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HISTORY AND DESCRIPTION OF THE NORTH-
AMPTON LUNATIC HOSPITAL, MASS.

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In the year 1854, by order of the State Legislature, the Governor of Massachusetts appointed a Board of Commissioners, whose duty it was;—first, to ascertain the number and condition of the insane in the Commonwealth; and, secondly, to see what further accommodations, if any, were needed for the relief and care of the insane. This board consisted of the Hon. Levi Lincoln, Dr. Edward Jarvis, and the Hon. Increase Sumner, but their duties were chiefly performed by Dr. Jarvis. Their report, dated March 1st, 1855, exhibits great thoroughness of research, and contains the most nearly perfect census that has ever been taken, in America, of the insane and the idiotic of any state or district. It shows that, although the four hospitals already existing within the State were full, and some of them overcrowded, there were still, among the general population, more than six hundred insane persons who were fit subjects for hospital care.

When the results of this investigation were made known to the Legislature, that body immediately took the subject into consideration, and, notwithstanding the

fact that the State had already erected two hospitals for the insane, resolved, without a dissenting vote, to erect a third. The act authorizing the establishment of this institution was passed on the 21st of May, 1855.

Commissioners for the selection of a site, and the construction of the buildings, were soon appointed. The chairman of this board was the late Dr. Luther V. Bell, so long, so well, and so widely known for his successful superintendency of the McLean Asylum.

A site was selected in Northampton, county of Hampshire, and the legal title of the institution was, for some years, "The Third State Lunatic Hospital." It has since been changed to its present form, "The Northampton Lunatic Hospital." It is to be hoped that, by another change, not far distant in the future, the word "lunatic" will be discarded from it, and that it will be made to read the "Northampton Hospital for the Insane." Although an architect was employed in the construction of the buildings, yet the general plan and the internal arrangements were essentially designed by Dr. Bell.

The corner-stone of the hospital edifice was laid on the 4th of July, 1856, when an address was delivered by Dr. Edward Jarvis.

The duties of the Board of Commissioners ceased by a legislative act of limitation, on the 1st of October, 1857. The building was still incomplete, but meanwhile a Board of Trustees had been appointed. The work thenceforward was continued under their supervision and direction.

William H. Prince, M. D., of Salem, Massachusetts, received the appointment of Superintendent of the Hospital, and began the duties of the office on the first of October, 1857.

One patient was admitted on the 1st of July, 1858, and four in the early part of August: but the 16th of August was the day upon which the hospital was really opened. On that day, by order of the Governor of the State, fifty one patients were transferred to it from the State hospital at Worcester. These were persons who had been committed to the hospital last mentioned from the four most westerly counties of the Commonwealth, within one of which the Northampton Hospital is situated.

Austin W. Thompson, M. D., of Northampton, who had previously been appointed Assistant Physician, entered upon the performance of the duties of the office at this time. He resigned and left on the 1st of October, 1859, and was succeeded by Cyrus K. Bartlett, M. D., who still continues in office. On the 1st of April, 1864, Dr. Prince resigned his office, and Dr. Bartlett was appointed as Superintendent *pro tempore*. He performed the duties until the 2nd of July, 1864, when the place was filled by the appointment of Dr. Pliny Earle, the present incumbent.

The first regular official year of the hospital began on the 1st of October, 1858. The daily average number of patients during the first eight official years is shown in the subjoined table :

OFFICIAL YEAR.	MEN.	WOMEN.	TOTAL.
1858-1859,.....	95.73	133.81	229.55
1859-1860,.....	113.78	142.17	255.96
1860-1861,.....	136.74	177.52	314.26
1861-1862,.....	137.80	175.99	313.80
1862-1863,.....	155.42	199.86	355.28
1863-1864,.....	157.10	200.53	357.63
1864-1865,.....	153.81	188.59	342.40
1865-1866,.....	166.97	209.37	376.35

This One



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In the following description of the establishment, I shall draw largely from one which was written by Dr. Prince, and published in the Third Annual Report of the Hospital.

