	15 00
Attendant (female) (1) . . . . .	"	13 00
Housework, centre (female) (2) . . . . .	"	15 00
Cook (female) (1) . . . . .	"	16 00
Assistant cook (male) (1) . . . . .	"	20 00
Assistant cooks (female) (2) . . . . .	"	14 00
Assistant cook (female) (1) . . . . .	"	13 00
Farmer's dining-room (female) (1) . . . . .	"	14 00
Watchman . . . . .	"	30 00
Carpenter . . . . .	per day	2 25
Carpenter . . . . .	"	1 50
Painter . . . . .	per month	50 00
Assistant engineer . . . . .	"	32 00
Night engineer and florist in summer . . . . .	"	28 00

Coachman . . . . .	per month	\$25 00
Farm-hand (1) . . . . .	"	32 00
Farm-hand (1) . . . . .	"	28 00
Farm-hands (3) . . . . .	"	25 00
Farm-hand (1) . . . . .	"	23 00
Farm-hand (1) . . . . .	"	21 00

In the warm season we generally hire one or two farm-hands by the day.

## INVENTORY OF STOCK AND SUPPLIES

ON HAND SEPT. 30, 1881.

Live-stock on the farm . . . . .	\$5,194 00
Produce of the farm on hand . . . . .	8,480 00
Carriages and agricultural implements . . . . .	3,997 00
Machinery and mechanical fixtures . . . . .	9,579 00
Beds and bedding in inmates' department . . . . .	11,650 25
Other furniture in inmates' department . . . . .	4,816 83
Personal property of State in Superintendent's department . . . . .	9,342 37
Ready-made clothing . . . . .	3,144 71
Dry-goods . . . . .	2,622 68
Provisions and groceries . . . . .	3,452 06
Drugs and medicines . . . . .	500 00
Fuel . . . . .	6,234 75
Library . . . . .	800 00
Total . . . . .	\$69,813 65

## TREASURER'S REPORT.

*To the Trustees of the Northampton Lunatic Hospital.*

THE financial condition of the hospital, for the official year 1880-81, is set forth in the following statement:—

## ASSETS.

Three hundred and forty acres of land . . . . .	\$10,000 00	
Hospital building . . . . .	250,000 00	
Two dwelling-houses . . . . .	4,000 00	
Two barns . . . . .	5,500 00	
Stable . . . . .	2,000 00	
Other buildings . . . . .	6,500 00	
	<hr/>	\$308,000 00

## PERSONAL ESTATE.

Stock and supplies on hand, as per inventory appended to the Trustees' Report . . . . .	69,813 65	
Reserve fund . . . . .	10,000 00	
	<hr/>	\$387,813 65

## RECEIPTS.

Cash on hand Sept. 30, 1880 . . . . .	\$5,289 54	
Received from the State Treasurer . . . . .	31,218 89	
from towns . . . . .	38,376 78	
from individuals . . . . .	15,677 30	
from sales . . . . .	2,065 88	
from interest . . . . .	732 25	
	<hr/>	\$93,360 64

## PAYMENTS.

1st. Salaries, wages, and labor . . . . .	\$25,434 52	
2d. Provisions and supplies, viz:—		
Meats of all kinds . . . . .	\$5,468 91	
Fish of all kinds . . . . .	1,411 29	
Fruit and vegetables . . . . .	956 02	
Flour and bread . . . . .	4,865 60	
Grain and meal for table . . . . .	285 38	
Grain and meal for stock . . . . .	1,934 38	
	<hr/>	
<i>Amounts carried forward . . . . .</i>	\$14,921 58	\$25,434 52

<i>Amounts brought forward</i>	\$14,921 58	\$25,434 52
Tea, coffee, and chocolate	732 89	
Sugar and molasses	2,419 53	
Butter and cheese	3,763 69	
Salt and other groceries	3,793 65	
	<hr/>	25,631 34
3d. Clothing		3,562 25
4th. Fuel and lights		8,118 26
5th. Medicines and medical supplies		1,539 87
6th. Furniture, beds, and bedding		2,900 08
7th. Transportation and travelling expenses		378 87
8th. Ordinary construction and repairs		3,032 91
9th. Extraordinary construction and repairs		9,291 03
10th. Miscellaneous expenses, including—		
1. Farm stock	\$1,597 58	
2. Farm supplies	4,158 63	
3. Water	750 00	
4. Minor expenses	644 92	
5. Contingencies	1,115 00	
	<hr/>	8,266 13
		<hr/>
		\$88,155 26

## LIABILITIES.

Salaries and wages due Oct. 1, 1881	\$3,521 35
Miscellaneous bills due	2,189 70
	<hr/>
	\$5,711 05
Due the institution for board Oct. 1, 1881—	
from State	\$7,658 72
towns	10,308 82
individuals	3,424 18
Due from Treasurer Sept. 30, 1881	5,205 38
	<hr/>
	26,597 10
	<hr/>
	\$20,886 05

## SUMMARY.

Total receipts	\$93,360 64
Total payments	88,155 26
	<hr/>
	\$5,205 38
Total liabilities	\$5,711 05
Total debts due the institution	26,597 10
Total expenditures	\$88,155 26
Dividing this sum by 451.79, the average number of patients, we have the average expenditure per patient	\$206.646
And the average weekly expenditure, per patient, of	3.965

# 16 LUNATIC HOSPITAL AT NORTHAMPTON. [Oct.

Deducting from the total expenditures . . . . .	\$88,155 26
The extraordinary expenses . . . . .	9,291 03
	<hr/>
We have the current expenses . . . . .	\$78,864 23

Dividing \$78,864.23 by 451.79, the average number of patients, we have the average expenditure per patient . . . . .	\$174.559
Making the average weekly expenditure per patient . . . . .	3.347

Deducting from the current cash expenditures . . . . .	\$78,864 23
The increase of personal assets . . . . .	2,493 31
	<hr/>
We have the apparent necessary cost for the year . . . . .	\$76,370 92

Dividing \$76,370.92 by 451.79, the average number of patients, we have, as the annual cost of each patient . . . . .	\$169 04
Making the average weekly cost of each patient . . . . .	3.242

PLINY EARLE, *Treasurer.*

NORTHAMPTON, October 6, 1881.

We have performed our duty as auditors of the Treasurer's accounts, and find that there is a proper voucher for every entry.

WM. M. GAYLORD,  
ADAMS C. DEANE.

OCTOBER 6, 1881.

## SUPERINTENDENT'S REPORT.

*To the Trustees of the Northampton Lunatic Hospital.*

IN entering upon an exposition of the operations of the hospital for another year, I perceive no better method of introducing the subject than by a presentation of the usual table, which embodies the leading results of those operations.

## 1. General Statistics, 1880-81.

	Males.	Females.	Totals.
Patients in Hospital Oct. 1, 1880 . . . . .	223	223	446
Admitted within the year . . . . .	57	66	123
Whole number of cases within the year . . . . .	280	289	569
Discharged within the year . . . . .	51	55	106
Viz., as recovered . . . . .	7	13	20
as much improved . . . . .	6	7	13
as improved . . . . .	15	15	30
as unimproved . . . . .	6	10	16
as not insane . . . . .	1	-	1
Deaths . . . . .	16	10	26
Patients remaining Sept. 30, 1881 . . . . .	229	234	463
Viz., supported as State patients . . . . .	95	86	181
as town patients . . . . .	104	120	224
as private patients . . . . .	30	28	58
Number of different persons within the year, . . . . .	278	282	560
admitted . . . . .	57	63	120
recovered . . . . .	7	13	20
Daily average number of patients . . . . .	228.01	223.78	451.79

The number of *persons* admitted in the course of the year was one hundred and twenty, of whom fifty-seven were men and sixty-three women; but three of these persons, all of them women, were admitted twice each. As every person is considered a new *patient*, or *case*, at every admission, those *three* women counted as *six* patients or cases. Consequently the number of *patients* admitted was one hundred and twenty-three, or three more than that of *persons*.

## 18 LUNATIC HOSPITAL AT NORTHAMPTON. [Oct.

Only one of the three women admitted twice each was discharged recovered on the first of those admissions. She returned to the hospital after an absence of more than nine months.

Of the one hundred and twenty persons admitted, twenty-six, or a little more than one-fifth of the whole, have been inmates of the hospital more than once. Six men and fifteen women, a total of twenty-one, have been admitted twice each; one man and two women three times each; one man four times, and one man eight times.

Of the twenty-one who have been received twice each, only seven, all of them women, were discharged as recovered on their first admission. Eight were discharged as improved, and six as unimproved.

Of the three who have been here three times each, the man was discharged as recovered on his first two admissions. The women were both discharged as unimproved on both admissions.

The man who was received for the fourth time had been discharged as recovered on his first admission, improved on the second, and unimproved on the third. He has been treated at two other hospitals within the State.

The man received the eighth time had been discharged as recovered four times, and improved three times.

Thus, of persons who in any foregoing year had left the hospital with a record of recovery, ten returned to it within the official year just closed; and those ten persons had been discharged as recovered a total of thirteen times.

The number of *persons* admitted exceeded by five that of the next preceding year; and the number in the house at the end of the official year is larger by seventeen than it was a year ago. The daily average number in the house was a trifle larger than in 1879-80, notwithstanding that no less than nineteen patients were transferred, in the course of the year, to the Springfield Almshouse. All of these facts tend to show that insanity is increasing in the western part of the State, the section from which this hospital derives its patients, as well as to confirm the belief that the time is not very remote at which the people of that section will require more accommodations of the kind than are here to be found.

## STATUS OF PATIENTS.

As has already been stated, the number of patients admitted was one hundred and twenty-three. Upon entering the hospital the cost of support of forty of them was defrayed by the State, of sixty-four by cities and towns, and of nineteen by their friends, or from other private sources. In the course of their terms of residence here this cost was transferred from the State to towns in two instances, and from the State to individuals in one instance.

One hundred and six patients either left the hospital or died. Twenty-five of these derived their support from the Commonwealth, sixty-three from cities and towns, and eighteen from individuals.

Of the four hundred and sixty-three patients who were in the hospital at the end of the official year, one hundred and eighty-one were beneficiaries of the State, two hundred and twenty-four were supported by cities and towns, and fifty-eight were private patients.

From the statistics in the Saturday reports sent from the hospital to the Board of Health, Lunacy, and Charity, we derive the weekly average number of patients in each of the three classes mentioned. They are as follows:—

	Males.	Females.	Totals.
State patients . . . . .	96.84	83.98	180.82
Town patients . . . . .	101.63	112.52	214.15
Private patients . . . . .	29.73	27.46	57.19

The relative proportion of the numbers of patients in the three classes has varied to a great extent at different periods in the course of the last seventeen years. At the end of the official year 1863-64 there were two hundred and fourteen State patients, forty-five town patients, and seventy private patients. The actual numbers in all the classes increased, but those of State patients far the most rapidly, until two years afterwards, at the close of September, 1866, they were, — of State patients, two hundred and seventy-two; town patients, fifty-two; private patients, eighty-one.

## 20 LUNATIC HOSPITAL AT NORTHAMPTON. [Oct.

From that time to the present there has been a gradual diminution of numbers in the class of State patients, largely in consequence of alterations in the laws of settlement.

Some fluctuations have occurred in regard to town patients; but, upon the whole, and taken from year to year, there has been a constant, and at times a rapid, augmentation of their number. On Sept. 30, 1869, there were sixty-two; Sept. 30, 1872, ninety-five; Sept. 30, 1876, one hundred and forty-six; Sept. 30, 1879, one hundred and eighty-four; and Sept. 30, 1880, two hundred and five.

The number of private patients increased from year to year, until it attained its maximum in 1871. At the close of April of that year the numbers in all the classes were, — of State patients, two hundred and thirty-nine; town patients, seventy-four; private patients, one hundred and twenty-two. From the opening of the hospital up to the time just mentioned, a period of thirteen years, private patients had been received from all quarters, whether within or without the State; and of the one hundred and twenty-two of this class at that time present, more than seventy came from places beyond the borders of the Commonwealth. The pressure for admission by residents of the State had now become so great that it was determined thenceforth to admit no others. This determination has been strictly adhered to, and since the 4th of October, 1871, no non-resident of Massachusetts has been received. Not this alone, but many of the patients from other States were removed by direction of the Trustees, in order the more rapidly to make room for our own citizens. Under these influences the number of private patients diminished until it reached fifty, its lowest point, in August, 1878. Since that time it has slightly increased from year to year.

### RECOVERIES.

Among the patients who left the hospital within the year, there were seven men and thirteen woman, a total of twenty, who — *according to our standard of mental health, and our judgment in regard to the extent to which, in individuals, that standard is modified by temperament, idiosyncrasy, education, and habits* — were properly considered as recovered. No patient was discharged as recovered more than once in the course of the year. Of the twenty recoveries, two of men

and one of women were of persons who had at some former time been inmates of this institution. One of the men had been here three times, and was discharged as recovered every time; the other had been here once, and was discharged as recovered. The woman had previously been admitted twice, and was discharged as recovered on each admission. The former recoveries of the three persons were six; the total of their recoveries since this their last discharge is ten. The seventeen other persons — five men and twelve women — who recovered, had never before been inmates of this institution.

Three of the persons, who upon leaving the hospital were recorded as much improved, would probably have fully recovered had they remained here a sufficient length of time.

Of the twenty persons discharged recovered, four were supported by the State, eleven by cities and towns, and one by private funds.

