

Seventeenth annual report of the Trustees of the State Lunatic Hospital at Northampton : October, 1872.

Contributors

State Lunatic Hospital (Northampton, Mass.)
Hitchcock, Edward.
Earle, Pliny.

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SEVENTEENTH ANNUAL REPORT
OF
THE TRUSTEES
OF THE
STATE LUNATIC HOSPITAL
AT
NORTHAMPTON.

OCTOBER, 1872.


BOSTON:
WRIGHT & POTTER, STATE PRINTERS,
79 MILK STREET (CORNER OF FEDERAL).
1873.

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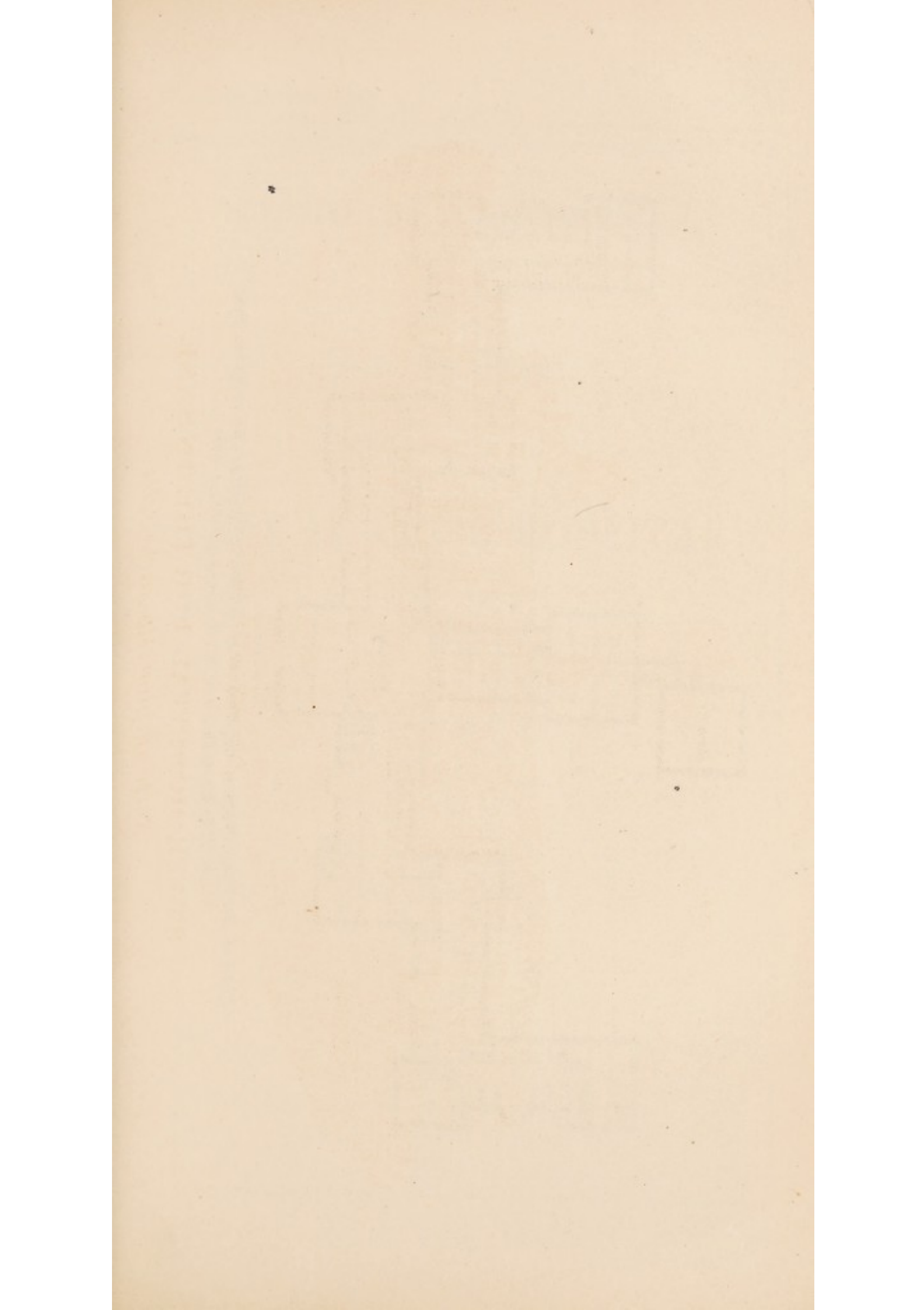
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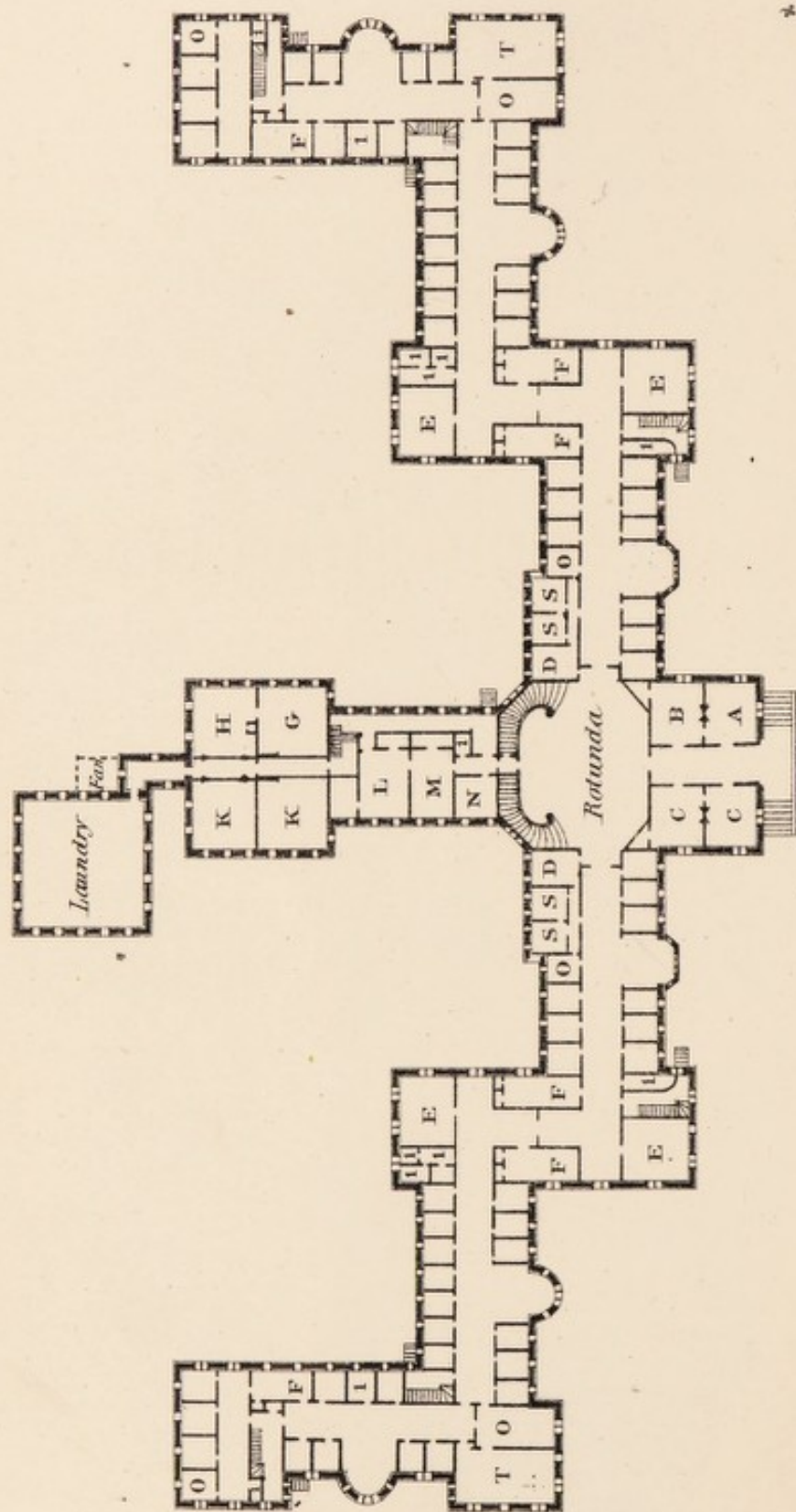


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STATE HOSPITAL FOR THE INSANE
Northampton, Massachusetts.





*Plan of the First Story of the State Hospital for the Insane, Northampton, Mass.
Scale 82 1/2 feet to the inch. Whole Length of Front 512 feet.*

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OFFICERS OF THE NORTHAMPTON LUNATIC HOSPITAL.

TRUSTEES:

| | | | | |
|--------------------------|---|---|---|----------------------|
| EDWARD HITCHCOCK, M. D., | . | . | . | <i>Amherst.</i> |
| SILAS M. SMITH, Esq., | . | . | . | <i>Northampton.</i> |
| HON. ELIPHALET TRASK, | . | . | . | <i>Springfield.</i> |
| HENRY L. SABIN, M. D., | . | . | . | <i>Williamstown.</i> |
| HON. EDMUND H. SAWYER, | . | . | . | <i>Easthampton.</i> |

RESIDENT OFFICERS:

| | | | | |
|-----------------------------|---|---|---|------------------------------------|
| PLINY EARLE, A. M., M. D., | . | . | . | <i>Superintendent.</i> |
| EDWARD B. NIMS, M. D., | . | . | . | <i>First Assistant Physician.</i> |
| EDWARD R. SPAULDING, M. D., | . | . | . | <i>Second Assistant Physician.</i> |
| WALTER B. WELTON, | . | . | . | <i>Clerk.</i> |
| ASA WRIGHT, | . | . | . | <i>Farmer.</i> |
| DANFORD MORSE, | . | . | . | <i>Engineer.</i> |

TREASURER:

| | | | | | |
|-------------------------|---|---|---|---|---------------------|
| PLINY EARLE, | . | . | . | . | <i>Northampton.</i> |
| Office at the Hospital. | | | | | |

SUBORDINATE OFFICERS:

| | | | | | |
|----------------------|---|---|---|---|---------------------------|
| JEREMIAH E. SHUFELT, | . | . | . | . | <i>Male Supervisor.</i> |
| LUCY A. GILBERT, | . | . | . | . | <i>Female Supervisor.</i> |
| F. JOSEPHUS RICE, | . | . | . | . | <i>Steward.</i> |
| MARY A. WARD, | . | . | . | . | <i>Seamstress.</i> |
| MIRA E. DAVIDSON, | . | . | . | . | <i>Laundress.</i> |
| CHARLES ZIEHLKÉ, | . | . | . | . | <i>Baker.</i> |

Commonwealth of Massachusetts.

TRUSTEES' REPORT.

*To His Excellency the Governor of the Commonwealth, and the
Honorable Council.*

We have the honor hereby to present to you the Seventeenth Annual Report of the Northampton Lunatic Hospital.

The measure in which, during the past year, this institution has accomplished the objects for which it was created, may be inferred from a review of the general statistics.

The number of patients in the hospital on the 30th of September, 1871, was four hundred and twenty, and one hundred and ninety-nine have been admitted in the course of the official year, making the whole number who have received the benefits of the institution six hundred and nineteen. Of this number, two hundred and ninety-nine were men, and three hundred and twenty women. Ninety-nine men and eighty-seven women, a total of one hundred and eighty-six, have been discharged. This includes nineteen men and eighteen women, a total of thirty-seven, who died. The number remaining in the hospital on the 30th of September, 1872, was four hundred and thirty-three, of whom two hundred were men and two hundred and thirty-three women.

The largest number of patients upon any one day of the year was four hundred and fifty-five; the smallest, four hundred and twelve; and the mean or average daily number resident for the year, a fraction over four hundred and twenty-eight.

Of those who were discharged, forty were cured, sixty improved, and forty-seven unimproved. A large proportion of the unimproved, as well as some of the improved, were transferred to the receptacle at Tewksbury, by the Board of State Charities. For the usual statistical details we refer you to the accompanying report of the Superintendent.

But one patient, non-resident of Massachusetts, was admitted in the course of the year. He was received on the first day of the year, and was mentioned in our last (sixteenth) report. He has since been discharged.

Applications for persons from other States are still numerous, and some of them very urgent, although considerable pains has been taken to disseminate a knowledge of the fact that admissions are restricted, exclusively and absolutely, to residents of this State. The number of patients in the house who belong in other States and countries, has been materially diminished in the course of the year; and it was hoped that the necessities of our own citizens would continue to be so limited as to permit these non-residents to remain as long as circumstances rendered it desirable, and, in the natural course of events, gradually be removed. During the last few months, however, the pressure for admission from persons within the limits of the Commonwealth has been so great as to raise the number of patients to a point altogether beyond the proper comfortable capacity of the buildings, and to convince us that something must be done for relief in this respect. Accordingly, active measures have been instituted for the removal of non-residents. The work cannot be accomplished in a moment, since, in most cases, admission to other hospitals must be obtained for them; but several have already been taken away, and, in the course of a few weeks, judging from present appearances, a considerable additional number will follow. Were they all gone, the hospital would still be full to the limit of prudence. We commend to your notice the remarks of the Superintendent upon the subject of the establishment of a new State hospital.

For nearly eight years prior to the first of January, 1872, the unfailing spring upon the premises furnished the hospital an ample supply of excellent water; but the raising of it to the attic was attended, in the payment for wages, fuel, and repairs

of boiler and pump, by no trifling expense. Hence, when the Northampton Water Company proposed to supply the establishment for seven hundred dollars a year, we believed it best to accept their offer. A written contract for three years was accordingly executed, and from December last the water for the hospital has come from that source. Its own pressure carries it into the tanks in the attic, the fountain-head being about thirty feet higher than the top of the cupola.

At an early period of the last spring preliminary measures were taken for making several important improvements upon the premises, in the course of the warm season of the current calendar year. The prosecution of the work of these improvements has been constant, requiring the close application of the resident officers and producing upon the premises a scene of active labor, aside from the ordinary duties of the establishment, such as has not before been witnessed since the hospital was opened.

The institution has never been furnished with adequate means of security from the ravages of fire. The acquisition of water from a source of such elevation as that of the water-works just mentioned, furnished the opportunity for the supply of this important need. The main pipe has been tapped in front of the centre building, and two branches of four inch pipe, one for each wing, have been laid. The length of each of these branches is about four hundred feet. Four hydrants, out of doors, — two in front of the building and two in the rear, — are attached to them. At points where the pipes pass under the building, four rising lines of two inch pipe, two in either wing, are carried through the successive stories to the attic. In each story, each pipe has an attachment for hose. These hydrants are so situated that, with about one hundred feet of hose at each attachment, any and every room for patients, and every point in the wings, can be reached by the nozzle of the hose. The hose has not yet been purchased, but soon will be.

It was stated in our last report that, in the summer of 1871, the plan of heating the south wing had been wholly changed, by the substitution of Gold's radiators for the old coils, some of them more than one hundred feet long, which had previously been used; and that if the new plan bore the test of the then

coming winter, it was intended to make a similar change in the north wing. The test was borne with a perfection even beyond our expectations. With all the radiators in operation, it was soon found that the temperature of the halls was too high for health, and, in some instances, for comfort. The steam was consequently shut off from a part of them. The apparatus then went through the winter, preserving a remarkable equability of temperature, even during the periods of greatest severity of cold. As proof of this, we invite attention to the following tables compiled by the Superintendent from records kept by Dr. Nims:—

Results of Observations of the Temperature in Eleven Halls of the South Wing of the Northampton Lunatic Hospital, at the time of the Morning Medical Visit, on Thirty Days, from the fifteenth of February to the fifteenth of March, inclusive, 1872.

| | Lowest temperature. | Highest temperature. | Mean, or Average. | Range between extremes in the month. |
|------------------------|------------------------|-------------------------|----------------------|--|
| Upper First Hall, . . | 65° | 72° | 68.53° | 7° |
| Second Hall, . . | 71° | 78° | 75.16° | 7° |
| Third Hall, . . | 66° | 72° | 69.4° | 6° |
| Fourth Hall, . . | 70° | 79° | 74.2° | 9° |
| Middle First Hall, . . | 66° | 76° | 71.53° | 10° |
| Second Hall, . . | 68° | 78° | 73.73° | 10° |
| Third Hall, . . | 67° | 76° | 70° | 9° |
| Fourth Hall, . . | 67° | 82° | 70.48° | 15° |
| Lower First Hall, . . | 68° | 78° | 72.76° | 10° |
| Second Hall, . . | 66° | 78° | 73° | 12° |
| Third Hall, . . | 65° | 77° | 68° | 12° |

On the lower fourth hall the thermometer was broken on the eighteenth of February and not replaced until the first of March. Hence, there were but eighteen observations on that hall. Of these, the lowest was 66°; the highest, 78°; the

mean, or average, 72.5° ; and the range between extremes, 12° . The mean or average of the eleven halls is 71.9° .

This table will tell its own story to persons who are at all interested in the subject. The only conceivable condemnatory criticism of it in any quarter is, that it shows too high a temperature for health. But it must be remembered that, for some reason, whether it be from climatic influences, physiological peculiarities, or mere habit, the American requires a much higher artificial temperature than the European.

For the purpose of exhibiting the bearing of these observations upon the relative temperature of rooms at different heights and heated from a common air-chamber beneath them all, the numbers showing the *mean, or average*, are arranged below according to the floors or stories, upon which the halls, respectively, are situated.

| | First Hall. | Second Hall. | Third Hall. | Fourth Hall. | Mean or average of the floor. |
|---------------------|-----------------|-----------------|----------------|-----------------|-------------------------------------|
| Upper floor, . . . | 68.53° | 75.16° | 69.4° | 74.2° | 71.82° |
| Middle floor, . . . | 71.53° | 73.73° | $70.^{\circ}$ | 70.48° | 71.43° |
| Lower floor, . . . | 72.76° | $73.^{\circ}$ | $68.^{\circ}$ | 72.05° | 71.56° |

The greatest difference between the mean or average temperatures of the four halls on different floors, is only thirty-nine hundredths (less than two-fifths) of one degree. This result is as surprising as it is satisfactory.

The necessary pressure of steam at the radiators in the basement, was very slight—from one to three pounds in ordinary weather, and not more than ten pounds when the mercury, out of doors, was at its lowest point. This result was very remarkable as contrasted with that of the operation of the old, radiating coils, through which, at times of intense cold, it was often impossible to force the steam, under the highest attainable pressure.

Under these circumstances, the question of making the same change for the north wing that had been made for the south, was settled without argument. The work has consequently

been done, in the course of the summer, at a cost of nearly four thousand dollars, — the expense being enhanced by the advance in the price of iron.

The Superintendent and the other medical officers of the institution being unanimous in the opinion that one of the greatest defects of the hospital, in a sanitary point of view, was its want of suitable enclosures whereby the patients might be enabled to be in the open air a much larger proportion of the time than is otherwise practicable, it was decided by our Board to make four airing-courts, two of them for either sex. They were begun in April and are now very nearly completed. The walls are of permanent masonry. The foundation, of stone laid in cement, is two feet wide and four deep. The walls are of brick, nine feet high for the men's courts and eight feet for the women's. They are twelve inches thick, with pilasters twenty inches square, at distances of about twenty-three feet. The pilasters rise five inches above the wall, and are covered with brownstone caps, each two feet square. The wall is also finished, at top, with brownstone coping.

The courts for the south wing contain about an acre. The larger one is so situated as to command a beautiful prospect, and is ornamented with flowers, shrubs, and both fruit and forest trees. Those for the men are a trifle smaller. They include a part of the grove on the west and north of the building, and will be pleasant retreats in the warm season. We believe that these enclosures are valuable acquisitions to the means for promoting the comfort and health of the inmates of the institution.

The architects of the hospital building made several hundred ventilating flues open into the attics, and, lest the ventilation should be imperfect, they placed a fan, operated by steam, in a proper position to force air through the patients' rooms, up those flues, into the attics. They then put the confirmatory seal upon these illustrations of their wisdom, by *not making* any special avenue for the air to get *out* of the attics. In default of this, the windows have been used as valves of escape. Not only, however, were these insufficient, but (although they permitted the egress of air) they allowed the ingress of snow and rain, very much to the detriment of the ceilings of the rooms of the third story. All these defects were removed,

about two months ago, by placing five of Emerson's metallic ventilators, each forty inches in diameter, upon the roofs, — two upon each wing and one upon the centre building. They were made and put up by W. F. Prindle, of Northampton, and immediately gave evidence of their utility by the improved condition of the atmosphere within the building.

The bowling alley, a brick building about eighty feet in length by twenty in width, having become somewhat dilapidated, was repaired in the course of the summer, and the opportunity was taken to substitute a raised and slated roof for the flat and gravelled one of the original structure.

An addition of twenty feet was made, in the latter part of the spring, to the building erected last year as a shed for farm wagons and carts, with a half story above, used for the storage of other farming implements and for the coarser kinds of lumber.

The floors of the rotunda of the second story, of five dining-rooms, and of one bath-room have been relaid, with southern pine, in the course of the year.

Such are the most important improvements of the last twelve months. In no former period of equal duration since the hospital was opened, has so much been done in the attempt to make the establishment complete of its kind.

The amount, for the year, of the bills for board is: —

| | | | | | | |
|---------------------|---|---|---|---|---|--------------|
| For State patients, | . | . | . | . | . | \$41,585 50 |
| Town patients, | . | . | . | . | . | 16,404 00 |
| Private patients, | . | . | . | . | . | 31,330 16 |
| | | | | | | <hr/> |
| Total, | . | . | . | . | . | \$89,319 66* |

The receipts of money from all sources, together with the objects and accounts of disbursements, are shown by the report of the Treasurer, hereto appended.

By the accounts of the hospital, which have been audited and approved, it appears that, on the 30th of September, 1872, there were: —

* In the similar table in our report for the official year 1870-71, the amount charged for "contingencies" was, by an oversight, included. The bills for board, alone, amounted to \$88,290.03.

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| | |
|--|-------------|
| Assets available for further disbursement, | \$27,529 55 |
| Liabilities at same date, | 9,395 68 |
| | <hr/> |
| Balance of cash assets, | \$18,133 77 |

This, of course, does not include the value of the provisions and supplies on hand.

It only remains to us to express our commendation of all the executive officers, and our belief that the hospital is still growing more and more worthy of the confidence of the people of the Commonwealth.

EDWARD HITCHCOCK,
S. M. SMITH,
ELIPHALET TRASK,
HENRY L. SABIN,
EDMUND H. SAWYER,

Trustees.

NORTHAMPTON, October 12, 1872.

TREASURER'S REPORT.

To the Trustees of the Northampton Lunatic Hospital.

The Treasurer respectfully submits the following statement of the receipts and expenditures for the year ending September 30, 1872:—

RECEIPTS.

| | |
|---|-------------------|
| Balance in hands of Treasurer, Sept. 30, 1871, . | \$12,442 78 |
| Received for board and contingencies of private patients, | 33,576 26 |
| for board and contingencies of town patients, | 14,655 48 |
| for board of State patients, | 32,761 60 |
| for animals and produce of farm sold, | 1,192 32 |
| on sundry accounts, | 1,478 50 |
| | <hr/> \$96,106 94 |

PAYMENTS.

| | |
|--|-------------|
| For provisions and supplies, | \$28,295 48 |
| fuel, | 6,694 34 |
| gas and oil, | 999 52 |
| water, | 436 34 |
| salaries and wages, | 18,631 56 |
| furniture, | 4,144 09 |
| clothing and dry goods, | 3,619 20 |
| contingencies, | 2,347 00 |
| farm, | 4,724 19 |
| farm stock, | 1,296 00 |
| farm wages, | 2,392 50 |
| | <hr/> |
| <i>Carried forward,</i> | \$73,580 22 |

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| | |
|--|-------------|
| Brought forward, | \$73,580 22 |
| For repairs and improvements, | 18,144 09 |
| miscellaneous expenses, | 3,876 67 |
| Balance in hands of the Treasurer, | 505 96 |
| | <hr/> |
| | \$96,106 94 |

The 12th section of chapter 288 of the Acts of 1864 authorizes the treasurer of either of the lunatic hospitals to draw from the treasury of the Commonwealth, near the beginning of each quarter of the financial year, *ninety per cent. of the probable amount due said hospital for the support of State pauper inmates during said quarter.* The advantage accorded by the statute was taken at this hospital until January, 1872. Since that time no money has been drawn under it. One consequence is, that our cash receipts this year are much less than in the year next preceding. In the last quarter of the financial year 1870-71, we received, in advance, \$9,000,—the estimated *ninety per cent.* for the support of State paupers *during that quarter.* This year we have received nothing for the last quarter.

| | |
|---|-------------|
| The State now owes the hospital, | \$11,094 37 |
| At the close of 1870-71 it owed the hospital only | 1,635 22 |
| | <hr/> |
| Difference in favor of this year, | \$9,459 15 |

Had we still acted under the statute above mentioned, the amount of this difference would have been added to our cash receipts, instead of appearing, as it does, in bills receivable.

PLINY EARLE, *Treasurer.*

NORTHAMPTON, October 12, 1872.

The Committee appointed to audit the accounts of the Treasurer, have attended to the duties assigned to them, and report that they have examined the books and accounts of the Treasurer, and find proper vouchers for all entries made.

ELIPHALET TRASK.

EDMUND H. SAWYER.

NORTHAMPTON, October 12, 1872.

SUPERINTENDENT'S REPORT.

To the Board of Trustees of the Northampton Lunatic Hospital.

GENTLEMEN:—The period at which it becomes necessary again to report to you the progress of the operations of this hospital is marked by an event in those operations worthy of special notice, as it is of some importance in the history not only of this institution but of the prevalence of mental disorders within the Commonwealth. I allude to the measures recently taken for the discharge of private patients whose legal residence is not in this State.

Whatsoever might have been the intention of the legislators by whose action the hospital was founded, in respect to limitation or non-limitation of its benefits, it is a fact that, in the earlier periods of its existence, nearly every applicant was admitted, irrespective of the State in which he lived. The hospital is so large that, at that time, the popular cry in many quarters was, "It will never be filled;" "It will never be needed." Because its extensive accommodations, planned by those who could best foresee the exigencies of the future, were not *immediately* called into requisition, the conclusion was jumped at that they would be *permanently* useless. The officers of that early period, in pursuing the course which they did, undoubtedly acted in accordance with their convictions of the best interests of all parties concerned. For several years the hospitals within the State met all the demands from the citizens of Massachusetts, still leaving room, at this institution, for applicants from abroad. At length, the receptacle at Tewksbury for quiet, chronic insane beneficiaries of the State, was established, and the removal to it of that class of patients from the State hospitals was begun. This measure again created vacancies here which, if re-filled, must be filled from sources foreign to this State; and as the financial condition of the institution was not then very satisfactory, and as the average

pay of patients from abroad was greater than that of those who were residents of the State, they were so filled. It was not until a period within the last two and a half years that, so far as our means for accommodation were concerned, the necessity of limiting the number of admissions of the applicants from other States began to appear. That necessity, however, rapidly grew more urgent, and in the course of eighteen months was such that the limitation became absolute prohibition.

As an exposition of the operations of the hospital in this direction, the subjoined table has been prepared. It shows the number of private patients, or boarders, received from other States in the course of each official year of the existence of the hospital, the daily average number of those patients actually resident, and the number of them remaining in the hospital at the end of the year:—

Boarders, non-residents of Massachusetts.

| OFFICIAL YEAR ENDING | Admitted. | Daily average resident for the year. | In hospital at end of the year. |
|---------------------------|-----------|--------------------------------------|---------------------------------|
| Sept. 30, 1859, | 11 | 6.15 | 8 |
| 30, 1860, | 16 | 11.00 | 15 |
| 30, 1861, | 35 | 22.41 | 28 |
| 30, 1862, | 11 | 23.22 | 25 |
| 30, 1863, | 30 | 29.65 | 41 |
| 30, 1864, | 17 | 35.88 | 32 |
| 30, 1865, | 18 | 32.18 | 32 |
| 30, 1866, | 20 | 32.90 | 39 |
| 30, 1867, | 24 | 42.13 | 43 |
| 30, 1868, | 40 | 54.35 | 50 |
| 30, 1869, | 15 | 50.82 | 48 |
| 30, 1870, | 51 | 55.87 | 74 |
| 30, 1871, | 13 | 62.33 | 55 |
| 30, 1872, | 1 | 50.06 | 35 |

It will be perceived that the number remaining at the close of the year covered by this report, is thirty-five. Several more will be taken away in a few days. Had they all been removed on the 30th of September, we should have still had three hundred and ninety-eight patients, which is but two less than what is considered the proper capacity of the building.