The farm and grounds connected with the institution consist of somewhat more than one hundred and eighty acres of land, in one lot, lying about one mile westerly from the centre of the town of Northampton, and separated from it by a narrow river, which forms the northern and a part of the eastern boundary of the estate.

The surface of the ground is diversified with hill, and grove, and meadow, presenting beautiful views as seen from the windows of the hospital.

There are between thirty and forty acres of woodland, covered with a thrifty growth of chestnut, pine and hemlock, forming several groves, through which are pleasant walks and drives.

The hospital stands on a commanding elevation, nearly in the centre of the farm, fronting the east. It is protected on the northwest, north and northeast by a grove, but has on the east and southeast an extensive, open lawn, over which is an unobstructed view of the town of Northampton, and the Holyoke range of mountains, of the broad meadows bordering on the Connecticut river, and the town of Hadley on the opposite bank; and beyond, and higher up the hillside, of Amherst and its college buildings.

The structure is of brick, with slated roof and brownstone window sills and caps. It is in the Elizabethan style of architecture, after a design by Jonathan Preston, of Boston; and with its irregular yet symmetrical form, its broken line of roof, the gables, grouped windows and

other peculiarities of this style, presents a picturesque and imposing appearance.

It was intended to accommodate two hundred and fifty patients, with the necessary officers and attendants; and is arranged for twelve classes of each sex. Practically this number has been much exceeded, the large dormitories having sufficient room for the additional beds.

The bottom of the lower story is six feet above the level of the ground, and a basement or cellar, eight feet deep, extends under the whole building. This preserves the lower story from dampness, and affords ample room for store rooms and bath rooms, for the steam pipe and the ventiduct by which the building is warmed and ventilated, and for the railway on which the food is transported from the kitchen to the dumb-waiters supplying the nineteen dining rooms.

The plan comprises a centre building, four stories high, which, with its extension in the rear, is one hundred and ninety feet deep, and a wing on each side consisting of four sections, each three stories high. The whole length of the front line is five hundred and twelve feet. The stories are each twelve feet high.

From its point of junction with the wings the centre projects, in front, thirty-four feet. Here it has a width of sixty feet, is four stories high, and surmounted by a cupola which rises to a height of one hundred feet above the ground. From this elevation is obtained a panoramic view of great beauty and extent.

The front door is reached through a portico with a flight of steps on either side.

The entrance hall is twelve feet wide and thirty-six feet long, and terminates at a broad door which opens into a rotunda forty-nine feet in width by fifty-seven feet

eight inches in length. Both these halls have a handsome mosaic floor of black walnut and maple. Upon the rear wall of the rotunda rise, on either side, spacious stairways leading to the stories above, the whole being abundantly lighted by large windows in each story.

On each side of the entrance hall are two rooms, eighteen by twenty-one feet, those on the right being occupied as the general business office, and the dispensary, those on the left as reception rooms. The three stories above contain rooms for the Superintendent and his family, and other officers. That part of the centre building in the rear of the rotunda, one hundred and four feet in length, consists of a basement and three stories. The basement contains a central passage-way from the outside to the cellar, having on one side the bakery and the store rooms, and on the other the kitchen and the store rooms connected with it.

The kitchen is twenty-four by forty-seven feet. It has a brick floor, laid in cement, is well lighted, and conveniently arranged. It contains a cooking range of large size, a broiler, and seven copper boilers for cooking by steam.

The story above the basement contains a dining room and a sitting room, and the drying, the ironing and the folding rooms of the laundry. The second and third stories are occupied, next the rotunda, by the chapel, a beautiful hall, forty-five feet long and thirty-six feet wide, finished to the rafters in a plain and handsome manner, in accordance with the general architectural style of the building. In 1866 its walls were painted in water colors, and ornamented with three oil paintings. In the rear of the chapel are sewing rooms and store rooms, and in the story above, several large sleeping

rooms for the farmers and the persons employed in this part of the house. On each side of the centre building is a wing consisting of four sections, three stories high, that on the north being devoted to males, and that on the south to female patients, the rear of the centre building serving as an effectual screen between them. The two wings correspond with each other; and the three stories of each wing do not differ in their general arrangement.