Both the number and the relative proportion of recoveries was small, — a fact which must be attributed to the material upon which the medical officers were required to work. As, in the olden time, it was found inconvenient to make brick without straw, so, now, it is not easy to effect a restoration from disease when that disease has been permitted to become permanently fixed before it is subjected to a curative process. The proportion of incurables received at the hospital appears to be constantly increasing in the progress of years. So large has it now become, that one wonders where such a mass of chronic mental disease, in its confirmed condition and its most aggravated forms, can come from, — such a number of broken-down constitutions, so much of imbecility, of dementia, of paralysis, and of long-existent mania. But light upon this subject is near its dawn. The forthcoming national census will reveal the unwelcome fact that the number of the insane within the United States is nearly twice as large as has generally been supposed. From thirty to forty years ago the estimated proportional number in Massachusetts was one to every thousand of the population. It is now known that there are nearly three to every thousand. It is from this great reserve of mental disorder that the hospitals are, in large measure, drawing their supplies of patients

## 22 LUNATIC HOSPITAL AT NORTHAMPTON. [Oct.

They are kept at their homes, or in other receptacles, so long as they can be cared for without an overburden of work or of annoyance, or so long as that care is unattended by personal danger, and then a refuge is found, chiefly in the institutions provided by the State.

### DEATHS.

Twenty-six patients died in the course of the year. Sixteen of them were men, and ten women. Judged by the extent of their fatality during this period, two diseases stand side by side, with four deaths each, as the most prominent destroyers of life. One of them is that peculiar form of cerebral disorder, which was never mentioned in a report of an American hospital for the insane until within the last forty years, the *paralysie générale* of the French, called *paralysis of the insane*, or *paresis*, by the English and the Americans; the other is that gradual destruction of the vital forces and slow wasting away of the body, without acute or severe disease, which in medical language is named *marasmus*, — a disorder which, with the single exception of consumption, is, in institutions for the insane, the cause of greater mortality than any other. Consumption, often the foremost, is this year the third on the mortuary list, with three deaths. Two patients died of paralysis, two of epilepsy, and two by suicide. There were ten more deaths, no two of which were the result of any one disease. The detail of their causes may be found in one of the tables in the appendix. It still remains to be a fact — a fact that approaches the marvellous — that no patient has ever died in the hospital of typhoid fever.

The only important unpleasant occurrences of the year were two deaths by self-destruction. In one of them, a man effected his purpose by strangulation; and in the other, a woman, by hanging. In both instances the medical examiner of this district was called to take cognizance of the matter. The hospital has now been in operation twenty-three years, and the number of deaths by suicide is sixteen, ten of which were of men, and six of women. Eight of those of men occurred within the first nine years of the history of the institution. During the time between the 8th of November, 1869, and the 15th of November, 1880, a period of more than eleven years, no casualty of this kind took place among the men.

Of the whole number of deaths by suicide, ten were within the first eleven years of the operations of the hospital, four within the last eleven years, and one in the middle, or twelfth year. But, as mentioned last year, the average number of patients in the hospital was larger by more than a hundred during the period last mentioned than during the period first mentioned.

Once more, as in a large majority of the preceding years, we have evidence of the greater mortality of men than of women among the insane. The sixteen deaths of men constitute a percentage of 5.70 in relation to the whole number of patients of that sex in the course of the year; but the percentage of the ten deaths of women, in like relation to their sex, was only 3.52. If, instead of the whole number of patients of either sex admitted, the daily average number in the house be taken as one of the terms of the comparison, the deaths of men were 7.01 per cent, while those of women were only 4.46.

Of the patients who died, seven were supported by the State, twelve by cities and towns, and seven by individuals or by private families.

The annual statistical history of the mortality in the hospital during the whole term of its existence is contained in the following table:—

## 24 LUNATIC HOSPITAL AT NORTHAMPTON. [Oct.

*Deaths and their Ratios from Sept. 30, 1858, to Oct. 1, 1881.*

OFFICIAL YEAR.	Whole No. of Patients.	Daily Average No. of Patients.	DEATHS.			Per Cent on Whole No. of Patients treated.	Per Cent on Daily Average No. of Patients.
			Men.	Women.	Total.		
1858-59,	313	229.55	7	12	19	6.07	8.27
1859-60,	398	255.96	9	18	27	6.78	10.54
1860-61,	434	314.26	15	15	30	6.91	9.54
1861-62,	442	313.80	9	10	19	4.29	6.05
1862-63,	470	355.28	19	7	26	5.53	7.31
1863-64,	475	357.63	17	30	47	9.89	13.14
1864-65,	469	342.40	17	24	41	8.76	11.97
1865-66,	488	376.35	18	13	31	6.35	8.23
1866-67,	543	401.03	23	24	47	8.65	11.71
1867-68,	565	413.41	25	18	43	7.61	10.40
1868-69,	590	405.10	13	12	25	4.23	6.17
1869-70,	604	408.83	22	11	33	5.46	8.07
1870-71,	616	421.90	16	12	28	4.54	6.64
1871-72,	619	428.72	19	18	37	5.97	8.63
1872-73,	614	437.23	13	8	21	3.42	4.80
1873-74,	626	469.54	14	11	25	3.99	5.32
1874-75,	629	475.35	23	18	41	6.52	8.62
1875-76,	629	474.21	18	19	37	5.88	7.80
1876-77,	603	476.16	21	21	42	6.96	8.82
1877-78,	551	442.43	14	9	23	4.17	5.19
1878-79,	535	436.73	14	9	23	4.29	5.27
1879-80,	559	450.51	17	12	29	5.19	6.44
1880-81,	569	451.79	16	10	26	4.57	5.75

The proportion of deaths during the year just closed was small. As calculated upon the whole number of patients treated, it was, as will be seen in the table, 4.57 per cent; and upon the daily average number in the house, 5.75 per cent. As calculated in the former way, there have been but eight of the twenty-three years of the existence of the hospital in which the proportion was smaller; and as in the latter, which statisticians regard as the more correct way, there have been but four.

Perhaps the most striking feature of the table, if examined as a whole, is the reduced mortality in the last half of the time in which the institution has been in operation, as compared with that of the first half. Not only is it lower, but it is more equable throughout the successive years of its period.

The ratio of deaths in the table has been calculated in the customary method, upon the number of *patients* treated. In one point of view there is a fallacy in the results of this method which, like other fallacies, conveys an erroneous

impression. This is especially true when the results of a series of years are under consideration. Under these circumstances the number of *patients* is always greater than the number of *persons*. By repeated admissions *one* person may make *several* patients. If, consequently, the percentage of deaths be calculated on the number of *patients*, it will always be smaller than the actual proportion of *persons* who have died. If, for example, one person should be admitted to a hospital ten times, and die there on his last admission, his statistical history would be one *person*, ten *patients*, one death; and the proportion of that death, calculated upon the whole number (10) of *patients*, would be only ten per cent, while if calculated upon the number (1) of *persons* it is 100 per cent.

In the statistical history of the Worcester Hospital, which has for several years been in the course of preparation, it has been shown that, prior to the close of the official year 1879-80, 12,401 *patients* had been admitted. The number of deaths had been 1,709, which is 13.78 per cent of the number of *patients*. But the actual number of *persons*, or individuals, admitted was only 9,246. Of this number, as before stated, 1,709 had died. This is 18.48 per cent, or the true proportion. The *annual* mortality at the hospital had probably not been over six or seven per cent.

In the course of the past year only one patient has been removed from the hospital, at the apparent approach of death, in order that he might die at home. In this instance, as in all other similar cases here, the decision in regard to removal was left entirely to the friends of the patient, without advice, either for or against it, from the medical officers of the institution.

#### WORSHIP AND ENTERTAINMENT.

In the course of the seventeen years of my connection with the hospital, there has been no Sabbath upon which the patients have not assembled for divine worship in the chapel; and in every instance the services have been conducted by a minister of the gospel having no official connection with the institution. These have mostly been pastors of the several denominational churches in Northampton; but not infrequently they have come from other towns in the neighbor-

hood, occasionally from remote parts of the State, and sometimes from other States. These services are usually attended by about one-half of the patients. Some years ago special efforts were made to increase the attendance, and the proportion of patients present was carried up to from two-thirds to three-fourths of the whole number in the house. But it was found that, under the circumstances, the liability to disturbance by talking, by eccentric conduct, or by outbreaks of excitement among the more demonstrative patients, was so greatly increased that the propriety and usefulness of the endeavor was more than doubted. The practice was consequently discontinued. With but one-half the inmates present, the most frequent causes of disturbance are the paroxysms, or "fits," of epileptics. These occurrences are extremely unpleasant; and consequently furnish one of the many arguments in favor of separate institutions for that class of the insane from whom they arise.

A list of all the exercises in the chapel, in the course of the year, both on the Sabbath and on secular evenings, is placed below:—

1. EXERCISES ON THE SABBATH,—

Divine worship . . . . . 52 days

2. EXERCISES ON SECULAR DAYS,—

In memory of President Garfield . . . . . 1 day

3. EXERCISES ON SECULAR EVENINGS,—

(a) *Readings, opening and closing with sacred music:—*

The Bible . . . . . 24 days

The Bible, and selections of prose . . . . . 11 "

The Bible, and selections of poetry . . . . . 27 "

Miscellaneous selections of prose . . . . . 71 "

Miscellaneous selections of poetry . . . . . 69 "

Miscellaneous selections of prose and poetry . . . . . 27 "

(b) *Lectures, opening and closing with sacred music:—*

1. Description of the Sandwich Islands . . . . . 1 day

2. California and its products . . . . . 1 "

3. The people of England and of France contrasted, 2 days

4. English and American dialects and idioms . . . . . 1 day

5. Origin and signification of English surnames . . . . . 2 days

6. Origin and signification of French surnames . . . . . 1 day

7. Origin and signification of German surnames . . . . . 1 "

8. Signification of Christian names . . . . . 1 "

9. Origin and signification of County names . . . . . 1 "

10. The English Mail-coach forty years ago . . . . . 1 "

11. The French Diligence forty years ago . . . . . 1 "

(c) *Other entertainments:—*

Pictures shown with the Stereopticon . . . . .	7 days
Concerts of vocal and instrumental music . . . . .	5 “
Recitations . . . . .	2 “
Exhibition of legerdemain . . . . .	1 day

(d) *Social gatherings:—*

Quadrille parties . . . . .	19 days
No assembly . . . . .	36 “
Total . . . . .	365 days

As shown by this table, there was an assembly of the patients for either worship, instruction, entertainment, or amusement upon three hundred and twenty-nine days of the year. Among the thirty-six exceptional days were those upon which the institution was visited respectively by the Trustees; the Board of Health, Lunacy, and Charity; the Legislative Committee on Charitable Institutions, and the Governor and Council.

We are indebted to Dr. A. M. Shew, of the Connecticut Hospital for the Insane, for the lecture upon the Sandwich Islands; to Mrs. Dall, of Washington, for that upon California; to the choir of the Edwards Church, in Northampton, for a concert; to Miss Longley and Miss Rice, for three concerts; and to Dr. T. M. Meekins, for the exhibitions of pictures.

## FARM.

The season which is now passing away will rank as high, at least, as the average in favorableness to the growth of those productions of the soil which in this latitude contribute the most largely to the subsistence of man and his domestic animals. Of all the ordinary products of a New England vegetable garden we had, as usual, a very liberal supply; and no small quantity is required for the tables of five hundred and twenty persons, which is about the average for the year of the hospital household. Of potatoes, the product of the first planting of the Early Rose was somewhat reduced by the first and only important drouth of the season; but, notwithstanding the ravages of the potato-bug, which upon this farm were greater than in any foregoing year, the later crops were large and of excellent quality. The whole production was about three thousand bushels.

For apples it is the off-year, and consequently no abun-

dance was anticipated, especially so soon after the overwhelming product of the years 1878 and 1880. Still the harvest of them will yield from seventy-five to a hundred barrels suitable for domestic use, and enough of poorer quality to make a dozen barrels of cider. This will enable us to keep up our own supply of vinegar.

Never before was the quantity of hay upon the premises so large. The first growth of grass yielded over 171 tons, and the second and third growths about 42 tons, making an aggregate of  $213\frac{1}{4}$  tons.