The reception and treatment of persons from other States has been, so far as I am aware, of no detriment to the citizens of Massachusetts. It has extended the sphere of usefulness of the institution, and enabled it to render itself more competent to minister to the necessities of its future inmates. Without those patients there would have been an utter inability to make the many improvements of the last seven years, unless it had been by direct appropriations from the treasury of the Commonwealth.

Although so long a time has elapsed since we ceased to admit such patients, applications for them still continue to be numerous. During the afternoon of the day upon which this is written, no less than three have been received, from as many different places out of the State.

The movement of the population of the hospital during the year just closed, as well as some of the most important numerical facts of its medical history, are shown in the following table of general statistics.

3

General Statistics, 1871-72.

| | Males. | Females. | Total. |
|---|--------|----------|--------|
| Patients in the Hospital, September 30, 1871, . | 198 | 222 | 420 |
| Admitted from the general population, . . . | 60 | 51 | 111 |
| Of the same persons, re-admitted this year, . | 4 | - | 4 |
| Transferred from the Worcester Hospital, . | 11 | 25 | 36 |
| Transferred from the Taunton Hospital, . | 24 | 20 | 44 |
| Transferred from Monson State Almshouse, . | 1 | - | 1 |
| Transferred from Tewksbury State Almshouse, | - | 1 | 1 |
| Transferred from Bridgewater State Workh'se, | 1 | 1 | 2 |
| Total of admissions within the year, . | 101 | 98 | 199 |
| Total of patients within the year, | 299 | 320 | 619 |
| Discharged, including deaths, | 99 | 87 | 186 |
| Remaining, September 30, 1872, | 200 | 233 | 433 |

Condition of Patients discharged.

| | | | |
|---|--------|--------|--------|
| Recovered, | 25 | 15 | 40 |
| Improved, | 33 | 27 | 60 |
| Unimproved, | 22 | 27 | 49 |
| Died, | 19 | 18 | 37 |
| Total, | 99 | 87 | 186 |
| Daily average number of patients, | 201.76 | 226.96 | 428.72 |
| Smallest number on any day, January 5, . | 195 | 217 | 412 |
| Largest number on any day, August 8, . . | 213 | 242 | 455 |

The largest number on any day exceeds, by ten, that of any foregoing year.

The daily average number is larger by nearly seven than ever before.

The total number of patients within the year is three more than in any former year.

The number of admissions, on the contrary, is less, by twelve, than in 1870-71. This diminution is in consequence of a reduction in the transfers from other State institutions. These transfers, within the year just closed, were but eighty-four; whereas, in the next preceding year, they were one hundred and fifteen. But the admissions by direct commitment from the general population, in this last year, were one hundred and fifteen; while in 1870-71 they were but ninety-six.

The largest number of monthly admissions was thirty-six, in July; the smallest, seven each in October, 1871, and September, 1872. As, however, the transfers from other hospitals are generally made in large numbers and at times rendered either convenient or necessary by circumstances more or less disconnected with the natural flow of patients from the people into the hospitals, it may be stated that the largest number of direct commitments was sixteen, in August; and the smallest seven, in each of the two months above mentioned.

The table below shows the relations of admissions to the seasons of the year.

| ADMISSIONS. | WHOLE NUMBER. | | | DIRECT COMMITMENT. | | |
|--|---------------|----------|--------|--------------------|----------|--------|
| | Males. | Females. | Total. | Males. | Females. | Total. |
| In October, November and December, 1871, | 18 | 16 | 34 | 18 | 9 | 27 |
| In January, February and March, 1872, | 30 | 22 | 52 | 20 | 12 | 32 |
| In April, May, and June, 1872, | 25 | 29 | 54 | 12 | 13 | 25 |
| In July, August and September, 1872, | 28 | 31 | 59 | 16 | 19 | 35 |
| Totals, | 101 | 98 | 199 | 66 | 53 | 119 |

Of the patients admitted, one hundred and eighteen, when received, were chargeable to the State, thirty to towns, and fifty-one to individuals.

The responsibility for the payment of the board of some of the patients is changed while they are here. Boarders sometimes become town patients; and town or State patients become

boarders. The most frequent change is the transfer of State patients to the charge of towns.

Of the patients discharged, ninety-eight, when discharged, were State beneficiaries; thirty were supported by towns, and fifty-eight were boarders.

The number of boarders discharged was, of course, increased by the removal, at the request of the Board of Trustees, of some of those whose residence is in other States.

Of the patients remaining in the hospital, two hundred and thirty are State patients; ninety-nine town patients, and one hundred and four boarders.

The diminution of the number of boarders, resulting from a cessation of admissions from other States, has been far less than was anticipated. As, however, the compulsory discharge of non-residents, all of whom belong to that class, has begun, a considerable decrease may be expected in the course of the coming year.

Of those who were discharged recovered, thirteen were supported by the State, eight by towns, and nineteen by individuals.

It may not be out of place to mention the fact that, as a rule, patients are not transferred from the other State hospitals to this, so long as there is a reasonable prospect of recovery. When restoration has become hopeless, or very doubtful, they are removed hither, to give room for the more recent cases which are constantly flowing into those hospitals from the great centres of population in the middle and the eastern sections of the State. This practice throws upon us a mass of chronic or organic disease not amenable to medical remedies, and necessarily depreciates the proportion of cures to a point materially below that which would be attainable if all the patients received came to the hospital directly from their homes and in the earlier stages of the disorder.

Of the thirty-seven persons who died, seventeen were State patients, six town patients, and fourteen boarders.

Although the proportion of deaths relative to the whole number of patients in the course of the year, as well as to the daily average number in the house, is somewhat larger than in the next preceding year, it is, nevertheless, smaller than the average for the whole period of the existence of the hospital. This

fact is deducible from the records embodied in the following table:—

Mortality from the Opening of the Hospital.

| OFFICIAL YEAR. | Whole No. of Patients. | Daily average No. of Patients. | DEATHS. | | | Per cent. on Whole No. of Patients. | Per cent. on daily Av. 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 |

During the period of the last four successive years the mortality has been not only below the average of the whole term of existence of the hospital, but below that of any other four years, whether successive or not.

In the course of the warm season there was a considerable number of cases of diarrhœa, most of them mild, and all terminating favorably. There were also several cases of dysentery. In one instance it proved fatal, but the patient was feeble previously to the attack, and consequently unable to sustain the shock and the wear of an acute disease.

I have now been connected with the hospital more than eight years, and during that period there has not been a case of typhoid fever in the house, among either the patients or the other inmates. The assertion, if I am correctly informed, is no less true of the six years during which the institution had been in operation before my connection with it. This exemption

from the most prevalent of the endemic febrile diseases of New England is almost marvellous. It demonstrates, at least, that hitherto, the deleterious exhalations which generate that fever cannot have been very abundant upon the premises. The sewerage cannot have been very incomplete, or the ventilation, how far soever short of perfection, very defective.

It may not, perhaps, be uninteresting as a matter of history, as well as in relation to some questions of social science, to know the extent to which the native and the foreign element of the population of the State have been represented among the patients during the existence of the hospital. This may be learned from the subjoined quotations from the numerical records.

Americans and Foreigners among the Patients.

| DATE. | Americans. | Foreigners. | Total. | Americans to Foreigners. |
|---------------------------|------------|-------------|--------|--------------------------|
| January 1, 1859, . . . | 63 | 163 | 226 | as 1 to 2.58 |
| 1, 1860, . . . | 83 | 146 | 229 | as 1 to 1.75 |
| 1, 1861, . . . | 117 | 187 | 304 | as 1 to 1.59 |
| 1, 1862, . . . | 131 | 182 | 313 | as 1 to 1.39 |
| 1, 1863, . . . | 123 | 218 | 341 | as 1 to 1.77 |
| 1, 1864, . . . | 144 | 213 | 357 | as 1 to 1.48 |
| 1, 1865, . . . | 131 | 189 | 320 | as 1 to 1.44 |
| 1, 1866, . . . | 145 | 216 | 361 | as 1 to 1.49 |
| 1, 1867, . . . | 161 | 233 | 394 | as 1 to 1.44 |
| 1, 1868, . . . | 177 | 233 | 410 | as 1 to 1.31 |
| 1, 1869, . . . | 185 | 225 | 410 | as 1 to 1.21 |
| 1, 1870, . . . | 190 | 207 | 397 | as 1 to 1.09 |
| 1, 1871, . . . | 195 | 216 | 411 | as 1 to 1.10 |
| 1, 1872, . . . | 217 | 199 | 416 | as 1.09 to 1 |
| September 30, 1872, . . . | 236 | 197 | 433 | as 1.19 to 1 |

At the opening of the calendar year, 1859, there were five foreigners to two Americans. The number of the latter has, with two slight exceptions, constantly increased, from year to year, and is now nearly four times as large as it was at that time. The number of foreigners has increased, but fluctuated

considerably, and is now only thirty-four larger than in January, 1859. The proportion between the two has been very materially altered, as there are now about five Americans to four foreigners. Let no one infer, from these statistics, that the relative proportion of insanity among the native population has increased, or that it has diminished among those of foreign birth. Be it remembered that, in the course of the period embraced by the table, the receptacle at Tewksbury has been opened, and now contains about three hundred foreigners, some of whom were removed thither from this hospital, and the rest of whom would have been brought to us had that receptacle not been in existence.

The number of *patients* admitted in the course of the year, as already stated, was one hundred and ninety-nine. But, as four men were received twice each, it follows that the number of *persons* was but one hundred and ninety-five. The subjoined table shows the relation of these persons to hospitals of this kind.

1871-72.—*Relation to Hospitals of the Persons Admitted.*

| | Males. | Females. | Total. |
|---|--------|----------|--------|
| Never before in any hospital, | 44 | 34 | 78 |
| Former inmates of this hospital, | 10 | 10 | 20 |
| of other hospitals in this State, | 33 | 44 | 77 |
| of hospitals in other States, | 2 | 3 | 5 |
| of this hospital, and of other hospitals in this State, | 2 | 1 | 3 |
| of this hospital, and of hospitals in other States, | 2 | 2 | 4 |
| of other hospitals in this State, and of hospitals in other States, | 4 | 4 | 8 |
| Total of persons, | 97 | 98 | 195 |

Only seventy-eight, which is precisely two-fifths of the whole number, had not before been in any hospital.

The principles upon which the medical treatment in the hospital is based, and the details of the method and the resources for the so-called moral treatment, together with the extent to which we avail ourselves of those resources, have been so fully set forth in some former annual reports as to obviate the necessity of attempting an elaborate presentation of them at the present time.

Medicines wisely selected and judiciously used are of primary importance in acute insanity, and of great utility in the debility which very frequently accompanies its chronic stages; while bodily exercise, and especially useful manual labor, is very widely applicable at nearly all periods of the disease, not alone as an ordinary hygienic measure, but frequently as a potent means of cure. I was long since convinced,—and that conviction has been confirmed by the experience of each successive year,—that hundreds of the insane who drag out their wretched and worthless lives in the American hospitals, becoming more and more deteriorated as time wears on, in all the characteristics which elevate man above the brute, and finally dying in the apathy and stupidity of drivelling imbecility, might be, or might have been, cured, if, at the proper time, they were subjected to the wholesome influence of some manual employment appropriate to each individual respectively. These cases are found exclusively in no particular class of society. They run through the gamut of the spheres of social life. For such of them as belong in the sphere of large possession of “this world’s goods,” I perceive little reason for hope, even in the distant future. Wealth, as a rule, spurns manual labor, the world over; and he who can definitely and accurately fortell the millennial day when this will not be so, must be gifted with the spirit of prophecy to an extent not vouchsafed to the seers and sages of the olden time. For such as belong to the laboring classes there is a little more reason for a hope of betterment “in the good time coming.” When hospitals shall have been more nearly perfected, and more especially when there shall exist a degree of popular knowledge and a state of public feeling which will permit the medical officers of the hospital to prescribe manual employment as they are now permitted to prescribe drugs palatable or drugs nauseous, the members of

these classes, having been accustomed to labor, will have an advantage over those whose right hands never learned the "cunning" of work.

Labor here, by patients, is not compulsory. We not unfrequently recommend it; and very often offer inducements to it by appeals to the palate, and other perquisites or extra privileges. The amount of labor out of doors performed in the course of the year, far exceeds that of any former year. The laying of the water-pipes for hydrants, the introduction of the new heating apparatus in the northern basement, and the building of the walls of the airing-courts have required much work in the excavation of trenches, the grading of grounds, the digging and the drawing of stone, and the other necessary changes. A very large proportion of this, as well as of the regular work upon the farm, has been done by patients. The table inserted below exhibits the amount of time in which they were employed, in the departments where a record of it is regularly kept.

Days' Work by Patients.

| MONTHS. | FARM. | KITCHEN. | | | SEWING ROOM. | LAUNDRY. | | |
|------------------|-------|----------|-------|--------|--------------|----------|-------|--------|
| | Men. | Men. | Women | Total. | Women | Men. | Women | Total. |
| October, 1871, . | 369 | 93 | 236 | 329 | 218 | 22 | 282 | 304 |
| November, . | 338 | 90 | 230 | 320 | 353 | 18 | 266 | 284 |
| December, . | 321 | 93 | 237 | 330 | 440 | 13 | 246 | 259 |
| January, 1872, . | 272 | 93 | 241 | 334 | 463 | 15 | 262 | 277 |
| February, . . | 254 | 87 | 223 | 310 | 368 | 9 | 243 | 252 |
| March, . . . | 264 | 93 | 226 | 319 | 442 | 9 | 238 | 247 |
| April, . . . | 306 | 90 | 193 | 283 | 185 | 21 | 233 | 254 |
| May, | 380 | 93 | 208 | 301 | 379 | 22 | 275 | 297 |
| June, | 432 | 90 | 235 | 325 | 375 | 25 | 275 | 300 |
| July, | 701 | 93 | 224 | 317 | 366 | 32 | 304 | 336 |
| August, . . . | 741 | 93 | 232 | 325 | 345 | 30 | 291 | 321 |
| September, . . | 522 | 90 | 234 | 324 | 298 | 24 | 267 | 291 |
| Total, . . . | 4,900 | 1,098 | 2,719 | 3,817 | 4,232 | 240 | 3,182 | 3,422 |

The whole number of days is sixteen thousand three hundred and forty-eight. The number which represents the work on the farm exceeds that of any foregoing year by about eight hundred.

But, as was shown in our last report, the table is a very incomplete index of the whole amount of labor upon the premises. As a fair illustration of the out-of-door activity in employment, I introduce a record made on the forenoon of July 9th, when no one had any intimation that such record was to be made, and no patient was working who would not have been at work if no record had been made.

Patients at Work, out of the Halls, July 9, 1872.

| | Men. | Women. | Total. |
|--|------|--------|--------|
| <i>Out of Doors.</i> | | | |
| Haying, with an attendant, | 5 | - | 5 |
| Hoeing potatoes, with an attendant, | 6 | - | 6 |
| Repairing roads, with an attendant, | 6 | - | 6 |
| Digging trench for wall, with an attendant, | 6 | - | 6 |
| Drawing stone for wall, with an attendant, | 2 | - | 2 |
| Change of radiators, with an attendant, | 3 | - | 3 |
| Cleaning grounds around building, with an attendant, | 3 | - | 3 |
| Weeding carrots, alone, | 3 | - | 3 |
| Hoeing cabbages, alone, | 1 | - | 1 |
| Hoeing onions, alone, | 1 | - | 1 |
| Hoeing broomcorn, alone, | 1 | - | 1 |
| Picking pease, alone, | 6 | - | 6 |
| Picking currants, alone, | 1 | - | 1 |
| Working among the flowers, alone, | 1 | - | 1 |
| Drawing brush, alone, | 1 | - | 1 |
| Total, | 46 | - | 46 |
| <i>Within Doors.</i> | | | |
| In the kitchen, | 3 | 7 | 10 |
| In the bakery, | 1 | - | 1 |
| In the boiler room, | 2 | - | 2 |
| In the laundry, | 2 | 14 | 16 |
| In the sewing room, | - | 16 | 16 |
| With the painter, | 1 | - | 1 |
| In centre building, housework, | - | 2 | 2 |
| In rear dining-room, | - | 2 | 2 |
| Total within doors, | 9 | 41 | 50 |
| Aggregate, without and within, | 55 | 41 | 96 |

The whole number of patients in the hospital on the morning of the 9th of July, was four hundred and twenty-eight. Ninety-six of them, as shown by the table, were at work *out of the halls*, and forty-six of them out of doors. No account was taken of those who were employed *in the halls*.

If now, perchance, this report may fall into the hands of some reader who will regard this table as exceedingly trivial and insignificant, I have only to remark that it is inserted here *expressly because of its significance*; and that, if considered from a point of view which embraces the whole scope of the great problem of the proper provision for the insane, it is the most suggestive, the most important and the most valuable table contained in the report.

As a further illustration of the subject, the record of the repairs of beds, all of which is done in the house, is again, as for several years heretofore, inserted.

| | |
|--|----|
| Hair mattresses re-picked and mostly furnished with new ticks, | 50 |
| Old ticks of hair mattresses filled with new husks, | 40 |
| Husk mattresses re-filled, | 64 |
| Hair pillows re-picked and supplied with new ticks, | 15 |
| Hair pillows re-picked, | 80 |

We are, as heretofore, indebted to the pastors of several churches in the town for the religious services in the chapel, upon the Sabbath. These services have been conducted in a spirit of Christian charity and toleration peculiarly appropriate in a congregation so heterogeneous in denominational membership and belief.

The number and character of all the gatherings of the inmates, in the course of the year, are exhibited below:—

ASSEMBLIES IN THE COURSE OF THE YEAR.

1. *Exercises in the Chapel on the Sabbath,—*

| | |
|--|---------|
| Divine worship in the afternoon, | 53 days |
|--|---------|

2. *Exercises in the Chapel on secular evenings,—*

| | |
|---|------|
| Scripture reading and sacred music, | 76 " |
| Sacred music and reading of poetry, | 84 " |
| Sacred music and reading of prose, | 82 " |

| | |
|--|-----------|
| Lectures, | 15 days. |
| Exhibition of pictures with magic lantern, | 6 " |
| Concert, | 1 " |
| 3. <i>Social assemblies</i> , — | |
| Dances, | 19 " |
| 4. No assembly, | 30 " |
| | — |
| Total | 366 days. |

The gathering to the chapel was prevented, on nine evenings, by the relaying of the rotunda floor. Twelve of the other evenings in which there was no assembly were on the days of the meetings of the Board of Trustees.

We are indebted, for five of the exhibitions of pictures, to Dr. Thomas W. Meekins, of this town, who, as an amateur in optics, has an oxyhydrogen microscope, of his own make, which works to great perfection.

For the gratuity of one of his entertaining solo concerts, our acknowledgments are due to Mr. Barnabee, the singer of wide renown.

FARM.

With the exception of a drought, not severe, in seed-time, the seasons have been remarkably favorable for the production of crops of all kinds raised upon the farm. Of hay, including rowen, there was more than in any former year. Of potatoes, there were thirty-two hundred bushels; of apples, about two hundred barrels; while all the fruit and vegetable-bearing vines flourished and produced with a vigor and an abundance beyond precedent here. An illustration of this is found in the fact that, besides the quantity of cucumbers reported below, not less than one hundred and fifty bushels went to seed.

A part of the quantities in this list of products are estimated, the crops not having yet been gathered; but in all those instances care has been taken that the estimate shall be low rather than high.

| PRODUCT. | QUANTITY. | VALUE. |
|-----------------------------|-----------|------------|
| Hay (first crop), | 66 tons, | \$1,980 00 |
| " (second crop), | 25 " | 750 00 |
| Corn fodder, | 25 " | 75 00 |

| PRODUCT. | QUANTITY. | VALUE. |
|---------------------------------------|--------------|----------|
| Corn, | 225 bushels, | 157 50 |
| Oats, | 200 " | \$100 00 |
| Broom seed, | 125 " | 31 25 |
| Potatoes, | 3,201 " | 1,619 50 |
| Carrots, | 500 " | 200 00 |
| Beets, | 370 " | 191 00 |
| Onions, | 151 " | 101 50 |
| Turnips (English), | 225 " | 45 00 |
| " (Swedish), | 275 " | 55 00 |
| Parsnips, | 30 " | 15 00 |
| Beans (in shell), | 138 " | 202 50 |
| " (string), | 12½ " | 19 00 |
| Pease (green, in shell), | 87 " | 103 50 |
| Sweet corn (green, in ear), | 144½ " | 144 50 |
| Cucumbers, | 104 " | 119 50 |
| Tomatoes, | 139 " | 107 50 |
| Currants (red), | 19½ " | 78 00 |
| " (black), | 1½ " | 6 00 |
| Summer squashes, | 50 " | 55 50 |
| Lettuce, | | 23 50 |
| Asparagus, | | 67 00 |
| Pie plant, | | 40 50 |
| Beet greens, | 52 bushels, | 52 00 |
| Melons (water), | 8,640 lbs., | 169 70 |
| " (musk), | 2,920 " | 59 17 |
| " (citron), | 2,350 " | 23 50 |
| Winter squashes, | 10 tons, | 400 00 |
| Broom brush, | 800 lbs., | 40 00 |
| Cabbages, | 4,000 heads, | 240 00 |
| Cherries, | 4½ bushels, | 18 00 |
| Apples (early), | 150 " | 60 00 |
| " (winter), | 135 bbls., | 101 25 |
| Quinces, | 2 bushels, | 6 00 |
| Veal, | 1,031 lbs., | 124 21 |
| Pork, | 11,366 " | 820 80 |
| Roasting Pig, | 1 | 3 00 |
| Turkeys, | 16 | 40 00 |
| Chickens, | 40 lbs., | 8 00 |

| PRODUCT. | QUANTITY. | VALUE. |
|-----------------------------|----------------|------------------|
| Heads and plucks, | | \$34 00 |
| Eggs, | 46½ dozen, | 15 44 |
| Milk (grass fed), | 17,654 quarts, | 1,235 78 |
| Straw, | 4 tons, | 80 00 |
| Cider, | 20 bbls., | 40 00 |
| Total, | | <hr/> \$9,866 86 |

The value as well as the quantity of the products exceeds that of any antecedent year; and had we, as is done at some public institutions, counted as products all the milk, the butter, the beef of cattle purchased years ago, the manure, etc., it would have been easy to show a value of sixteen or seventeen thousand dollars, instead of between nine and ten thousand.

The whole quantity of milk was seventy thousand six hundred and sixteen quarts, — a liberal supply for the large family of inmates.

Of twenty-seven swine raised upon the premises and slaughtered in the course of the year, the dressed weights, respectively, were 467, 626, 427, 420, 500, 500, 463, 348, 345, 400, 371, 464, 250, 270, 435, 181, 148, 135, 453, 451, 586, 450, 400, 440, 700, 581, 555. Average weight of the largest ten, 544; of the largest five, 609 pounds.

The stock now upon the farm includes eight horses, eight oxen, one bull, twenty-eight cows, two two-year steers, and eighty-eight swine.

The grass purchased standing, off the premises, and harvested by the employes and patients of the hospital, produced about one hundred tons of hay.

Besides the usual amount of fertilizers, a large quantity of clay and of meadow muck, equal to about four hundred cart-loads of each, has been put upon the garden.

IMPROVEMENTS.

As the several important improvements of the establishment, in which we have been engaged during the last six months, will undoubtedly be described in your report to the governor and council, to which the Superintendent's Report is customarily

appended, it would be a superfluity to give an account of them in this place. The hydrants will add much to the security from fire; the ventilators have already proved their ability for usefulness; the alterations in the hot-air chambers, and the introduction of Gold's radiators, bring the heating apparatus to a degree of perfection which would have been considered impossible seven years ago; and the airing courts remove a very great and long-felt defect of the institution. It is a defect which still exists in but too many of the American hospitals.

DOES MASSACHUSETTS NEED ANOTHER HOSPITAL?

In the Annual Report, one year ago, at the close of some remarks upon European hospitals and the different methods of provision for the care and custody of the insane, I ventured the opinion that not only would the necessity for all the Massachusetts hospitals remain, but that the time was not far distant when more would be required. The evidences of that approaching need, which were then apparent, have assumed a prominence of unmistakable significance. In short, it appears to me that the necessity has already become so pressing, that the legislature of the approaching winter will come short of its duty to humanity and the true interests of the citizens of the Commonwealth, if it fail to enact a law authorizing the creation of new accommodations for from three hundred to five hundred patients. A very large proportion of the apartments for even that number, will be wanted as soon as they can be provided, and the remainder will not be obliged to stand long unoccupied. The Worcester hospital has four hundred and thirty-nine patients, which is all that it can properly accommodate; the hospital at Taunton has four hundred and fourteen, which is more than its full complement; and here we have four hundred and thirty-three, which is thirty-three more than we ought to have. Even if all the patients from other States were this day removed, the number remaining would be as large as is prudently permissible, and very much larger than was intended by the designers of the buildings. The receptacle of Tewksbury, which for several years has acted as a safety-valve to the State hospitals, receiving from them large numbers, mostly of quiet incurables, is likewise full. The amount of relief, therefore,

which it can render the hospitals, in future, will be limited to the diminution of its present occupants by natural or ordinary causes.

Meanwhile, the population of the State is rapidly increasing, and the influx of the foreign element, which already furnishes about one-half the inmates of the hospitals at Taunton and Northampton, is not diminishing. Hence, even if mental disorders are not increasing in a greater ratio than the increase of population, — a proposition which has not been proved, and the truth of which is exceedingly doubtful, — there is every reason for the belief that the number of the insane demanding the benefits of the public institutions will be essentially enlarged, with each successive year.

Let not the citizens of Massachusetts be unduly alarmed at this prospect; or, if alarmed, let them seek such consolation as is implied in the aphorism, "Misery loves company." The reported number of insane and idiotic in England, increased from 41,129 in 1862, to 56,755 in 1871. In Scotland, during the same period, the increase was from 6,341 to 7,808; and in France, during the fifteen years from 1851 to 1866, the increase was from 44,970, at the former date, to 90,679 at the latter. These ratios far exceed that of the increase of population in the same countries, and in the course of the same periods, respectively. The people of the most enlightened nations of the earth are now swept onward by a current from which, for the present, there is no escape. The activity, the excitement and the mental strain of a civilization which has received the marvellous impulses of steam and electricity, are producing what the physiologist might have foretold as their legitimate effects. Where these effects will end, no prophet now can tell. But, unless the race adapts itself more consistently and wisely to the change of circumstances, the prospect is anything but cheering to him who would wish to see a diminution, rather than an augmentation, of mental disorders.

Massachusetts, with a population of about one million five hundred thousand, has hospital accommodations, including the receptacle at Tewksbury, for about one thousand nine hundred insane; or about *one and one-third to a thousand*. The canton of Zurich, in Switzerland, with a population of two hundred

and sixty thousand, has hospital accommodations for one thousand insane persons, or very nearly *four to a thousand*. The proportion of accommodation in the Swiss canton is, therefore, three times as great as in Massachusetts. Neither, if we regard the same people as an example, should we make the expense of additional hospitals an obstacle in the pathway of duty to humanity. When, in the canton mentioned, the hospital capacity for the insane was relatively more than twice as large as it now is in this State, the people founded, erected and opened (in 1870) an institution for two hundred and fifty more, at an expense of three millions of francs, gold, equivalent to about \$660,000 of the currency of the United States, at the present time. This is the hospital at Burghozli, near Zurich. Shall the Swiss be nobler ensamples of the expansive liberality of true Christian benevolence than the descendants of the Pilgrims?