The first section of each wing is one hundred and fourteen feet in length, and in each story consists of a central corridor, twelve feet wide, with sleeping chambers on either side. These are eleven in number. They are each eight feet six inches wide, eleven feet long and twelve feet high, each having a glazed window five feet by three. The lower sash is balanced by weights, and is movable at will. Upon the outside of every window in the wings is an unglazed iron sash.

At that end of the hall which adjoins the centre building, is a parlor, entered from both the rotunda and the wing, in which patients may have a private interview with their friends. Adjoining this, in the wing, and separated from the corridor by a private passageway, are two chambers where patients who are very ill can be cared for in private, or by their friends. The corridor is lighted, at the end opposite the centre building, by three windows, each seven feet high by two and a half feet wide, and in addition to this, midway of its length, by a bay window measuring eighteen by seventeen feet on the floor, affording not only light and air to the hall, but a pleasant sitting room, being comfortably furnished in the three stories according to the condition of the patients occupying them.

There is, in each story, access to a stairway leading to an outer door, affording a ready escape in case of fire. In the corner of this section, at the end most remote from the centre building, is a parlor, or day room, twenty-two feet square, with large and pleasant windows on two sides. There is also a dining room, twenty-four feet long and eleven feet wide, furnished with a substantial black walnut table. There are, in each story of this section, a sink room and a water closet, and two closets for clothing, and in the basement, a bath room with six tubs.

The second section of each wing extends in the same direction, but is set back from the line of the first, which it overlaps forty feet. Like that it contains, in each of the three stories, a central corridor, twelve feet wide and one hundred and fourteen feet long, with chambers on each side. There is also a parlor of large size and well lighted, a dining room, closets for clothing, a sink room, a bath room, and a water closet. The hall is lighted, at the end nearest the centre building, by three windows, and in the middle by a bay window twenty by twenty feet on the floor. There are, in each story of this section, thirteen chambers for patients. There is also access to a stairway leading to an outer door.

The third section of each wing is placed at right angles with the second, and extends to the rear. It is ninety-three feet in length, and is lighted, in the centre, by a bay window. In the outer angle which it forms with the second section, is a dormitory, eighteen by thirty-five feet, which will comfortably accommodate eight or ten patients. Adjoining this, in the inner angle, is a large room for the attendants of the two adjacent halls. In the partition wall between the attendants' room and

the large dormitory, is a glazed window through which the patients in the latter may be observed. The dormitory was intended for persons having a tendency to suicide. The sleeping rooms are arranged on each side of the central hall or corridor, and are of the same size as those in the other two sections. There is also a dining room, a sink room, a bath room, and a water closet, and one room for two beds.

The fourth section of each wing is placed at right angles with the third, and is fifty feet in length. It contains four rooms in each story, besides a sink room, a bath room, and a water closet. This section, which is intended for the most violent and excited class of patients, has a corridor ten feet wide and forty-seven feet long. The sleeping rooms, each eleven feet by twelve, are all upon one side of it. These rooms differ from those in the other sections only in their greater size, and in having the windows protected by wire screens and sliding shutters. The corridor is well lighted by a large window at each end.

The whole number of rooms in the hospital which can be used as chambers for patients and their attendants, is two hundred and ten. Six of these are dormitories, capable of containing ten beds each, and six are for two beds each.

The doors and their casings, and the window sills throughout the wings, are of chestnut wood, oiled and varnished. The floors are all of maple, with the exception above mentioned, in the entrance hall and the rotunda.

There is, in each hall for patients, a water closet containing a cast-iron hopper enameled on the inside, to which the water is admitted by turning a valve with a detached key, which may always be in the possession of an attendant. The trap is sunk beneath the floor, the

cleansing valve being on a level with the floor. The hoppers and traps are of heavy cast iron, substantially made and well secured.