The following list of products—the quantities of some of which are estimates, because the harvest is yet unfinished—was prepared by the Farmer, Mr. Wright:—

#### SCHEDULE OF PRODUCTS.

Hay (first growth of home farm), 102 tons, at \$16	. . . \$1,632 00
Hay (after-growth of home farm), $26\frac{1}{2}$ tons, at \$16	. . . 424 00
Hay (first growth, S. Day lot), $26\frac{1}{2}$ tons, at \$16	. . . 424 00
Hay (second growth, S. Day lot), $11\frac{1}{2}$ tons, at \$16	. . . 184 00
Hay (South lot), $29\frac{1}{4}$ tons, at \$16	. . . 468 00
Hay (Clark orchard), $14\frac{3}{4}$ tons, at \$16	. . . 236 00
Hay (Fowle lot), $2\frac{3}{4}$ tons, at \$16	. . . 44 00
Corn-fodder, dry, 20 tons	. . . 100 00
Oat-straw, 7 tons	. . . 70 00
Corn, 500 bushels	. . . 325 00
Potatoes, 3,000 bushels	. . . 1,800 00
Oats, 200 bushels	. . . 100 00
Broom-seed, 50 bushels	. . . 25 00
Carrots, 200 bushels	. . . 60 00
Beets, 1,200 bushels	. . . 480 00
Onions, 300 bushels	. . . 240 00
Turnips, 500 bushels	. . . 125 00
Parsnips, 25 bushels	. . . 12 50
Beans, Lima, in shell, $140\frac{1}{2}$ bushels	. . . 175 62
Beans, string, 36 bushels	. . . 45 00
Beans, Lima, dry, 20 bushels	. . . 60 00
Pease, green, in pod, 79 bushels	. . . 118 50
Sweet corn, green, in ear, 193 bushels	. . . 193 00
Tomatos, 111 bushels	. . . 111 00
Lettuce, 94 bushels	. . . 56 40
Cucumbers, $94\frac{1}{2}$ bushels	. . . 94 50
Squashes, summer, $93\frac{1}{2}$ bushels	. . . 116 87
Squashes, winter, 6 tons	. . . 240 00
<i>Amount carried forward</i>	. . . <u>\$7,960 39</u>

<i>Amount brought forward</i>	\$7,960 39
Melons, 7,694 pounds	115 11
Asparagus, 29½ bushels	88 50
Pie-plant, 19 bushels	19 00
Beet-greens, 66 bushels	33 00
Cabbages, 2,500 heads	100 00
Currants, red, 8 bushels	32 00
Apples, 86 barrels	172 00
Pears, 27 bushels	40 50
Quinces, 3 bushels	6 00
Veal, raised here, 186 pounds	22 32
Pork, 15,610 pounds	1,092 70
Pigs sold, 120	331 00
Pigs, roasting	5 00
Turkeys, 442 pounds	86 05
Chickens, 32 pounds	5 76
Heads and plucks	21 00
Eggs, 133½ dozen	41 50
Milk, grass-fed, 24,069 quarts	1,203 45
Cider, 12 barrels	24 00
Broom-brush, 400 pounds	24 00
Calf-skins	3 00
Young calves sold	35 00
Wood sold	115 00
	<hr/>
	\$11,576 28

Inasmuch as a large part of the milk is produced from the hay, grain, and roots raised upon the farm, and the value of which is included in the foregoing list, we only report under appraisal one-quarter of the actual production, supposing that to be the product of grass. The whole quantity was 24,069 gallons. The list gives that number of quarts.

Thirty-five hogs, which were raised and fattened on the premises, were slaughtered within the official year. The weight of their carcasses, individually, was as followe: 369, 329, 516, 380, 440, 443, 534, 500, 302, 500, 496, 520, 450, 500, 336, 500, 481, 544, 400, 500, 450, 425, 355, 591, 743, 387, 230, 368, 411, 400, 400, 438, 480, 532, 360. The total weight was 15,610 pounds, making the largest annual product of pork in the history of the hospital farm. The mean or average weight is 446 pounds; the average weight of the largest five, 588 pounds; and that of the largest ten, 548 pounds.

There are now on the farm 9 horses, 8 oxen, 1 bull, 30 cows, 1 heifer, 104 swine, and some domestic fowls.

## HOW THE HOSPITAL IS SUPPORTED.

The following financial exposition is the same that was published in the annual report for 1879-80, excepting such modifications as were required to accurately exhibit the facts as they exist at the present time.

Although a State institution, this hospital has received no gratuitous assistance from the State since the spring of 1867. Since that time it has relied for its income solely upon the products of its farm, the board-bills of its patients, and the small sum of ten dollars each for the funeral expenses of State patients who die in the hospital, and whose remains are not removed for burial. The receipts from the last-mentioned source, during the past year, were sixty dollars.

For the entire support of State patients, including clothing and all loss from breakage and other kinds of destruction, the hospital received three dollars and fifty cents each per week from the treasury of the Commonwealth from April 1, 1870, to April 1, 1879. For one year after the latter date it received but three dollars each per week; and since April 1, 1880, it has received three dollars and twenty-five cents each per week. This is the compensation fixed by statute law. Two-fifths of the inmates now belong to this class. During the past year the weekly average of them was 39.99 per cent of the whole.

For town patients it has received, and now receives, from the treasuries of the towns respectively in which those patients have legal settlements, the same sum per week as from the State treasury for State patients; but the towns clothe their patients, and remunerate the hospital for damages done by them. Nearly one-half of the inmates are now in this class. The weekly average of them for the year was 47.36 per cent.

For private patients there is no uniform price. The average pay from all who were here Sept. 30, 1881, was \$5.013 each per week. Clothing and damages are extra charges. The weekly average of these patients, during the past year, was 12.64 per cent, or about one-eighth of the whole.

The average weekly pay *per capita* received by the hospital for all its patients — State, town, and private — in the course of the year, is \$3.501. Such are the pecuniary resources of the institution. We turn to the results of

## THE FINANCE OF THE LAST SIXTEEN YEARS.

In April, 1865, the hospital was freed from debt, and the financial statement at the close of that month showed a balance of \$302.04 in its favor. Between that time and the 1st of June, 1867, it received a direct bonus from the State of five thousand dollars, in two appropriations, for specific purposes,—one of two thousand, and the other of three thousand dollars.

As an offset to the five thousand dollars bonus, the hospital has purchased and paid for several lots of land, amounting to about one hundred and forty-nine acres, the total cost of which was \$25,590. The State then has, in this way alone, been overpaid for its bonus in the sum of \$20,590.

The amount paid by the hospital for repairs and improvements in the course of the sixteen years, from Sept. 30, 1865, to Sept. 30, 1881, is \$191,722.38.

The surplus of cash assets now on hand, including the reserve fund, is \$30,970.21, or \$30,668.17 larger than it was on the 30th of April, 1865.

The *purchased* provisions and supplies, including fuel and stored clothing, now on hand, are estimated to have cost \$15,456.20. The estimated value of similar supplies on the 30th of April, 1865, was \$2,500. The increase of assets under this head is, therefore, \$12,956.20.

The value of household furniture in the hospital is, at a low estimate, at least ten thousand dollars greater than it was on the 30th of April, 1865, at the same rate or standard of appraisal. To be certain, however, of no exaggeration, let it be called eight thousand dollars. Collecting these several sums, the account of debit of the Commonwealth to the hospital appears to be as follows:—

Excess of cost of land over direct bonus . . . . .	\$20,590 00
Repairs and improvements . . . . .	191,722 38
Excess of present cash assets . . . . .	30,668 17
Increase of provisions and supplies . . . . .	12,956 20
Increase of furniture . . . . .	8,000 00
	<hr/>
	\$263,936 75

The necessary current repairs of the buildings may be estimated at three thousand dollars annually. Deducting this

sum for each of the sixteen years since Sept. 30, 1865, a total of \$48,000, there is a remainder of \$215,936.75. To this amount, then, has the hospital assisted itself to things, for most of which it is generally expected that such institutions will rely upon direct appropriations from the treasury of the Commonwealth.

#### STUDIES RELATIVE TO THE CURABILITY OF INSANITY.

In once more inviting the attention of readers to the subject of the Curability of Insanity, I do not propose to inflict upon them a long discussion of the subject. The arguments already advanced in proof of the allegation that mental disorders are far less susceptible of cure than has generally heretofore been believed, ought to be, as to a great extent they have been, sufficient for their purpose. There is little necessity of additional evidence, either cumulative or other. Not only is the truth of the seven propositions derived as "conclusions" from my discussion of the subject five years ago becoming more and more widely recognized and acknowledged, both by the medical profession and by interested laymen, but an increasing number of the superintendents of hospitals and asylums so explain their statistics of recoveries as to give further proofs of that truth. Many of these might be quoted; but, at this point, two may be allowed to suffice.

In his report for 1880 of the Lancaster (Eng.) County Lunatic Asylum, Dr. David M. Cassidy records 159 patients as discharged recovered in the course of the year. In 88 of them the recoveries were from a first attack, while 66 were patients who had previously recovered from earlier attacks.

"Such recoveries," he writes, "as those in the latter category, must of course be taken for what they are worth. They are, in fact, relapsing cases, and nearly all will probably become again, more or less frequently, asylum inmates. Nor should it be concealed that even among the eighty-eight primary recoveries many will probably relapse, and some will die insane. This suggests forcibly the consideration that the care and alleviation of the condition of the general body of the insane is at least as important a function of asylums as is the so-called 'cure' of a small percentage of cases, few of

whom remain permanently sane. It also suggests the futility of making artificial distinctions between the curable and the incurable insane."

Dr. G. Mackenzie Bacon, of the Cambridgeshire, Isle of Ely, and Borough of Cambridge Pauper Lunatic Asylum, in the report of that institution for 1880, after announcing his intention to "tabulate all the re-admissions" of that institution from the time of its opening, proceeds as follows:—

"I feel it is only by such a method that we can arrive at the knowledge of what cases are really cured, and that it is important that asylum superintendents should know how many patients recover, in the sense of being restored to health for at least a considerable period, *and not merely how soon a recovered patient returns to the same asylum, to again go through the farce of a recovery, and be re-admitted perhaps in a week or a month.*"

*Results, in 1879-80 at the Massachusetts State Hospitals.*—The adoption last year by all the State hospitals for the insane in Massachusetts of the new series of statistical tables prepared by the Board of Health, Lunacy, and Charity, has given us an advantage never before enjoyed. It has enabled us to show very nearly, if not positively, just what was done by those institutions in the course of the official year 1879-80 towards the restoration of the insane and the diminution of their number within the Commonwealth.

At the four State hospitals, at Worcester, Taunton, Northampton, and Danvers, in the course of the year ending with Sept. 30, 1880, the number of persons admitted was 1,092, — *persons*, or individuals, be it understood, because it not infrequently happens that one and the same person is admitted more than once in the course of a year. Out of this number of persons, and those who were in the said hospitals at the beginning of the year, the number of persons discharged recovered was 283. This makes the recoveries, calculated on the admissions—the method which approximates most nearly the truth—equal to 25.91 per cent, or a small fraction more than one-fourth of the whole.

Such, then, are the results for one year at our curative State establishments. I have here stated them in the way that similar results have always, prior to the year 1880, been reported at the institutions for the insane throughout the United States. Even as so reported, giving to them all the

advantage derived from a broad, general statement, with no examination into the detail of modifying facts and conditions, they yield no evidence of a great degree of curability of the insane. The curable *three-fourths* of former faith dwindles very nearly to *one-fourth* in absolute practice.

The hospital at Danvers, the newest of the four institutions mentioned, and situated nearest the populous centres of the State, received nearly all of the recent cases from Boston during the past year. It probably also received all which were committed from Lynn, Salem, Lowell, and Lawrence. But as that hospital has been only a short time in operation, I disregard it in the showing that I am now about to make, and take the three other hospitals, which have been in operation different periods, varying from twenty-three to forty-eight years.

Those three older hospitals, at Worcester, Taunton, and Northampton, admitted during the official year 1879-80, 521 persons. They discharged recovered 118 persons, making a percentage of recoveries of 22.64, a noteworthy fraction less than one-fourth of the number admitted.

But let us look a little farther. The three hospitals *discharged* 118 persons recovered; but they *admitted* 55 persons whom they had *previously* discharged recovered. Consequently the actual gain, in the course of the year, of recovered persons in the community was only 118 minus 55, which is 63. This is only 12.09 per cent, or less than one-eighth of the number of persons admitted. It is an average of 21 gained recoveries at each of three large hospitals, the average number of the patients of which was, for the year, equal to 503 for each.

A fact yet unmentioned gives, at first view, a still more discouraging aspect to the case. The 55 persons re-admitted after previous recovery had been discharged recovered, not alone once each, making 55 recoveries, but a total of 115 times. The public had been told in the reports of 115 recoveries of those 55 persons. Hence, if *recoveries*, and not *persons*, be considered, the three hospitals issued 118; but they took back 115 which had been previously issued, leaving in the general population a gain of only three, or an average of one for each hospital.

It is not improbable, however, that the excess of *recoveries*

(115) over that of persons (55) re-admitted was counter-balanced by a similar excess of *recoveries* over that of *persons* (118) discharged. For example, if one of the 55 persons re-admitted had previously been discharged recovered five times, there may have been, among the 118 discharged recovered, one who had previously been discharged recovered an equal number of times.

The statistics just given in aggregate for the three institutions were specifically, for each one of them, as follows:—

At the Worcester Hospital, the oldest of the three, although its present building is the newest, the number of persons admitted was 222. The number discharged recovered was 41, which is 18.46 per cent, or less than one-fifth of the admissions. But among the admissions were 25 persons whom it had previously discharged recovered. Hence the actual gain of recovered persons outside of the hospital was only (41 minus 25) 16, or 7.2 per cent of the number admitted.

The 25 persons re-admitted had been discharged recovered a total of 58 times.

At the Taunton Hospital, 184 persons were admitted and 49 discharged recovered, a percentage of 26.62. Of those admitted, 19 had previously been discharged recovered, so that the gain of recovered persons in the general population was only (49 minus 19) 30, or 16.3 per cent of the admissions.

The 19 persons re-admitted had been discharged recovered 35 times.

At the Northampton Hospital, the number admitted was 115. The number discharged recovered was 28, equal to 25.22 per cent. But of the persons admitted there were 11 who had previously been discharged recovered. The gain of recovered persons in the community was, therefore, only (28 minus 11) 17, or 14.78 per cent of the number admitted.

The 11 persons re-admitted had been discharged recovered a total of 22 times.

It is believed that from this exposition it will be apparent that the method still almost universally prevalent of reporting recoveries is, except in a technical or medical sense, very fallacious and deceptive; and that, until some other method, similar to the new one in Massachusetts, be adopted, those statistics will be worth next to nothing in the study of the problems of social science.