I have taken it as granted that, if further provision for the insane be made, that provision will be in the shape of *the hospital*, properly so called. Some other methods have been proposed as alleged improvements, and advocated by gentlemen whose ability all must concede, and whose benevolence no one can question. But in my apprehension they are not adapted to the people of Massachusetts. To render a colony like that of Gheel a possibility, one of the primary conditions must be a very different relationship between labor and capital from that which exists in this State. In old and populous countries, where hands are more numerous than work is abundant, where toil is repaid with but its pittance, and where the inhabitants of the rural districts and villages are bred to a severe simplicity of life and an economy of habit which are the necessary consequents of the excess of laborers, such a place may be created; but not here. Destroy to-day in Massachusetts all her railroads; burn all her mills in which cotton, wool, iron and leather are converted into the necessities, the conveniences, the comforts and the luxuries of life; annihilate every sewing-machine; take from the farmers the mowing-machine and all the other modern improvements by which the useful production, by a given amount of human labor, has been so marvellously increased; and in each of these instances make a reparation of

the things destroyed or taken away an impossibility; prevent all emigration from the State, but receive every immigrant who would have the hardihood to come; and finally, reduce the rate of interest to three per cent., and perhaps fifty years hence the philanthropist might attempt a Gheel with some prospect of success.

The same conditions which are insuperable obstacles to the growth of an institution like the Belgian colony, will for the present prevent the introduction to any extent of that modification of the same plan which is found in Scotland, where families, in homes more or less widely scattered, are licensed to receive the insane as boarders, the number not to exceed four in each house. In a country like ours, where every artisan can earn from three to four dollars per day; every able-bodied common laborer from one and a half to three dollars; every lad of fifteen from one to one and a half dollars, and every young woman from two to five dollars per week, with board; where in perhaps four-fifths of the families of native laborers it is almost literally true that

“The table groans with costly piles of food,”

and the proportion of carpeted floor is larger than in the royal palaces of the continent of Europe, people are not likely to attempt to gain a livelihood by boarding and clothing insane persons for three and a half dollars each per week, — the sum now paid the hospitals for the support of State beneficiaries. Neither is it probable that they will do it for the mere pleasure of the thing; and in Massachusetts the present generation is so far remote from the Pilgrim Fathers that his faith must be large who believes they will do it from a sense of religious duty.

But, as an argument in favor of an attempt to provide for the insane of the State in this manner, some persons have alleged the example of Scotland, where a few imbeciles and incurables have been placed in licensed houses, and others, under the cognizance of the Board of Lunacy, have been permitted to remain with their relatives. Scotland is not Massachusetts. It is a land of comparatively cheap labor, and remote from the large centres of population, of a severe economy and great simplicity

of habit. Undoubtedly, as asserted by Dr. Mitchell, of the Scottish Commission in Lunacy, even another Gheel might be created there, provided the proper authorities considered it a wise step to attempt that achievement, — which they very prudently do not. This acknowledged, let us for a moment endeavor to ascertain the real direction of the example set by Scotland. If the practice of placing the insane as boarders in private families, or leaving them with their friends, were really, in popular sentiment, considered an improvement, even in that country, the number so placed or left would naturally and inevitably increase, and the demand for new hospitals would probably cease. But what are the facts? In the course of the decade from 1861 to 1871, the number of insane persons so placed or so left with relatives, in Scotland, actually *diminished*, to the extent of a fraction more than twenty per cent., while the number of the insane and idiotic *increased* twenty-three per cent. This fact clearly demonstrates that, to use the language of Dr. W. A. F. Browne, of Dumfries, a former member for several years of the Commission in Lunacy, and whose authority has no superior in Scotland, “the public and the custodians of the poor are still strongly in favor of the protection and provisions afforded by asylums.”

Meanwhile, Scotland has not ceased from multiplying her hospitals. I cannot now say to what extent this is true, but the Fife and Kinross Asylum was opened in 1868; the asylum at Murthley, in Perthshire, antedates it but a few years; and the Parochial Asylum of Govan, Glasgow, was nearly finished in June, 1871. I visited the one last mentioned, by the advice of Dr. Mitchell, who mentioned it as an example of a class of asylums, the establishment of which is encouraged by the commission. It is hardly necessary to add that, with the exception that it is in juxtaposition with an almshouse, it fully corresponds with the latest idea of a hospital for the dependent insane.

As proof of the state of the question in Scotland at the present time, I may quote from a letter received from Dr. W. A. F. Browne within the last ten days. “In whatever direction,” says he, “the fluctuations of the proportional numbers of the insane in private dwellings may eventuate, the demand for increased asylum accommodation is increasing. ‘The cry is, still they

come !' Several of the asylums in Scotland are full, or crowded ; several new ones are in process of erection, and others contemplate extension."

With the testimony here adduced, I shall not object to the presentation of Scotland as an example to be followed by Massachusetts.

Assuming, then, that further provision for the insane is necessary, and that, if provided, it shall be by the method and in the form of hospitals, the question next to be considered is the plan of the hospitals. Shall they be constructed upon the general principle of congregation, or, more properly, aggregation, heretofore followed, or upon that of dissemination ? Shall the hospital be a unit, like one of the major planets, or shall it be, like the asteroids, the scattered fragments of an exploded planet, revolving in eccentric orbits ? In my report for last year, this subject was briefly considered. That report was written very hastily, as, at the time when, according to the statute, it ought to have been in the hands of the government officers in Boston, I was still upon the ocean, returning from Europe. It was also written under the impression that the "cottage plan" had been definitively adopted for the new hospital at Worcester, and that the buildings had already been commenced. For these reasons the discussion was but brief, and I abstained from the expression of any preference for any plan. I desired not to throw even the small stumbling-block of such an expression in the way of the experiment. With decided convictions upon the subject, I nevertheless endeavored to write as a neutral.

It is not desired to recall anything then written touching upon this disputed question. On the contrary, if necessary, every word is reaffirmed. But within the last three months it has been learned that the cottage plan has been abandoned at Worcester. No inducement to the suppression of an opinion now remains, except the suspicion that, if our modern Solomons should disregard all other literature, and confine their observation to what has been published upon this subject alone, they would exclaim, sympathetically with their primal namesake, 'Of making many books there is no end.'

Yet no allusion to the subject would have here been made, had not been that within the last six months my opinion of it has

been requested in quarters worthy of respectful attention, but at times when my occupations precluded the possibility of a full response.

Of the two paramount objections to the hospital of numerous and dispersed buildings, as in the Whittingham Asylum in Lancashire, England, which has recently been opened, and as in the plan formerly contemplated at Worcester, one has a special bearing upon the purses of the tax-payers; the other, upon the welfare of the patients, the cares and anxieties of the officers, and the efficiency of their administration.

The first is, *excess of cost*, as compared with that of the hospital as generally hitherto constructed. No detail of specification is necessary to demonstrate satisfactorily to the mind of any person who has even a limited knowledge of the subject, that the excess of original cost must be large. No man having a family of ten persons will, if influenced by pecuniary considerations, alone, erect ten dwellings for them rather than one. Where is the master builder who, contracting simply for the construction of house room for five hundred people, would ever dream of fulfilling that contract by the erection of twenty dwellings? At the Whittingham Asylum there are sixteen separate edifices. Now, to the excess of cost consequent upon the mere multiplication of buildings, must be added the *whole* expense of the long reaches of corridor by which they are connected. It appears to me that the estimate of fifty per cent excess of cost of an establishment so constructed, over that of the so-called "close" hospital, is not an exaggeration. At Worcester, the plan contemplated was almost identical with that at Whittingham, with the addition of independent cottages, more or less in number, at quite remote distances from the group linked together with corridors. Another important feature in that plan, as proposed by Dr. Bemis, was the enclosure of the farm, or a large part of it, by a high wall; this measure probably being believed essential for the prevention of the escape of patients enjoying the alleged larger liberty of the cottages. The cost of this wall must come within the category of excessive expenses of the plan.

The current expense of operation is the practical question next demanding consideration.

*

First; heating. By what method soever the numerous dis-severed buildings may be warmed, it is obvious that the expense must materially preponderate over that of warming a "close" hospital with accommodations for an equal number of patients. Most emphatically must this be true, if the connecting corridors are warmed; and if they be not warmed, either overcoats and shawls will be in brisk demand through the winter, or colds and rheumatism will not be scarce. Were the winter climate of England as severe as that of Massachusetts, and were the price of coal as high in Lancashire as in this State, we may rest assured that the Whittingham Asylum, as it now exists, would never have been created. Our father John, across the water, with all his profusion of benevolence, still so far keeps a wary eye upon the pennies as to secure the assurance that, when he distributes them, the benefit of their full value will return to some of his children.

Secondly; officers and employés. The additional labor caused by the dissemination of patients, in the cottage plan, is equivalent to the services of one or two additional officers, or the destruction of the health and the consequent breaking down of the officers, without such addition. The proportionate increase of employés must be considerably larger. The smaller average number of patients in a hall or ward; the distribution of food, if it be sent from a common kitchen, or the cooking of it, if it be prepared in numerous kitchens; and the traversing of the long corridors and other spaces by the almost constant intercommunication between the buildings; all indicate the absolute necessity of additional performers of the labor. Compact as is the Northampton hospital, the amount of walking, in attendance upon the calls of the friends of patients and upon general visitors, is enormous. What would it be if our distances were quadrupled, or octupled, or, in regard to some of them, stretched to half a mile? The attendants having the direct care of patients must be more numerous. In the two cottages for females now in operation at the Worcester hospital, the pay of the attendants is to-day equal to *three dollars seven cents and six mills*, monthly, for each patient. In the Northampton hospital, to-day, the similar attendance, including supervisors, in the women's department, is equal to *ninety-seven cents*

and four mills, monthly, per patient,—a difference of two hundred and fifteen per cent in favor of this hospital. This single item of excess of cost in the cottages is equal to twenty-three dollars and twenty-two cents annually for each patient; and to five thousand four hundred and ten dollars and twenty-six cents annually, for the number of female patients now in this hospital. Who is going to foot the bills, enhanced in various ways, and so much enhanced in but one of those ways? Even at the present cost, many town patients are removed from the hospitals, because of the expense, and placed in almshouses or other receptacles where they can be supported for a less amount.

The second objection alluded to above as of paramount importance, is really the graver of the two. It is the difficulty of surveillance by the superior officers, which is a necessary consequence of the independent dwellings and their distances from the offices. Money *can* overcome the pecuniary obstacle; but, with all its potency, it never can entirely remove the evil involved in the diminished facilities for frequent and often unexpected observation of every division of the establishment. To the conscientious superintendent whose heart is in his work, and who feels the magnitude of his responsibility, this defect must ever be an endless source of solicitude and of wearing anxiety. I speak the words of truth and soberness when I assert my belief, not only that no labor should be imposed upon the superintendent of an institution like that which was contemplated at Worcester, other than the simple duty of inspection; but that, how faithfully soever he might perform that duty, the institution would still be more defective, in this respect, than a "close" hospital, with the ordinary attention of the supervising officers. And should the superintendent's duty be thus restricted, his office would soon degenerate, in general estimation, to that of "keeper."

It is not proposed here to enter into a detail of the special methods by which the wholesome restraint of constant supervisory oversight may be avoided. They must be obvious to any one familiar with the working of a public institution. But this question may very pertinently be asked of whomsoever it may concern: At a time when, among the people, there is an

almost morbid sensitiveness in regard to the management of hospitals for the insane, and when, at the sources of most complaint, it has been acknowledged that the fault from which that sensitiveness and that complaint have sprung lies with the subordinates, and not with the principals of those institutions, — is it the part of wisdom so to enlarge the borders of those hospitals as greatly to weaken the disciplinary power of the superintendents by increasing the measure of independence in the subordinates?

“But,” suggests an opponent, “there is so much less restraint in the cottages.” Does that opponent remember that one of the essentials in the Worcester plan was a high wall circumscribing the farm, — a wall which must be a perpetual restraint to *all* the patients, so long as they are on the premises? It could only have been in view of the effectually restraining power of this wall, that the otherwise astounding proposition that two-thirds of the ordinary inmates of the hospital might properly be placed in cottages could have been advanced. At this Northampton hospital, “close” though it be, there is no such wall. The entrance gate is always open except upon the Sabbath. And along the boundary of a large part of the farm there is no obstacle to easy transit. Upon a foregoing page of this report, I have shown that, on the ninth of July last, there were ninety-six patients at work, out of the halls, and forty-six of them out of doors. Fifteen of the latter were alone, and probably two thirds of those who were with attendants were often, and might have been at that time, permitted to work alone. All of the men mentioned as working within doors had, and now have, unrestricted liberty of the premises. A considerable number who were not at work were equally untrammelled in their movements. There might have been, at the same time, as there often has been, not less than a hundred others distributed in groups, with their attendants, some of them sitting in the grove and others walking in various places upon the premises, to the distance of half a mile from the hospital. Candidly, now, would this hospital have been any more “close” under these circumstances, than that at Worcester, had it been constructed, with its limiting line of unscalable wall? Even on the supposition that there were no such wall, I perceive no suf-

ficient reason for the possibility of a larger liberty in one plan than in the other. A man who can have his freedom in a cottage can have it in a larger building.

In this connection, let us remember the fact, which appears to have been overlooked by or unknown to the advocates of the cottage plan, that in no inconsiderable number of cases, the very disciplinary restraint complained of is one of the most important, sometimes the most essential element in the means of effecting a cure.

"But," again interposes the opponent, "the cottages look so homelike." Granted. But cannot halls or wards be made to look homelike? and further, if a homelike appearance is the great restorative, why did not the inmates of the hospitals recover at their homes? Why, indeed, did they ever become insane? Why is there such a rush to the hospitals? Wherefore do these patients leave the very place of all places for homelike looks and seek a refuge where, according to some, so little of those looks is to be found? They who have had much observation of the insane very well know that, how homelike soever a cottage or a hall occupied by them may appear, the *family feeling* can exist there but rarely, and never to a material extent. As, in one direction, the insane never unite in cabals or conspiracies, so, in another, they never form chains of friendship. With very rare exceptions, the person of disordered mind, whether among few or many others, is always alone in heart and feeling.

In a hospital for from four hundred to five hundred patients, where it is impossible for the superintendent to devote that attention to each individual which is easily practicable in smaller institutions, the exercises in the chapel or recreation rooms, which are now considered as necessary adjuncts to every such establishment, become doubly important. The superintendent and other officers can there exert an influence compensatory for that which is lost in the manner just mentioned. The value of these exercises has never yet, in my opinion, been fully appreciated, even in the hospitals themselves, — much less among the people at large. But in the cottage plan all patients in buildings remote from those connected by corridors must be mostly debarred from a participation in those exercises, partic-

ularly at that season of the year in which they are of greatest utility. I consider this an objection of no trifling importance.

The argument in favor of cottages found in the removal of the quiet patients beyond the limits of the voices of the more noisy has some force; but the cottages must be at a very considerable distance to attain a greater exemption from that annoyance than is found in the third story of the Northampton hospital.

In discussions upon the merits of the different plans under consideration, I have heretofore expressed the opinion that, were the most intelligent of the patients here to be removed to cottages remotely situated upon the premises, they would soon desire to return. This opinion was ventured without, in a single instance, any previous questioning of the patients. But while I have been writing this part of my report, one attempt at an investigation of the truth of the basis of the opinion has been made. Going to the hall occupied by the most intelligent and quiet females, I found seven ladies sitting in the "bay." Six of them have received an education called "accomplished." Conversing with them upon other subjects, a suitable opportunity at length offered for the introduction of that now under consideration. Having described a hypothetical cottage erected upon these premises, and stated the whole matter with, as I believe, perfect fairness, I put the question to them, individually, whether they would choose to be removed to that cottage or to remain where they are. Each responded promptly. Five of them said they would choose to remain where they are; one said she would go to the cottage, and one said she "wouldn't choose either," — which was not an unreasonable reply.

A State hospital of twenty or twenty-five buildings *can* be made, and its farm, as was proposed at Worcester, *can* be surrounded by a wall so high as ordinarily to prevent escape, and when this is accomplished it *can* be conducted with a certain (or uncertain) degree of efficiency. Massachusetts is rich. A State that can walk erect through the Hoosac Tunnel need not stumble over an institution with a score of edifices, a half mile of corridors, and two miles of very expensive wall. But, for one, I think the people of the Commonwealth may be congratulated that the plan was relinquished at Worcester, and that

it is not advisable for them, through their representatives in legislature and boards of trustees, to adopt it in any future establishment of the kind. I very much fear that it would prove a failure.

It is not only conceded, but here maintained, that the trustees and the administrative officers of an institution are, or ought to be, the proper tribunal of judgment in a question of plan or design of new edifices for that institution. The proposition holds good, with double force, in its application to corporations. Those managers and officers can decide the question better than any man, or any other body of men, can decide it for them. They know their sources of income. They know the general character and habits of their customers. They know all the circumstances and conditions which can or should modify the decision, better than other persons can know them. Hence, for example, if a new establishment for the McLean Asylum were to be constructed, the directing and the executive officers of that asylum are the best judges of the design of that establishment. The patients who resort to that institution are mostly of the wealthier class. They are accustomed to the luxuries of life, in their various forms, and can pay for them. The institution is, in its own possessions, rich. *If, then, it can bear the strain* which must come not alone upon its purse, but upon its officers in their daily work, I can perceive no sufficient reason for the prevention of a trial there of the plan of dispersed dwellings. That asylum has already tried it to a small extent, with the "Appleton Wards," and the two more recent edifices for the most demonstrative class of patients. If the question of superiority of plans can be settled only by a practical test, the sooner it is so settled the better; and perhaps the McLean Asylum and its patrons can bear the burden of trying it as well as anybody.

Other correlative questions now present themselves.

If another State hospital be erected, what shall be its dimensions? In what section of the State shall it be placed? Shall it be intended, like the present hospitals, as a general receptacle, or shall it rather be specially adapted to a particular class or the insane?

The tendency to gigantic establishments, in consequence of

their comparative cheapness of both construction and operation, is everywhere almost irrepressible. Massachusetts furnishes no exception to the rule. Nevertheless, and even though it be done without the shadow of a hope that it will be of any avail, I shall not be deterred from reiterating my protest against them. No hospital should be so large as to render it an impossibility for the superintendent to know the history and the character of the disease of every patient, and that, too, without deficiency of all that other knowledge, and *with* the performance of all that other work which are essential to a vigorous, prudent and successful administration. He should be able, metaphorically speaking, to grasp the whole establishment and carry it "as within the hollow of his hand." As a general proposition, overgrown hospitals bear much the same relation to those of a proper size, that the Lancasterian School, with its five hundred or a thousand pupils, and its numerous monitors, bears to the smaller schools taught by from one to three or four persons. In both cases the larger institutions provide "the greatest good for the greatest number," and on the contrary, the smaller ones provide the greatest good attainable.

Neither as a matter of feeling and of taste would I advocate the principle of large hospitals. Such institutions require extensive buildings; and in the construction of these buildings the opportunity for ostentatious display is generally too tempting to be disregarded. Domes and towers and turrets are very appropriately situated, and may be very beautiful, upon the buildings of such institutions as the universities of Harvard and Yale; but far less so, in my view, when they stand as monuments over the misfortune and the miseries of men. I would make hospitals for the insane neat, tasteful, comfortable within; not gorgeous, imposing, pretentious without.

Were a system for the care and custody of the insane of Massachusetts now to be devised, I would recommend that it should consist of a series of small hospitals, designed for not more than two hundred and fifty patients each, and so situated in the several counties or quarters of the State, that some one of them should be easily accessible to every citizen. Whether they should be founded, owned and conducted by the State, or by the counties or districts respectively, is perhaps a matter of but

little importance. Under present circumstances the call for another hospital is upon the Commonwealth. If this call meets with a favorable response, and if it be decided that the institution shall be a general receptacle, the northeasterly section of the State, at some point readily reached from Boston, Lowell, Lawrence, Lynn and Salem, is unquestionably its appropriate situation.

But, in my opinion, the first and most pressing need is a hospital for insane convicts and the homicidal insane. After an elaborate discussion of this subject, the Secretary of the Board of State Charities, in his report for 1870-71, says:—

“A receptacle for insane convicts and for other insane persons, acquitted or not prosecuted on criminal charges for violent acts on the ground of insanity, or disposed to commit such acts, is required.”

In view of the exposition of the subject by the Secretary, it is unnecessary to say more, in this place, than that our other patients are annoyed and their lives imperilled by those who are proper subjects for the proposed hospital; and that it is impossible for us to make those subjects themselves so comfortable as they might be in an institution properly adapted to them.

We are indebted to the Hon. William B. Washburn, M. C. and the Hon. Alvah Crocker, M. C., for several volumes of Public Documents of the United States; to the Hon. Samuel F. Lyman, William B. Hale, Esq., and the “Book Club,” in Northampton, for magazines and other periodical publications; to the publisher of “Old and New,” for a copy of each of its issues; and to a young gentleman, formerly a patient here, for fifty dollars, in money, which will be devoted to the purchase of chromo-lithographic pictures, as substitutes for the engravings upon the walls of the hall of which he was an occupant.

The corps of officers remains the same as at the beginning of the year. Among the subordinate officers two changes have occurred,—the former seamstress, after faithful service, having gone “to the West,” and the former laundress having taken the situation of attendant. You are already aware, and hence need not be told, of the industry and regard for the interests of the institution manifested by all the heads of departments in

the establishment. With a salutation of thanks, and a desire sympathetic with your own for the future welfare of the hospital, this Report is respectfully submitted.

PLINY EARLE, *Superintendent.*

NORTHAMPTON, October 12, 1872.

APPENDIX.

TABLE No. 1.—1871-72.—*Admissions.**

| MONTHS. | BY COMMITMENT. | | | FROM OTHER STATE HOSPITALS. | | | TOTALS. | | |
|-----------------------|----------------|----------|---------|--------------------------------|----------|---------|---------|----------|---------|
| | Males. | Females. | Totals. | Males. | Females. | Totals. | Males. | Females. | Totals. |
| October, 1871, . . . | 5 | 2 | 7 | - | - | - | 5 | 2 | 7 |
| November, . . . | 6 | 3 | 9 | - | 7 | 7 | 6 | 10 | 16 |
| December, . . . | 7 | 4 | 11 | - | - | - | 7 | 4 | 11 |
| January, 1872, . . . | 5 | 1 | 6 | 4 | 4 | 8 | 9 | 5 | 14 |
| February, . . . | 9 | 6 | 15 | 6 | 6 | 12 | 15 | 12 | 27 |
| March, . . . | 6 | 5 | 11 | - | - | - | 6 | 5 | 11 |
| April, . . . | 1 | 5 | 6 | 5 | 6 | 11 | 6 | 11 | 17 |
| May, . . . | 6 | 3 | 9 | 8 | 10 | 18 | 14 | 13 | 27 |
| June, . . . | 5 | 5 | 10 | - | - | - | 5 | 5 | 10 |
| July, . . . | 6 | 6 | 12 | 12 | 12 | 24 | 18 | 18 | 36 |
| August, . . . | 6 | 10 | 16 | - | - | - | 6 | 10 | 16 |
| September, . . . | 4 | 3 | 7 | - | - | - | 4 | 3 | 7 |
| Totals of Patients, . | 66 | 53 | 119 | 35 | 45 | 80 | 101 | 98 | 199 |

* The number of admissions was 199; but the number of *persons* admitted was but 195. All the following tables, except the first, which relate to admissions, give only the number of *persons*.

TABLE No. 2. — 1871-72. — *Discharges.*

| MONTHS. | [DIRECT.] | | | Removed by B'd State Charities. | | | TOTALS. | | |
|--------------------------|-----------|----------|---------|------------------------------------|----------|---------|---------|----------|---------|
| | Males. | Females. | Totals. | Males. | Females. | Totals. | Males. | Females. | Totals. |
| October, 1871, | 6 | 4 | 10 | - | - | - | 6 | 4 | 10 |
| November, | 3 | 7 | 10 | - | - | - | 3 | 7 | 10 |
| December, | 9 | 3 | 12 | - | 6 | 6 | 9 | 9 | 18 |
| January, 1872, | 9 | 5 | 14 | - | - | - | 9 | 5 | 14 |
| February, | 4 | 4 | 8 | 3 | 1 | 4 | 7 | 5 | 12 |
| March, | 4 | 5 | 9 | 3 | - | 3 | 7 | 5 | 12 |
| April, | 4 | - | 4 | 8 | 7 | 15 | 12 | 7 | 19 |
| May, | 4 | 3 | 7 | 3 | 1 | 4 | 7 | 4 | 11 |
| June, | 10 | 3 | 13 | 1 | 13 | 14 | 11 | 16 | 27 |
| July, | 6 | 6 | 12 | - | - | - | 6 | 6 | 12 |
| August, | 10 | 7 | 17 | 2 | 7 | 9 | 12 | 14 | 26 |
| September, | 6 | 5 | 14 | 1 | 2 | 1 | 10 | 5 | 15 |
| Totals, | 78 | 52 | 130 | 21 | 21 | 56 | 99 | 87 | 186 |

TABLE No. 3. — 1871-72. — *Daily Average Number of Patients in the Hospital.*

| MONTHS. | Males. | Females. | Totals. |
|-----------------------------|--------|----------|---------|
| October, 1871, | 196.51 | 220.58 | 417.09 |
| November, | 199.76 | 222.43 | 422.20 |
| December, | 199.00 | 220.58 | 419.58 |
| January, 1872, | 197.35 | 219.32 | 416.67 |
| February, | 201.31 | 222.31 | 423.62 |
| March, | 205.61 | 223.87 | 429.48 |
| April, | 198.60 | 223.33 | 421.93 |
| May, | 196.64 | 231.03 | 427.67 |
| June, | 204.93 | 232.60 | 437.53 |
| July, | 206.65 | 231.38 | 438.03 |
| August, | 210.52 | 241.35 | 451.87 |
| September, | 204.23 | 234.60 | 438.83 |
| Average for the year, . . . | 201.76 | 226.96 | 428.72 |

TABLE NO. 4. — 1871-72. — *Nativity of the Patients Admitted.*

| NATIVITY. | Males. | Females. | Totals. |
|-----------------------------|--------|----------|---------|
| Maine, | 1 | 4 | 5 |
| New Hampshire, | 2 | 5 | 7 |
| Vermont, | 1 | 3 | 4 |
| Massachusetts, | 34 | 27 | 61 |
| Rhode Island, | 1 | — | 1 |
| Connecticut, | 4 | 2 | 6 |
| New York, | 3 | 3 | 6 |
| Ohio, | 1 | — | 1 |
| North Carolina, | 1 | — | 1 |
| Alabama, | 1 | — | 1 |
| Americans, | 49 | 44 | 93 |
| Canada, | 2 | 2 | 4 |
| Nova Scotia, | 2 | 1 | 3 |
| New Brunswick, | 1 | 1 | 2 |
| England, | 4 | 8 | 12 |
| Ireland, | 30 | 41 | 71 |
| Scotland, | 2 | — | 2 |
| Germany, | 4 | — | 4 |
| Prussia, | 1 | — | 1 |
| Hungary, | 1 | — | 1 |
| Foreigners, | 47 | 53 | 100 |
| Americans, | 49 | 44 | 93 |
| At sea, | — | 1 | 1 |
| Unknown, | 1 | — | 1 |
| Total of Persons, | 97 | 98 | 195 |

TABLE No. 5.—1871-72.—*Residence of the Patients Admitted.*

| COUNTIES AND STATES. | Males. | Females. | Total. |
|-----------------------------|--------|----------|--------|
| Hampshire, | 7 | 11 | 18 |
| Hampden, | 26 | 16 | 42 |
| Berkshire, | 11 | 11 | 22 |
| Franklin, | 12 | 7 | 19 |
| Worcester, | 6 | 6 | 12 |
| Middlesex, | 7 | 14 | 21 |
| Suffolk, | 21 | 19 | 40 |
| Norfolk, | 1 | 2 | 3 |
| Essex, | 2 | 7 | 9 |
| Bristol, | 2 | 4 | 6 |
| Barnstable, | 1 | 1 | 2 |
| New York, | 1 | — | 1 |
| Total of Persons, | 97 | 98 | 195 |