Each section, excepting the first, of either wing also contains, in each story, a bath room furnished with a cast-iron bath tub, into which cold and hot water are drawn. An overflow pipe to each tub prevents the danger of flooding the floors. In the basement under the first section, a large room is furnished with six bath tubs so arranged that, although in one room, six patients can bathe, under the care of an attendant, with as much privacy as if in separate rooms.

The hospital is heated by steam from one boiler-room, and ventilated by mechanical force.

Sixteen feet in the rear of the centre building is the engine house. This is of brick, two stories high, forty five feet long and forty three feet wide. In the lower story are four tubular boilers, each four feet in diameter and sixteen feet in length. These generate the steam for supplying the engine, heating the building, drying the clothing, cooking, and heating the water for washing and bathing. In a room adjoining the boilers is an engine of fifteen horse power, which drives the machinery in the wash room above, and the ventilating fan in a small adjoining building.

The fan consists of a central, horizontal shaft supporting twelve pairs of arms, which carry the floats by which the air is propelled. Its diameter is fourteen feet. The floats are three feet wide and six feet six inches long, (which is the width of the fan) and are so arranged that the whole or a part of them may be used, at pleasure.

A cast-iron pipe of three-inch calibre conveys the steam from the boilers to the basement under the rotunda. From this point a two and one-half inch pipe leaves the

main, on each side, to supply the ranges of pipe under the corresponding wing. Under the corridor of each wing, and running nearly its whole length, there is a brick hot-air chamber, four feet in width and five in height. The radiators, which are of wrought iron pipe, are suspended in these, upon iron bars. Most of the condensed water returns to a tank in the boiler room, and is used to supply the boilers.

Flues lead directly from the hot-air chamber to the corridors and rooms above. On one side of the hot-air chamber is the ventiduct for cold air. From the fan-wheel, the ventiduct, seven feet in width and six feet deep, passes beneath the basement floor as far as the centre of the building, where it divides to supply the two wings. Its dimensions are reduced, and it rises to the level of the hot-air chamber. Into the latter, the air from the ventiduct is admitted through apertures near the bottom of a dividing wall.

A current of fresh air is thus forced by the fan through these openings, across the steam pipe, into the flues leading to the rooms above.

In the halls for patients, at intervals of a few feet throughout the length of each corridor, are the openings of the warm-air flues, nine inches from the floor. Ten feet above these are openings into the ventilating flues which lead directly to the attic, from which the foul air escapes through the open windows. The apertures in the warm-air flues are covered with immovable cast iron gratings, the valves for regulating the transmission of heat being in the basement below, where the flue leaves the hot-air chamber, and, of course, entirely out of the reach of the patients. Beside the great number of flues in the corridors, every sleeping room has a heating and a ventilating flue, securing a constant circulation of air

through the room. Aside from this general system of heating there are some local radiators in all the halls, except four. The central edifice is warmed by local radiation alone.

For water, the hospital has two sources of supply, either of which is sufficient for the purpose. One of them is the river on the easterly borders of the farm, and about two thousand feet distant from the buildings. The other is a natural spring, upon the premises, southwest of the buildings, and at a distance from them of about eighteen hundred feet.

The water is driven from the river to the attic of the hospital by a Littlefield's Forcing Pump with seven-inch steam cylinder and five-inch water cylinder. The elevation from the river to the attic is about one hundred and sixty feet.

At the other source, the water is received from the spring in a large circular reservoir, and thence conveyed to the attic, through pipes of two and one-half inch calibre, by a steam forcing-pump of Dwight's patent and manufacture. The elevation is about one hundred and thirty feet.

The receiving reservoir in the attic is a circular wooden tank, sixteen feet in diameter, in the central building. From this the water is distributed to five other tanks, two in the attic of each wing, and one in the attic of the rear building. Those in the wings are cylindrical, each twenty-four feet in length and four feet in diameter, and made of boiler iron.