At the Danvers Hospital, the number of persons admitted in the official year was 571. The number discharged recovered was 165, or 28.89 per cent.

The proportion of recent cases received at that institution was unquestionably, and for obvious reasons, larger than at either of the other three.

That hospital had been in operation less than eighteen months at the beginning of the official year in question; hence it could not be expected that, among the persons admitted, there should be many who had previously been discharged from it recovered. And yet there were some such re-admissions — the report does not state how many; but it was of so many persons that their total of recoveries was 18.

*A Glance at Great Britain.* — Having shown the results at the State hospitals of Massachusetts, perhaps it may be permitted to extend our observation to some of the similar institutions abroad, for the purpose of further illustrating the subject, as well as showing the advantages of our recently adopted method of reporting recoveries.

At the British asylums the method of reporting the statistics has always been essentially the same as it is in the United States. We, indeed, followed their example. But it has heretofore been my impression that the proportion of patients re-admitted, after having been discharged recovered, was much smaller there than in this country. I have supposed that the British patients remained longer in the hospitals than do the American, and that thus their recoveries were so confirmed that relapses, or subsequent attacks, were comparatively infrequent. From information recently received, I infer that, at least to a certain extent, I was mistaken, and that there is no very great difference in these respects between the two countries.

Dr. Clouston, of the Royal Edinburgh (Morningside) Asylum, in his report for 1880, has introduced tables by which the same light is thrown upon his statistics of recoveries as upon those of the Massachusetts institutions by the new and recently adopted method of reporting, with the exception that he does not clearly discriminate between *cases* (or *patients*) and *persons*.

The admissions at Morningside, in 1880, were 347. Of these *patients*, the number suffering from the

First attack of the disease was . . . . .	231
Second attack . . . . .	58
Third attack . . . . .	24
Had had several attacks . . . . .	26
Congenital . . . . .	8

Hence it appears that, of the 347, no less than 108 (58 plus 24 plus 26), or nearly one-third of the whole, were re-admitted after recovery from one or more former attacks.

On the supposition that the word "several" means *three* (it probably, as used above, means more), those 108 patients had already been discharged "recovered" a total of 184 times.

So much for the patients admitted.

The number of patients *discharged*, recovered, was 165, which is 47.55 per cent, as calculated on the admissions. Of these 165, there were who

Recovered for the first time . . . . .	97
Had recovered in former years . . . . .	63
Recovered more than once in 1880 . . . . .	5
Total . . . . .	<hr/> 165

At the close of the year no less than nine (9) of these had already been brought back to the asylum, and still remained there or had been removed *unrecovered*.

If the figures in these two tables represent *persons*, we derive from them the following result:—

The asylum discharged, recovered, 165; but it took back, of persons who had formerly been discharged recovered, 108. Consequently the actual gain of recovered persons in the general population was only 57 (165 minus 108). This is only 16.42 per cent of the admissions.

The movement of the population at the Morningside Asylum is very rapid. Many of the patients apparently remain in the institution but a comparatively short time. For these reasons it is believed that the proportion of patients returning to it after having been discharged recovered is larger than at most of the British asylums.

In his report for 1880 of the Derbyshire (England) County Lunatic Asylum, Dr. J. Murray Lindsay states that in 20 per cent of the admissions "there had been previous attacks of

insanity." At the Richmond District Asylum, Dublin, Ireland, in 1880, the admissions were 420, of which 65, or 15.47 per cent, were "relapsed cases." The number discharged recovered was 167; but the gain of recovered persons in the general population was only 102 (167 minus 65).

*The British Medico-Psychological Association.*—The most striking evidence of progressive thought relative to the general subject under consideration is the fact that, at the annual meeting of the British Medico-Psychological Association, which was held in London in August last, the statistical committee of that society recommended for adoption some new tables, as well as alterations in some of those already in use, so modifying the series, as a whole, that the statistics of the asylums can be reported with essentially the same detail and the same perspicuity in regard to recoveries as is found in the new tables of the institutions in Massachusetts.

After a brief discussion, it was decided to postpone for one year the question of their adoption, for the purpose of giving the members an opportunity to study them and to discuss their merits at the quarterly meetings. But there can hardly be a doubt as to the result. The proposed alterations will be adopted. In the present state of things—when, in consequence of the existence of various organizations for the promotion of the objects of social science, the call, outside of the profession, for information in regard to insanity is ten-fold greater than it was forty years ago—the members of the British association cannot afford to refuse to display their statistics in such manner as will render them valuable to the members of those organizations. The present *technical* truthfulness of those statistics must be expanded into an *absolute* truthfulness in regard to the relation between the disease and individuals, or the most important part of the statistics themselves will soon become entirely, as they even now are essentially, valueless. Dr. Clouston is not going to recede from the position gained by the step in advance taken at the time of making the report just passed under review,—a position in which he could show not alone what his institution had accomplished during the year in relation to *disease*, but also to what extent its beneficial influence had affected his *fellow-men*. There are many others among his colleagues in the specialty in England and Scotland who are even now

ready to follow his example. The rest will doubtless mostly be ready at the expiration of the appointed year. Let them remember that, no less than forty years ago, a reformation in the statistics of insanity was called for by an Englishman whose keen and comprehensive intellect and whose soundness of judgment were second to those of no one of his countrymen who have written upon the subject: I allude to the late Samuel Tuke. In the thoughtful and excellent article used as an introduction to his translation of Dr. Maximilian Jacobi's treatise on the construction and management of institutions for the insane, he wrote as follows:—

“The whole subject of the mode of reporting the results of our institutions for the insane calls loudly for attention, if we would arrive at any useful statistical comparisons as to the effect of treatment and other circumstances on the health of the patients, and in regard to the cure of this greatest of all human maladies. The subject would not be unworthy of a special consultation amongst the professional men who are devoted to this department of the medical art.”

It appears to me, from the very wording of this extract, that its author had in view the specific changes—perhaps with others—which it is intended to accomplish by the adoption of the proposition now before the Medico-Psychological Association. Shall his suggestions be permitted to lie under the dust and ashes of a half-century before they are carried into effect?

*Old but valuable German Statistics.*—At the Siegburg Asylum, in Rhenish Prussia, an institution which at that time was under the superintendence of Dr. Maximilian Jacobi, the statistics of recoveries from Jan. 1, 1825, to Dec. 31, 1845, a period of twenty-one years, were as follows:—

	Men.	Women.	Total.
Whole number recovered . . . . .	377	284	661
Living at the end of the period, and have had no relapse . . . . .	169	153	322
Relapsed, and recovered again at the Asylum . . . . .	79	48	127
Relapsed and not yet cured . . . . .	5	6	11
Relapsed and become incurable . . . . .	34	30	64
Relapsed and died insane . . . . .	39	18	57
Died without a relapse . . . . .	43	25	68
Not heard from . . . . .	8	4	12

The number of patients admitted in the course of the period is not given, and consequently the percentage of recoveries cannot be obtained. The statistics are valuable chiefly for the purpose of ascertaining to what extent the recoveries were permanent.

At the time of the close of the twenty-one years, 259 of the 661 persons had "relapsed," or, as it is generally stated in this country, had had a second attack. This is equivalent to 39.1 per cent, or a slight fraction less than two-fifths of the whole. But these are not *final* results. Within the *ten years next following the close of the period* the number of relapses would be large, especially among the patients who recovered in the last half of the period. If about *two-fifths* of the whole relapsed *within* the period, it appears perhaps more than probable that *one-fifth* (or half as many more) would relapse *afterwards*. Supposing this estimate to be accurate, the whole number of persons relapsed would be equal to three-fifths of the whole number of persons recovered. This corresponds with Dr. Thurnam's well-known formula, derived from his investigation of the subsequent history of patients recovered at the York Retreat.

In regard to the proportion of the persons recovered who would ultimately die insane, it will be perceived that, at the close of the period, it was still too early to furnish the data for a very accurate estimate. Something, however, in that direction may be done. Already the number who had relapsed and died insane was 57. The number who had relapsed and become incurable, and who would consequently die insane, was 64. This gives a total of 121, or a little less than *one-fifth* of the whole, whose deaths, while insane, were assured. According to the above-mentioned formula, *two-fifths* of the whole should die insane. Hence we must find a little over *one-fifth*, or in actual numbers 143, *more* who would die insane. These must be looked for (1) in the 322 who had not relapsed, but many of whom undoubtedly would relapse; (2) in the 127 who had relapsed and recovered again, and, judging by what we know in regard to the liability to repeated relapses, a very large proportion of whom would relapse again; and (3) in the 11 who had relapsed, and were not yet cured. Of these 460 persons, it would not be surprising if 143 should die insane.

*An Echo from the Antipodes.*—There are two lunatic asylums in South Australia. They are under the general supervision of a board of visitors, of which Dr. Alexander S. Paterson is chairman. The report for 1880 of this Board, signed by the chairman as colonial surgeon, is before me. It deals with the subject of recoveries with a commendable extent of detail, although it fails to discriminate between *persons* and *cases*, and to give the number of attacks and of recoveries of those patients who have been re-admitted after recovery.

At the two asylums, Adelaide and Parkside, the aggregate number of admissions in 1880 was 223. The number of patients discharged recovered was 90, which is equal to 40.35 per cent. But, of the patients admitted, there were 35 who had previously been discharged recovered. The two institutions gave to the people 90 recoveries; but they received back from the people 35 former recoveries. Therefore, the gain of recoveries among the people was (90 minus 35) only 55. This is 24.66 per cent of the admissions.

Five of the patients re-admitted returned to the hospital within a month from the time at which they were discharged recovered.

As might be expected, in a country so recently settled as South Australia, a large proportion of the recoveries were from cases originating in intemperance. In no less than 25 cases of males, the form of the disorder is called *alcoholismus*. The patients recovered in 24 of them. Eight of these were in the asylum less than a month each; and the average time of treatment of the 24 was only one month and seven days.

*Athenian Success.*—I now approach a “study” from the consideration of which I would gladly be released; but, in the discussion of this subject, it is proper that all fallacies should be exposed, and all sources of error pointed out. Furthermore, I have been criticised for the assertion, in the pamphlet on the Curability of Insanity, that the medical officers of institutions for the insane are men “with like passions as other men,” and therefore the introduction here of any evidence that sustains the truth of the assertion is more than justifiable.

That the reader may enter more intelligently upon the matter, it may be remarked that, in Ohio, the superintend-

ents of the State institutions for the insane are among those persons whose offices are the "spoils" which belong to the victors in politics. The mere statement of this fact is sufficient for the present purpose. Any attempt to present, in detail, the evils consequent upon such a state of things would be irrelevant.

In his report for 1880, of the State Asylum for the Insane at Athens, Ohio, Dr. H. C. Rutter, who had but recently been appointed to the office of superintendent, mentions the discussion of the Curability of Insanity begun in the reports of this hospital; and, after stating that it has been taken up by alienists all over the world," gives the following confirmatory evidence of the truth of one of my "conclusions":—

“It has frequently happened that the same person has been discharged more than once during one year, and that each discharge has been reported as a separate cure. One person in Ohio is reported to have recovered seven times in one year, and while he figured in the annual report as seven ‘recoveries,’ was actually a patient in one of the wards at the time the report was made out.”

After some further remarks he proceeds as follows:—

“It has also been charged that these ‘cures’ are flexible, and can be increased by the Superintendent whenever occasion arises to prove his superior fitness and qualifications as a specialist. This charge has been made repeatedly, and by many distinguished members of the profession, who have been disgusted with the idle talk about cures made by political superintendents for the purpose of gaining cheap notoriety through the secular press. We have, perhaps, felt this in Ohio to a greater extent than in almost any other State in the Union. To show that these charges are not made without some foundation, and that some reason for the demand that is being pressed for a reform in our asylum statistics does exist, I will quote some interesting cures from the general register of this asylum.

“During the two years previous to May 20, 1880, we find among the ‘cures’ the following remarkable cases. I quote from the male register, and presume the female register shows an equal proportion of remarkable cures :—

									Cures.
"	Duration of insanity over 50 years	.	.	.	.	.	.	.	1
"	" " " " 20 "	.	.	.	.	.	.	.	6
"	" " " " 18 "	.	.	.	.	.	.	.	3
"	" " " " 15 "	.	.	.	.	.	.	.	3
"	" " " " 12 "	.	.	.	.	.	.	.	3
"	" " " " 6 "	.	.	.	.	.	.	.	16
Total over six years									32 "

Total over six years	32''
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Thus, in the course of two years, and from the men's department alone, thirty-two cases were discharged as recovered, in no one of which had the disease existed less than six years. In one it had existed fifty years; and the average duration for the whole was more than twelve years. "Four of these," continues the Doctor, "were cases of chronic dementia; four were epileptic, with duration of insanity ranging from seven years to twenty-one years."

No man who has had any considerable experience in a hospital for the insane can fail to instantly perceive the preposterous absurdity of such statistics as these. By a probably low estimate, there are now in the public institutions of Massachusetts not less than fifteen hundred insane persons who might be set at liberty and reported as "cured" or "recovered" with as much propriety as were those thirty-two patients at the Athens Asylum. But by those thirty-two cases, together, undoubtedly, with similar ones from the female department, the Superintendent increased the proportion of his "cures" to 63.50 per cent.