TABLE No. 6. — 1871-72. — *By what Authorities Committed.*

| WHEN FIRST ADMITTED. | Males. | Females. | Total. |
|---|--------|----------|--------|
| Committed by Probate Court, | 36 | 24 | 60 |
| by Overseers of the Poor, | 2 | 4 | 6 |
| by Board of State Charities, | 37 | 47 | 84 |
| by Supreme Judicial Court, | 1 | — | 1 |
| by Friends, | 21 | 23 | 44 |
| Total of Persons, | 97 | 98 | 195 |
| <i>Of the four Persons re-admitted.</i> | | | |
| Committed by Overseers of the Poor, | 1 | — | 1 |
| by Friends, | 3 | — | 3 |
| Total of Admissions, | 101 | 98 | 199 |

TABLE NO. 7.—1871-72.—*Ages of the Patients Admitted.*

| AGES. | | | | | | Males. | Females. | Total. |
|----------------------|---|---|---|---|---|--------|----------|--------|
| 15 years and under, | . | . | . | . | . | 1 | — | 1 |
| From 15 to 20 years, | . | . | . | . | . | 2 | 6 | 8 |
| 20 to 25 years, | . | . | . | . | . | 18 | 11 | 29 |
| 25 to 30 years, | . | . | . | . | . | 18 | 11 | 29 |
| 30 to 35 years, | . | . | . | . | . | 13 | 23 | 36 |
| 35 to 40 years, | . | . | . | . | . | 10 | 12 | 22 |
| 40 to 50 years, | . | . | . | . | . | 18 | 21 | 39 |
| 50 to 60 years, | . | . | . | . | . | 7 | 8 | 15 |
| 60 to 70 years, | . | . | . | . | . | 5 | 5 | 10 |
| 70 to 80 years, | . | . | . | . | . | 2 | — | 2 |
| Unknown, | . | . | . | . | . | 3 | 1 | 4 |
| Total of Persons, | . | . | . | . | . | 97 | 98 | 195 |

TABLE NO. 8.—1871-72.—*Civil Condition of the Patients Admitted.*

| CONDITION. | | | | | | Males. | Females. | Total. |
|-------------------|---|---|---|---|---|--------|----------|--------|
| Married, | . | . | . | . | . | 41 | 42 | 83 |
| Single, | . | . | . | . | . | 48 | 49 | 97 |
| Widowers, | . | . | . | . | . | 3 | — | 3 |
| Widows, | . | . | . | . | . | — | 7 | 7 |
| Unknown, | . | . | . | . | . | 5 | — | 5 |
| Total of Persons, | . | . | . | . | . | 97 | 98 | 195 |

TABLE NO. 9.—1871-72.—*Occupations of the Men Admitted.*

| | | | |
|--------------------------|----|-----------------------------|----|
| Laborers, | 27 | Varnisher, | 1 |
| Farmers, | 12 | Locksmith, | 1 |
| Clerks, | 6 | Moulder, | 1 |
| Operatives, | 5 | Teacher, | 1 |
| Vagrants, | 4 | Miner, | 1 |
| Masons, | 4 | Clergyman, | 1 |
| Teamsters, | 3 | Peddler, | 1 |
| Stone Masons, | 3 | Convict, | 1 |
| Tinners, | 2 | Pattern Maker, | 1 |
| Machinists, | 2 | Musician, | 1 |
| Carpenters, | 2 | Saloon Keeper, | 1 |
| Painters, | 2 | Brakeman, | 1 |
| Baker, | 1 | Hotel Keeper, | 1 |
| Mechanic, | 1 | Engineer, | 1 |
| Cigar Maker, | 1 | Tailor, | 1 |
| Shoemaker, | 1 | No occupation, | 3 |
| Undertaker, | 1 | Unknown, | 1 |
| Switch Tender, | 1 | Total of Persons, | 97 |

TABLE NO. 10.—1871-72.—*Alleged Causes of Insanity of the Patients Admitted.*

| CAUSES. | Males. | Females. | Totals. |
|-------------------------------------|--------|----------|---------|
| <i>Mental.</i> | | | |
| Loss of property, | 1 | — | 1 |
| Hard study, | — | 1 | 1 |
| Mental labor, | 1 | — | 1 |
| Grief, | — | 1 | 1 |
| Spiritualism, | — | 1 | 1 |
| Religious excitement, | — | 2 | 2 |
| Loss of friends, | — | 2 | 2 |
| Disappointment, | — | 3 | 3 |
| "Love affair," | 2 | 3 | 5 |
| Business reverses, | 6 | — | 6 |
| Domestic trouble, | 2 | 4 | 6 |
| Total of mental causes, | 12 | 17 | 29 |
| <i>Physical.</i> | | | |
| Paralysis, | 1 | — | 1 |
| Syphilis, | 1 | — | 1 |
| Injuries, | 1 | — | 1 |
| Old age, | 1 | — | 1 |
| Typhoid fever, | — | 1 | 1 |
| Neuralgia, | — | 1 | 1 |
| Opium eating, | 2 | — | 2 |
| Sunstroke, | 3 | — | 3 |
| Injury of head, | 3 | — | 3 |
| Change of life, | — | 4 | 4 |
| Puerperal, | — | 7 | 7 |
| Masturbation, | 10 | — | 10 |
| Overwork, | 3 | 8 | 11 |
| Epilepsy, | 5 | 7 | 12 |
| Intemperance, | 20 | 1 | 21 |
| Ill health, | 9 | 19 | 28 |
| Total of physical causes, | 59 | 48 | 107 |
| of mental causes, | 12 | 17 | 29 |
| Unknown, | 26 | 33 | 59 |
| Total of persons, | 97 | 98 | 195 |

TABLE NO. 11.—1871-72.—*Duration of the Disease before Admission.*

| DURATION. | Males. | Females. | Total. |
|-------------------------------|--------|----------|--------|
| Under 1 month, | 21 | 12 | 33 |
| From 1 to 3 months, | 11 | 16 | 27 |
| 3 to 6 months, | 14 | 11 | 25 |
| 6 to 12 months, | 13 | 16 | 29 |
| 1 to 2 years, | 7 | 11 | 18 |
| 2 to 5 years, | 8 | 11 | 19 |
| 5 to 10 years, | 4 | 5 | 9 |
| 10 to 20 years, | 4 | 4 | 8 |
| Congenital, | — | 1 | 1 |
| Unknown, | 15 | 11 | 26 |
| Total of Persons, | 97 | 98 | 195 |

TABLE NO. 12.—1871-72.—*Age at first Attack of Insanity.*

| AGES. | Males. | Females. | Total. |
|--------------------------------|--------|----------|--------|
| 15 years and under, | 3 | 1 | 4 |
| From 15 to 20 years, | 4 | 6 | 10 |
| 20 to 25 years, | 13 | 15 | 28 |
| 25 to 30 years, | 17 | 10 | 27 |
| 30 to 35 years, | 9 | 11 | 20 |
| 35 to 40 years, | 9 | 8 | 17 |
| 40 to 50 years, | 10 | 14 | 24 |
| 50 to 60 years, | 5 | 3 | 8 |
| 60 to 70 years, | 3 | 1 | 4 |
| Unknown, | 24 | 29 | 53 |
| Total of Persons, | 97 | 98 | 195 |

TABLE NO. 13.—1871-72.—*Status of the Patients Admitted.*

| HOW SUPPORTED. | Males. | Females. | Total. |
|---|--------|----------|--------|
| <i>As First Admitted.</i> | | | |
| Supported by State, | 57 | 61 | 118 |
| Supported by Towns and Cities, | 17 | 12 | 29 |
| Supported by Individuals, | 23 | 25 | 48 |
| Total of Persons, | 97 | 98 | 195 |
| <i>Of four of the same Persons re-admitted.</i> | | | |
| Supported by Town, | 1 | — | 1 |
| Supported by Individuals, | 3 | — | 3 |
| Total of Admissions within the year, | 101 | 98 | 199 |
| <i>Of the same Patients, as at present, or when discharged.</i> | | | |
| Supported by State, | 57 | 59 | 116 |
| Supported by Town, | 17 | 15 | 32 |
| Supported by Individuals, | 23 | 24 | 47 |
| Total of persons, | 97 | 98 | 195 |
| <i>Of the four Patients re-admitted.</i> | | | |
| Supported by Town, | 1 | — | 1 |
| Supported by Individuals, | 3 | — | 3 |
| Total of Admissions within the year, | 101 | 98 | 199 |

TABLE No. 14.—1871-72.—Deaths.

| CAUSES OF DEATH. | Males. | Females. | Total. |
|--|--------|----------|--------|
| <i>Nervous System.</i> | | | |
| Epilepsy, | 3 | 2 | 5 |
| Apoplexy, | 2 | 2 | 4 |
| Paresis, | 4 | 1 | 5 |
| Paralysis, | 1 | 1 | 2 |
| Typhomania, | 1 | 2 | 3 |
| Exhaustion of Acute Mania, | — | 1 | 1 |
| Spinal Meningitis, | 1 | — | 1 |
| <i>Respiratory.</i> | | | |
| Phthisis, | 4 | 3 | 7 |
| <i>Digestive.</i> | | | |
| Dysentery, | — | 1 | 1 |
| <i>General.</i> | | | |
| Marasmus, | 2 | — | 2 |
| Exhaustion of Chronic Mania, | — | 2 | 2 |
| Old Age, | — | 1 | 1 |
| <i>Accidental.</i> | | | |
| Suicide, | — | 1 | 1 |
| Injuries, | 1 | 1 | 2 |
| Total, | 19 | 18 | 37 |

TABLE NO. 15.—1871-72.—*Number and Status of Patients at the close of each Week in the Year.*

| DATE. | State. | Town. | Private. | Total. | DATE. | State. | Town. | Private. | Total. |
|--------------|--------|-------|----------|--------|--------------|--------|-------|----------|--------|
| 1871. | | | | | 1872. | | | | |
| Oct. 7, | 214 | 88 | 117 | 419 | Apr. 6, | 230 | 90 | 110 | 430 |
| 14, | 214 | 86 | 118 | 418 | 13, | 219 | 91 | 100 | 419 |
| 21, | 212 | 86 | 116 | 414 | 20, | 217 | 91 | 109 | 417 |
| 28, | 213 | 87 | 116 | 416 | 27, | 216 | 91 | 110 | 417 |
| Nov. 4, | 213 | 88 | 116 | 417 | May 4, | 226 | 91 | 110 | 427 |
| 11, | 213 | 88 | 118 | 419 | 11, | 221 | 91 | 109 | 421 |
| 18, | 220 | 90 | 117 | 427 | 18, | 227 | 92 | 109 | 428 |
| 25, | 220 | 89 | 116 | 425 | 25, | 227 | 93 | 110 | 430 |
| Dec. 2, | 218 | 88 | 116 | 422 | June 1, | 235 | 93 | 112 | 440 |
| 9, | 217 | 90 | 113 | 420 | 8, | 236 | 92 | 114 | 442 |
| 16, | 218 | 89 | 114 | 421 | 15, | 234 | 91 | 111 | 436 |
| 23, | 212 | 89 | 115 | 416 | 22, | 234 | 91 | 112 | 437 |
| 30, | 212 | 88 | 116 | 416 | 29, | 223 | 91 | 113 | 427 |
| 1872. | | | | | July 6, | 224 | 91 | 113 | 428 |
| Jan. 6, | 213 | 88 | 111 | 412 | 13, | 230 | 92 | 113 | 435 |
| 13, | 220 | 88 | 112 | 420 | 20, | 237 | 93 | 111 | 441 |
| 20, | 220 | 88 | 112 | 420 | 27, | 248 | 93 | 111 | 452 |
| 27, | 222 | 85 | 108 | 415 | Aug. 3, | 247 | 94 | 114 | 455 |
| Feb. 3, | 222 | 85 | 109 | 416 | 10, | 247 | 93 | 115 | 455 |
| 10, | 224 | 84 | 108 | 416 | 17, | 247 | 93 | 113 | 453 |
| 17, | 237 | 85 | 108 | 430 | 24, | 246 | 93 | 110 | 449 |
| 24, | 234 | 85 | 112 | 431 | 31, | 236 | 94 | 111 | 441 |
| Mar. 2, | 234 | 85 | 111 | 430 | Sept. 7, | 235 | 94 | 111 | 440 |
| 9, | 234 | 85 | 110 | 429 | 14, | 235 | 94 | 110 | 439 |
| 16, | 233 | 84 | 111 | 428 | 21, | 234 | 94 | 111 | 439 |
| 23, | 234 | 84 | 113 | 431 | 28, | 234 | 94 | 107 | 435 |
| 30, | 234 | 86 | 110 | 430 | | | | | |

TABLE NO. 16.—1871-72.—*List of Articles made in Sewing-Room.*

| | | | |
|------------------------------|-----|---------------------------------|--------|
| Dresses, | 251 | Pillow Cases, | 398 |
| Chemises, | 260 | Bed Spreads hemmed, | 90 |
| Shirts, | 53 | Pillow Ticks, | 47 |
| Aprons, | 137 | Mattress Ticks, | 43 |
| Nightgowns, | 24 | Straw Ticks, | 16 |
| Sacks, | 25 | Table Cloths, | 14 |
| Waists, | 11 | Napkins, | 6 |
| Drawers, | 39 | Towels, | 298 |
| Caps, | 18 | Rollers, | 67 |
| Collars, | 155 | Curtains, | 41 |
| Hats trimmed, | 36 | Camisoles, | 49 |
| Bonnets trimmed, | 36 | Camisole Suits, | 7 |
| Shirts, | 242 | Clothes Bags, | 18 |
| Suspenders, pairs, | 108 | Under Vests, | 8 |
| Kerchiefs, | 70 | Pieces Carpet hemmed, | 14 |
| Carpets, | 24 | Sundries, | 29 |
| Sheets, | 558 | Articles repaired, | 17,533 |

TABLE NO. 17.—1871-72.—*Monthly Consumption of Gas.*

| MONTHS. | | | | | | Cubic Feet. | Daily Average. |
|--------------------------|--|--|--|--|--|-------------|----------------|
| 1871, October, | | | | | | 29,600 | 954.83 |
| November, | | | | | | 36,850 | 1,228.33 |
| December, | | | | | | 42,350 | 1,336.12 |
| 1872, January, | | | | | | 38,450 | 1,240.32 |
| February, | | | | | | 31,250 | 1,077.58 |
| March, | | | | | | 25,000 | 806.45 |
| April, | | | | | | 17,000 | 566.66 |
| May, | | | | | | 12,550 | 404.83 |
| June, | | | | | | 9,550 | 318.33 |
| July, | | | | | | 10,050 | 324.19 |
| August, | | | | | | 13,050 | 420.96 |
| September, | | | | | | 19,750 | 658.33 |
| Total, | | | | | | 285,450 | 779.91* |

* Daily average for the year.

TABLE No. 18.
Supplies for the several Departments for the year 1871-72.

| | Sheets. | Pillow Cases. | Bed Spreads. | Blankets. | Bed Ticks. | Pillow Ticks. | Towels. | Curtains. | Wash Bowls. | Bwers. | Chambers. | Mirrors. | Hair Brushes. | Carpet Strips. | Plates. | Cups. | Saucers. | Tumblers. | Mugs. | Bowls. | Pitchers. | Sirup Cups. | Castors. | Knives. | Forks. |
|----------------------------|---------|---------------|--------------|-----------|------------|---------------|---------|-----------|-------------|--------|-----------|----------|---------------|----------------|---------|-------|----------|-----------|-------|--------|-----------|-------------|----------|---------|--------|
| <i>Men's Department.</i> | | | | | | | | | | | | | | | | | | | | | | | | | |
| Upper 1st Hall, . . | 18 | 6 | 6 | 4 | 3 | - | 24 | - | 1 | 4 | 3 | 1 | - | 10 | - | 6 | 6 | 16 | - | 3 | 2 | - | - | - | - |
| 2d Hall, . . | 24 | 24 | 12 | 9 | 2 | 2 | 12 | 5 | - | - | 11 | - | - | - | 12 | 4 | 8 | 28 | 4 | 2 | 2 | - | - | 4 | 4 |
| 3d and 4th Halls, | 28 | 28 | 18 | - | 4 | 8 | 6 | - | - | - | 38 | - | 1 | 1 | - | - | 18 | 6 | 6 | 6 | - | - | 1 | 4 | - |
| Middle 1st Hall, . . | 28 | 26 | - | 6 | 3 | - | 16 | - | - | - | 9 | - | - | - | - | - | 14 | 1 | - | 1 | 1 | - | 1 | 3 | - |
| 2d Hall, . . | 16 | 16 | 18 | 4 | 2 | 2 | 6 | - | - | - | 25 | - | - | - | - | - | 13 | - | 6 | 6 | 3 | - | - | - | - |
| 3d and 4th Halls, | 30 | 24 | - | 23 | 3 | 3 | 5 | - | - | - | 42 | 2 | 2 | - | 8 | - | 34 | - | 8 | 1 | - | - | - | - | - |
| Lower 1st Hall, . . | 34 | 36 | 12 | - | 2 | 1 | 8 | - | - | - | 4 | - | 1 | - | 13 | - | 6 | 1 | 9 | 2 | - | - | 2 | 6 | 6 |
| 2d Hall, | 38 | 26 | - | 8 | 3 | 4 | 6 | - | - | - | 27 | - | 4 | - | 10 | - | - | - | - | - | 3 | - | - | - | - |
| 3d and 4th Halls, | 14 | 26 | 6 | 33 | 3 | 4 | 4 | - | - | - | 29 | 2 | - | - | 11 | - | - | - | - | 6 | - | - | - | - | - |
| <i>Women's Department.</i> | | | | | | | | | | | | | | | | | | | | | | | | | |
| Upper 1st Hall, . . | 8 | 44 | 2 | - | - | - | 49 | - | - | 1 | 6 | - | - | - | 21 | 12 | 24 | 42 | - | 3 | 3 | - | - | 8 | - |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-----|-----|-----|-----|----|----|-----|----|---|----|-----|----|---|----|-----|----|-----|-----|----|----|----|---|----|----|----|
| Upper 2d Hall, . . . | 12 | 24 | 8 | 1 | 2 | - | 36 | 7 | 1 | 2 | 6 | 1 | - | 9 | 18 | 6 | 24 | 48 | - | 2 | - | - | - | 4 | 6 |
| 3d Hall, . . . | 36 | 36 | 24 | - | - | 2 | 20 | 2 | - | - | 24 | 2 | - | - | - | - | - | - | - | 2 | 2 | - | 1 | - | - |
| 4th Hall, . . . | 10 | 9 | 6 | - | - | 3 | 16 | 4 | 2 | 2 | 6 | 1 | - | 3 | 24 | 6 | 12 | 6 | - | 6 | 3 | - | - | - | - |
| Middle 1st Hall, . . | 52 | 50 | 8 | 2 | 8 | - | 14 | - | 1 | 1 | 6 | - | - | 1 | 18 | 18 | 18 | 24 | - | 4 | 1 | - | - | - | - |
| 2d Hall, . . . | 24 | 36 | 6 | 7 | - | 7 | 6 | 2 | - | - | 30 | - | - | - | - | - | 6 | - | 12 | 7 | 3 | - | 1 | - | - |
| 3d Hall, . . . | 36 | 24 | - | 12 | 6 | 1 | - | - | - | - | 16 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4th Hall, . . . | 24 | 8 | - | 9 | - | 3 | 3 | - | - | - | 6 | 1 | - | - | - | - | 6 | 4 | 3 | 3 | - | - | - | - | - |
| Lower 1st Hall, . . | 36 | 39 | 2 | - | 10 | - | - | - | - | - | - | - | - | - | - | - | - | - | 3 | 3 | 2 | 1 | - | - | - |
| 2d Hall, . . . | 48 | 36 | - | 2 | - | - | 6 | 2 | - | - | 24 | - | - | - | - | - | - | 6 | 1 | - | - | - | - | - | - |
| 3d Hall, . . . | 36 | 28 | 6 | 7 | 9 | - | 8 | - | 1 | 1 | 36 | - | - | - | 14 | - | - | 6 | 1 | - | 1 | - | 6 | 6 | 6 |
| 4th Hall, . . . | - | 12 | 6 | 4 | - | - | 10 | - | - | - | 12 | - | - | - | 18 | - | 6 | - | 7 | 2 | 2 | - | - | - | - |
| Kitchen, . . . | - | - | - | - | - | - | 4 | 2 | - | - | - | - | - | - | 105 | 24 | 24 | 24 | - | 31 | 3 | - | 7 | 6 | 18 |
| Rear, . . . | 22 | 42 | 4 | - | 1 | - | 40 | 7 | 3 | 2 | 5 | 2 | - | 4 | - | - | - | 1 | - | - | 4 | - | - | - | - |
| Centre, . . . | 14 | 21 | 1 | - | - | - | 6 | - | - | - | 1 | - | - | 11 | 156 | - | - | 6 | 3 | - | 1 | - | - | - | - |
| Aggregate, . . . | 588 | 623 | 145 | 131 | 61 | 40 | 305 | 31 | 9 | 13 | 366 | 12 | 8 | 39 | 428 | 76 | 189 | 219 | 63 | 81 | 36 | 1 | 13 | 41 | 40 |

Trustees of the Northampton Lunatic Hospital.

| NAME. | Residence. | When app't'd. | 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 | - | Still in office. |
| 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 Laflin, . . . | 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 | - | Still in office. |
| Silas M. Smith, . . | Northampton, . | 1864 | - | do. do. |
| Edmund H. Sawyer, . | Easthampton, . | 1864 | - | do. do. |
| Henry L. Sabin, . . | Williamstown, . | 1866 | - | do. do. |

Number of Persons, other than Officers, employed in the Regular Duties of the Hospital.

| OCCUPATIONS. | Male. | Female. | Total. |
|---------------------------------------|-------|---------|--------|
| Supervisors, | 1 | 1 | 2 |
| Assistant Supervisor, | — | 1 | 1 |
| Assistant Clerk, | — | 1 | 1 |
| Seamstress, | — | 1 | 1 |
| Laundress, | — | 1 | 1 |
| Assistant Laundress, | — | 1 | 1 |
| Baker, | 1 | — | 1 |
| Steward, | 1 | — | 1 |
| General Attendants, | 10 | 12 | 22 |
| Housework, centre building, | — | 2 | 2 |
| Cook, | — | 1 | 1 |
| Assistant Cooks, | 1 | 4 | 5 |
| Watchman, | 1 | — | 1 |
| Carpenters, | 3* | — | 3 |
| Painter, | 1 | — | 1 |
| Assistant Engineer, | 1 | — | 1 |
| Hostler, | 1 | — | 1 |
| Farmers, | 5† | — | 5 |
| Total, | 26 | 25 | 51 |

* Usually but two.

† In winter only three.

SUPPLEMENT.

This compendium of the numerical medical records of the Northampton Lunatic Hospital is the first work of its kind ever published in Massachusetts. Its principal object is, to place the statistics of the institution in such form as to render them more valuable than they hitherto have been, as elements in the solution of problems in medical and social science. It is not extended to that minuteness of detail seen in some European works of a similar description, and hence does not pretend to be comparable with them. Such as it is, and for so much as it may be worth for the purposes mentioned, it is given to the public.

NORTHAMPTON, October 12, 1872.

STATISTICS
OF THE
STATE LUNATIC HOSPITAL,
AT NORTHAMPTON, MASS.,

TO SEPTEMBER 30, 1872.

BY PLINY EARLE, A. M., M. D., *Superintendent of the Hospital.*

FIRST DIVISION.

THE WHOLE NUMBER OF PATIENTS ADMITTED.

THE Northampton Lunatic Hospital, the third institution of the kind founded by, and belonging to, the Commonwealth of Massachusetts, went into operation in the summer of 1858. Although one female patient was admitted on the first of July, it appears that the hospital was not yet fully prepared for general occupation, as the next was not received until the third of August. Between that date and the fifteenth of the same month, three more entered from the general population, and on the sixteenth, fifty-one were received by transfer from the State hospital at Worcester, to which they had mostly been committed from the four westerly counties, Hampshire, Hampden, Franklin and Berkshire. On the seventh of September sixty-eight more, all of them State beneficiaries, and nearly all natives of Ireland, were transferred from the City Asylum at South Boston. On the twentieth of September a party of sixty-three, and on the thirtieth of the same month a party of twenty-eight, were transferred from the hospital at Worcester.

Meanwhile, eighteen patients, including the one received in July, had been admitted directly from the people, and eight had been discharged, leaving two hundred and twenty in the hospital. This was the close of the official year.

Thus in the short period of two months the building became occupied to the extent of more than five-sixths of its capacity,

as estimated by its designer, by a mass of chronic cases, how incurable will be shown upon subsequent pages. From that time to this the hospital has not only been a resort for persons coming directly from their homes, but a receptacle, and until within a few years, the only receptacle, for the overflow of the two other State hospitals at Worcester and Taunton, which are nearer the great centres of the population of the State. The extent to which it has subserved this purpose will be seen hereafter.

The first object of these investigations is to ascertain the material for analysis in the primary general statistics showing the movement of the population of the hospital.

TABLE NO. 1.

Admissions, Discharges, and Numbers resident at the end of Official Years.

| OFFICIAL YEARS. | Admitted. | | | Discharged. | | | Remaining at the end of Official Year. | | |
|--------------------|-----------|--------|--------|-------------|--------|--------|--|--------|--------|
| | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. |
| 1858 for 2 months, | 99 | 129 | 228 | 6 | 2 | 8 | 93 | 127 | 220 |
| 1858-1859, . . | 46 | 47 | 93 | 41 | 41 | 82 | 98 | 133 | 231 |
| 1859-1860, . . | 73 | 94 | 167 | 42 | 46 | 88 | 129 | 181 | 310 |
| 1860-1861, . . | 71 | 53 | 124 | 51 | 53 | 104 | 149 | 181 | 330 |
| 1861-1862, . . | 64 | 48 | 112 | 65 | 45 | 110 | 148 | 184 | 332 |
| 1862-1863, . . | 70 | 68 | 138 | 51 | 36 | 87 | 167 | 216 | 383 |
| 1863-1864, . . | 47 | 45 | 92 | 70 | 71 | 141 | 144 | 190 | 334 |
| 1864-1865, . . | 70 | 64 | 134 | 56 | 60 | 116 | 158 | 194 | 352 |
| 1865-1866, . . | 75 | 61 | 136 | 51 | 32 | 83 | 182 | 223 | 405 |
| 1866-1867, . . | 61 | 77 | 138 | 68 | 62 | 130 | 175 | 238 | 413 |
| 1867-1868, . . | 68 | 84 | 152 | 73 | 71 | 144 | 170 | 251 | 421 |
| 1868-1869, . . | 84 | 85 | 169 | 87 | 101 | 188 | 167 | 235 | 402 |
| 1869-1870, . . | 90 | 112 | 202 | 82 | 117 | 199 | 175 | 230 | 405 |
| Total, . . | 918 | 967 | 1,885 | 743 | 737 | 1,480 | - | - | - |

In the course of the period of twelve years and two months, the whole number of patients admitted was *one thousand eight hundred and eighty-five*. The annual numbers of admission to the close of the official year 1863-64 are quite irregular. This was caused in part by the civil war, and in part by the irregularity in transfers. Thus, in the year 1858-59, only two were brought from the other hospitals; and in the year 1860-61, and again in the year 1863-64, none. From the year last mentioned to the close of the year 1869-70, there is a constant increase of the number of annual admissions.

In the course of the whole period the number of discharges was *one thousand four hundred and eighty*. The numbers annually discharged are more irregular than those of admissions. This irregularity is attributable to both natural and incidental causes. During the last five years of the period, there is an unexceptional annual increase of patients discharged.

The number in the house at the close of the official year increased from 220, in 1858, to 405, in 1870. This increase was constant during the first five years. Then, in 1863-64, there were no transfers from other hospitals; the number of patients received from the general population was reduced by the still-existing war, and the hospital was in an unsettled condition caused by a change of superintendents. From that time there was an increase, until, in two years, the extreme proper capacity of the buildings (400) was reached. For the last six years of the period, the numbers are all above that point, but they fluctuate to some extent.

In this connection, perhaps, as suitably as anywhere, may be introduced a table showing the daily average number of patients resident for each year of the period.

TABLE No. 2.