In the basement under the rotunda are two tanks of boiler iron, each seven feet long and one four feet, the other five feet in diameter, each containing a coil of brass pipe through which steam is passed for heating water for bathing and washing. These tanks are supplied by a pipe

an inch and a half in diameter leading from the tank in the attic. By the pressure thus obtained the hot water is forced into the sink rooms and the bathing rooms in every story, affording a constant and abundant supply.

The waste water of the hospital, the contents of the sewers, and the water from the roofs are conducted in brick drains, underground, to the rear of the building, where they all meet in the main sewer. This is of stone, three feet eight inches by one foot six inches, with a very rapid fall. At a distance of five hundred feet from the building it terminates in a large cess-pool, in which its solid contents are collected. From this a six-inch cement pipe conducts the fluid portion about three hundred feet farther. It then enters a wooden trough resting upon elevated frames and flows to the meadow, where it is used as a fertilizer.

The second story of the engine house is fitted up as a wash room. It contains two rows of wash tubs of pine plank, placed back to back, with ample space around them on all sides. Each tub is supplied with hot and cold water, and steam. There is a washing machine of the largest size of the David Parker patent, a centrifugal hydro-extractor, by which the clothing is partially dried, and a patent mangle.

The drying room is fitted with movable frames running upon rollers. The clothing is suspended upon these, over ranges of steam pipe arranged in the ordinary manner.

The hospital is lighted throughout by gas, which is supplied by the Northampton Gas Company.

One hundred and twenty-five feet in the rear of the first section of the south wing, is the stable. It is of brick, forty-six by forty-eight feet, and two stories high. It has stalls for eight horses, and space for several carriages.

North of the stable, at the distance of one hundred and twenty-seven feet, upon a site in the rear of the first section of the north wing, and within the southern extremity of the grove, before-mentioned, is a brick building, eighty feet long by twenty feet wide and one story high, erected in 1861, and used for the game of bowls. It has two good alleys.

Almost due west of the central edifice of the hospital, and at a distance of three hundred and twenty-five feet from the engine house, are the barn and the piggery, which were erected in 1860-61. They are of wood, the barn being roofed with slate. The barn is one hundred and four feet long, fifty-six feet wide, and sixteen feet eight inches from the principal floor to the eaves. It has, on the main floor, besides the ordinary accommodations for hay, a granary, a meal room, two rooms for farming implements, and a space for carriages. Below this floor are the stable for cattle and a large room for vegetables, the latter warmed by steam from the boiler room. Beneath the stable for cattle is a cellar into which the manure is dropped.

The piggery forms an L with the barn. It is seventy feet long, with pens upon either side of a central alley, and, at its southern extremity, joins a transverse section, forty-four feet long, with pens upon one side of the alley.

Near the road which forms the southern boundary of the farm, is a neat and substantial house of two stories, built a few years before the farm was purchased by the State, and now occupied by the farmer and his family. An avenue, bordered with well-grown maple trees, leads from this house to a point near the southern extremity of the hospital.

On the bank of the river, east of the hospital and near the pump-house, there is a well constructed ice-

house of sufficient capacity to contain an abundant supply of ice for the use of the hospital throughout the year. This was built before the hospital was opened.

The government of the hospital is vested in a board of five trustees, appointed by the Governor and Council, one retiring every year.

The executive officers are, 1st, a Superintendent, who must be an educated physician; 2d, an Assistant Physician; 3d, a Treasurer; 4th, a Clerk; 5th, a Farmer; and 6th, an Engineer. They are appointed, and their salaries determined, by the Board of Trustees.

Beside these, the by-laws require six "subordinate officers,"—1st, a Male Supervisor; 2d, a Female Supervisor; 3d, a Housekeeper, 4th, a Seamstress; 5th, a Laundress; and 6th, a Baker. Practically, there are but five. The housekeeper has been dispensed with for several years, the principal duties of the office being performed by a steward.