I am still of the opinion that "the medical officers of institutions for the insane can claim no exemption from the common weaknesses of human nature;" that "they are men with like passions as other men," and that the degree of confidence which is to be placed in their statistics depends, to a large extent, upon the temperament and character of the individual from whom they come.

#### ACKNOWLEDGMENTS.

The hospital is indebted to Dr. Alonzo S. Wallace, of Brookline, New Hampshire, and formerly an assistant physician here, for the gift of a preserved and mounted specimen of the gray eagle. It has been placed in the rotunda. We are also under obligations to several other persons for contributions to the reading-matter for the inmates:—to Miss Florence Austin for eight volumes of Harpers' Family Library, and two illustrated monthly publications; to Miss Julia Clark, of the Northampton Book Club, for several volumes of magazines; to S. E. Bridgman for many copies of religious newspapers; and to the publishers of "The Staaten Zeitung" for two copies, weekly, and the publishers of "The Christian Register" for one copy, weekly, of those periodicals.

The official year closes with the same staff of administrative officers with which it began; but among the subordinate officers there have been two changes: Jeremiah E. Shufelt, who for over sixteen years had occupied the position of Supervisor, and performed its duties with much ability, and Nell Russell, who for more than four years faithfully filled the place of Laundress, have left. I cannot well forbear to commend both of them as the possessors of three qualifications pre-eminent in persons employed in a public institution, — a quiet, bridled tongue, intent attention to their own business, and judicious non-interference with the business of others.

And thus, regardful of the exigencies of the future, we turn our backs upon another cycle of time departed and of duties performed. To you who have been our counsellors, and to all those who, with a single eye to duty, have been engaged with me in bearing the burden of the year, I extend my most cordial thanks.

PLINY EARLE.

OCTOBER 6, 1881.

## DIETARY OF THE NORTHAMPTON LUNATIC HOSPITAL.

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[There are two bills of fare, the first of which is supplied to the tables of about two hundred persons, and the second to those of somewhat over three hundred.]

### BILL OF FARE, No. 1.

#### *Breakfast.*

*Monday.* — Tea, coffee, broiled beefsteak, potatoes, warm rolls ("biscuit"), bread and butter.

*Tuesday.* — Tea, coffee, fried tripe,<sup>1</sup> potatoes, warm rolls, bread and butter.

*Wednesday.* — Tea, coffee, broiled mackerel, potatoes, and warm brown (rye and indian) bread.

*Thursday.* — Tea, coffee, broiled beefsteak, potatoes, warm rolls, bread and butter.

*Friday.* — Tea, coffee, fried tripe,<sup>1</sup> potatoes, warm rolls, bread and butter.

*Saturday.* — Tea, coffee, either fried fish-balls or liver, meat hash, hot corn-cake, bread and butter.

*Sunday.* — Tea, coffee, cold corned beef, potatoes, warm rolls, bread, butter, and fried indian corn pudding.

#### *Dinner.*

*Monday.* — Roast beef, potatoes and one other vegetable, bread, butter, boiled rice with syrup or sugar.

*Tuesday.* — Vegetable soup, roast or stewed veal,<sup>2</sup> potatoes and one other vegetable, bread, butter, and baked indian pudding.

*Wednesday.* — Either fried or baked fresh fish, or boiled mutton, potatoes and one other vegetable, bread, butter, and berry or apple pudding with sauce.<sup>3</sup>

*Thursday.* — Vegetable soup, corned beef, potatoes and one other vegetable, bread, butter, and boiled suet pudding with syrup.

<sup>1</sup> Tripe is replaced in winter by sausages, and in spring by fried ham and eggs, except in the season of shad, when that fish is given once each week instead of ham and eggs, and once instead of beefsteak.

<sup>2</sup> Substituted in winter by fresh pork ribs, roasted.

<sup>3</sup> In spring, maple syrup is used as sauce for puddings.

## 46 LUNATIC HOSPITAL AT NORTHAMPTON. [Oct.

*Friday.* — Either boiled or roasted mutton,<sup>1</sup> or stewed or roasted veal, potatoes and one other vegetable, bread, butter, and tapioca pudding or raisin pudding of either rice, bread, or cracker.

*Saturday.* — Baked beans, corned beef, potatoes and one other vegetable, pickles, bread, butter, and baked bread pudding.

*Sunday.* — Cold corned beef, potatoes, warm baked beans, pickles, bread, butter, and pies, the kind varying with the season.

### *Supper.*

*Monday.* — Tea, bread, warm corn-cake, butter, hard gingerbread, and a relish.<sup>2</sup>

*Tuesday.* — Tea, white bread, graham bread, butter, soft gingerbread, and a relish in the warm season, substituted by buckwheat-cakes in the cold season.

*Wednesday.* — Tea, bread, butter, cookies and ginger snaps, and a relish.

*Thursday.* — Tea, bread, butter, pie (the kind varying with the season), and cheese.

*Friday.* — Tea, bread, butter, cake (the kind varying), and a relish.

*Saturday.* — Tea, bread, butter, doughnuts, and cheese.

*Sunday.* — Tea, bread, butter, cookies and ginger snaps, and blanch-mange, or corn-starch.

*Extra.* — In the winter and spring months hulled corn at supper, once in two weeks, on Saturdays.

## BILL OF FARE, No. 2.

### *Breakfast.*

*Monday.* — Coffee, cold corned beef, potatoes, and bread.

*Tuesday.* — Coffee, cold roast beef, potatoes, and bread.

*Wednesday.* — Coffee, meat stew, potatoes, and warm rye and indian corn brown bread.

*Thursday.* — Coffee, picked codfish cooked in milk, potatoes, and bread.

*Friday.* — Coffee, cold corn beef or meat stew, potatoes, and bread.

*Saturday.* — Coffee, hash (either of meat or fish), and bread.

*Sunday.* — Coffee, cold baked beans, potatoes, and bread.

Butter is used in two halls in the morning.

### *Dinner.*

*Monday.* — Roast beef, potatoes and one other vegetable,<sup>3</sup> boiled hominy with molasses, and bread.

<sup>1</sup> Substituted by stewed oysters in winter and spring, with some kind of roasted meat for those who prefer it.

<sup>2</sup> This term, used for the want of a better, includes dried beef, berries, baked apples, apple-sauce, and canned fruits, all of which are supplied, and each according to the season.

<sup>3</sup> Except two months in the spring.

*Tuesday.* — Vegetable soup, potatoes and one other vegetable,<sup>1</sup> baked indian pudding,<sup>2</sup> and bread.

*Wednesday.* — Boiled fresh fish with drawn butter sauce, potatoes and one other vegetable,<sup>1</sup> boiled hasty pudding with molasses, and bread.

*Thursday.* — Vegetable soup, potatoes, cabbage or some other vegetable, boiled rice with molasses,<sup>3</sup> and bread.

*Friday.* — Boiled codfish with drawn butter sauce, potatoes, beets, or some other vegetable, boiled hasty pudding with molasses, and bread.

*Saturday.* — Hot baked beans, potatoes, baked indian or bread pudding, pickles, and bread.

*Sunday.* — Cold corned beef, potatoes, pies (the kind varying with the season), and bread.

#### *Supper.*

*Monday.* — Tea, bread and butter.

*Tuesday.* — Tea, bread, butter, and soft gingerbread.

*Wednesday.* — Tea, bread, butter, and some kind of relish.

*Thursday.* — Tea, bread and butter.

*Friday.* — Tea, bread, butter, and soft gingerbread.

*Saturday.* — Tea, bread and butter.

*Sunday.* — Tea, bread and butter.

#### EXTRAS.

In August and September these tables are furnished at supper with either berries, tomatoes, or baked apples, as many as five times a week.

In four halls, sauce, of either fresh or dried apples, is furnished as often as three times a week for the rest of the year.

#### EXTRAS FOR THE WHOLE HOUSEHOLD.

All persons have roasted turkey at dinner on "Thanksgiving Day," and either turkey or chicken on one other day in the year.

From four to five bushels of green sweet corn, in the ear, is consumed, in its season, daily, with the exception of Sunday.

Tomatoes, cucumbers, and melons are furnished in liberal quantities in their season.

In the spring, cowslips and dandelions are largely used as greens, and horse-radish as a condiment.

During eight months of the year, a barrel of apples are distributed, daily, among the patients.

Beef tea, chicken broth, mutton broth, scalded milk, arrow-root gruel, oatmeal gruel, milk punch, cracked wheat, oatmeal porridge, dry toast, milk toast, toast with dropped egg, and boiled eggs, for invalids and all who are not able to take the regular fare.

<sup>1</sup> Except two months in the spring.

<sup>2</sup> All baked puddings for the whole household are made with milk.

<sup>3</sup> Maple syrup is furnished in place of molasses three or four times in the spring.

Editorial - The American Medical Association is proud to have been the first to recognize the importance of the medical profession in the United States. It is the duty of the medical profession to protect the public health and to advance the science of medicine. The American Medical Association is the only organization in the United States that represents the entire medical profession. It is the only organization that has the power to set standards for the medical profession and to enforce them. It is the only organization that has the power to grant licenses to medical practitioners and to revoke them if necessary. It is the only organization that has the power to set the rules for the medical profession and to enforce them. It is the only organization that has the power to set the standards for the medical profession and to enforce them. It is the only organization that has the power to set the rules for the medical profession and to enforce them.

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## APPENDIX.

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2.\* *Monthly Admissions, Discharges, and Averages.*

MONTHS.	ADMISSIONS.			DISCHARGES (including Deaths).			DAILY AVERAGE OF PATIENTS IN THE HOUSE.		
	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
<b>1880.</b>									
October . . .	8	5	13	4	6	10	225.93	223.68	449.61
November . . .	3	6	9	5	5	10	225.63	223.10	448.73
December . . .	4	2	6	3	—	3	226.32	224.22	450.54
<b>1881.</b>									
January . . .	5	1	6	6	12	18	228.13	221.16	449.29
February . . .	4	5	9	1	1	2	226.18	216.96	443.14
March . . .	4	5	9	2	6	8	228.35	219.42	447.77
April . . .	4	5	9	5	1	6	230.23	218.77	449
May . . .	5	6	11	7	4	11	227.42	222.03	449.45
June . . .	5	8	13	3	4	7	228.07	224.10	452.17
July . . .	5	8	13	3	4	7	229.80	227.68	457.48
August . . .	4	9	13	9	7	16	230.54	231.71	462.25
September . . .	6	6	12	3	5	8	229.40	231.93	461.33
Total of cases .	57	66	123	51	55	106			
Total of persons,	57	63	120	51	53	104			
Daily average for the year . . .	—	—	—	—	—	—	228.01	223.78	451.79†

3. *Received on First and Subsequent Admissions.*

NUMBER OF THE ADMISSION.	CASES ADMITTED.			TIMES PREVIOUSLY RECOVERED.		
	Males.	Females.	Total.	Males.	Females.	Total.
First . . . . .	48	49	97	—	—	—
Second . . . . .	6	15	21	—	7	7
Third . . . . .	1	2	3	1	—	1
Fourth . . . . .	1	—	1	1	—	1
Eighth . . . . .	1	—	1	4	—	4
Total of cases . . .	57	66	123	6	7	13
Total of persons . . .	57	63	120	3	7	10

\* For Table No. 1, see the beginning of the Superintendent's report.

† These totals were obtained by a division of the sums of daily residence for the year by 365, the number of days in the year.

# 52 LUNATIC HOSPITAL AT NORTHAMPTON. [Oct.

## 4. Ages of Persons admitted for the First Time.

AGES.	AT FIRST ATTACK OF INSANITY.			WHEN ADMITTED.		
	Males.	Females.	Total.	Males.	Females.	Total.
Fifteen years and less . . .	1	2	3	1	—	1
From 15 to 20 years . . .	3	2	5	—	5	5
20 to 25 years . . .	3	8	11	5	7	12
25 to 30 years . . .	5	2	7	9	2	11
30 to 35 years . . .	5	4	9	6	6	12
35 to 40 years . . .	3	5	8	7	5	12
40 to 50 years . . .	6	14	20	7	20	27
50 to 60 years . . .	1	1	2	8	3	11
60 to 70 years . . .	3	—	3	2	1	3
70 to 80 years . . .	1	—	1	1	—	1
Over 80 years . . .	—	—	—	1	—	1
Unknown . . .	17	11	28	1	—	1
Total of persons . . .	48	49	97	48	49	97

## 5. Parentage of Persons admitted.

PLACES OF NATIVITY.	MALES.		FEMALES.		TOTAL.	
	Father.	Mother.	Father.	Mother.	Father.	Mother.
Massachusetts . . .	19	16	15	13	34	29
New Hampshire . . .	1	1	—	1	1	2
Vermont . . .	1	1	1	1	2	2
Connecticut . . .	4	6	3	3	7	9
Rhode Island . . .	2	—	1	1	3	1
New York . . .	—	2	3	4	3	6
North Carolina . . .	—	—	1	1	1	1
America . . .	1	1	—	—	1	1
Canada . . .	1	1	1	1	2	2
England . . .	1	3	5	5	6	8
Ireland . . .	20	20	29	29	49	49
Wales . . .	1	—	—	—	1	—
Germany . . .	2	2	2	2	4	4
Holland . . .	1	1	—	—	1	1
Sweden . . .	1	1	—	—	1	1
Italy . . .	—	—	1	1	1	1
Unknown . . .	2	2	1	1	3	3
Totals of persons . . .	57	57	63	63	120	120

6. *Residence of Persons admitted.*

PLACES.	Males.	Females.	Total.
Massachusetts, —			
Hampshire County . . . . .	10	16	26
Hampden County . . . . .	31	28	59
Berkshire County . . . . .	11	13	24
Franklin County . . . . .	4	6	10
Unknown . . . . .	1	—	1
Total of persons . . . . .	57	63	120
Cities or large towns *	27	34	61
Country districts . . . . .	29	29	58
Unknown . . . . .	1	—	1
Total of persons . . . . .	57	63	120

7. *Civil Conditions of Persons admitted.*

NUMBER OF THE ADMISSION.	UNMARRIED.			MARRIED.			WIDOWED.			DIVORCED.		
	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
First . . . . .	23	19	42	19	24	43	5	5	10	1	1	2
Second . . . . .	3	4	7	3	6	9	—	3	3	—	—	—
Third . . . . .	—	—	—	1	1	2	—	—	—	—	—	—
Fourth . . . . .	—	—	—	1	—	1	—	—	—	—	—	—
Eighth . . . . .	1	—	1	—	—	—	—	—	—	—	—	—
Total of persons . . . . .	27	23	50	24	31	55	5	8	13	1	1	2

\* Containing not less than 10,000 inhabitants.