Daily average Number of Patients resident in the Hospital.

| OFFICIAL YEARS. | Men. | Women. | Total. |
|-------------------------------|--------|--------|--------|
| 1858, for 2 months, | 45.78 | 39.75 | 85.54 |
| 1858-59, | 95.72 | 133.81 | 229.54 |
| 1859-60, | 113.78 | 142.20 | 255.99 |
| 1860-61, | 136.78 | 177.52 | 314.30 |
| 1861-62, | 137.99 | 173.26 | 311.26 |
| 1862-63, | 155.43 | 199.86 | 355.29 |
| 1863-64, | 157.10 | 200.55 | 357.65 |
| 1864-65, | 153.87 | 188.57 | 342.45 |
| 1865-66, | 167.12 | 209.37 | 376.50 |
| 1866-67, | 178.58 | 222.45 | 401.03 |
| 1867-68, | 171.40 | 241.99 | 413.40 |
| 1868-69, | 166.41 | 238.71 | 405.12 |
| 1869-70, | 169.97 | 238.86 | 408.83 |

The results as here exhibited were obtained by dividing the sum of the daily numbers for the year by the number of the days in the year, in each instance, respectively. As there are some differences, fractional only, with but one exception, between these results and those of a similar table in the annual report for 1865-66, it is proper to remark that, before this analysis was begun, a large amount of work was bestowed upon the record books of the hospital for the purpose of making them as nearly perfect as possible. The results here shown come from the books so perfected. The differences alluded to originated chiefly in the custom which prevailed of permitting patients to go home upon trial, and if they did not return, not following a uniform rule in regard to the date of discharge, whether on the day the patient left, or the day upon which intelligence was received that he would not return.

The deviations from regularity of increase, as here exhibited,

are necessary consequences of those shown in the foregoing table. Thus, the reduced daily average of the year 1864-65, is a result of the comparatively small number with which the year began, — the 334 remaining at the close of 1863-64. With but two exceptions, however, there was a progressive augmentation of average population until the hospital was full.

It is now proposed to show by what authorities the patients were committed to the hospital, as well as the numbers admitted by virtue of each of those authorities.

TABLE No. 3.

Numbers of Patients Committed by the several Authorities, respectively.

| AUTHORITIES. | Men. | Women. | Total. |
|--|------|--------|--------|
| Governor of the State, | 99 | 174 | 273 |
| Alien Commissioners, | 10 | 24 | 34 |
| Board of State Charities, | 81 | 156 | 237 |
| Supreme Judicial Court, | 2 | 3 | 5 |
| Superior Court, | 6 | 3 | 9 |
| Probate Court, | 285 | 261 | 546 |
| Grand Jury, | 1 | 0 | 1 |
| Court of Common Pleas, | 3 | 0 | 3 |
| Police Court, | 7 | 4 | 11 |
| Justice of the Peace and Quorum, | 5 | 14 | 19 |
| Justice of the Peace, | 8 | 2 | 10 |
| Overseers of Poor, | 32 | 31 | 63 |
| Friends, | 344 | 289 | 633 |
| Voluntary, | 33 | 4 | 37 |
| Elopers returned, | 1 | 1 | 2 |
| Not stated, | 1 | 1 | 2 |
| Total, | 918 | 967 | 1,885 |

By a special legislative act, the governor was authorized, when this hospital should be ready to receive them, to order the transfer to it of some of the patients then in the other hospitals. This explains the action of the executive as here recorded. The Board of Alien Commissioners had the power, and since that board was abolished, the Board of State Charities has had the power to transfer the inmates of one State charitable institution to another, at their discretion. Nearly all the patients sent to the hospital by these three authorities were brought from the other hospitals. A few came from the State almshouses.

Of all the other committals the largest number (633) were by the friends of the patients; the next largest by the courts of probate; and the next by the overseers of the poor of towns. For several years persons making application for admission, or freely consenting, upon the advise of their friends, to enter the hospital for treatment, were received without any of the regular forms prescribed by the statutes. Hence we find thirty-seven patients under the head "Voluntary." This practice no longer exists.

Of the 1885 patients admitted, it has already been shown, in the first table, that 175 men and 230 women, a total of 405, remained in the hospital at the close of the period; while 743 men and 747 women, a total of 1480, had been discharged. The fourth total indicates the condition of the patients upon discharge for each official year and for the whole period.

TABLE NO. 4.
Results of Treatment.

| | RECOVERED. | | | IMPROVED. | | | UNIMPROVED† | | | NOT INSANE. | | | ELOPED. | | | DIED. | | | TOTALS. | | |
|-----------------|------------|--------|--------|-----------|--------|--------|-------------|--------|--------|-------------|--------|--------|---------|--------|--------|-------|--------|--------|---------|--------|--------|
| | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. |
| 1858, 2 months, | . | . | . | 4 | 0 | 4 | 2 | 2 | 4 | - | - | - | - | - | - | - | - | - | 6 | 2 | 8 |
| 1858-59, . | 18 | 15 | 33 | 9 | 9 | 18 | 7 | 4 | 11 | - | - | - | 0 | 1 | 1 | 7 | 12 | 19 | 41 | 41 | 82 |
| 1859-60, . | 17 | 16 | 33 | 11 | 10 | 21 | 1 | 2 | 3 | - | - | - | 4 | 0 | 4 | 9 | 18 | 27 | 42 | 46 | 88 |
| 1860-61, . | 18 | 17 | 35 | 12 | 14 | 26 | 4 | 6 | 10 | - | - | - | 2 | 1 | 3 | 15 | 15 | 30 | 51 | 53 | 104 |
| 1861-62, . | 19 | 15 | 34 | 26 | 15 | 41 | 9 | 4 | 13 | 1 | 0 | 1 | 1 | 1 | 2 | 9 | 10 | 19 | 65 | 45 | 110 |
| 1862-63, . | 12 | 16 | 28 | 15 | 10 | 25 | 4 | 3 | 7 | - | - | - | 1 | 0 | 1 | 19 | 7 | 26 | 51 | 36 | 87 |
| 1863-64, . | 30 | 19 | 49 | 18 | 15 | 33 | 3 | 5 | 8 | 0 | 1 | 1 | 2 | 1 | 3 | 17 | 30 | 47 | 70 | 71 | 141 |
| 1864-65, . | 17 | 16 | 33 | 14 | 15 | 29 | 8 | 5 | 13 | - | - | - | - | - | - | 17 | 24 | 41 | 56 | 60 | 116 |
| 1865-66, . | 16 | 10 | 26 | 12 | 7 | 19 | 5 | 2 | 7 | - | - | - | - | - | - | 18 | 13 | 31 | 51 | 32 | 83 |
| 1866-67, . | 24 | 18 | 42 | 15 | 13 | 28 | 6 | 7 | 13 | - | - | - | - | - | - | 23 | 24 | 47 | 68 | 62 | 130 |
| 1867-68, . | 21 | 19 | 40 | 22 | 27 | 49 | 5 | 7 | 12 | - | - | - | - | - | - | 25 | 18 | 43 | 73 | 71 | 144 |
| 1868-69, . | 31 | 18 | 49 | 23 | 33 | 56 | 20 | 38 | 58 | - | - | - | - | - | - | 13 | 12 | 25 | 87 | 101 | 188 |
| 1869-70, . | 23 | 27 | 50 | 15 | 43 | 58 | 22 | 34 | 56 | 0 | 2 | 2 | - | - | - | 22 | 11 | 33 | 82 | 117 | 199 |
| Totals, . | 246 | 206 | 452 | 196 | 211 | 407 | 96 | 119 | 215 | 1 | 3 | 4 | 10 | 4 | 14 | 194 | 194 | 388 | 743 | 737 | 1480 |

Remembering the large number, chiefly of incurables, brought from the other hospitals when this was opened, and that similar transfers from the same sources continued, from time to time, throughout the twelve years, no one will expect a large proportion of cures. Of the 1,480 discharged, 452 are recorded as recovered. The ratios of recoveries will appear in the course of the analysis.

It may be remarked that, in excess of all those influences which tend to diminish the number of recoveries in nearly all institutions for the insane, this hospital, in common with the two other kindred State establishments of Massachusetts, is afflicted — in a scientific point of view — with another of no inconsiderable importance. This is the practice of the removal, often at an early period after admission, of those state beneficiaries who, upon immigration, landed in other States, and the responsibility for whose support consequently falls upon authorities within those States. In most of these cases the hospital has no reasonable opportunity of testing the curability of the patient; and in many of them, as soon as the dawn of convalescence promises complete restoration, the person is hurried away, and we are thus compelled to finish the record with "improved" instead of "recovered." So long as this practice — a perfectly legal and proper one — continues, so long will it be an impossibility nearly to approximate the truth in the problem of the curability of insanity in Massachusetts, unless all those cases are wholly expunged from the statistics.

The column of "Eloped" does not contain the whole number of those who escaped, but those alone whose mental condition, when they left, is not recorded.

Mortality. The ratio of deaths to the number discharged is as follows: —

Of 743 men discharged, 194 died, equal to 25.97 per cent.

Of 737 women discharged, 388 died, equal to 26.32 per cent.

Of 1,480 patients discharged, 194 died, equal to 26.21 per cent.

In order more fully and more properly to illustrate the mortality among the patients, the reader is referred to the fifth table, in which are shown, for each year, the percentage of deaths: first, upon the whole number of patients under treatment in the course of the year; and, secondly, upon the daily average number resident in the house.

TABLE No. 5.

Deaths.

| OFFICIAL YEARS. | DEATHS. | | | PER CENT OF ALL UNDER TREATMENT. | | | PER CENT OF DAILY AVERAGE NUMBER IN THE HOUSE. | | |
|----------------------------|---------|--------|--------|----------------------------------|--------|--------|--|--------|--------|
| | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. |
| 1858-59, . . | 7 | 12 | 19 | 5.03 | 6.89 | 6.07 | 7.31 | 8.96 | 8.27 |
| 1859-60, . . | 9 | 18 | 27 | 5.26 | 7.92 | 6.78 | 7.91 | 12.65 | 10.54 |
| 1860-61, . . | 15 | 15 | 30 | 7.50 | 6.41 | 6.91 | 10.96 | 8.45 | 9.54 |
| 1861-62, . . | 9 | 10 | 19 | 4.22 | 4.36 | 4.29 | 6.52 | 5.77 | 6.10 |
| 1862-63, . . | 19 | 7 | 26 | 8.71 | 2.77 | 5.53 | 12.22 | 3.50 | 7.31 |
| 1863-64, . . | 17 | 30 | 47 | 7.94 | 11.49 | 9.89 | 10.82 | 14.95 | 13.14 |
| 1864-65, . . | 17 | 24 | 41 | 7.94 | 9.44 | 8.76 | 11.04 | 12.72 | 11.97 |
| 1865-66, . . | 18 | 13 | 31 | 7.72 | 5.09 | 6.35 | 10.77 | 6.20 | 8.23 |
| 1866-67, . . | 23 | 24 | 47 | 9.46 | 8.00 | 8.65 | 12.87 | 10.78 | 11.71 |
| 1867-68, . . | 25 | 18 | 43 | 10.28 | 5.59 | 7.61 | 14.58 | 7.43 | 10.40 |
| 1868-69, . . | 13 | 12 | 25 | 5.11 | 3.57 | 4.23 | 7.81 | 5.02 | 6.17 |
| 1769-70, . . | 22 | 11 | 33 | 8.56 | 3.17 | 5.46 | 12.94 | 4.60 | 8.07 |
| Total, . . | 194 | 194 | 388 | - | - | - | - | - | - |
| Mean annual Mortality, . . | | | | 7.31 | 6.22 | 6.71 | 10.48 | 8.42 | 9.29 |

The practice of calculating the percentage of deaths upon the number of patients discharged, is deceptive, and for reasons obvious to any one who investigates the subject, utterly false as a means of illustrating the ratio of mortality as a scientific truth. It is introduced here because of the favorable opportunity of showing its falsity by actual demonstration.

As seen above, the ratio of deaths of women was larger than that of men by thirty five hundredths of one per cent, when compared with the number discharged. But the number of women patients has always exceeded that of men, as will be seen in that part of Table No. 1 which gives the numbers remaining at the close of each official year. At the end of the year 1869-70,

the excess of women was fifty-five, and the daily average number for that year was sixty-nine larger than that of men. Yet in the course of the whole period as many men as women died. By a noteworthy coincidence the numbers were equal in the two sexes.

By a consultation of the fifth table, it will be perceived that, when calculated upon *the number of patients under treatment*, the per cent of the mean annual mortality was 7.31 for men, and only 6.22 for women, a difference of more than one per cent in favor of the women, — if longevity be a favor. Furthermore, if the calculation be upon the daily average number of patients in the house, a method which, I believe, is admitted by the best statisticians to be the most accurate, the greater fatality of insanity in men than in women becomes still more evident. So calculated, the mean annual mortality was, for men, 10.48 per cent, while for women it was but 8.42 per cent, showing an excess of 2.06 per cent of men.

Therefore, assuming that these statistics are sufficient to form the basis of an estimate nearly approximating truth, if one thousand insane men and one thousand insane women were this day placed in a hospital, and whenever one of them should be discharged another should be instantly admitted, so that there would at all times be one thousand of each sex, and no more, then, at the end of six years from this day, the number of deaths among the men will exceed that among the women by one hundred and twenty-three. This large mortality of men is one of the primary causes of the almost universal predominance of the number of women in the hospitals.

The sixth table shows the sum of deaths in each of the calendar months during the twelve years.

TABLE NO. 6.

Monthly Mortality.

| | Men. | Women. | Total. |
|----------------------|------|--------|--------|
| October, | 15 | 25 | 40 |
| November, | 16 | 13 | 29 |
| December, | 15 | 22 | 37 |
| January, | 9 | 12 | 21 |
| February, | 15 | 9 | 24 |
| March, | 16 | 17 | 33 |
| April, | 21 | 15 | 36 |
| May, | 18 | 20 | 38 |
| June, | 16 | 17 | 33 |
| July, | 21 | 15 | 36 |
| August, | 22 | 18 | 40 |
| September, | 10 | 11 | 21 |
| Total, | 194 | 194 | 388 |

The largest number of deaths in any twelve corresponding months of the twelve years, is forty; and this is shown to have occurred in both August and October. The smallest number is twenty-one, which likewise occurred twice, — in January and September. August is one of the months in which “summer complaints,” diarrhœa and dysentery are particularly prevalent; but, as will appear hereafter, the mortality from these diseases was exceedingly small. The excess of deaths in that month is rather due to those debilitated patients who have not sufficient vitality to survive the prolonged depressing influence of a high temperature; while the similar predominance in October may be attributed to another portion of the same class who, although they have sustained the shock of summer, have done so at the loss of so much vital energy as to render them incapable of encountering that of winter.

If these sums be arranged in groups according to the seasons, or, what is essentially the same, the four calendar quarters of the year, the results are as follows:—

| QUARTERS. | DEATHS. | | |
|---|---------|--------|--------|
| | Men. | Women. | Total. |
| October, November and December, | 46 | 60 | 106 |
| January, February and March, | 40 | 38 | 78 |
| April, May and June, | 55 | 52 | 107 |
| July, August and September, | 53 | 44 | 97 |
| Total, | 194 | 194 | 388 |

The result shown by this table corresponds with that of common observation, namely: that more patients die in spring and autumn than in summer and winter.

The diseases resulting in death, with their numbers of victims, respectively, appear in the seventh table.

TABLE NO. 7.

Causes of Death of 388 Persons.

| CAUSES. | Men. | Women. | Total. |
|------------------------------------|------|--------|--------|
| <i>Diseases of Nervous System.</i> | | | |
| Maniacal Exhaustion, | 7 | 10 | 17 |
| "Exhaustion," | 10 | 5 | 15 |
| Typhomania, | 3 | 7 | 10 |
| Meningitis, | — | 1 | 1 |
| Softening of the Brain, | 2 | — | 2 |
| General Paralysis, | 17 | 1 | 18 |
| Paralysis, | 7 | 3 | 10 |
| Paralysis and Scald, | 1 | — | 1 |

| CAUSES. | Men. | Women. | Total. |
|---|------|--------|--------|
| <i>Diseases of Nervous System. — Continued.</i> | | | |
| Paralysis and Erysipelas, | 1 | — | 1 |
| Apoplexy, | 3 | 4 | 7 |
| Apoplexy, sequelæ of, | 1 | — | 1 |
| Epilepsy, | 26 | 6 | 32 |
| Epilepsy and Fall, | 1 | — | 1 |
| Cerebral Rheumatism, | 1 | — | 1 |
| Convulsions, | 1 | 1 | 2 |
| Fit, | 1 | — | 1 |
| <i>Digestive.</i> | | | |
| Diarrhœa, | — | 1 | 1 |
| “ Chronic, | 2 | 3 | 5 |
| Dysentery, | 2 | 4 | 6 |
| Supposed Organic Disease of Stomach, | 1 | — | 1 |
| <i>Respiratory.</i> | | | |
| Phthisis, | 40 | 91 | 131 |
| Phthisis and Heart Disease, | 0 | 1 | 1 |
| Pneumonia, | 2 | 2 | 4 |
| “ Typhoid, | 1 | — | 1 |
| Capillary Bronchitis, | 1 | — | 1 |
| <i>Circulatory.</i> | | | |
| Disease of the Heart, | — | 3 | 3 |
| <i>Serous Membranes.</i> | | | |
| Hydrothorax, | — | 1 | 1 |
| Peritonitis, | 1 | — | 1 |
| <i>General.</i> | | | |
| Marasmus, | 31 | 39 | 70 |
| Chronic Exhaustion, | 12 | — | 12 |
| General Debility, | 1 | — | 1 |
| Old Age, | 2 | 2 | 4 |

| CAUSES. | Men. | Women. | Total. |
|---|------|--------|--------|
| <i>Miscellaneous.</i> | | | |
| Suicide, | 9 | 2 | 11 |
| Strangulated Hernia, | 1 | — | 1 |
| Abscess, | 1 | — | 1 |
| Abscess of Thigh, | 1 | — | 1 |
| Dropsy, | 1 | 2 | 3 |
| Cancer, | — | 1 | 1 |
| Injuries, | 2 | 1 | 3 |
| Injury from Fall, | | 1 | 1 |
| Unknown, — supposed Intus susception, . | 1 | — | 1 |
| Unknown, | — | 2 | 2 |
| Totals, | 194 | 194 | 388 |

SECOND DIVISION.

PATIENTS ADMITTED FROM THE HOSPITALS AT WORCESTER, TAUNTON AND EAST BOSTON.

As has been seen, the whole number of admissions, or of *patients* admitted, was, — of men, 918; of women, 967: total, 1,885.

Since a pretty large number were received more than once, it follows that the above figures do not indicate the number of *persons*. That number, and the extent to which a part of those persons again resorted to the hospital, are indicated in the eighth table.

TABLE No. 8.

| | Men. | Women. | Total. |
|--------------------------------------|------|--------|--------|
| Persons admitted, | 775 | 856 | 1631 |
| Of whom were admitted a second time, | 104 | 77 | 181 |
| “ “ third time, | 29 | 18 | 47 |
| “ “ fourth time, | 6 | 7 | 13 |
| “ “ fifth time, | 1 | 3 | 4 |
| “ “ sixth time, | 1 | 3 | 4 |
| “ “ seventh time, | 1 | 2 | 3 |
| “ “ eighth time, | 1 | 1 | 2 |
| Total of admissions, | 918 | 967 | 1,885 |

Hence, it appears that the number of *persons* was 1631; and that, of these, 181 were re-admitted once each, and some of them more than once, until the total of admissions was 1,885. Or, to put it in another way:—

| | Men. | Women. | Total. |
|-----------------------------------|------|--------|--------|
| Whole number of persons admitted, | 775 | 856 | 1,631 |
| Re-admissions of 181 of them, | 143 | 111 | 254 |
| Whole number of admissions, | 918 | 967 | 1,885 |

The 1,631 persons came to the hospital from two very distinct and different sources. While a pretty large majority of them were committed directly from their homes or other places among the people at large, a somewhat important part were, as has already appeared, transferred from other hospitals for the insane within the State. A very large portion of these were the incurables, who had accumulated in those hospitals as the dregs of the operations of many preceding years. Some of them had been inmates of but one of those institutions; others had been at two of them; while a number had “swept around the circle”

of East Boston, Worcester and Taunton, to finish at Northampton, . . . unless they should be transferred to Tewksbury.

If a knowledge of the true relations of insanity to life, longevity, health and various other questions of medical or social science is by any possibility ever to be attained, one of the primary conditions for its acquisition is, that the investigations shall be made among all the insane, as the disease occurs in community, and from the time of its origin. This, for the present, is an impossibility, because all the insane are not taken to the hospitals. The nearest possible approach to that condition is a pursuit of the investigations among the insane who enter the hospitals directly from the people.

For this reason it is proposed to separate the patients who were received by transfer from the other hospitals from those who were committed directly from the people, and present the statistics of each class by themselves. The fact that the statistics of the transferred patients, so far as their history went, while there, are already intermixed with those of from one to three other hospitals within the State, is another, and indeed, of itself, a sufficient reason for this division.

In the ninth table is a record of the number of patients transferred from the other hospitals, the years in which they were brought, and the number received in each year.

TABLE NO. 9.

Patients Transferred from the Hospitals at Worcester, Taunton and South Boston.

| YEAR ENDING. | | | | | | | Men. | Women. | Total. |
|-------------------|---|---|---|---|---|---|------|--------|--------|
| Sept. 30th, 1858, | . | . | . | . | . | . | 88 | 122 | 210 |
| " " 1859, | . | . | . | . | . | . | 2 | — | 2 |
| " " 1860, | . | . | . | . | . | . | 17 | 43 | 60 |
| " " 1861, | . | . | . | . | . | . | — | — | — |
| " " 1862, | . | . | . | . | . | . | 17 | 23 | 40 |
| " " 1863, | . | . | . | . | . | . | 5 | 21 | 26 |
| " " 1864, | . | . | . | . | . | . | — | — | — |
| " " 1865, | . | . | . | . | . | . | 16 | 28 | 44 |
| " " 1866, | . | . | . | . | . | . | 16 | 22 | 38 |
| " " 1867, | . | . | . | . | . | . | — | 29 | 29 |
| " " 1868, | . | . | . | . | . | . | 5 | 12 | 17 |
| " " 1869, | . | . | . | . | . | . | 20 | 15 | 35 |
| " " 1870, | . | . | . | . | . | . | 17 | 40 | 57 |
| Total, . | . | . | . | . | . | . | 203 | 355 | 558 |

It is here shown that the transfers from the three other hospitals to that at Northampton were of men, 203; women, 355; total, 558. These were, however, so many *patients*, but *not* so many *persons*. Two women who had been transferred from Worcester were discharged, and after a season, brought again from the same hospital. One woman, originally transferred from Taunton, was, after her discharge, brought a second time from that hospital; and one man who had come from East Boston was, after discharge, brought again, *not* from the same hospital, but from that at Worcester. By a deduction of these four patients, one man and three women, from the totals of the eighth table, we obtain the number of *persons* received from the three hospitals. That number is 554, of which 202 were men, and 352 women.

From the tenth table we learn that of these 554 persons, 241 were brought from the hospital at Worcester, 239 from that at Taunton, and 74 from that at East Boston.

TABLE NO. 10.

Persons Admitted by Transfer from other Hospitals before October 1st, 1870.

| INSTITUTION. | Men. | Women. | Total. |
|------------------------------------|------|--------|--------|
| Worcester L. Hospital, | 118 | 123 | 241 |
| Taunton L. Hospital, | 60 | 179 | 239 |
| Boston City L. Hospital, | 24 | 50 | 74 |
| Total, | 202 | 352 | 554 |

For reasons already alleged, all statistics relating to the previous history, either of these persons themselves, or of their disease, will be omitted, and those alone presented which illustrate the results of their treatment here. The eleventh table embodies those results.

TABLE NO. 11.

Results of Treatment of 554 Persons, received by Transfer from other Hospitals, before October 1st, 1870.

| | Recovered. | | | Improved. | | | Unimproved. | | | Eloped. | | | Died. | | | Remain- ing. | | |
|----------------------|------------|--------|--------|-----------|--------|--------|-------------|--------|--------|---------|--------|--------|-------|--------|--------|-----------------|--------|--------|
| | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. |
| Worcester L. Hosp. | 10* | 12 | 22 | 22 | 32 | 54 | 12 | 13 | 25 | 3 | 2 | 5 | 29 | 37 | 66 | 42 | 27 | 69 |
| Taunton L. " | 1 | 9 | 10 | 5 | 29 | 34 | 7 | 26 | 33 | 4 | - | 4 | 17 | 55 | 72 | 26 | 60 | 86 |
| Boston City L. Hosp. | - | 2 | 2 | 7 | 8 | 15 | 3 | 11 | 14 | 1 | 1 | 2 | 8 | 19 | 27 | 5 | 9 | 14 |
| Total, | 11 | 23 | 34 | 34 | 69 | 103 | 22 | 50 | 72 | 8 | 3 | 11 | 54 | 111 | 165 | 73 | 96 | 169 |

This table is not devoid of interest as containing a demonstration of the incurability of chronic insanity. Briefly as practicable, and in as clear a light as possible, its most important results will be presented.

Of 118 men from Worcester hospital, 10 recovered; equal to 8.74 per cent.

Of 123 women from Worcester hospital, 12 recovered; equal to 9.75 per cent.

Of 241 persons from Worcester hospital, 22 recovered; equal to 9.12 per cent.

Of 60 men from Taunton hospital, 1 recovered; equal to 1.66 per cent.

Of 179 women from Taunton hospital, 9 recovered; equal to 5.02 per cent.

Of 239 persons from Taunton hospital, 10 recovered; equal to 4.18 per cent.

Of 24 men from South Boston hospital, 0 recovered; equal to 0.00 per cent.

Of 50 women from South Boston hospital, 2 recovered; equal to 4.00 per cent.

Of 74 persons from South Boston hospital, 2 recovered; equal to 2.70 per cent.

Of 202 men from the three hospitals, 11 recovered; equal to 5.44 per cent.

Of 352 women from the three hospitals, 23 recovered; equal to 6.53 per cent.

Of 554 persons from the three hospitals, 34 recovered; equal to 6.13 per cent.

The number of recoveries of the whole is equal to a small fraction over six per cent.* Of the patients who came from the different hospitals, the largest relative number of recoveries was in those from Worcester; the next, in those from Taunton; and the smallest, in those from South Boston. This is easily explainable. At the opening of this hospital nearly all of the patients committed to Worcester from the four westerly counties were transferred. Among them were a number who had but

* See note at the end of the Statistics.

recently been committed, and whose disease was curable. On the contrary, those from South Boston had probably all, or nearly all of them been committed before the erection of the State hospital at Taunton, and consequently their disease had existed several years.

Still further to illustrate the incurability of the 74 South Boston patients, it may be stated that of the only two who were discharged as recovered, one was re-admitted and subsequently discharged only as "improved." As a similar illustration for those from Worcester, it appears that of the 51 transferred from that hospital on the 16th of August, 1858, although three men and three women (nearly 12 per cent.) recovered, yet the three men have all been re-admitted. Two of them died here, and one of them remains, incurable. The first group of patients, fifteen in number, received from the Taunton hospital, were transferred in February, 1860. Not one of them recovered. Of twenty women received from the same hospital in September, 1860, only one recovered. She has not been re-admitted. Again, of thirty-four transferred from Taunton in June, 1862, only one recovered; and he has not been re-admitted. The restorations of patients from that hospital have been chiefly among the more recent transfers, since the mass of their *very* old cases were transferred, or otherwise discharged.

Of the 175 of these transferred persons who were discharged from, and left this hospital, 103 of them as improved and 72 as unimproved, a very large part were removed to the receptacle connected with the State Almshouse at Tewksbury.

Mortality. No further investigation into the death rate of these persons will here be made than to show the ratio of deaths in the course of the whole period, to the number of persons received by transfer.

Of 118 men from Worcester, 29 died; equal to 24.57 per cent.

| | | | | | |
|---------------------------|----|---|---|-------|---|
| Of 123 women " | 37 | " | " | 30.08 | " |
| Of 241 persons " | 66 | " | " | 27.38 | " |
| Of 60 men from Taunton, | 17 | " | " | 28.33 | " |
| Of 179 women " | 55 | " | " | 30.72 | " |
| Of 239 persons " | 72 | " | " | 30.13 | " |
| Of 24 men from S. Boston, | 8 | " | " | 33.33 | " |

Of 50 women from S. Boston 19 died; equal to 38.00 per cent.