The subordinate officers are appointed by the superintendent.

The whole number of persons, including the executive officers, now employed in the hospital is fifty-one.

For convenience in calling persons most frequently wanted, there is, above the chapel, a large gong-bell, rung by a "pull" in the dispensary. The person wanted is designated by the number of strokes upon the bell.

Religious services are regularly held, upon Sabbath afternoons. They are conducted by the pastors of the several neighboring denominational churches. On the evenings of most of the secular days there are likewise exercises of some kind, singing, reading, or lectures, in the chapel. These are attended by from one-half to two-thirds of the patients.

The means for the illustration of lectures consist of a

blackboard, an electrical machine and an air-pump, with their appropriate implements, a pneumatic trough and other chemical apparatus, a magic lantern and slides, and a large number of diagrams and pictures, painted in water-colors upon cotton.

A library of more than one thousand volumes is devoted to the use of the patients. There are two billiard tables, two bowling alleys, as before mentioned, a bagatelle table, and implements for various other games, together with means and facilities for a diversity of entertainment in other forms of recreation or amusement.

When the hospital was opened the steam with which it was supplied was generated in four boilers, each twenty seven feet in length by four feet in diameter, and having two flues each, of sixteen inches calibre. For some years it was found impossible to keep all parts of the building sufficiently warm, in winter. The steam did not force itself through the long reaches of radiating coils in the air chambers most remote from the boilers. Some of the coils were shortened, and other experiments were tried in the hope of overcoming the difficulty, but without success. Hence, in the summer of 1864, the four original flue-boilers were removed and three of the tubular boilers now in use introduced. It was decided to heat the second section of either wing by local radiation alone, and radiators were consequently placed in the halls of those sections.

These alterations proved to be an improvement, but yet were not successful to the desired extent. Consequently, in the autumn of 1866, another boiler was procured and a steam pipe was run directly from the main, near the boilers, underground, to the hot-air chamber of the fourth or remotest section of the North wing.

With these additions all the success expected has been achieved. During the last two months—January and February—thermometers have been kept in all the halls for patients, and observations recorded twice daily, once at ten o'clock in the forenoon, and again at eight o'clock in the evening. The results are recorded in the first two tables. It will be perceived, first, that not one observation in the two months indicates a temperature below 60 degrees; secondly, that the *lowest average temperature* of the 10 A. M. observations in either wing, for the whole month, is *sixty-eight and one-third degrees*, and that of the evening observations *sixty-nine and two-thirds degrees*.

In the upper 3d hall, of the north wing, the mean temperature was nearly three degrees lower than in any other hall. This hall is used only in connection with the adjoining fourth hall, the patients frequenting it, at pleasure, as a place of promenade, during the day, although its sleeping rooms, except the large dormitory, which has been converted into a billiard room, are occupied at night.

The thermometers were suspended each in such position as was thought fairly to indicate the temperature of the hall. They were from six to eight feet from the floor, and hence show a somewhat higher degree of heat than that which immediately surrounded the inmates.

It was believed that at ten o'clock A. M., immediately after the hours devoted to the morning work, during which doors are more than usually open, and, in some instances, windows raised, the temperature of the halls was as low as at any period of the twenty-four hours,—certainly as low as at any time when the patients were not in their beds.

But to test the latter point, observations were taken at six o'clock in the morning on twelve consecutive days,

from the 5th to the 16th of February, inclusive. A synopsis of them is exhibited in the third table.

In the north wing the mean or average, in all the halls, was $\frac{1}{5}$ of one degree *lower* at six o'clock than at ten o'clock; in the south wing, it was $\frac{1}{4}$ (or a little more than one-half) of a degree *higher*. Hence the difference at the two hours is not sufficient to be of any practical importance.

TABLE FIRST.

Temperature, by Fahrenheit's Scale, of the twenty-four Halls for Patients in the Northampton Lunatic Hospital, in January, 1867.