## 54 LUNATIC HOSPITAL AT NORTHAMPTON. [Oct.

## 8. Occupations of Persons admitted.

OCCUPATIONS.	Males.	OCCUPATIONS.	Females.
County officer . . .	1	Lawyer's wife . . .	1
Clerk . . . .	1	Musician's wife . . .	1
Book-keeper . . .	1	Farmer's wife . . .	6
Manufacturer . . .	1	Farm laborer's wife . .	1
Piano-tuner . . .	1	Laborer's wife . . .	9
Freight-agent . . .	1	Machinist's wife . . .	3
Printer . . . .	1	Watchmaker's wife . .	1
Farmer . . . .	7	Millwright's wife . . .	1
Farm-laborer . . .	4	Carpenter's wife . . .	1
Laborer . . . .	14	Undertaker's wife . . .	1
Mill operative . . .	1	Fruit-seller's wife . . .	1
Spinner . . . .	1	Saloon-keeper's wife . .	1
Weaver . . . .	2	Tinsmith's wife . . .	2
Machinist . . . .	1	Fireman's wife . . .	1
Mechanic . . . .	1	Teacher . . . .	2
Watchmaker . . . .	1	Housekeeper . . . .	5
Paper-maker . . . .	2	Hospital attendant . . .	1
Button-maker . . .	1	Nurse . . . .	1
Carpenter . . . .	2	Dressmaker . . . .	1
Carriage-maker . . .	1	Laundress . . . .	1
Wheelwright . . . .	1	Saloon-keeper . . . .	1
Cigar-maker . . . .	1	Mill operative . . . .	5
Hotel waiter . . . .	1	Paper-sorter . . . .	1
Tailor . . . .	2	Servant . . . .	6
Baker . . . .	1	None . . . .	9
Butcher . . . .	1		
Stone-mason . . . .	1		
None . . . .	4		
Total of persons . . .	57	Total of persons . . .	63

9. *Reported Duration of Insanity before Last Admission.*

PREVIOUS DURATION.	FIRST ADMISSION TO THIS HOSPITAL.			ALL OTHER ADMISSIONS *			TOTAL.		
	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
Congenital . . . . .	—	—	—	1	—	1	1	—	1
Under 1 month . . . . .	4	3	7	—	—	—	4	3	7
From 1 to 3 months . . . . .	6	7	13	—	1	1	6	8	14
3 to 6 months . . . . .	4	5	9	—	—	—	4	5	9
6 to 12 months . . . . .	5	5	10	1	—	1	6	5	11
1 to 2 years . . . . .	5	9	14	—	2	2	5	11	16
2 to 5 years . . . . .	8	6	14	1	2	3	9	8	17
5 to 10 years . . . . .	3	4	7	1	5	6	4	9	13
10 to 20 years . . . . .	1	—	1	2	1	3	3	1	4
Over 20 years . . . . .	—	1	1	1	1	2	1	2	3
Unknown . . . . .	12	9	21	2	5	7	14	14	28
Total of cases . . . . .	48	49	97	9	17	26	57	66	123
Total of persons . . . . .	—	—	—	9	16	25	57	63	120
	Y. M.	Y. M.	Y. M.	Yrs.	Yrs.	Yrs.			
Average of known cases . . . . .	2 2	2 10	2 6	16 $\frac{4}{7}$	8 $\frac{11}{2}$	11 $\frac{17}{14}$	4 $\frac{6}{12}$	4 $\frac{3}{12}$	4 $\frac{4}{12}$

10. *Form of Disease in the Cases admitted.*

FORM OF DISEASE.	Males.	Females.	Total.
Mania, acute . . . . .	22	18	40
Mania, chronic . . . . .	10	15	25
Mania, paretic . . . . .	2	—	2
Mania, epileptic . . . . .	1	3	4
Dipsomania . . . . .	1	—	1
Melancholia . . . . .	10	18	28
Dementia . . . . .	10	11	21
Dementia, acute . . . . .	1	1	2
Total of cases . . . . .	57	66	123
Total of persons . . . . .	57	63	120

\* In this division of the table the whole period of time, from the first attack to the last admission, is indicated.

## 56 LUNATIC HOSPITAL AT NORTHAMPTON. [Oct.

## 11. Probable Causes of Insanity in Persons admitted.

CAUSES.	Males.	Females.	Total.
<i>Physical.</i>			
Ill-health . . . . .	3	15	18
Intemperance . . . . .	12	4	16
Over-work . . . . .	4	8	12
Epilepsy . . . . .	3	4	7
Change of life . . . . .	—	8	8
Masturbation . . . . .	4	—	4
Bodily injuries . . . . .	3	1	4
Apoplexy . . . . .	—	1	1
Sunstroke . . . . .	1	—	1
Opium-eating . . . . .	1	—	1
Typhoid fever . . . . .	—	1	1
Old age . . . . .	1	—	1
Congenital . . . . .	1	—	1
Total of physical . . . . .	33	42	75
<i>Mental.</i>			
Domestic trouble . . . . .	1	4	5
Trouble . . . . .	1	2	3
Disappointment . . . . .	—	3	3
Loss of friends . . . . .	—	1	1
Loss of money . . . . .	—	1	1
Hard study . . . . .	1	—	1
Total of mental . . . . .	3	11	14
Total of physical . . . . .	33	42	75
Unknown . . . . .	21	10	31
Total of persons . . . . .	57	63	120

## 12. Relation to Hospitals of the Persons admitted.

	Males.	Females.	Total.
Never before in any hospital . . . . .	42	46	88
Former inmates of this hospital . . . . .	6	11	17
Former inmates of other hospitals in this State:—			
Danvers . . . . .	1	—	1
Shady Lawn, Northampton . . . . .	—	1	1
Former inmates of hospitals in other States, Former inmates of this hospital and of other hospitals in this State:—	5	1	6
South Boston and Taunton . . . . .	1	—	1
Former inmates of this hospital and of hospitals in other States . . . . .	2	3	5
Former inmates of this hospital, of other hospitals in this State, and of hospitals in other States . . . . .	—	—	—
Former inmate of hospital in England . . . . .	—	1	1
Totals . . . . .	57	63	120

## 13. Discharges, classified by Admission and Result.

ADMISSION.	RECOVERED.			MUCH IMPROVED.			IMPROVED.			UNIMPROVED.			DIED.			TOTAL.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
First . . . . .	5	12	17	4	4	8	13	12	25	5	7	12	14	8	22	41	43	84
Second . . . . .	1	-	1	1	3	4	-	2	2	1	2	3	2	2	4	5	9	14
Third . . . . .	-	1	1	1	-	1	1	-	1	-	1	1	-	-	-	2	2	4
Fourth . . . . .	1	-	1	-	-	-	-	1	1	-	-	-	-	-	-	1	1	2
Eighth . . . . .	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	1	-	1
Total of cases . . . . .	7	13	20	6	7	13	15	15	30	6	10	16	16	10	26	50	55	105
Total of persons . . . . .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	53	103

One man was discharged as not insane, making the total of cases 106 and the total of persons 104.

# 58 LUNATIC HOSPITAL AT NORTHAMPTON. [Oct.

## 14. How supported.

SUPPORTED AS	PATIENTS ADMITTED.			AVERAGE OF THE YEAR.		
	Males.	Females.	Total.	Males.	Females.	Total.
State patients . . .	21	19	40	96.84	83.98	180.82
Town patients . . .	27	37	64	101.63	112.52	214.15
Private patients . . .	9	10	19	29.73	27.46	57.19
Total of cases . . .	57	66	123	-	-	452.16*

## 15. Cases discharged Recovered. — Duration.

PERIOD.	DURATION BEFORE ADMISSION.			HOSPITAL RESIDENCE.			WHOLE DURATION FROM THE ATTACK.		
	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
Congenital . . .	-	-	-	-	-	-	-	-	-
Under 1 month . . .	-	3	3	-	-	-	-	-	-
From 1 to 3 months . . .	2	1	3	3	4	7	-	-	-
3 to 6 months . . .	1	2	3	2	2	4	1	-	1
6 to 12 months . . .	-	1	1	1	1	2	2	2	4
1 to 2 years . . .	-	4	4	1	3	4	-	5	5
2 to 5 years . . .	-	-	-	-	3	3	-	4	4
5 to 10 years . . .	-	-	-	-	-	-	-	-	-
10 to 20 years . . .	-	-	-	-	-	-	-	-	-
Over 20 years . . .	-	-	-	-	-	-	-	-	-
Unknown . . .	4	2	6	-	-	-	4	2	6
Total of cases . . .	7	13	20	7	13	20	7	13	20
Total of persons . . .	7	13	20	7	13	20	7	13	20
Average of known cases (in months). . . . .	$2\frac{2}{3}$	$9\frac{6}{11}$	$8\frac{1}{14}$	$5\frac{1}{7}$	$14\frac{8}{13}$	$11\frac{1}{20}$	$5\frac{1}{3}$	$19\frac{6}{11}$	$16\frac{1}{2}$

\* This, the weekly average, is larger by the fraction of  $\frac{37}{1001}$  than the daily average, which was 451.79.

## 16. Cases resulting in Death.—Duration.

PERIOD.	DURATION BEFORE ADMISSION.			HOSPITAL RESI- DENCE.			WHOLE DURATION FROM THE ATTACK.		
	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
Congenital . . .	—	—	—	—	—	—	—	—	—
Under 1 month . .	1	1	2	1	—	1	—	—	—
From 1 to 3 months .	3	—	3	1	2	3	—	—	—
3 to 6 months . .	1	1	2	1	—	1	—	—	—
6 to 12 months . .	1	2	3	1	1	2	1	3	4
1 to 2 years . . .	1	—	1	1	1	2	—	—	—
2 to 5 years . . .	5	3	8	7	2	9	7	—	7
5 to 10 years . . .	4	1	5	2	2	4	3	4	7
10 to 20 years . .	—	2	2	1	2	3	3	1	4
Over 20 years . . .	—	—	—	1	—	1	2	2	4
Unknown . . . . .	—	—	—	—	—	—	—	—	—
Totals . . . . .	16	10	26	16	10	26	16	10	26
Average of known cases (in months) . . . . .	38 $\frac{1}{2}$ $\frac{5}{16}$	53 $\frac{1}{2}$ $\frac{11}{16}$	44 $\frac{11}{16}$ $\frac{2}{8}$	65 $\frac{1}{16}$ $\frac{1}{8}$	62 $\frac{3}{10}$ $\frac{1}{10}$	64	104	115 $\frac{1}{2}$ $\frac{1}{8}$	108 $\frac{11}{16}$ $\frac{1}{8}$

## 17. Cases discharged by Recovery or Death.

FORM OF INSANITY.	RECOVERIES.			DEATHS.		
	Males.	Females.	Total.	Males.	Females.	Total.
Mania, acute . . . .	6	12	18	—	—	—
Mania, chronic . . .	1	—	1	3	3	6
Mania, paretic . . .	—	—	—	3	—	3
Mania, epileptic . .	—	—	—	2	2	4
Melancholia . . . .	—	1	1	1	3	4
Dementia . . . . .	—	—	—	6	1	7
Dementia, paretic . .	—	—	—	1	—	1
Dementia, epileptic .	—	—	—	—	1	1
Totals . . . . .	7	13	20	16	10	26

## 18. Causes of Death.

CAUSES.	Males.	Females.	Total.
<i>Nervous System.</i> — Paresis . . . .	4	—	4
Chronic disease of the brain . . . .	1	—	1
Epilepsy . . . .	—	2	2
Paralysis . . . .	—	2	2
<i>Circulatory.</i> — Heart disease . . . .	1	—	1
<i>Respiratory.</i> — Pneumonia . . . .	1	—	1
Phthisis . . . .	2	1	3
<i>Digestive.</i> — Enteritis . . . .	—	1	1
Colliquative diarrhoea . . . .	1	—	1
<i>Miasmatic.</i> — Dysentery . . . .	—	1	1
Erysipelas . . . .	—	1	1
<i>Urinary.</i> — Nephria, or Bright's disease . . . .	1	—	1
<i>General.</i> — Old age . . . .	1	—	1
Marasmus . . . .	3	1	4
<i>Accidental.</i> — Suicide . . . .	1	1	2
Totals . . . .	16	10	26

## 19. Deaths, classified by Results of Previous Admissions.

NUMBER OF THE ADMISSION.	RECOVERED.			MUCH IMPROVED.			IMPROVED.			UNIMPROVED			TOTAL.		
	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
First . . .	—	—	—	—	—	—	2	2	4	1	—	1	3	2	5
Total of cases,	—	—	—	—	—	—	—	—	—	—	—	—	3	2	5

## 20. Recoveries, classified by Results of Previous Admissions.\*

NUMBER OF THE ADMISSION.	RECOVERED.			MUCH IMPROVED.			IMPROVED.			UNIMPROVED			TOTAL.		
	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
First . . .	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Second . .	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—
Third . . .	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Tot. of persons	2	1	3	—	—	—	—	—	—	—	—	—	—	—	—

\* In all the cases of more than one admission, this classification is based upon the result of the admission next preceding the last in each case respectively.