Of 74 persons " 27 " " 36.48 "

Of 202 men from the three hospitals, 54 died; equal to 26.73 per cent.

Of 352 women from the three hospitals, 111 died; equal to 31.53 per cent.

Of 554 persons from the three hospitals, 165 died; equal to 29.78 per cent.

The largest relative number of deaths was among the persons from South Boston; the next, among those from Taunton; and the least, among those from Worcester. But the patients from South Boston were most of them transferred at the opening of this hospital, and none of them after May, 1862. Hence the average term of their residence here was probably longer than that of those from either of the other hospitals.

The attentive reader will observe that the percentage of deaths of women is larger than that of men, among the patients from each of the hospitals. It is not improbable that the average term of residence of the sex first mentioned was longer than that of the other; but no researches have been made in regard to this subject.

It only remains to show the recorded causes of death of the 165 persons, together with the extent to which those causes, respectively, proved fatal. These may be found in the twelfth table.

TABLE No. 12.
Causes of Death of Patients from other Hospitals.

| CAUSES. | Men. | Women. | Total. |
|--|------|--------|--------|
| <i>Nervous System.</i> | | | |
| Epilepsy, | 6 | 3 | 9 |
| Apoplexy, | — | 2 | 2 |
| Paralysis, | — | 1 | 1 |
| Convulsions, | 1 | 1 | 2 |
| "Fit," | 1 | — | 1 |
| Maniacal Exhaustion, | 2 | 1 | 3 |
| "Exhaustion," | 2 | 2 | 4 |
| <i>Organs of Digestion.</i> | | | |
| Diarrhœa, | — | 1 | 1 |
| Diarrhœa, chronic, | 1 | 1 | 2 |
| Dysentery, | 1 | 1 | 2 |
| <i>Organs of Respiration.</i> | | | |
| Pneumonia, | — | 1 | 1 |
| Phthisis, | 25 | 72 | 97 |
| Phthisis and disease of Heart, | — | 1 | 1 |
| <i>Organs of Circulation.</i> | | | |
| Disease of heart, | — | 2 | 2 |
| <i>General.</i> | | | |
| Marasmus, | 6 | 18 | 24 |
| Chronic exhaustion, | 4 | — | 4 |
| <i>Miscellaneous.</i> | | | |
| Dropsy, | 1 | 2 | 3 |
| Cancer, | — | 1 | 1 |
| Abscess, | 1 | — | 1 |
| Injuries, | 2 | 1 | 3 |
| Unknown, Supposed Intussusception, | 1 | — | 1 |
| Total, | 54 | 111 | 165 |

One of the first impressions derived from an examination of this table is that of the vast preponderance of chronic diseases. Only in four cases, one of diarrhoea, two of dysentery and one of pneumonia, was the mortality due to an acute disease originating in this hospital. Another remarkable fact is found in the ravages committed by phthisis. The deaths from that disease were 97, which is 58.78 per cent. of the whole mortality. It is worthy of notice, also, that the fatality from this source differed greatly in relative frequency in the two sexes. Of the whole number of men (202) received by transfer, 25 died of phthisis, equal to 12.37 per cent.; of the whole number of women (352), the deaths were 72, or 20.45 per cent.; the ratio of the latter being nearly two-thirds greater than that of the former.

READMISSION OF PERSONS FROM OTHER HOSPITALS.

Of the 554 persons whose history, so far as regards their first reception at this hospital is concerned, is given in the foregoing pages, it appears that 19 were readmitted, some of them more than once, making the total of readmissions 26. This subject can be best illustrated as follows:—

TABLE No. 13.

| | Men. | Women. | Total. |
|---|------|--------|--------|
| Persons transferred from other hospitals, . | 202 | 352 | 554 |
| Of whom were admitted a second time, . | 10 | 9 * | 19 |
| “ “ “ “ “ third time, . | 3 | 2 | 5 |
| “ “ “ “ “ fourth time, . | 2 | — | 2 |
| Total of readmissions, | 15 | 11 | 26 |
| Total admissions of the 554 persons, . | 217 | 263 | 580 |

The history of the readmissions now demands attention. This will be given as succinctly as practicable.

1. SECOND ADMISSIONS.

Results of treatment of the patients admitted the second time:—

| | Men. | Women. | Total. |
|--|------|--------|--------|
| Discharged, recovered, | 3 | 1 | 4 |
| “ improved, | 1 | 4 | 5 |
| “ unimproved, | 1 | 1 | 2 |
| Eloped, | 1 | — | 1 |
| Died, | 1 | — | 1 |
| Remaining, September 30, 1870, | 3 | 3 | 6 |
| Total of second admissions, | 10 | 9 | 18 |

The one death here mentioned was from paralysis.

2. THIRD ADMISSIONS.

Results of treatment of patients on their third admission:—

| | Men. | Women. | Total. |
|--------------------------------------|------|--------|--------|
| Discharged, recovered, | — | 1 | 1 |
| “ improved, | 2 | — | 2 |
| Died, | 1 | 1 | 2 |
| Total of third admissions, | 3 | 2 | 5 |

Of the two fatal cases, the man died of marasmus, the woman of dysentery.

3. FOURTH ADMISSIONS.

As seen above, only two persons, both men, had been received the fourth time. One of them died of paralysis; the other remains in the hospital, incurable.

Thus, of the twenty-six patients readmitted, six men and two women, a total of eight, recovered; three men and one woman, a total of four, died; and four men and three women, a total of seven, remain in the hospital.

THIRD DIVISION.

PATIENTS ADMITTED BY DIRECT COMMITMENT.

SECTION 1ST: ADMISSIONS.

The eighth table shows the whole number of *persons* received as patients at the hospital, together with the number of their re-admissions. The thirteenth table shows the number who were transferred from the other hospitals, and the numbers of their readmissions. It consequently follows that if the numbers in the thirteenth table be deducted from the corresponding numbers in the eighth table, the remainder will represent the number of persons admitted from other places than the hospitals, together with the number of their readmissions. That deduction having been made, the result is as follows:—

TABLE No. 14.

| | Men. | Women. | Total. |
|---|------|--------|--------|
| Persons admitted by direct commitment, . . . | 573 | 504 | 1,077 |
| Of whom were admitted a second time, . . . | 94 | 68 | 162 |
| “ “ “ third time, . . . | 26 | 16 | 42 |
| “ “ “ fourth time, . . . | 4 | 7 | 11 |
| “ “ “ fifth time, . . . | 1 | 3 | 4 |
| “ “ “ sixth time, . . . | 1 | 3 | 4 |
| “ “ “ seventh time, . . . | 1 | 2 | 3 |
| “ “ “ eighth time, . . . | 1 | 1 | 2 |
| Total of admissions not from the three hospitals, | 701 | 604 | 1,305 |
| The readmissions, 2d to 8th inclusive, amount to | 128 | 100 | 228 |

Our first attention is demanded by the *persons* admitted, of whom there were 1,077. Three of these were discharged as "not insane." If not insane they have no right of position in these statistics. Their presence here would constitute an element of error. Hence they will be deducted.

| | Men. | Women. | Total. |
|--|------|--------|--------|
| Persons admitted by direct commitment, . . . | 573 | 504 | 1,077 |
| Rejected as not insane, | 1 | 2 | 3 |
| Persons insane, | 572 | 502 | 1,074 |

We have now arrived at a legitimate subject for a greater detail of statistics. The figures indicate, essentially, the sum of first admissions, by the natural current into the hospital from the general population. They include, however, some exceptions to the rule. For example, thirty-four were transferred from the State almshouses; but as they had not been in the hospitals for the insane, and as, in most instances, their period of residence in the almshouses had been short, their proper place is evidently here. A few others were brought directly from other hospitals than the three above mentioned; but their number is very small and the hospitals whence they came are, with one exception, in other States than Massachusetts.

Annual Admissions. The fifteenth table shows the number of the aforesaid 1,074 persons who were admitted to the hospital in each year, respectively, of the whole period.

TABLE No. 15.

Annual Admissions of 1,074 Persons.

| YEARS. | Men. | Women. | Total. |
|---------------------------|------|--------|--------|
| 1858, 2 months, | 11 | 7 | 18 |
| 1858-59, | 40 | 46 | 86 |
| 1859-60, | 49 | 48 | 97 |
| 1860-61, | 58 | 46 | 104 |
| 1861-62, | 33 | 20 | 53 |
| 1862-63, | 51 | 36 | 87 |
| 1863-64, | 35 | 29 | 64 |
| 1864-65, | 38 | 28 | 66 |
| 1865-66, | 51 | 31 | 82 |
| 1866-67, | 42 | 40 | 82 |
| 1867-68, | 49 | 60 | 109 |
| 1868-69, | 52 | 49 | 101 |
| 1869-70, | 63 | 62 | 125 |
| Total, | 572 | 502 | 1,074 |

From the opening of the hospital to the official year 1860-61, the year of the beginning of the civil war, there was a progressive increase in the number of admissions. Thenceforward, until near the close of the war, in the official year 1863-64, the numbers were smaller, but not by regular progression. Subsequently there was an increase which, in 1866-67, became pretty rapid, until, in the last year of the period, the number was very nearly twice as large as it was in 1863-64.

Monthly Admissions. The sixteenth table includes the number of persons admitted in the corresponding calendar months of the whole period.

TABLE No. 16.
Monthly Admissions of 1,074 Persons.

| MONTHS. | Men. | Women. | Total. |
|----------------------|------|--------|--------|
| October, | 36 | 42 | 78 |
| November, | 32 | 38 | 70 |
| December, | 45 | 28 | 73 |
| January, | 45 | 28 | 73 |
| February, | 43 | 40 | 83 |
| March, | 38 | 38 | 76 |
| April, | 48 | 45 | 93 |
| May, | 64 | 50 | 114 |
| June, | 51 | 60 | 111 |
| July, | 43 | 43 | 86 |
| August, | 63 | 58 | 121 |
| September, | 64 | 32 | 96 |
| Total, | 572 | 502 | 1,074 |

The largest number was in August, the next in May, and the next in June; while the smallest was in November.

Consolidating these numbers into sums according to the calendar quarters of the year, we find that these sums will be, for :

| | Men. | Women. | Total. |
|---|------|--------|--------|
| October, November, and December | 113 | 108 | 221 |
| January, February, and March, | 126 | 106 | 232 |
| April, May, and June, | 163 | 155 | 318 |
| July, August, and September, | 170 | 133 | 303 |
| Total, | 572 | 502 | 1,074 |

The largest number is in the second calendar, or spring quarter, and the smallest in the fourth, or autumnal quarter.

Uniting the whole into two sums corresponding with the colder and the warmer half year, those sums are, for :

| | Men. | Women. | Total. |
|--|------|--------|--------|
| October to March, inclusive, | 239 | 214 | 453 |
| April to September, " | 333 | 288 | 621 |
| Total, | 572 | 502 | 1,074 |

The whole number admitted in the warm season exceeded that of the cold season by 37.08 per cent.

Nativity. The seventeenth table shows the nativity of the 1,074 persons, so far as could be ascertained; and the number of whom that fact in their history is unknown is remarkably small.

It will be perceived that the number of Americans is nearly three times as large as that of foreigners. Lest an erroneous inference be drawn from this fact, it should be stated that nearly all of the 554 persons transferred from the hospitals at Worcester, Taunton and South Boston were foreigners. In the Seventeenth Annual Report of this hospital, to which this pamphlet is a supplement, it is shown that on the first of January, 1859, the foreigners were to the Americans as 5 to 2. The ratio gradually decreased; but, as late as January 1, 1867, it was as 144 to 100; and on January 1, 1870, as 109 to 100.

Residence. By the eighteenth table we learn that 810, or 75.41 per cent. of these persons were residents of Massachusetts; that of these, the largest number (285) were from the county of Hampden; and that the other three of the western counties, arranged according to the progressively decreasing numbers furnished by them, rank as follows: Hampshire (205), Berkshire (119), Franklin (109). The same four counties ranked, in 1860, according to their population, as follows: Hampden (57,366), Berkshire (55,120), Hampshire (37,823), Franklin (31,434).

TABLE NO. 17.

Nativity of the 1,074 Persons Admitted.

| STATES. | Men. | Women. | Total. | COUNTRIES. | Men. | Women. | Total. |
|----------------|------|--------|--------|--------------|------|--------|--------|
| Maine, | 2 | 4 | 6 | "America," | 74 | 54 | 128 |
| N. Hampshire, | 11 | 4 | 15 | Canada, | 6 | 9 | 15 |
| Vermont, | 11 | 13 | 24 | Nova Scotia, | 2 | 0 | 2 |
| Massachusetts, | 222 | 155 | 377 | Rio Janeiro, | 1 | 0 | 1 |
| Rhode Island, | 3 | 4 | 7 | Chili, | 1 | 0 | 1 |
| Connecticut, | 51 | 45 | 96 | England, | 14 | 8 | 22 |
| New York, | 54 | 50 | 104 | Scotland, | 4 | 1 | 5 |
| New Jersey, | 2 | 1 | 3 | Ireland, | 77 | 127 | 204 |
| Pennsylvania, | 3 | 1 | 4 | Belgium, | 2 | 1 | 3 |
| Delaware, | 0 | 1 | 1 | Austria, | 1 | 1 | 2 |
| Maryland, | 6 | 0 | 6 | Prussia, | 2 | 0 | 2 |
| Virginia, | 0 | 2 | 2 | Germany, | 7 | 9 | 16 |
| N. Carolina, | 0 | 1 | 1 | Saxony, | 1 | 0 | 1 |
| Alabama, | 1 | 0 | 1 | Switzerland, | 0 | 1 | 1 |
| Kentucky, | 1 | 0 | 1 | Denmark, | 1 | 0 | 1 |
| Ohio, | 4 | 2 | 6 | Italy, | 0 | 1 | 1 |
| Michigan, | 0 | 1 | 1 | Malta, | 1 | 0 | 1 |
| Illinois, | 2 | 1 | 3 | Africa, | 1 | 2 | 3 |
| Missouri, | 1 | 2 | 3 | Not stated, | 3 | 1 | 4 |

| | Men. | Women. | Total. |
|----------------------|------|--------|--------|
| Total of Americans, | 448 | 341 | 789 |
| Total of Foreigners, | 121 | 160 | 281 |
| Unknown, | 3 | 1 | 4 |
| Aggregate, | 572 | 502 | 1,074 |

TABLE NO. 18.

Residence of 1,074 Persons Admitted.

| COUNTIES. | Men. | Women. | Total. | STATES. | Men. | Women. | Total. |
|-------------------------|------|--------|--------|---------------|------|--------|--------|
| Hampshire Co., | 101 | 104 | 205 | Maine, | 2 | 0 | 2 |
| Hampden “ | 146 | 139 | 285 | N. Hampshire, | 4 | 1 | 5 |
| Franklin “ | 61 | 48 | 109 | Vermont, | 7 | 2 | 9 |
| Berkshire “ | 66 | 53 | 119 | Rhode Island, | 3 | 2 | 5 |
| Essex “ | 7 | 5 | 12 | Connecticut, | 49 | 49 | 98 |
| Middlesex “ | 10 | 3 | 13 | New York, | 61 | 43 | 104 |
| Norfolk “ | 2 | 4 | 6 | New Jersey, | 1 | 3 | 4 |
| Plymouth “ | 1 | 0 | 1 | Pennsylvania, | 2 | 0 | 2 |
| Suffolk “ | 6 | 5 | 11 | Maryland, | 3 | 0 | 3 |
| Worcester “ | 6 | 9 | 15 | S. Carolina, | 0 | 1 | 1 |
| Monson, S. A. House, | 13 | 13 | 26 | Florida, | 1 | 0 | 1 |
| Tewksbury, do., | 4 | 4 | 8 | Ohio, | 3 | 0 | 3 |
| | | | | Michigan, | 1 | 1 | 2 |
| | | | | Illinois, | 4 | 1 | 5 |
| | | | | Iowa, | 0 | 1 | 1 |
| | | | | Wisconsin, | 0 | 4 | 4 |
| | | | | California, | 1 | 0 | 1 |
| | | | | Canada, | 6 | 7 | 13 |
| | | | | Chili, | 1 | 0 | 1 |

| | Men. | Women. | Total. |
|-----------------------------------|------|--------|--------|
| Residents of Massachusetts, . . . | 423 | 387 | 810 |
| “ other States, . . . | 142 | 108 | 250 |
| “ other Countries, . . . | 7 | 7 | 14 |
| Aggregate, . . . | 572 | 502 | 1,074 |

The counties of Hampshire and Berkshire alone change position; but upon further examination it will be found that the differences in the extent to which the benefits of the hospital were sought by the inhabitants of those several counties are much greater than would be inferred from this general comparison. By dividing the population of each county by the number of patients sent from it to the hospital, it will be found that in the course of the whole period,

| | | | | | | | | | |
|-----------|-----------|---|---------|-----|-------|-----|----|-----|-------------|
| Hampshire | furnished | 1 | patient | for | every | 184 | of | its | population. |
| Hampden | " | 1 | " | " | " | 201 | " | " | |
| Franklin | " | 1 | " | " | " | 288 | " | " | |
| Berkshire | " | 1 | " | " | " | 463 | " | " | |

Or, putting the proposition in another way:—

A given population in Berkshire furnishing 100 patients, would, in Franklin, furnish 160, in Hampden, 230, and in Hampshire, 251 patients.

It is not reasonable to suppose that the prevalence of insanity in the several counties differs materially. Hence, the difference of extent to which the hospital is a resort from those counties appears to be attributable solely to the comparative nearness or remoteness of position. The mass of population in Hampshire is nearer the hospital than that of any other county; that of Hampden next; and of Franklin next; while that of Berkshire is the most remote.

From this exposition it may be learned that, for the best accommodation of the people, and in order to give the people the full benefit which they are disposed to seek in these hospitals, it is better to have several small institutions distributed in as many sections of a territory, than one or two large ones near the centre of that territory. Such is the plan recommended for Massachusetts in the annual report to which this is a supplement.

By whom Supported. The nineteenth table indicates the number of persons who, upon admission, were supported by the States, the towns, and individuals, respectively.

TABLE NO. 19.

Sources of Support of 1,074 Persons Admitted.

| YEARS. | STATE. | | | TOWNS. | | | SELF OR FRIENDS. | | | TOTAL. | | |
|-----------------|--------|--------|--------|--------|--------|--------|---------------------|--------|--------|--------|--------|--------|
| | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. |
| 1858, 2 months, | 3 | 1 | 4 | 3 | 4 | 7 | 5 | 2 | 7 | 11 | 7 | 18 |
| 1858-59, . . | 8 | 9 | 17 | 13 | 9 | 22 | 19 | 28 | 47 | 40 | 46 | 86 |
| 1859-60, . . | 12 | 11 | 23 | 9 | 5 | 14 | 28 | 32 | 60 | 49 | 48 | 97 |
| 1860-61, . . | 11 | 15 | 26 | 12 | 8 | 20 | 35 | 23 | 58 | 58 | 46 | 104 |
| 1861-62, . . | 6 | 8 | 14 | 8 | 7 | 15 | 19 | 5 | 24 | 33 | 20 | 53 |
| 1862-63, . . | 10 | 11 | 21 | 11 | 4 | 15 | 30 | 21 | 51 | 51 | 36 | 87 |
| 1863-64, . . | 9 | 10 | 19 | 6 | 4 | 10 | 20 | 15 | 35 | 35 | 29 | 64 |
| 1864-65, . . | 6 | 13 | 19 | 7 | 6 | 13 | 25 | 9 | 34 | 38 | 28 | 66 |
| 1865-66, . . | 12 | 15 | 27 | 6 | 2 | 8 | 33 | 14 | 47 | 51 | 31 | 82 |
| 1866-67, . . | 7 | 12 | 19 | 8 | 5 | 13 | 27 | 23 | 50 | 42 | 40 | 82 |
| 1867-68, . . | 11 | 19 | 30 | 9 | 6 | 15 | 29 | 35 | 64 | 49 | 60 | 109 |
| 1868-69, . . | 14 | 20 | 34 | 6 | 9 | 15 | 32 | 20 | 52 | 52 | 49 | 101 |
| 1869-70, . . | 24 | 16 | 40 | 6 | 11 | 17 | 33 | 35 | 68 | 63 | 62 | 125 |
| Total, . . | 133 | 160 | 293 | 104 | 80 | 184 | 335 | 262 | 597 | 572 | 502 | 1,074 |

More than half of the whole number were private patients, or "boarders." A little more than one-sixth were supported by towns, and about three-fourteenths by the State. It will be remembered, however, that nearly all of the patients brought from the other hospitals were wards of the State; so that this class has at all times constituted more than one-half of the patients resident in the house. At the close of the period of these statistics, September 30, 1870, the whole number resident was 408, of whom 218 were supported by the State, 66 by towns, and 124 by individuals.

Occupation. The twentieth table exhibits the extent to which the different occupations of the men were represented among

the patients. An attempt, not very satisfactory in its result, has been made to group the several employments according to their nature or characteristics. The "learned professions," and other chiefly intellectual pursuits, are placed first. Then come those of the mercantile and the financial sphere; and these are followed by agriculturists, mechanics, workers in wood and other artisans, ending with a group of miscellanies not easily classified.

TABLE No. 20.

Occupations of the Men.

| | | | |
|----------------------------------|-----|--|-----|
| Clergymen, | 9 | Engineer, | 1 |
| Lawyers, | 12 | Operatives, | 12 |
| Physicians, | 3 | Carriage Trimmer, | 1 |
| Teacher, | 1 | Tinners, | 2 |
| Students, | 20 | Carpenters and Wheelwrights, | 12 |
| Author, | 1 | Cabinet Makers, | 3 |
| Reporters, | 3 | Basket Maker, | 1 |
| Actors, | 2 | Shoemakers, | 9 |
| Inventor, | 1 | Tailors, | 4 |
| Artists, | 4 | Printers, | 3 |
| Musician, | 1 | Bookbinders, | 2 |
| Military Officer, | 1 | Watchmaker and Jeweller, | 2 |
| Naval Engineer, | 1 | Masons, Stone Cutter, | 3 |
| Merchants and Traders, | 46 | Painters, | 4 |
| Clerks, Bookkeepers, | 33 | Chemist, | 1 |
| Brokers, | 2 | Baker, | 2 |
| Cashiers, | 2 | Tanner, | 1 |
| Agents, | 3 | Miller, | 1 |
| Deputy Sheriff, | 1 | Barbers, | 3 |
| Treasurer, | 1 | Saloon Keepers, | 3 |
| Publisher, | 1 | Cigar Maker, | |
| Manufacturers, | 8 | Whip Maker, | 1 |
| Farmers, | 126 | Nurse, | 1 |
| Laborers, | 112 | Seamen, | 8 |
| Drovers, | 2 | No occupation, | 41 |
| Stable Keepers, | 2 | Unknown, | 17 |
| Butcher, | 1 | Total, | 572 |
| Machinists, | 16 | | |
| Mechanics, | 10 | | |
| Blacksmiths, | 7 | | |
| Moulder, | 1 | | |

TABLE No. 21.
Civil or Social Condition of 1,074 Persons Admitted.

| | MARRIED. | | | SINGLE. | | | WIDOWERS AND WIDOWS. | | | DIVORCED. | | | UNKNOWN. | | | TOTAL. | | |
|-------------------|----------|--------|--------|---------|--------|--------|-------------------------|--------|--------|-----------|--------|--------|----------|--------|--------|--------|--------|--------|
| | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. |
| 1858, 2 months, . | 5 | 1 | 6 | 4 | 5 | 9 | 2 | 1 | 3 | - | - | - | - | - | - | 11 | 7 | 18 |
| 1858-59, . | 17 | 19 | 36 | 21 | 20 | 41 | 2 | 7 | 9 | - | - | - | - | - | - | 40 | 46 | 86 |
| 1859-60, . | 20 | 23 | 43 | 28 | 20 | 48 | 1 | 5 | 6 | - | - | - | - | - | - | 49 | 48 | 97 |
| 1860-61, . | 28 | 16 | 44 | 26 | 21 | 47 | 3 | 9 | 12 | - | - | - | 1 | 0 | 1 | 58 | 46 | 104 |
| 1861-62, . | 12 | 10 | 22 | 17 | 6 | 23 | 4 | 4 | 8 | - | - | - | - | - | - | 33 | 20 | 53 |
| 1862-63, . | 25 | 14 | 39 | 23 | 22 | 45 | 2 | 0 | 2 | - | - | - | 1 | 0 | 1 | 51 | 36 | 87 |
| 1863-64, . | 23 | 7 | 30 | 7 | 16 | 23 | 1 | 4 | 5 | 1 | 0 | 1 | 3 | 2 | 5 | 35 | 29 | 64 |
| 1864-65, . | 16 | 8 | 24 | 16 | 15 | 31 | 4 | 3 | 7 | 0 | 1 | 1 | 2 | 1 | 3 | 38 | 28 | 66 |
| 1865-66, . | 24 | 16 | 40 | 22 | 10 | 32 | 4 | 4 | 8 | 0 | 1 | 1 | 1 | 0 | 1 | 51 | 31 | 82 |
| 1866-67, . | 22 | 16 | 38 | 18 | 17 | 35 | 1 | 6 | 7 | - | - | - | 1 | 1 | 2 | 42 | 40 | 82 |
| 1867-68, . | 21 | 26 | 47 | 23 | 24 | 47 | 2 | 8 | 10 | 1 | 0 | 1 | 2 | 2 | 4 | 49 | 60 | 109 |
| 1868-69, . | 22 | 25 | 47 | 22 | 16 | 38 | 4 | 4 | 8 | 1 | 1 | 2 | 3 | 3 | 6 | 52 | 49 | 101 |
| 1869-70, . | 30 | 28 | 58 | 29 | 24 | 53 | 2 | 8 | 10 | 0 | 2 | 2 | 2 | 0 | 2 | 63 | 62 | 125 |
| Total, . | 265 | 209 | 474 | 256 | 216 | 472 | 32 | 63 | 95 | 3 | 5 | 8 | 16 | 9 | 25 | 572 | 502 | 1,074 |

No discussion of the comparative frequency of insanity in the different spheres of occupation is here proposed, and the table will be dismissed with a few remarks.

The numbers of students, clerks and bookkeepers may be considered, to a very great extent, as illustrations of the effects of the several pernicious habits that prevail among young men.

In the 126 farmers are included, not proprietors or land-owners alone, but the mere laboring agriculturists as well. The number under this head is the largest, and aside from that under the comprehensive term "laborers," by far the largest of any in the table. Let no one hastily infer that, of all classes, farmers are the most subject to mental disorders. Nothing could be more erroneous. In the four counties from which the hospital chiefly derives its inmates, agriculturists are overwhelmingly more numerous than any other section of the population as classed by occupation. So far as mere employment is concerned, as a generative cause of insanity, the farmer is unquestionably less liable to that disorder than perhaps any other person. He is in a sphere more nearly natural than the artisans, the mechanics, and the professional men of a civilization abounding with artificial conditions and influences.

Civil or Social Condition. In the twenty-first table we have an exposition of the relationship to marriage of these patients, so far as ascertained. The most remarkable feature of the results shown in this table is the close approximation to equality of the numbers of the married and the single, not only in the total but in either sex. Thus:—

| | | | |
|-----------------|-----|---------------|--------------------------|
| Of 521 men, | 265 | were married; | equal to 50.86 per cent. |
| " " " | 256 | " single; | " " 49.14 " " |
| Of 425 women, | 209 | " married; | " " 49.18 " " |
| " " " | 216 | " single; | " " 50.82 " " |
| Of 946 persons, | 474 | " married; | " " 50.11 " " |
| " " " | 472 | " single; | " " 49.89 " " |

Of men, the married exceeded the single by 1.72 per cent; but of women, the single exceeded the married by 1.64 per cent. Of both sexes, there was the trifling difference of but 22 hundredths of one per cent, the married predominating to that extent.

Of 95 persons whose spouses were not living, 32 were men and 63 women. The number of widows lacks but one of being twice as large as that of widowers. It is undoubtedly true that the grief, the anxiety, the care, and the labor consequent upon the loss of a spouse, operate much more effectively among women than among men, as producers of insanity.