TEN O'CLOCK, A. M.					EIGHT O'CLOCK, P. M.				
HALLS.	Number of Observations.	Highest in Degrees.	Lowest in Degrees.	AVERAGE.	Number of Observations.	Highest in Degrees.	Lowest in Degrees.	AVERAGE.	
Upper 1st, North, . .	28	72	66	$69\frac{2}{3}$	31	74	67	$71\frac{2}{3}$	
Upper 2d, North, . .	30	72	64	$67\frac{2}{3}$	28	74	65	$69\frac{2}{3}$	
Upper 3d, North, . .	31	78	60	$65\frac{2}{3}$	31	70	61	$66\frac{2}{3}$	
Upper 4th, North, . .	31	81	61	$69\frac{6}{31}$	31	81	62	$70\frac{1}{31}$	
Middle 1st, North, . .	30	72	61	$68\frac{3}{31}$	31	73	68	$70\frac{7}{31}$	
Middle 2d, North, . .	31	74	61	$69\frac{1}{31}$	31	75	67	$70\frac{1}{31}$	
Middle 3d, North, . .	30	73	64	$68\frac{1}{3}$	31	74	63	69	
Middle 4th, North, . .	30	75	66	$70\frac{6}{30}$	31	80	64	$71\frac{1}{31}$	
Lower 1st, North, . .	31	73	60	$68\frac{2}{31}$	31	74	64	$69\frac{7}{31}$	
Lower 2d, North, . .	30	70	62	$66\frac{3}{30}$	31	72	62	$66\frac{2}{31}$	
Lower 3d, North, . .	30	80	66	$72\frac{1}{30}$	31	79	66	$73\frac{2}{31}$	
Lower 4th, North, . .	31	82	66	$73\frac{1}{3}$	31	84	63	$74\frac{1}{31}$	
Average,				$69\frac{1}{25}$	Average,			$70\frac{7}{10}$	
Upper 1st, South, . .	31	72	62	$67\frac{1}{31}$	31	72	65	$68\frac{2}{31}$	
Upper 2d, South, . .	31	73	62	$68\frac{2}{31}$	31	75	61	$68\frac{3}{31}$	
Upper 3d, South, . .	31	70	62	$66\frac{2}{31}$	31	70	65	$68\frac{3}{31}$	
Upper 4th, South, . .	31	74	62	$67\frac{2}{31}$	31	76	63	$69\frac{2}{31}$	
Middle 1st, South, . .	30	69	64	$67\frac{1}{30}$	31	72	68	$69\frac{2}{31}$	
Middle 2d, South, . .	31	72	64	$68\frac{9}{31}$	31	76	64	$69\frac{1}{31}$	
Middle 3d, South, . .	31	74	62	$68\frac{1}{31}$	31	74	66	$69\frac{2}{31}$	
Middle 4th, South, . .	31	76	68	71	31	78	68	$72\frac{9}{31}$	
Lower 1st, South, . .	31	72	62	$66\frac{1}{31}$	31	72	63	$68\frac{2}{31}$	
Lower 2d, South, . .	31	78	60	66	31	78	60	$66\frac{5}{31}$	
Lower 3d, South, . .	31	74	67	$72\frac{1}{31}$	31	82	68	$74\frac{1}{31}$	
Lower 4th, South, . .	31	74	64	$69\frac{1}{31}$	31	75	68	$70\frac{2}{31}$	
Average,				$68\frac{1}{3}$	Average,			$69\frac{2}{3}$	

TABLE SECOND.

Temperature. by Fahrenheit's Scale, of the twenty-four Halls for Patients in the Northampton Lunatic Hospital, in February, 1867.