## 21. Deaths, classified by Duration of Insanity and of Treatment.

PERIOD.	DURATION OF INSANITY "FROM FIRST ATTACK."			WHOLE KNOWN PERIOD OF HOSPITAL RESIDENCE.		
	Males.	Females.	Total.	Males.	Females.	Total.
Congenital . . . . .	—	—	—	—	—	—
Under 1 month . . . . .	—	—	—	1	—	1
From 1 to 3 months . . . . .	—	—	—	1	1	2
3 to 6 months . . . . .	—	—	—	1	—	1
6 to 12 months . . . . .	1	2	3	1	1	2
1 to 2 years . . . . .	3	—	3	1	1	2
2 to 5 years . . . . .	3	1	4	3	2	5
5 to 10 years . . . . .	4	2	6	5	3	8
10 to 20 years . . . . .	3	2	5	2	2	4
Over 20 years . . . . .	2	3	5	1	—	1
Unknown . . . . .	—	—	—	—	—	—
Totals . . . . .	16	10	26	16	10	26
Average of known cases (in months) . . . . .	121 $\frac{13}{16}$	173 $\frac{3}{5}$	141 $\frac{19}{26}$	76	66 $\frac{7}{10}$	72 $\frac{9}{13}$

## 22. Ages of those who Died.

AGES.	AT TIME OF THE FIRST ATTACK.			AT TIME OF DEATH.		
	Males.	Females.	Total.	Males.	Females.	Total.
Fifteen years and less . . . . .	1	2	3	1	—	1
From 15 to 20 years . . . . .	2	—	2	—	—	—
20 to 25 years . . . . .	—	—	—	—	1	1
25 to 30 years . . . . .	1	—	1	2	—	2
30 to 35 years . . . . .	2	2	4	—	2	2
35 to 40 years . . . . .	2	1	3	4	1	5
40 to 50 years . . . . .	1	4	5	4	2	6
50 to 60 years . . . . .	2	—	2	—	1	1
60 to 70 years . . . . .	1	—	1	1	3	4
70 to 80 years . . . . .	1	—	1	3	—	3
Over 80 years . . . . .	—	—	—	1	—	1
Unknown . . . . .	3	1	4	—	—	—
Totals . . . . .	16	10	26	16	10	26

23. *Annual Admissions since the Opening of the Hospital, with the Discharges and Deaths within the Official Year, and the Number of each Year's Admissions remaining Sept. 30, 1881.*

YEARS.		NEW CASES (FIRST ADMISSIONS).																		
		ADMITTED.						DISCHARGED AND DIED IN 1880-81.												
		Males.	Females.	Total.	RECOVERED.			MUCH IMPROVED.			IMPROVED.			UNIMPROVED.			DIED.			
					Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	
1858, 2 months	.	.	.	99	129	228	-	-	-	-	-	-	-	-	-	-	-	1	-	1
1858-59	.	.	.	42	46	88	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1859-60	.	.	.	66	91	157	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1860-61	.	.	.	58	46	104	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1861-62	.	.	.	51	43	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1862-63	.	.	.	56	57	113	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1863-64	.	.	.	35	30	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1864-65	.	.	.	54	55	109	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1865-66	.	.	.	66	52	118	-	-	-	-	-	-	-	-	-	-	-	1	-	1
1866-67	.	.	.	42	69	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1867-68	.	.	.	54	71	125	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1868-69	.	.	.	72	64	136	-	-	-	-	-	-	-	-	-	-	-	1	-	1







## 24. Relapsed Cases admitted in each Year, and discharged in 1881.

YEARS ENDING SEPT. 30.	CASES PREVIOUSLY RECOVERED IN THIS HOSPITAL.														REMAINING SEPT. 30. 1881.*			
	ADMITTED.			DISCHARGED AND DIED IN 1881.														
				RECOVERED.			MUCH IMPROVED.			IMPROVED.			UNIMPROVED.					DIED.
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1858, 2 months	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
1858-59	2	1	3	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
1859-60	5	1	6	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
1860-61	8	7	15	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
1861-62	6	2	8	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
1862-63	5	8	13	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
1863-64	6	10	16	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
1864-65	8	4	12	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
1865-66	4	3	7	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
1866-67	11	6	17	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
1867-68	8	7	15	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
1868-69	6	9	15	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
1869-70	5	4	9	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2



# 68 LUNATIC HOSPITAL AT NORTHAMPTON. [Oct.

## 25. Classed Average of Patients.

OFFICIAL YEAR.	State Patients.	Town Patients.	Private Patients.	Total.
<i>Monthly Average.</i>				
1864-65 . . .	225.10	48.16	69.83	343.25
1865-66 . . .	252.16	50.58	75.58	378.33
<i>Weekly Average.</i>				
1866-67 . . .	261.96	49.46	89.75	401.17
1867-68 . . .	262.65	47.92	103.06	413.63
1868-69 . . .	248.52	54.98	101.46	404.96
1869-70 . . .	236.19	65.04	107.23	408.46
1870-71 . . .	234.10	77.07	118.38	429.55
1871-72 . . .	226.96	89.57	112.27	428.80
1872-73 . . .	248.02	99.23	90.00	437.25
1873-74 . . .	284.48	102.88	82.06	469.42
1874-75 . . .	274.35	128.34	72.46	475.15
1875-76 . . .	259.19	146.02	68.94	474.15
1876-77 . . .	254.84	161.58	60.02	476.44
1877-78 . . .	211.90	175.71	54.75	442.36
1878-79 . . .	200.34	182.29	54.23	436.86
1879-80 . . .	197.03	198.01	55.46	450.50
1880-81 . . .	180.82	214.15	57.19	452.15

## 26. Monthly Consumption of Gas.

MONTHS.							Cubic Feet.	Daily Average.
<b>1880.</b>								
October . . . . .	.	.	.	.	.	.	32,250	1,040.82
November . . . . .	.	.	.	.	.	.	39,750	1,325.00
December . . . . .	.	.	.	.	.	.	44,750	1,443.55
<b>1881.</b>								
January . . . . .	.	.	.	.	.	.	43,300	1,396.77
February . . . . .	.	.	.	.	.	.	33,200	1,185.71
March . . . . .	.	.	.	.	.	.	31,350	1,011.29
April . . . . .	.	.	.	.	.	.	20,550	685.00
May . . . . .	.	.	.	.	.	.	14,650	472.58
June . . . . .	.	.	.	.	.	.	12,400	413.33
July . . . . .	.	.	.	.	.	.	11,400	367.74
August . . . . .	.	.	.	.	.	.	13,750	443.54
September . . . . .	.	.	.	.	.	.	22,350	745.00
Totals . . . . .	.	.	.	.	.	.	319,700	875.89*

\* Daily average for the year.

27. Supplies for the Several Departments for the Year 1880-81.

	Sheets.	Pillow-cases.	Bed-spreads.	Blankets.	Rubber Sheets.	Bed-ticks.	Pillow-ticks.	Towels.	Curtains.	Wash-bowls.	Ewers.	Chambers.	Mirrors.	Hair-brushes.	Combs.	Carpet-strips.	Plates.	Cups.	Saucers.	Tumblers.	Mugs.	Bowls.	Pitchers.	Syrup-cups.	Knives.	Forks.	Lanterns.
<i>Men's Department.</i>																											
Upper 1st Hall . . .	18	12	3	2	2	6	-	12	3	-	-	-	-	-	-	11	15	12	18	21	3	6	4	-	3	3	-
2d Hall . . .	2	18	-	2	-	11	9	-	7	1	-	18	2	2	7	3	3	21	6	25	6	3	3	-	2	14	-
3d and 4th Halls . .	6	16	-	5	-	6	4	-	-	-	-	1	2	1	3	1	12	9	18	9	-	-	1	-	15	5	-
Middle 1st Hall . . .	14	18	7	5	-	5	5	2	6	1	-	7	1	1	4	-	13	33	-	6	-	-	2	-	3	-	-
2d Hall . . .	28	30	6	19	1	3	6	6	-	1	-	11	2	3	4	-	7	-	-	18	2	-	-	-	-	-	-
3d and 4th Halls . .	18	32	8	-	3	2	6	-	-	-	-	10	2	-	4	-	6	-	-	-	-	-	-	-	1	1	-
Lower 1st Hall . . .	24	24	14	5	-	-	-	14	2	1	-	10	-	-	-	-	18	-	-	-	12	2	-	-	-	-	-
2d Hall . . .	27	23	-	12	-	-	4	6	6	-	-	17	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-
3d and 4th Halls . .	-	6	-	18	-	-	-	-	-	-	-	13	1	-	-	-	3	-	-	4	-	-	-	-	-	-	-
<i>Women's Department.</i>																											
Upper 1st Hall . . .	12	36	-	-	-	-	-	12	1	1	1	6	-	-	-	-	6	12	18	12	12	-	-	-	-	-	-
2d Hall . . .	16	36	12	-	4	4	-	20	4	3	-	12	2	-	-	2	6	6	6	30	6	-	-	-	4	-	-
3d Hall . . .	28	40	-	-	3	2	-	16	-	-	-	15	2	-	10	-	6	6	12	6	-	10	-	-	-	-	-
4th Hall . . .	15	12	-	-	2	3	-	24	-	-	-	6	-	-	3	1	-	12	12	-	6	6	-	-	-	6	-
Middle 1st Hall . . .	18	18	2	6	4	3	-	12	4	1	1	6	-	-	11	3	12	12	12	6	6	6	1	1	4	3	-
2d Hall . . .	39	40	4	6	9	-	-	20	-	-	-	8	-	-	5	3	-	-	6	6	-	-	-	-	-	-	-
3d Hall . . .	12	16	-	-	2	-	-	4	-	-	-	6	-	-	7	1	-	-	-	6	-	-	-	-	-	-	-
4th Hall . . .	12	-	-	-	4	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lower 1st Hall . . .	36	24	-	6	3	3	2	20	-	-	1	12	1	-	5	2	-	-	-	6	6	-	1	-	2	-	-
2d Hall . . .	48	40	2	8	4	12	12	34	3	-	-	24	-	-	16	2	-	-	-	-	-	6	3	-	-	-	-
3d Hall . . .	24	12	-	6	3	-	-	4	1	-	-	6	-	-	4	2	6	-	-	-	-	5	1	-	-	-	-
4th Hall . . .	-	12	2	-	-	-	2	-	1	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-
Kitchen . . .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	18	48	36	-	-	6	-	29	12	-
Rear . . .	17	19	2	-	-	5	-	30	2	4	-	6	-	-	-	2	24	-	-	1	-	24	2	-	-	-	-
Centre . . .	16	10	2	-	-	1	1	12	1	-	-	1	-	1	1	2	1	-	-	-	-	3	-	-	-	-	3
Aggregate . . .	430	494	64	97	44	68	45	286	45	12	4	207	12	12	97	33	303	141	195	200	70	73	27	1	67	48	7

• 27. Supplies for the Several Departments for the Year 1880-81 — Concluded.