TABLE No. 22.

Ages of 1,074 Persons at the time of Admission.

| AGES. | | | | BY DECADES. | | |
|------------------------|------|--------|--------|-------------|--------|--------|
| | Men. | Women. | Total. | Men. | Women. | Total. |
| 15 years and under, . | 6 | 6 | 12 | } 42 | 37 | 79 |
| From 15 to 20 years, . | 36 | 31 | 67 | | | |
| “ 20 to 25 “ . | 71 | 49 | 120 | } 140 | 132 | 272 |
| “ 25 to 30 “ . | 69 | 83 | 152 | | | |
| “ 30 to 35 “ . | 72 | 60 | 132 | } 140 | 117 | 257 |
| “ 35 to 40 “ . | 68 | 57 | 125 | | | |
| “ 40 to 50 “ . | 102 | 106 | 208 | 102 | 106 | 208 |
| “ 50 to 60 “ . | 56 | 54 | 110 | 56 | 54 | 110 |
| “ 60 to 70 “ . | 59 | 35 | 94 | 59 | 35 | 94 |
| “ 70 to 80 “ . | 15 | 12 | 27 | 15 | 12 | 27 |
| Over 80 years, . . | 3 | 2 | 5 | 3 | 2 | 5 |
| Unknown, . . . | 15 | 7 | 22 | 15 | 7 | 22 |
| Total, | 572 | 502 | 1,074 | 572 | 502 | 1,074 |

Age on Admission. The number of persons within each decade of life, and, partially, within each semi-decade, at the time of admission, is recorded in the twenty-second table. The largest number is in the decade from 20 to 30 years; and the other decades rank in their natural order to the age of 70 years. Then comes that from 10 to 20 years, and is succeeded by that

By a comparison of this table with that of ages on admission (No. 21), it will be perceived that the decennial numbers have undergone an important modification. The number of persons under 20 years of age is somewhat more than doubled; and that of those between 20 and 30 years has an augmentation of thirteen. On the contrary, the number between 30 and 40 years has suffered a reduction of sixty; that between 40 and 50 a reduction of sixty-one; that between 50 and 60 a reduction of 34; that between 60 and 70 a reduction of 44; and that between 70 and 80 a reduction of 9; while that of persons over 80 is reduced from 5 to 1.

The question, In which decennium of life is the race most subject to insanity? is a problem which may be considered as not hitherto absolutely solved. Drs. Thurnam and Tuke, Bates, Kirkbride, Duglison, and Earle have published investigations of the subject, illustrated by statistics. Two of these authorities make the greatest liability to mental disorder in the decennium from 20 to 30 years, and three of them in that from 30 to 40. But no two of them agree in the relative liability in the other decades.

A greater number of persons are *attacked* by insanity between the ages of 20 and 30 years than in any other decennium of life. *That* is established beyond dispute. But the number of living persons at that period of life is much larger than in any later decennium. Hence the questions are, first: In what decennium is the number of persons attacked by insanity the largest as compared with the living persons in that decennium? and secondly: What is the relative frequency in the other decennia? To the solution of these questions, it is proposed to bring the assistance of the statistics with which we are engaged.

Of the 1,074 persons, the residence of 718, or 66.85 per cent, was within the limits of the four counties, Hampshire, Hampden, Franklin and Berkshire. By a comparison of the number of these patients who were attacked by insanity in the several decennia, respectively, with the number of persons of corresponding ages in the population of those counties, the answers to these questions will be obtained with the greatest practicable degree of accuracy. This is done in the subjoined table. The

second column of the table shows the number of white persons in the aforesaid counties, in seven decades of life, according to the census of 1860.

| | Population. | Persons attacked. | Of population. |
|----------------------|-------------|-------------------|----------------|
| From 10 to 20 years, | 36,544. | 154,* equal to | 1 in 237 |
| From 20 to 30 " | 32,594. | 285, " | 1 in 114 |
| From 30 to 40 " | 24,610. | 197, " | 1 in 125 |
| From 40 to 50 " | 18,641. | 147, " | 1 in 127 |
| From 50 to 60 " | 13,135. | 76, " | 1 in 173 |
| From 60 to 70 " | 8,778. | 50, " | 1 in 175 |
| From 70 to 80 " | 4,288. | 18, " | 1 in 238 |

Hence the testimony of these statistics is to the effect that the greatest liability to insanity is in the decennium from 20 to 30 years; that this liability constantly and regularly diminishes in the successive subsequent decennia, and that the liability of the decennium from 10 to 20 years ranks between that from 60 to 70 years and that from 70 to 80.

Causes of Insanity. A table (No. 25) of alleged causes of the mental disorder of these persons has been introduced, quite as much, perhaps, for the apparent completeness of these statistics as from any faith in its value. The causes here assigned are, as the table indicates, those which were alleged by the friends of the patients. But, as every person of experience in the specialty well knows, the friends are often mistaken in the matter. Nevertheless, it is unquestionably true that, in a large number of the cases contained in this table, the alleged causes were the true ones. In the arrangement of them, they have been divided into the two classes, "Physical," and "Mental or Moral"; and each class subdivided into groups corresponding with the similarity of character, influence or effect of the several agents or causes.

* Seven congenital imbeciles are here rejected.

TABLE No. 25.

Alleged Causes of Insanity.

| | Men. | Women. | Totals. |
|--|------|--------|---------|
| <i>1. Mental or Moral Causes.</i> | | | |
| Pecuniary Difficulties, | 19 | 6 | 25 |
| Business Troubles, | 9 | 0 | 9 |
| Death of Friends, | 6 | 19 | 25 |
| Family Affliction, | 1 | 0 | 1 |
| Grief, | 0 | 2 | 2 |
| Suicide of Husband, | 0 | 1 | 1 |
| Domestic Trouble, | 9 | 10 | 19 |
| Jealousy, | 1 | 2 | 3 |
| Desertion of Husband, | 0 | 1 | 1 |
| Misfortune, | 0 | 1 | 1 |
| Disappointment, | 1 | 4 | 5 |
| Crossed in Love, | 1 | 1 | 2 |
| Homesickness, | 0 | 3 | 3 |
| Anxiety, | 0 | 2 | 2 |
| Religious excitement, | 8 | 9 | 17 |
| Spiritualism, | 2 | 4 | 6 |
| Millerism, | 1 | 0 | 1 |
| War Excitement, | 1 | 0 | 1 |
| Political Excitement, | 1 | 0 | 1 |
| Excitement, | 1 | 0 | 1 |
| Excitement of Travel, | 0 | 1 | 1 |
| Overwork, mental, | 7 | 0 | 7 |
| Hard Study, | 5 | 2 | 7 |
| School Teaching, | 0 | 1 | 1 |
| Alleged Assault, | 0 | 1 | 1 |
| Fright, | 1 | 4 | 5 |
| Total of mental or moral causes, . . . | 74 | 74 | 148 |

TABLE OF CAUSES — Continued.

| | Men. | Women. | Total. |
|-----------------------------------|------|--------|--------|
| <i>2. Physical Causes.</i> | | | |
| Hereditary, | 9 | 14 | 23 |
| Epilepsy, | 43 | 19 | 62 |
| Paralysis, | 8 | 1 | 9 |
| Apoplexy, | 5 | 0 | 5 |
| Paresis, | 1 | 0 | 1 |
| Meningitis, | 0 | 1 | 1 |
| Cerebral Inflammation, | 0 | 1 | 1 |
| Injury to Head, | 8 | 2 | 10 |
| Injury by Fall, | 1 | 0 | 1 |
| Injury, | 3 | 0 | 3 |
| Lightning Stroke, | 1 | 0 | 1 |
| Overwork, | 12 | 12 | 24 |
| Exhaustion, | 1 | 0 | 1 |
| Exposure, | 2 | 0 | 2 |
| Sunstroke, | 3 | 1 | 4 |
| Ill Health, | 57 | 101 | 158 |
| General Debility, | 1 | 1 | 2 |
| Fever, | 0 | 1 | 1 |
| Acute Cold, | 0 | 1 | 1 |
| Nervous Derangement, | 0 | 1 | 1 |
| Puerperal, | 0 | 26 | 26 |
| Suppression, | 0 | 2 | 2 |
| Change of Life, | 0 | 8 | 8 |
| Uterine Disease, | 0 | 1 | 1 |
| Intemperance, | 116 | 19 | 135 |
| Opium eating, | 3 | 5 | 8 |
| Tobacco, | 1 | 2 | 3 |
| <i>Carried forward,</i> | 275 | 219 | 494 |

TABLE OF CAUSES — Concluded.

| | Men. | Women. | Total. |
|--|------|--------|--------|
| <i>Physical Causes. — Continued.</i> | | | |
| <i>Brought forward,</i> | 275 | 219 | 494 |
| Greediness, | 1 | 0 | 1 |
| Masturbation, | 19 | 1 | 20 |
| Venereal Excess, | 1 | 0 | 1 |
| Old Age, | 7 | 8 | 15 |
| Congenital, | 2 | 5 | 7 |
| Accidental, | 1 | 0 | 1 |
| Total of Physical Causes, | 306 | 233 | 539 |
| Total of Mental Causes, | 74 | 74 | 148 |
| Total in which Causes are alleged, | 380 | 307 | 687 |
| Unknown, | 192 | 195 | 387 |
| Total of Persons, | 572 | 502 | 1,074 |

Thus, it appears that, of the 1,074 persons, there were 687 for whose mental disorder causes were assigned. Of these, 539 are agents whose action is primarily upon the body, and 148 are such as first act upon the mind. The number of physical causes, therefore, is about three and one-half times as large as that of the mental or moral causes.

Whatever may be the degree of truthfulness of this table, its contents are suggestive of thoughts which might readily be expanded over a larger number of pages than the intended limits of this pamphlet. That work is not included in our present purpose, and therefore we leave them without further comment.

Form of Disease. The perfect classification of insanity is practically an utter impossibility. Its several great types or forms are, it is true, unmistakably evident, each in a certain

number of cases; but in others they either alternate, each with some other, or so overlap, or intermingle,

“Shade unperceived, so softening into shade,”

that he who attempts to classify them often becomes doubtful, perplexed, bewildered. For example, in chronic cases, who can tell where mania ends and dementia begins? Who can define that subtle boundary in the region intellectual? So great are the difficulties, here merely hinted at, that were ten of the ablest and most experienced experts separately and independently to classify the patients of a hospital for the insane, there is no probability that any two of their classifications would be, throughout, alike.

The nomenclature adopted at this hospital when it was opened, and followed ever since, is one of the simplest of the many which are in use. It is seen in the twenty-sixth table, in which the 1,074 patients are classified.

TABLE NO. 26.

Form of Disease.

| | Men. | Women. | Total. |
|-----------------------------|------|--------|--------|
| Mania, | 268 | 280 | 548 |
| Typhomania, | 3 | 7 | 10 |
| Paresis, | 7 | — | 7 |
| Melancholia, | 74 | 73 | 147 |
| Monomania, | 11 | 8 | 19 |
| Dementia, | 170 | 127 | 297 |
| Idiocy, | — | 3 | 3 |
| Dipsomania, | 29 | 2 | 31 |
| Delirium Tremens, | 8 | — | 8 |
| Not stated, | 2 | 2 | 4 |
| Total, | 572 | 502 | 1,074 |

More than half the patients — 549 of 1,074 — are recorded as having mania; nearly one-third — 298 — dementia; and about one-seventh — 147 — melancholia. The rest are distributed among the less frequent forms.

SECTION 2. DISCHARGES.

The admissions and readmissions of the 1,074 persons having been passed under review and subjected to analysis, it now becomes necessary, for the completion of the hospital history of those persons to the 1st of October, 1870, to ascertain the number discharged, and their condition, at the time of discharge.

In the subjoined numerical statement, the relations of those persons to the hospital, at the date just mentioned, are indicated.

| | Men. | Women. | Total. |
|--|------|--------|--------|
| Persons admitted by direct commitment, . | 572 | 502 | 1,074 |
| Of whom had been discharged, | 487 | 389 | 876 |
| Remaining, October, 1870, | 85 | 113 | 198 |

Our investigations, therefore, now relate to the 876 persons who had either died or left the hospital.

MONTHLY DISCHARGES.

The twenty-seventh table shows the aggregate number discharged in each month of the official year, in the course of the period.

The largest number was in August, the next in October, the next in May; and the smallest in January and February, the numbers in those months being equal, and either of them less than half of either of those of the first three months mentioned.

TABLE NO. 27.

Monthly Discharges.

| MONTHS. | Men. | Women. | Total. |
|----------------------|------|--------|--------|
| October, | 52 | 45 | 97 |
| November, | 37 | 33 | 70 |
| December, | 39 | 34 | 73 |
| January, | 20 | 22 | 42 |
| February, | 26 | 16 | 42 |
| March, | 25 | 30 | 55 |
| April, | 50 | 27 | 77 |
| May, | 51 | 40 | 91 |
| June, | 46 | 23 | 69 |
| July, | 46 | 37 | 83 |
| August, | 47 | 51 | 98 |
| September, | 48 | 31 | 79 |
| Total, | 487 | 389 | 876 |

The numbers being brought together in groups corresponding with the calendar quarters of the year, the results are as follows: —

| | Men. | Women. | Total. |
|---|------|--------|--------|
| October, November and December, | 128 | 112 | 240 |
| January, February and March, | 71 | 68 | 139 |
| April, May and June, | 147 | 90 | 237 |
| July, August and September, | 141 | 119 | 260 |
| Total, | 487 | 389 | 876 |

The largest number is in the third calendar quarter, and the

smallest in the first, that of the former being nearly twice as great as that of the latter. Uniting them once more and making but two groups, corresponding with the cold season and the warm season, we have:—

| | Men. | Women. | Total. |
|--|------|--------|--------|
| October to March, inclusive, | 199 | 180 | 379 |
| April to September, inclusive, | 288 | 209 | 497 |
| Total, | 487 | 389 | 876 |

Of the whole number, 56.73 per cent. were discharged in the warmest six months, and 43.26 per cent. in the coldest. In another form of statement, the number discharged in the warmest half-year exceeded that in the coldest half-year by 31.13 per cent.

The results in the cases of the 876 persons are embodied in the twenty-eighth table.

Recoveries. The ratio of recoveries to the number discharged, as shown by this table, may be expressed as follows:—

| | | | | | | |
|----------------|-------------|-----|------------|----------|-------|---------|
| Of 487 men | discharged, | 179 | recovered, | equal to | 36.75 | per ct. |
| Of 389 women | " | 139 | " | " | 35.73 | " |
| Of 876 persons | " | 318 | " | " | 36.30 | " |

The deceptive character of percentage calculated upon the number of patients discharged has already been brought to notice. The only condition under which it would present *the truth which is wanted*, and in such manner as to enable it justly to represent all institutions, whatever be the circumstances modifying their admissions and discharges is, that *all the admitted patients to whom the statistics apply shall have been discharged*.

The ratio of recoveries with reference to the 1,074 patients admitted, is as follows:—

| | | | | | | |
|--------------|-----------|-----|------------|----------|-------|---------|
| Of 572 men | admitted, | 179 | recovered, | equal to | 31.29 | per ct. |
| 502 women | " | 139 | " | " | 27.68 | " |
| 1074 persons | " | 318 | " | " | 29.61 | " |

TABLE No. 28.
Results in the Cases of 876 Persons Discharged.

| Official Years. | RECOVERED. | | | IMPROVED. | | | UNIMPROVED. | | | ELOPED. | | | DIED. | | | TOTAL. | | |
|-------------------|------------|-------|--------|-----------|-------|--------|-------------|-------|--------|---------|-------------|--------|-------|-------|--------|--------|-------|--------|
| | Men. | Women | Total. | Men. | Women | Total. | Men. | Women | Total. | Men. | Wo- men. | Total. | Men. | Women | Total. | Men. | Women | Total. |
| 1858, 2 months, . | - | - | - | - | - | - | 1 | 1 | 2 | - | - | - | - | - | - | 1 | 1 | 2 |
| 1858-1859, . | 15 | 10 | 25 | 3 | 4 | 7 | 1 | 1 | 2 | - | 1 | 1 | 2 | 5 | 7 | 21 | 21 | 42 |
| 1859-1860, . | 14 | 14 | 28 | 8 | 9 | 17 | 1 | 2 | 3 | 2 | - | 2 | 8 | 10 | 18 | 33 | 35 | 68 |
| 1861, . | 14 | 14 | 28 | 9 | 11 | 20 | 4 | 5 | 9 | 2 | - | 2 | 7 | 7 | 14 | 36 | 37 | 73 |
| 1862, . | 13 | 10 | 23 | 18 | 8 | 26 | 7 | 2 | 9 | - | - | - | 8 | - | 8 | 46 | 20 | 66 |
| 1862-1863, . | 8 | 8 | 16 | 9 | 6 | 15 | 4 | 3 | 7 | - | - | - | 12 | 1 | 13 | 33 | 18 | 51 |
| 1863-1864, . | 19 | 13 | 32 | 13 | 11 | 24 | 3 | 4 | 7 | 2 | - | 2 | 12 | 8 | 20 | 49 | 36 | 85 |
| 1864-1865, . | 11 | 11 | 22 | 8 | 5 | 13 | 3 | 2 | 5 | - | - | - | 8 | 11 | 19 | 30 | 29 | 59 |
| 1865-1866, . | 15 | 8 | 23 | 10 | 5 | 15 | 2 | 1 | 3 | - | - | - | 14 | 8 | 22 | 41 | 22 | 63 |
| 1866-1867, . | 20 | 10 | 30 | 10 | 9 | 19 | 3 | 4 | 7 | - | - | - | 11 | 6 | 17 | 44 | 29 | 73 |
| 1867-1868, . | 12 | 14 | 26 | 13 | 16 | 29 | 4 | 6 | 10 | - | - | - | 12 | 8 | 20 | 41 | 44 | 85 |
| 1868-1869, . | 23 | 10 | 33 | 13 | 11 | 24 | 13 | 16 | 29 | - | - | - | 6 | 7 | 13 | 55 | 44 | 99 |
| 1869-1870, . | 15 | 17 | 32 | 13 | 16 | 29 | 14 | 12 | 26 | - | - | - | 15 | 8 | 23 | 57 | 53 | 110 |
| Totals, . | 179 | 139 | 318 | 127 | 111 | 238 | 60 | 59 | 119 | 6 | 1 | 7 | 115 | 79 | 194 | 487 | 389 | 876 |

It must be remembered that these percentages do not show the absolute ratio of curability of the patients, because, among those who still remained in the hospital, and especially those who were admitted within the last year of the period, there were some who would recover. The number of these was not large, and, probably, at most, would not add more than two per cent to these percentages.* This small ratio of cures is both an evidence and a consequence of the large number of chronic cases among the persons admitted, — a fact in proof of which we have already had sufficient testimony.

It will be perceived that the number of cures of men is 3.61 per cent larger than that of women. Assuming this to be a general truth as applicable to the insane, then of 1,000 insane persons of each sex, 38 more men than women will recover. If the greater curability of men, here apparent, be indeed a general truth, it is one of the reasons for the usual excess of women in the hospitals. But if the cases of delirium tremens and its congeneric conditions, a class of cases not generally recognized as properly belonging to those mental states included under the generic term "insanity," were rejected from the statistics, it is doubtful that the ratio of cures would be larger in men than in women.

The comparative curability of the several leading forms of insanity is one of the most interesting subjects in the history of the disease. For the purpose of illustrating it, so far as the ability is given by these statistics, the twenty-ninth table has been prepared. It shows the results, at the close of the period, of all the discharged cases of the several forms, respectively.

In those two fearful diseases, typhomania and paresis, there was no case of cure. The relative recoveries in most of the other forms are expressed by percentage, below : —

| | Admitted. | | Discharged. | |
|--------------|--------------|---------------|---------------|-------------------|
| Mania: | of 268 cases | of men, | 111 recovered | = 41.34 per cent. |
| " | " 280 " | " women, | 103 " | = 36.78 " " |
| " | " 548 " | " both sexes, | 214 " | = 39.05 " " |
| Melancholia: | " 74 " | " men, | 17 " | = 22.97 " " |
| " | " 73 " | " women, | 18 " | = 24.65 " " |
| " | " 147 " | " both sexes, | 35 " | = 23.81 " " |

* See note at the end of these statistics.

TABLE No. 29.

Relation of Form of Disease to Result of Treatment.

| | RECOVERED. | | | IMPROVED. | | | UNIMPROVED. | | | ELOPED. | | | DIED. | | | TOTAL. | | |
|----------------------------------|------------|--------|--------|-----------|--------|--------|-------------|--------|--------|---------|--------|--------|-------|--------|--------|--------|--------|--------|
| | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. |
| Mania, | 111 | 103 | 214 | 59 | 52 | 111 | 20 | 23 | 43 | 6 | 0 | 6 | 26 | 31 | 57 | 222 | 209 | 431 |
| Typhomania, | | | | | | | | | | | | | 3 | 7 | 10 | 3 | 7 | 10 |
| Paresis, | | | | | | | 2 | 0 | 2 | | | | 4 | 0 | 4 | 6 | 0 | 6 |
| Melancholia, | 17 | 18 | 35 | 27 | 23 | 50 | 12 | 15 | 27 | | | | 16 | 8 | 24 | 72 | 64 | 136 |
| Monomania, | 6 | 3 | 9 | 4 | 3 | 7 | 1 | 0 | 1 | 0 | 1 | 1 | | | | 11 | 7 | 18 |
| Dementia, | 13 | 12 | 25 | 30 | 31 | 61 | 28 | 20 | 48 | | | | 65 | 33 | 98 | 136 | 96 | 232 |
| Idiocy and Imbecility, | | | | 0 | 1 | 1 | 0 | 1 | 1 | | | | 0 | 1 | 1 | 0 | 3 | 3 |
| Dipsomania, | 22 | 2 | 24 | 4 | 0 | 4 | | | | | | | 1 | 0 | 1 | 27 | 2 | 29 |
| Delirium Tremens, | 8 | 0 | 8 | | | | | | | | | | | | | 8 | 0 | 8 |
| Not stated, | 1 | 0 | 1 | 1 | 1 | 2 | | | | | | | | | | 2 | 1 | 3 |
| Totals, | 178 | 138 | 316 | 125 | 111 | 236 | 63 | 59 | 122 | 6 | 1 | 7 | 115 | 80 | 195 | 487 | 389 | 876 |

| | Admitted. | | | Discharged. | | |
|------------|-------------|-----------------|--|-------------|-------------------|-----|
| Monomania: | of 11 cases | of men, | | 6 recovered | = 54.54 per cent. | |
| " | " 8 | " " women, | | 3 | " = 37.50 | " " |
| " | " 19 | " " both sexes, | | 9 | " = 47.36 | " " |
| Dementia: | " 170 | " " men, | | 13 | " = 7.65 | " " |
| " | " 127 | " " women. | | 12 | " = 9.44 | " " |
| " | " 297 | " " both sexes, | | 25 | " = 8.41 | " " |

These results do not differ greatly from the opinions of the present writer, as derived from observation, with the single exception of those relating to monomania. That form of mental disorder, according to my views of the nomenclature of insanity, instead of being the most curable, is one of the most incurable of all. As the persons whose disorder was arranged under this head were, with but two exceptions, admitted in the earlier years of the history of the hospital, I know nothing of them except by the record, which, of course, is here followed. But from the history of nearly all the cases which recovered, it is very evident that their monomania was a mania for alcoholic liquors, and the reader of that history can detect no reason for placing them among monomaniacs instead of dipsomaniacs.

The eight cases of delirium tremens all recovered; but this form of disorder is not generally classified as insanity proper.

Of the 29 cases of dipsomania, 24 were discharged as recovered. It is apprehended that, in all these cases, the term "recovered" was intended to signify merely the recovery of a condition of natural sobriety, or absence of intoxication. So far as the writer's experience in the treatment and observation of inebriates is concerned, there is little hope of recovery from the habit so long as there is no legal authority for the detention of its subjects a much longer period than they will voluntarily remain under restraint. It would, perhaps, have been better to reject the whole of these cases from the statistics, or place them, as are those from other hospitals, in a class by themselves.

Time in the Hospital of the Recovered. The approximate time of residence in the hospital of the 318 persons discharged recovered, may be learned from the thirtieth table.

TABLE No. 30.

Time in the Hospital of 318 Persons who Recovered.

| TIME IN HOSPITAL. | Males. | Females. | Total. |
|-------------------------------|--------|----------|--------|
| Under 1 month, | 20 | 7 | 27 |
| From 1 to 3 months, | 68 | 41 | 109 |
| “ 3 “ 6 “ | 52 | 45 | 97 |
| “ 6 “ 9 “ | 19 | 22 | 41 |
| “ 9 “ 12 “ | 10 | 11 | 21 |
| “ 1 “ 2 years, | 6 | 5 | 11 |
| “ 2 “ 3 “ | 1 | 5 | 6 |
| “ 3 “ 5 “ | 2 | 2 | 4 |
| “ 7 “ 10 “ | 1 | 1 | 2 |
| Total, | 179 | 139 | 318 |

The numbers in this table clearly illustrate the difference in the time of residence at the hospital of those of the two sexes who recovered. Of the men, 78.21 per cent. were discharged within six months from the time of admission; while of the women, only 66.90 per cent were discharged within that period. This difference in favor of the former is 11.31 per cent.

The contents of the table are worthy of observation as showing the rarity of recoveries after the first year of hospital treatment. Of the 318 recoveries, only 23, or 7.23 per cent. took place subsequently to the first twelvemonth of residence here. Yet, as is evident from the numbers in the lower part of the table, the hope of recovery is not always necessarily extinguished, even after several years duration of the disorder.

Mortality. The ratio of mortality in relation both to the number discharged and the number admitted, notwithstanding the objections to the former method, will here be shown.

| | | | | | |
|------------------------|-----|-------|----------|-------|-----------|
| Of 487 men discharged, | 115 | died; | equal to | 23.61 | per cent. |
| Of 389 women | " | 79 | " | 20.31 | " |
| Of 876 persons | " | 194 | " | 22.14 | " |

| | | | | | |
|----------------------|-----|-------|----------|-------|-----------|
| Of 572 men admitted, | 115 | died; | equal to | 20.10 | per cent. |
| Of 502 women | " | 79 | " | 15.75 | " |
| Of 1,074 persons | " | 194 | " | 18.06 | " |

By the latter and more just formula, the excess of mortality among men is made strikingly apparent. It is equal to 4.35 per cent. of the whole number of the sex admitted.

If this preponderance be regarded as a universal truth, it necessarily follows that of 1,000 insane persons of each sex, the deaths of men will be so much more rapid than of women, that, within a period not absolutely definable, but a period equivalent to that of the residence of the 1,074 patients in this hospital, 43 more of the former than of the latter will die.

It should be remarked that there is no apparent special reason, as there is in regard to recoveries, for this preponderance of mortality in the male sex. When the statistics of insanity shall have become sufficiently numerous and properly perfected, I believe it a *probability* that it will be proven that of persons becoming insane, more men than women will recover; while I regard it as a *certainty* that it will be likewise demonstrated that the average duration of life will be longest among women.

Time in Hospital of Persons who Died. A generalization of the time of residence in the hospital of the persons who died, is shown in the thirty-first table.

The earlier mortality of the men becomes apparent upon an inspection of the contents of this table.

| | | | | | | |
|--------------------------|----|-------|-------|----------|----|-----------|
| In the first six months, | 61 | men | died; | equal to | 53 | per cent. |
| " " " " " | 39 | women | " | 49.36 | " | " |

In the first half year, therefore, the excess of deaths of men was 3.64 per cent. of the whole number of deaths of that sex in the course of the period.

| | | | | | | |
|--------------------|----|-------|-------|----------|-------|-----------|
| In the first year, | 73 | men | died; | equal to | 63.48 | per cent. |
| " " " " " | 45 | women | " | 56.96 | " | " |

TABLE No. 31.

Time in Hospital of the 194 Persons who Died.

| TIME. | | | | | | Men. | Women. | Total. |
|---------------------|---|---|---|---|---|------|--------|--------|
| Under 1 month, | . | . | . | . | . | 24 | 17 | 41 |
| From 1 to 3 months, | . | . | . | . | . | 18 | 12 | 30 |
| “ 3 to 6 “ | . | . | . | . | . | 19 | 10 | 29 |
| “ 6 to 9 “ | . | . | . | . | . | 5 | 4 | 9 |
| “ 9 to 12 “ | . | . | . | . | . | 7 | 2 | 9 |
| “ 1 to 2 years, | . | . | . | . | . | 15 | 14 | 29 |
| “ 2 to 3 “ | . | . | . | . | . | 8 | 6 | 14 |
| “ 3 to 5 “ | . | . | . | . | . | 9 | 9 | 18 |
| “ 5 to 7 “ | . | . | . | . | . | 6 | 2 | 8 |
| “ 7 to 9 “ | . | . | . | . | . | 2 | 2 | 4 |
| “ 9 to 10 “ | . | . | . | . | . | 1 | 1 | 2 |
| Over 10 “ | . | . | . | . | . | 1 | 0 | 1 |
| Total, | . | . | . | . | . | 115 | 79 | 194 |

Hence, at the end of the first year, that excess had become 6.42 per cent. The thirty-second table furnishes additional evidence upon this point. * It exhibits the extent of mortality during the first two weeks of residence in the hospital.

Here it will be seen that the difference in the ratio of deaths of the two sexes, very soon after admission, was larger than at the end of six months, and nearly as large as at the expiration of a year. Of 115 deaths of men, 23, or precisely 20 per cent. occurred within two weeks from the time of admission; while of 79 deaths of women, only 11, or 13.92 per cent. took place in the same period. The difference is 6.08 per cent. of the number of deaths in the fortnight.

Fourteen of the persons died within the first week after admission. In most of these cases it would undoubtedly have been more prudent to keep the patient at home rather than to subject him to the exposure and fatigue of removal to the hospital.

TABLE NO. 32.

Deaths within Two Weeks from Admission.

| TIME. | Men. | Women. | Total. |
|--------------------------------------|------|--------|--------|
| Died 2 days after Admission, | — | 1 | 1 |
| “ 3 “ “ “ | 2 | | 2 |
| “ 4 “ “ “ | 2 | 1 | 3 |
| “ 5 “ “ “ | 2 | 1 | 3 |
| “ 6 “ “ “ | 2 | 1 | 3 |
| “ 7 “ “ “ | 2 | — | 2 |
| “ 8 “ “ “ | 2 | — | 2 |
| “ 9 “ “ “ | 1 | 1 | 2 |
| “ 10 “ “ “ | 3 | 5 | 8 |
| “ 11 “ “ “ | 2 | 1 | 3 |
| “ 12 “ “ “ | 3 | — | 3 |
| “ 14 “ “ “ | 2 | — | 2 |
| Total, | 23 | 11 | 34 |

Monthly Mortality. The thirty-third table exhibits the aggregate number of deaths in the corresponding months of the year, for the whole period.

The greatest mortality was in August, the next in July, and the least in January and March, — the deaths being equal in the two months last named. Arranged in correspondence with the calendar quarters, the results are such as seen below: —

| | Men. | Women. | Total. |
|---|------|--------|--------|
| October, November and December, | 29 | 27 | 56 |
| January, February and March, | 16 | 12 | 28 |
| April, May and June, | 36 | 16 | 52 |
| July, August and September, | 34 | 24 | 58 |

TABLE No. 33.
Monthly Mortality.

| MONTHS. | Men. | Women. | Total. |
|----------------------|------|--------|--------|
| October, | 10 | 8 | 18 |
| November, | 12 | 7 | 19 |
| December, | 7 | 12 | 19 |
| January, | 5 | 4 | 9 |
| February, | 8 | 2 | 10 |
| March, | 3 | 6 | 9 |
| April, | 13 | 4 | 17 |
| May, | 10 | 9 | 19 |
| June, | 13 | 3 | 16 |
| July, | 14 | 7 | 21 |
| August, | 14 | 10 | 24 |
| September, | 6 | 7 | 13 |
| Total, | 115 | 79 | 194 |

It is worthy of remark that the mortality in the first calendar quarter, the coldest three months of the year, was less than half of that of the third quarter, and precisely half of that of the fourth. The results, as shown by the table, differ somewhat from those of the similar table relating to the patients brought from the other hospitals. A larger relative number of the old cases included in that table appear to have died in the spring.

Bringing these figures into groups corresponding with the colder and the warmer half year, it is found that the number of deaths in the six months, —

| | Men. | Women. | Total. |
|--|------|--------|--------|
| October to March, inclusive, was | 45 | 39 | 84 |
| April “ September, “ “ | 70 | 40 | 110 |

Hence, it appears that the mortality in the warm season largely exceeded that in the cold season. But this excess was almost wholly of men; the numbers of women in the two seasons differing from each other by but a unit.

Causes of Death. The causes of death and the numerical extent to which each cause augmented the mortality are shown by the thirty-fourth table.

TABLE NO. 34.
Causes of Death of 194 Persons.

| CAUSES. | Men. | Women. | Total. |
|--|------|--------|--------|
| <i>Diseases of Nervous System.</i> | | | |
| Maniacal Exhaustion, | 5 | 9 | 14 |
| Exhaustion, | 5 | 3 | 8 |
| Typhomania, | 3 | 7 | 10 |
| Meningitis, | — | 1 | 1 |
| Softening of the Brain, | 2 | — | 2 |
| General Paralysis, | 15 | 1 | 16 |
| Paralysis, | 4 | 2 | 6 |
| Paralysis and Scald, | 1 | — | 1 |
| Apoplexy, | 2 | 2 | 4 |
| “ Sequelæ of, | 1 | — | 1 |
| Epilepsy, | 17 | 3 | 20 |
| Cerebral Rheumatism, | 1 | — | 1 |
| <i>Digestive.</i> | | | |
| Dysentery, | | 1 | 1 |
| Chronic Diarrhœa, | 1 | 2 | 3 |
| Supposed Organic Disease of Stomach, | 1 | — | 1 |
| <i>Respiratory.</i> | | | |
| Phthisis, | 13 | 17 | 30 |
| Pneumonia, | 2 | 1 | 3 |
| Capillary Bronchitis, | 1 | — | 1 |

CAUSES—Continued.

| CAUSES. | Men. | Women. | Total. |
|---------------------------------|------|--------|--------|
| <i>Circulatory.</i> | | | |
| Disease of the Heart, | — | 1 | 1 |
| <i>Serous Membranes.</i> | | | |
| Hydrothorax, | — | 1 | 1 |
| Peritonitis, | 1 | — | 1 |
| <i>General.</i> | | | |
| Marasmus, | 20 | 21 | 41 |
| Chronic Exhaustion, | 8 | — | 8 |
| General Debility, | 1 | — | 1 |
| Old Age, | 2 | 2 | 4 |
| <i>Miscellaneous.</i> | | | |
| Strangulated Hernia, | 1 | — | 1 |
| Abscess of Thigh, | 1 | — | 1 |
| Injury from Fall, | — | 1 | 1 |
| Suicide, | 7 | 2 | 9 |
| Unknown, | — | 2 | 2 |
| Totals, | 115 | 79 | 194 |

The reader will observe the much larger relative number of deaths from the more acute forms of cerebral disorder, than in the cases brought from the other hospitals; and on the other hand, the much small number from phthisis. In view of the diverse character of the two classes of patients, these differences in the sources of mortality might be expected.

SECTION 3d. READMISSIONS.

The statistics of the third division relate to 573 men, and 504 women, a total of 1,077 persons. But one man and two

women were rejected, as not insane, leaving the number to whom most of those statistics apply, 572 men and 502 women; a total of 1,074.

It has been shown in the fourteenth table, that 94 of the men and 68 of the women, a total of 162 persons, were readmitted, some of them more than once, making the whole number of re-admissions of men, 128; of women, 100; total, 228.

An analysis of these readmissions is now in course.

Second Admissions. Of persons admitted a second time, there were men, 94; women, 68; total, 162.

One of the women was not insane, upon her second admission, but was received, at her urgent request, for treatment of bodily disorder. Deducting her, the number is men, 49; women, 67; total, 161.

The condition of these persons, as recorded when they left the hospital *on their first admission*, was as follows:—

| | Men. | Women. | Total. |
|-----------------------|------|--------|--------|
| Recovered, | 50 | 38 | 88 |
| Improved, | 30 | 23 | 53 |
| Unimproved, | 11 | 6 | 17 |
| Eloped, | 3 | 0 | 3 |
| Total, | 94 | 67 | 161 |

The results thus far, of their second admission, are as follows:

| | Men. | Women. | Total. |
|--|------|--------|--------|
| Discharged recovered, | 36 | 27 | 63 |
| “ improved, | 25 | 20 | 45 |
| “ unimproved, | 5 | 5 | 10 |
| Died, | 18 | 2 | 20 |
| Total discharged, | 84 | 54 | 138 |
| Remaining in the hospital, Sept. 30, 1870, . | 10 | 13 | 23 |
| Total, | 94 | 67 | 161 |

Of 94 men readmitted, 36 recovered; equal to 38.29 per cent.

Of 67 women " 27 " " 40.30 "

Of 161 persons " 63 " " 39.13 "

Third Admissions. The persons admitted a third time each were, of men, 26; women, 16; total, 42.

When discharged from their *second admission*, their condition had been recorded as follows: —

| | Men. | Women. | Total. |
|-----------------------|------|--------|--------|
| Recovered, | 13 | 8 | 21 |
| Improved, | 13 | 7 | 20 |
| Unimproved, | — | 1 | 1 |
| Total, | 26 | 16 | 42 |

The results of this, their third admission, are shown below.

| | Men. | Women. | Total. |
|--------------------------------------|------|--------|--------|
| Discharged, recovered, | 11 | 7 | 18 |
| “ improved, | 6 | 5 | 11 |
| “ unimproved, | 4 | 1 | 5 |
| Died, | 4 | 0 | 4 |
| Total discharged, | 25 | 13 | 38 |
| Remaining, Sept. 30, 1870, | 1 | 3 | 4 |
| Total of third admissions, | 26 | 16 | 42 |

Of 26 men, on third admission, 11 recovered; equal to 42.30 per cent.

Of 16 women, on third admission, 7 recovered; **equal to 43.75** per cent.

Of 42 persons, on third admission, 18 recovered; **equal to 42.85** per cent.

Fourth Admissions. The persons received a fourth time each were, of men, 4; women, 7; total, 11.

They had been discharged from their *third admissions* as follows:—

| | Men. | Women. | Total. |
|-----------------------|------|--------|--------|
| Recovered, | 1 | 4 | 5 |
| Improved, | 3 | 2 | 5 |
| Unimproved, | — | 1 | 1 |
| Total, | 4 | 7 | 11 |

The results of this, their fourth admission, are these:—

| | Men. | Women. | Total. |
|---------------------------------------|------|--------|--------|
| Discharged, recovered, | 2 | 3 | 5 |
| “ improved, | — | 1 | 1 |
| “ unimproved, | — | 1 | 1 |
| Died, | — | 1 | 1 |
| Total discharged, | 2 | 6 | 8 |
| Remaining, Sept. 30, 1870, | 2 | 1 | 3 |
| Total of fourth admissions, | 4 | 7 | 11 |

Of 4 men, 2 recovered; equal to 50 per cent.

“ 7 women, 3 “ “ 42.85 “ “

“ 11 persons, 5 “ “ 45.45 “ “

Fifth Admissions. Of these there were men, 1; women, 3: total, 4. Their condition on discharge from *fourth admission* was:

| | Men. | Women. | Total. |
|----------------------|------|--------|--------|
| Recovered, | 1 | 2 | 3 |
| Improved, | — | 1 | 1 |
| Total, | 1 | 3 | 4 |

The results of this, their fifth admission, are:—

| | Men. | Women. | Total. |
|--------------------------------------|------|--------|--------|
| Discharged, recovered, | 1 | 2 | 3 |
| “ improved, | — | 1 | 1 |
| Total of fifth admissions, | 1 | 3 | 4 |

Of 4 persons, 3 recovered; equal to 75 per cent.

Sixth Admissions. The numerals of the sixth admissions are an exact repetition of those of the fifth, and relate to the same four persons. Their condition on discharge from their *fifth admission* is shown above; and the results of this, their sixth admission, are the same, namely:—

| | Men. | Women. | Total. |
|--------------------------------------|------|--------|--------|
| Discharged, recovered, | 1 | 2 | 3 |
| “ improved, | — | 1 | 1 |
| Total of sixth admissions, | 1 | 3 | 4 |

Seventh Admissions. Of these there were men, 1; women, 2; total, 3. The man and one of the women had been discharged from their *sixth admission* as recovered; and the other woman, as improved.

The results of the seventh admissions were as follows:—

| | | |
|--|------------------------|---|
| Discharged, recovered, | 1 man, 1 woman; total, | 2 |
| Remaining, | — 1 | 1 |
| Total of seventh admissions, | 1 2 | 3 |

Eighth Admissions. The man and the woman discharged recovered from their seventh admission, were received each an eighth time. The man was discharged recovered. The woman remained in the house at the end of the period.

By combining the numbers under the several heads of these successive readmissions, the following results are obtained:—

| | Men. | Women. | Total. |
|---|------|--------|--------|
| Discharged, recovered, | 53 | 42 | 95 |
| “ improved, | 31 | 28 | 59 |
| “ unimproved, | 9 | 7 | 16 |
| Died, | 22 | 3 | 25 |
| Total discharged of readmissions, | 115 | 80 | 195 |
| Remaining, Sept. 30, 1870, | 13 | 19 | 32 |
| Total of readmissions (of insane), . . . | 128 | 99 | 227 |

Of 128 readmissions of men, there were 53 recoveries; equal to 41.40 per cent. Of 99 readmissions of women, there were 42 recoveries; equal to 42.42 per cent. Of 227 readmissions of both sexes, there were 95 recoveries; equal to 41.85 per cent.

One of the most remarkable results, as shown by these statistics, is the very considerable increase in the ratio of recoveries over that of the 1,074 persons upon their first admission.

Of 227 readmissions there were 95 recoveries; equal to 41.85 per cent. Of 1,074 first admissions there were 318 recoveries; equal to 29.61 per cent. Excess of recoveries on readmission, 12.24 per cent.

Of 128 readmissions, of men, there were 22 deaths; equal to 17.18 per cent. Of 99 readmissions of women, there were 3 deaths; equal to 3.03 per cent. Of 227 readmissions of both sexes, there were 25 deaths; equal to 11.01 per cent.

The very remarkable difference in the ratio of deaths in the two sexes cannot fail to be noticed. This excessive mortality among the men, upon readmission, affords another illustration of the earlier fatality of insanity in that sex, and the consequent greater longevity of women.

The causes of the death of the 25 persons who died upon readmission, are included in the thirty-fifth table.

TABLE No. 35.

Causes of Death on Readmission.

| CAUSES. | FIRST AD- MISSION. | | | THIRD AD- MISSION. | | | FOURTH AD- MISSION. | | | TOTAL. | | |
|-----------------------------|-----------------------|--------|--------|-----------------------|--------|--------|------------------------|--------|--------|--------|--------|--------|
| | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. |
| <i>Nervous System.</i> | | | | | | | | | | | | |
| General Paralysis, | 2 | - | 2 | - | - | - | - | - | - | 2 | - | 2 |
| Paralysis, | 1 | - | 1 | - | - | - | - | - | - | 1 | - | 1 |
| Paralysis and Erysipelas, . | - | - | - | 1 | - | 1 | - | - | - | 1 | - | 1 |
| Apoplexy, | 1 | - | 1 | - | - | - | - | - | - | 1 | - | 1 |
| Epilepsy, | 3 | - | 3 | - | - | - | - | - | - | 3 | - | 3 |
| Epilepsy and Fall, . . . | 1 | - | 1 | - | - | - | - | - | - | 1 | - | 1 |
| Exhaustion, | 3 | - | 3 | - | - | - | - | - | - | 3 | - | 3 |
| <i>Digestive.</i> | | | | | | | | | | | | |
| Dysentery, | 1 | - | 1 | - | - | - | - | 1 | 1 | 1 | 1 | 2 |
| <i>Respiratory.</i> | | | | | | | | | | | | |
| Phthisis, | 1 | 2 | 3 | 1 | - | 1 | - | - | - | 2 | 2 | 4 |
| Typhoid Pneumonia, . . . | 1 | - | 1 | - | - | - | - | - | - | 1 | - | 1 |
| <i>General.</i> | | | | | | | | | | | | |
| Marasmus, | 3 | - | 3 | 1 | - | 1 | - | - | - | 4 | - | 4 |
| <i>Accidental.</i> | | | | | | | | | | | | |
| Suicide, | 1 | - | 1 | 1 | - | 1 | - | - | - | 2 | - | 2 |
| Totals, | 18 | 2 | 20 | 4 | - | 4 | - | 1 | 1 | 22 | 3 | 25 |

The man who died of typhoid pneumonia contracted the disease before his readmission, and lived but three days after his arrival at the hospital.

Having thus given the history, to the close of the period, of the 161 persons readmitted, it is proposed to present the results

in another form, which will more strikingly illustrate the duplication, triplication, and in some instances further multiplication of recoveries of the same person. It will also show that a large number of those who were discharged recovered, on first admission, were subsequently discharged as only improved and unimproved, or else they died or remained in the hospital. With one exception, all those who remained are incurable.

TABLE NO. 36.

Number of Admissions of the same Persons, and the Results:

| | Men. | Women. | Total. |
|---|------|--------|--------|
| Admitted twice. Discharged recovered twice, . | 16 | 17 | 33 |
| Admitted twice. Discharged first, recovered; second, improved, | 7 | 5 | 12 |
| Admitted twice. Discharged first, recovered; second, unimproved, | 1 | — | 1 |
| Admitted twice. Discharged first, recovered; remain in hospital, | 2 | 5 | 7 |
| Admitted twice. Discharged first, recovered; second, died, | 6 | — | 6 |
| Admitted twice. Discharged first, improved; second, recovered, | 4 | 2 | 6 |
| Admitted twice. Discharged improved both times, | 3 | 5 | 8 |
| Admitted twice. Discharged first, improved; second, unimproved, | 3 | 3 | 6 |
| Admitted twice. Discharged first, improved; remain, | 5 | 7 | 12 |
| Admitted twice. Discharged first, improved; second, died | 7 | 2 | 9 |
| Admitted twice. Discharged first, unimproved; second, recovered, | 2 | — | 2 |
| Admitted twice. Discharged first, unimproved; second, improved, | 1 | 3 | 4 |
| Admitted twice. Discharged unimproved both times, | 1 | 1 | 2 |
| Admitted twice. Discharged first, unimproved; remain, | 3 | 1 | 4 |
| Admitted twice. Discharged first, unimproved; second, died | 4 | — | 4 |
| Admitted twice. Eloped first; discharged re- covered, second, | 1 | — | 1 |
| Admitted twice. Eloped first; discharged im- proved, second, | 1 | — | 1 |
| Admitted twice. Eloped first; died, second, . | 1 | — | 1 |

| | Men. | Women. | Total. |
|--|------|--------|--------|
| Admitted three times. Discharged recovered three times, | 7 | 2 | 9 |
| Admitted three times. Discharged recovered twice; improved, once, | 1 | 1 | 2 |
| Admitted three times. Discharged recovered, twice; remains, | - | 1 | 1 |
| Admitted three times. Discharged recovered, twice; died, third, | 1 | - | 1 |
| Admitted three times. Discharged recovered, once; improved, twice, | 2 | 2 | 4 |
| Admitted three times. Discharged first, recovered; second, improved; third, unimproved, . | 3 | - | 3 |
| Admitted three times. Discharged first, recovered; second, improved. Remains, | 1 | 1 | 2 |
| Admitted three times. Discharged first, recovered; second and third, improved, | 2 | - | 2 |
| Admitted three times. Discharged first and second, improved; third, recovered, | 1 | | 1 |
| Admitted three times. Discharged improved three times, | 1 | 2 | 3 |
| Admitted three times. Discharged improved twice; unimproved third, | 1 | - | 1 |
| Admitted three times. Discharged improved twice; died third, | 2 | - | 2 |
| Admitted four times. Discharged recovered four times, | 1 | - | 1 |
| Admitted four times. Discharged recovered three times; died fourth, | - | 1 | 1 |
| Admitted four times. Discharged recovered twice; improved once; unimproved fourth, . | - | 1 | 1 |
| Admitted four times. Discharged recovered once; improved twice. Remains, | 1 | - | 1 |
| Admitted four times. Discharged improved three times; recovered fourth, | - | 1 | 1 |
| Admitted four times. Discharged improved three times. Remains, | 1 | - | 1 |
| Admitted four times. Discharged unimproved three times. Remains, | - | 1 | 1 |
| Admitted six times. Discharged recovered six times, | - | 1 | 1 |
| Admitted seven times. Discharged first, improved; second and third, recovered; fourth, fifth and sixth, improved. Remains, . . . | - | 1 | 1 |
| Admitted eight times. Discharged recovered seven times; third improved, | 1 | - | 1 |
| Admitted eight times. Discharged recovered seven times. Remains, | - | 1 | 1 |
| Total, | 94 | 67 | 161 |

Hence, it appears that in these one hundred and sixty-one persons there were one hundred and eighty-four recoveries, one hundred cases improved, thirty-four cases unimproved, two elopements, and twenty-four deaths; while thirty-one of the persons still remained in the hospital.

To put it in another form :

| | | | |
|--|---|--------|-----------|
| Of the 161 persons, the recoveries equalled 114.28 per cent. | | | |
| improved | " | 70.18 | " |
| unimproved | " | 21.11 | " |
| eloped | " | 1.24 | " |
| deaths | " | 14.90 | " |
| Remaining in the hospital, | " | 19.25 | " |
| <hr/> | | | |
| Total, | " | 240.96 | per cent. |

If this formula of percentage involves a most glaring absurdity, — and the existence of that absurdity probably no one will deny, — does it not likewise demonstrate the almost equal absurdity of a reliance upon the unanalyzed statistics of the hospitals as elements in any calculation, the object of which is the solution of a problem of medical or social science?

But a still more impressive illustration remains untold. Of the 161 persons readmitted, 50 men and 38 women, a total of 88 persons were discharged recovered on their first admission. These 88 persons, although recovered, re-entered the hospital, some of them once, others more than once, until the sum of their admissions became, of men, 125; women, 97; total, 222. The recorded results of these admissions form the basis of the subjoined formulæ, similar to the one above.

| | | | |
|---|-------|--------------|-----------|
| Of 50 men, the recoveries were 91; equal to 182 per cent. | | | |
| improved | " 19; | " 38 | " |
| unimproved | " 4; | " 8 | " |
| deaths | " 6; | " 14 | " |
| Remaining in the hospital, | " 4; | " 8 | " |
| <hr/> | | | |
| Total, | 125; | equal to 250 | per cent. |

Of 38 women, the recoveries were 75; equal to 197.36 per cent.

| | | | | | |
|----------------------------|---|-----|---|-------|---------------------------|
| improved | " | 12; | " | 31.55 | " |
| unimproved | " | 1; | " | 2.63 | " |
| deaths | " | 1; | " | 2.63 | " |
| Remaining in the hospital, | " | 8; | " | 21.05 | " |
| <hr/> | | | | | |
| Total, | . | . | . | 97; | equal to 255.22 per cent. |

Of 88 persons, the recoveries were 166; equal to 188.63 per ct.

| | | | | | |
|----------------------------|---|-----|---|-------|-------------------------|
| improved | " | 31; | " | 35.22 | " |
| unimproved | " | 5; | " | 5.68 | " |
| deaths | " | 8; | " | 9.09 | " |
| Remaining in the hospital, | " | 12; | " | 13.63 | " |
| <hr/> | | | | | |
| Total, | . | . | . | 222; | equal to 252.25 per ct. |

If, in a body of statistics, 88 persons contribute 166 recoveries, 31 cases improved, 5 cases unimproved, and 8 deaths, while 12 of those persons are still in the hospital, all but one of them incurable, it is submitted that those statistics must be utterly useless for scientific purposes, until they be subjected to analysis.

NOTE.

NORTHAMPTON LUNATIC HOSPITAL, Oct. 1st, 1872.

Two years have elapsed since the close of the period embraced by the foregoing statistics. The patients then in the hospital, and consequently included in the statistics, even those who had but recently been admitted, have now been under treatment a sufficient time to pretty satisfactorily test the question of their curability. It is proposed here to insert the history of them, in their relation to the hospital, and the results as illustrated by the condition upon discharge of those who have left the hospital or have been removed by death.

Of the patients who were received by transfer from the hospitals at Worcester, Taunton and South Boston, the number remaining in the house on the 30th of September, 1870, was, of men, 73; women, 96; total, 169. The subjoined table embodies the changes of the two intervening years.

TABLE No. 37.

Persons from other Hospitals. Changes from September 30, 1870, to September 30, 1872.

| | WORCESTER LUNATIC HOSPITAL. | | | TAUNTON LUNATIC HOSPITAL. | | | SOUTH BOSTON LUNATIC HOSPITAL. | | | TOTALS. | | |
|----------------------------------|--------------------------------|--------|--------|------------------------------|--------|--------|-----------------------------------|--------|--------|---------|--------|--------|
| | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. | Men. | Women. | Total. |
| Discharged Recovered, | - | 1 | 1 | - | 1 | 1 | | | | - | 2 | 2 |
| “ Improved, | - | 3 | 3 | 2 | 18 | 20 | - | 2 | 2 | 2 | 23 | 25 |
| “ Unimproved, | 9 | 2 | 11 | 3 | 14 | 17 | - | 1 | 1 | 12 | 17 | 29 |
| Died, | 1 | - | 1 | 6 | 3 | 9 | - | - | - | 7 | 3 | 10 |
| Remain Sept. 30, 1872, | 32 | 21 | 53 | 15 | 24 | 39 | 5 | 6 | 11 | 52 | 51 | 103 |
| Totals, | 42 | 27 | 69 | 26 | 60 | 86 | 5 | 9 | 14 | 73 | 96 | 169 |

The number discharged, including deaths, is: of men, 21; women, 45; total, 66. As will be perceived, there were but two recoveries. If these be added to those which occurred prior to the 30th of September, 1870, the ratio of cures of the patients from other hospitals is increased *thirty-six-hundredths of one per cent.* Of the 554 persons, the whole number of recoveries is 36; which is equal to 6.49 per cent.

Of the 1,074 persons received by direct commitment, the number remaining in the hospital, September 30th, 1870, was, of men, 85; women, 113; total, 198. The number and condition of those who have left the institution in the course of the last two official years, together with the deaths and the number still remaining, are shown in the thirty-eighth table.

TABLE NO. 38.

Changes from Sept. 30, 1870, to Sept. 30, 1872, of 198 Persons remaining, at former date, of 1,074 directly committed.

| | Men. | Women. | Total. |
|---------------------------------|------|--------|--------|
| Discharged Recovered, | 6 | 7 | 13 |
| “ Improved, | 13 | 16 | 29 |
| “ Unimproved, | 8 | 12 | 20 |
| Died, | 14 | 9 | 23 |
| Remaining, Sept. 30, 1872, | 44 | 59 | 103 |
| Total, | 85 | 113 | 198 |

By the additional thirteen cures here recorded, the ratio of recoveries to persons admitted (1,074) is increased *one and twenty-one hundredths* (1.21) per cent. Inasmuch as the full curability, at least during their residence in the hospital, of the 1,074 persons, is now essentially ascertained, the subjoined ratios may properly be introduced.

| | Men. | Women. | Total. |
|--|------|--------|--------|
| Recovered before September 30th, 1870, . . . | 179 | 139 | 318 |
| “ since “ “ “ . . . | 6 | 7 | 13 |
| Total recovered, | 185 | 146 | 331 |

Of 572 men admitted, 185 recovered; equal to 32.34 per cent.

Of 502 women “ 146 “ “ 29.08 “

Of 1,074 persons “ 331 “ “ 30.82 “

Thus an average of a fraction less than thirty-one in every hundred of these persons recovered. The recoveries of men were 3.26 per cent. more numerous than those of the women; but if the cases of dipsomania and delirium tremens had been rejected, the opposite would have been true; the number of recovered of women, in that case, exceeding that of the men.