	Spoons.	Glass Casters.	Table-spreads.	Napkins.	Tin Plates.	Tin Cups.	Iron Spoons.	Dish-towels.	Hollers.	Wash-basins.	Soap, pounds.	Brooms.	Whisks.	Dust-brushes.	Scrubbing-brushes.	Dust-pans.	Mops.	Pails.	Spittoons.	Blacking.	Shoe-brushes.	Spools Thread.	Skein Linen Thread.	Papers Needles.	Papers Pins.	R Chambers.
<i>Men's Department.</i>																										
Upper 1st Hall . . .	6	1	1	6	—	2	9	—	6	—	38	8	4	3	2	1	1	1	—	—	6	1	—	—	—	—
2d Hall . . .	—	1	1	—	—	—	6	12	—	—	42	21	1	1	3	—	1	1	—	—	7	—	—	—	—	—
3d and 4th Halls . . .	—	—	—	—	—	—	—	12	6	2	60	16	—	1	1	—	1	1	—	—	5	—	—	—	—	—
Middle 1st Hall . . .	—	—	—	—	—	—	—	12	—	—	48	23	1	2	1	—	—	—	—	—	13	—	—	—	—	—
2d Hall . . .	—	—	—	—	—	—	32	6	12	—	21	—	—	1	1	—	—	—	—	—	12	—	—	—	—	—
3d and 4th Halls . . .	—	—	—	—	—	—	17	12	6	1	46	20	1	1	2	—	5	1	1	—	19	—	—	—	—	—
Lower 1st Hall . . .	—	—	—	—	—	—	—	12	6	—	32	12	—	1	1	—	3	1	1	—	16	—	—	—	—	—
2d Hall . . .	—	—	—	—	—	—	37	6	12	1	46	23	—	1	—	—	3	1	—	—	16	—	—	—	—	—
3d and 4th Halls . . .	—	—	—	—	—	—	44	12	6	1	54	19	2	—	—	—	2	1	—	—	9	—	—	—	—	—
<i>Women's Department.</i>																										
Upper 1st Hall . . .	6	—	2	12	—	—	—	—	—	1	30	5	—	—	—	2	1	1	1	—	—	—	—	—	—	—
2d Hall . . .	—	—	—	—	—	—	—	—	—	1	44	17	—	—	—	—	1	1	—	—	—	—	—	—	—	—
3d Hall . . .	—	—	—	—	—	—	24	—	—	—	58	8	2	—	—	1	1	—	—	—	—	—	—	—	—	—
4th Hall . . .	—	—	—	—	—	—	—	—	6	—	40	9	1	1	—	—	3	—	—	—	—	—	—	—	—	—
Middle 1st Hall . . .	—	—	—	—	—	—	12	12	—	2	54	16	—	—	—	—	2	—	—	—	—	—	—	—	—	—
2d Hall . . .	—	—	—	—	—	—	30	6	18	—	60	26	1	—	2	1	4	—	—	—	—	—	—	—	—	—
3d Hall . . .	—	—	—	—	—	—	12	12	—	—	64	14	—	2	1	—	2	—	—	—	—	—	—	—	—	—
4th Hall . . .	—	—	—	—	—	—	12	12	—	—	48	9	—	1	1	—	2	—	—	—	—	—	—	—	—	—
Lower 1st Hall . . .	—	—	—	—	—	—	—	6	—	—	40	19	—	1	1	—	2	—	—	—	—	—	—	—	—	—
2d Hall . . .	—	—	—	—	—	—	42	6	—	—	58	25	—	1	1	—	2	—	—	—	—	—	—	—	—	—
3d Hall . . .	—	—	—	—	—	—	12	—	—	1	40	6	—	1	1	—	—	—	—	—	—	—	—	—	—	—
4th Hall . . .	—	—	—	—	—	—	—	—	—	1	18	7	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Kitchen . . .	—	—	—	—	—	—	—	16	6	—	72	61	—	1	1	—	—	—	—	—	—	—	—	—	—	—
Rear . . .	—	—	—	—	—	—	—	—	6	—	160	90	2	3	1	—	—	—	—	—	—	—	—	—	—	—
Centre . . .	—	—	—	—	—	—	—	—	—	1	28	5	2	1	2	—	1	—	—	—	—	—	—	—	—	—
Aggregate . . .	12	20	14	18	111	36	295	142	90	12	1,222	480	17	22	20	8	52	36	4	107	10	125	6	35	80	15

*28. Days' Work by Patients.*

MONTHS.	FARM.	KITCHEN.			SEWING- ROOM.	LAUNDRY.		
	Men.	Men.	Women.	Total.	Women.	Men.	Women.	Total.
<b>1880.</b>								
October .	708	124	272	396	146	21	290	311
November .	606	120	248	368	153	22	321	343
December .	448	124	237	361	169	23	319	342
<b>1881.</b>								
January .	487	124	237	361	154	13	326	339
February .	412	112	221	333	142	20	311	331
March .	434	124	240	364	149	23	343	366
April .	597	150	223	373	147	24	301	325
May .	716	155	219	374	144	32	336	368
June .	814	150	218	368	155	35	350	385
July .	801	155	221	376	161	46	270	316
August .	776	155	233	388	156	46	328	374
September .	646	150	235	385	129	48	342	390
Totals .	7,445	1,643	2,804	4,447	1,805	353	3,837	4,190

The total of days' work here recorded is 17,887. This is what was performed by the regular workers on the farm and in the three departments mentioned. No record was kept of the time of work on the ornamental grounds, at the stable, in the bakery, the boiler-room, the mattress-room, and the carpenter's shop. A large amount of other work is done both in the halls, and, at irregular times, out of them.

# 72 LUNATIC HOSPITAL AT NORTHAMPTON. [Oct.

## 29. List of Articles made in the Sewing-room.

Dresses . . . . .	260	Bolster-cases . . . . .	53
Chemises . . . . .	398	Spreads, hemmed . . . . .	79
Aprons . . . . .	148	Bags . . . . .	21
Waists . . . . .	12	Table-spreads . . . . .	14
Sacques . . . . .	15	Towels . . . . .	316
Drawers . . . . .	77	Towels, hemmed . . . . .	114
Skirts . . . . .	147	Napkins . . . . .	18
Nightdresses . . . . .	18	Roller-towels . . . . .	81
Collars . . . . .	115	Bureau-spreads . . . . .	4
Shirts . . . . .	196	Waiter-napkins . . . . .	6
Camisoles . . . . .	30	Dish-towels . . . . .	10
Pants (pairs) . . . . .	2	Curtains . . . . .	56
Straw-ticks . . . . .	19	Carpets . . . . .	5
Mattress-ticks . . . . .	27	Carpet-strips, hemmed . . . . .	53
Feather-ticks . . . . .	16	Handkerchiefs . . . . .	2
Pillow-ticks . . . . .	55	Suspenders (pairs) . . . . .	114
Bolster-ticks . . . . .	2	Hats trimmed . . . . .	18
Sheets . . . . .	438	Ox-blankets . . . . .	2
Pillow-cases . . . . .	435	Articles repaired . . . . .	18,358

## 30. Upholstery done in the Year.

Hair-mattresses made, new materials . . . . .	15
Hair-mattresses made, new ticks . . . . .	33
Hair-mattresses overhauled, hair repicked . . . . .	22
Husk-mattresses made, new materials . . . . .	12
Hnsk-mattresses made, new husks . . . . .	8
Husk-mattresses overhauled, with increase of husks . . . . .	20
New husk under-beds made, new materials . . . . .	15
Old under-bedticks filled with new husks . . . . .	103
Hair-pillows made, new materials . . . . .	20
Hair-pillows overhauled, hair repicked . . . . .	12
Hair-pillows repicked, and put in new ticks . . . . .	13

*31. Annual Cost of Gas,*

YEAR.	Cost of Gas.	Average Number of Patients.	Cost per Patient.
1860-61 . . . . .	\$2,030 39	314.26	\$6 46
1861-62 . . . . .	2,085 29	313.80	6 64
1862-63 . . . . .	2,109 02	355.63	5 93
1863-64 . . . . .	2,069 79	357.63	5 78
1864-65 . . . . .	1,653 05	342.40	4 82
1865-66 . . . . .	1,107 98	376.35	2 94
1866-67 . . . . .	1,056 16	401.03	2 63
1867-68 . . . . .	1,022 51	413.41	2 47
1868-69 . . . . .	903 92	405.10	2 23
1869-70 . . . . .	915 30	408.83	2 23
1870-71 . . . . .	1,043 99	421.90	2 47
1871-72 . . . . .	980 94	428.72	2 28
1872-73 . . . . .	1,006 61	437 23	2 30
1873-74 . . . . .	1,066 74	469.54	2 27
1874-75 . . . . .	1,012 63	475.35	2 13
1875-76 . . . . .	1,089 82	474 21	2 29
1876-77 . . . . .	1,033 59	476.16	2 17
1877-78 . . . . .	1,066 02	442.43	2 41
1878-79 . . . . .	1,033 05	436 73	2 37
1879-80 . . . . .	945 00	450.51	2 10
1880-81 . . . . .	949 65	451.79	2 10

The hospital has always been supplied with gas by the Northampton Gas-Light Company. Until April 1, 1879, the price was \$3.25 per thousand cubic feet, with an additional charge for meter-rent. Since that time it has been but \$3.00, including meter-rent, and, during the last year, with a discount of 5 per cent.

## 74 LUNATIC HOSPITAL AT NORTHAMPTON. [Oct.

*32. Trustees of the Northampton Lunatic Hospital.*

NAME.	Residence.	When app'ted.	Service ended.	From what Cause.
Charles E. Forbes * .	Northampton .	1856	1857	Term expired.
Lucien C. Boynton .	Uxbridge . .	1856	1858	do. do.
Eliphalet Trask .	Springfield . .	1856	1875	do. do.
John C. Russell * .	Great Barrington,	1856	1859	Resigned.
Horace Lyman . .	Greenfield . .	1856	1857	Removed.
Charles Smith . .	Northampton .	1857	1860	Resigned.
Luther V. Bell * .	Somerville . .	1857	1859	do.
Zebina L. Raymond *	Greenfield . .	1858	1859	do.
Franklin Ripley * .	Greenfield . .	1859	1860	Died in office.
Edward Dickinson *.	Amherst . . .	1859	1864	Resigned.
Walter Laffin * .	Pittsfield . . .	1859	1866	Term expired.
Silas M. Smith . .	Northampton .	1860	1863	do. do.
Charles Allen . .	Greenfield . . .	1860	1861	Resigned.
Alfred R. Field * .	Greenfield . . .	1861	1864	do.
Edward Hitchcock .	Amherst . . .	1863	1879	do.
Silas M. Smith . .	Northampton .	1864	-	Still in office.
Edmund H. Sawyer *	Easthampton .	1864	1879	Died in office.
Henry L. Sabin . .	Williamstown .	1866	1876	Term expired.
Adams C. Deane . .	Greenfield . . .	1875	-	Still in office.
Henry W. Taft . .	Pittsfield . . .	1876	-	do. do.
William M. Gaylord,	Northampton .	1879	-	do. do.
Lyman D. James . .	Williamsburg .	1879	-	do. do.

\* Deceased.

33. *Officers and Employés.*

Time employed March 1, 1881.

NAME.	Years.	Months.	Days.
Pliny Earle, M.D., Superintendent . . .	16	7	26
Edward B. Nims, M.D., 1st Ass't Physician,	12	2	14
Daniel Pickard, M.D., 2d Ass't Physician .	3	10	22
Walter B. Welton, Clerk . . . . .	15	—	14
Asa Wright, Farmer . . . . .	23	3	—
Danford Morse, Engineer . . . . .	16	—	7
Robert H. Gallivan, Supervisor . . . .	7	10	11
Lucy A. Gilbert, Supervisor . . . . .	14	—	18
F. Josephus Rice, Steward . . . . .	22	4	24
Mary Ward, Seamstress . . . . .	10	6	3
Nell Russell, Laundress . . . . .	3	11	8
Charles Ziehlke, Baker . . . . .	18	6	—
Frances C. Earle, Assistant Clerk . . .	8	11	6
Atlanta J. McPhee, Assistant Supervisor .	5	5	12
Stella Allis, Assistant Seamstress . . .	—	1	29
Minnie J. Howes, Assistant Laundress . .	2	9	19
Perry Davis, Attendant . . . . .	11	4	16
Thomas Powers, Attendant . . . . .	6	11	11
James Neill, Attendant . . . . .	5	7	21
Walter Pillinger, Attendant . . . . .	6	9	29
Michael Powers, Attendant . . . . .	2	10	6
Allen M. Towne, Attendant . . . . .	1	6	10
Willard C. Ellis, Attendant . . . . .	1	7	—
Eugene C. Wilbur, Attendant . . . . .	—	11	26
Richard F. Neill, Attendant . . . . .	2	7	16
George E. Rood, Attendant . . . . .	—	4	14
Joseph E. Rood, Attendant . . . . .	—	1	21
Luke Belville, Attendant . . . . .	—	1	6
Maria E. Graves, Attendant . . . . .	13	1	7
Martha R. Harris, Attendant . . . . .	6	6	7
Jane McGuire, Attendant . . . . .	5	10	3
Nellie M. Henchy, Attendant . . . . .	5	2	2
Mary Ransom, Attendant . . . . .	5	3	15
Victoria S. Pillinger, Attendant . . . .	4	8	9
Cora Woodward, Attendant . . . . .	4	4	10
Cecile Riel, Attendant . . . . .	4	4	23
Minnie J. Guilfoil, Attendant . . . . .	2	5	24
Maggie F. McKenna, Attendant . . . . .	1	11	9
Mary C. McKenna, Attendant . . . . .	1	9	26
Maria F. Parker, Attendant . . . . .	—	10	15
Naomi A. Griffin, Attendant . . . . .	—	9	21
Bessie J. Burnham, Attendant . . . . .	—	9	15
Ellen C. Potter, Attendant . . . . .	—	4	21
William C. Hall, Assistant Engineer . .	15	5	17
Nicholas Riel, Night Engineer . . . . .	5	2	25
Andrew N. Thorington, Watchman . . .	10	1	30
Sifroi Belville, Carpenter . . . . .	10	10	7
Waldy Tetro, Carpenter . . . . .	7	11	23
Walter Tower, Carpenter . . . . .	4	3	—
Alfred Parenteau, Painter . . . . .	15	6	18

*Officers and Employés — Concluded.*

NAME.	Years.	Months.	Days.
David Mercier, Coachman . . . .	4	—	14
Charles Egen, Assistant Baker . . . .	3	5	4
Benjamin Rockwell, Assistant Farmer . . . .	13	9	—
John Mercier, Assistant Farmer . . . .	13	8	—
Elson E. Howes, Assistant Farmer . . . .	3	11	23
Julius Freeman, Assistant Farmer . . . .	3	7	24
Henry Wilson, Assistant Farmer . . . .	1	10	8
Erie L. Ditty, Assistant Farmer . . . .	—	9	26

Nine of the persons have not been in their present situations during the whole period of service; for example, the supervisors, the assistant supervisor, and the seamstress were formerly attendants.

Twelve of the persons have been employed more than once. In these instances the table gives the total time of service.