TEN O'CLOCK, A. M.					EIGHT O'CLOCK, P. M.				
HALLS.	Number of Observations.	Highest in Degrees.	Lowest in Degrees.	AVERAGE.	Number of Observations.	Highest in Degrees.	Lowest in Degrees.	AVERAGE.	
Upper 1st, North,..	28	73	65	$68\frac{2}{8}$	28	75	66	$70\frac{0}{8}$	
Upper 2d, North,..	28	70	64	$67\frac{7}{8}$	28	72	63	$67\frac{2}{8}$	
Upper 3d, North,..	28	68	60	$65\frac{2}{8}$	28	70	62	$65\frac{3}{8}$	
Upper 4th, North,..	28	83	60	$72\frac{0}{8}$	28	77	64	$70\frac{3}{8}$	
Middle 1st, North,..	28	79	63	$69\frac{1}{8}$	28	74	64	$70\frac{4}{8}$	
Middle 2d, North,..	28	75	63	71	28	74	67	71	
Middle 3d, North,..	28	74	64	$69\frac{7}{8}$	28	74	66	$69\frac{4}{8}$	
Middle 4th, North,..	28	73	66	$69\frac{3}{8}$	28	72	65	$69\frac{7}{8}$	
Lower 1st, North,..	28	74	66	$69\frac{4}{8}$	28	75	67	$71\frac{1}{8}$	
Lower 2d, North,..	28	73	63	$68\frac{1}{8}$	28	73	65	$69\frac{2}{8}$	
Lower 3d, North,..	28	78	60	$72\frac{1}{8}$	28	78	70	$73\frac{0}{8}$	
Lower 4th, North,..	28	82	64	$71\frac{3}{8}$	28	86	64	$71\frac{4}{8}$	
Average,				$69\frac{2}{8}$	Average,			$69\frac{2}{8}$	
Upper 1st, South,..	28	72	63	$67\frac{1}{8}$	28	73	65	$69\frac{1}{8}$	
Upper 2d, South,..	28	75	68	$70\frac{7}{8}$	28	75	68	$71\frac{1}{8}$	
Upper 3d, South,..	28	70	63	$67\frac{4}{8}$	28	72	63	$68\frac{3}{8}$	
Upper 4th, South,..	28	78	67	$69\frac{5}{8}$	38	75	64	$70\frac{2}{8}$	
Middle 1st, South,..	28	74	65	$69\frac{2}{8}$	28	75	66	$70\frac{1}{8}$	
Middle 2d, South,..	28	78	68	72	28	77	68	$71\frac{2}{8}$	
Middle 3d, South,..	28	78	64	$71\frac{1}{8}$	28	75	68	$70\frac{5}{8}$	
Middle 4th, South,..	28	78	63	$70\frac{6}{8}$	28	78	63	71	
Lower 1st, South,..	28	72	66	$69\frac{9}{8}$	28	76	67	$71\frac{0}{8}$	
Lower 2d, South,..	28	74	62	$68\frac{4}{8}$	28	73	67	$69\frac{4}{8}$	
Lower 3d, South,..	28	79	66	$73\frac{9}{8}$	28	78	68	$74\frac{5}{8}$	
Lower 4th, South,..	28	77	64	$70\frac{2}{8}$	28	77	66	$71\frac{3}{8}$	
Average,				$69\frac{4}{8}$	Average,			$70\frac{4}{8}$	

TABLE THIRD.

Temperature at Six o'clock, A. M., from the 5th to the 16th of February, inclusive.

HALLS.	Number of Observations.	Highest in Degree.	Lowest in Degree.	AVERAGE.	HALLS.	Number of Observations.	Highest in Degree.	Lowest in Degree.	AVERAGE.
Upper 1st, North,..	12	73	65	69 $\frac{1}{3}$	Upper 1st, South,..	12	70	64	67 $\frac{2}{3}$
Upper 2d, North,..	12	71	64	67 $\frac{1}{3}$	Upper 2d, South,..	12	75	68	70 $\frac{1}{3}$
Upper 3d, North,..	12	68	62	65 $\frac{1}{3}$	Upper 3d, South,..	12	71	64	67 $\frac{1}{3}$
Upper 4th, North,..	12	80	63	72 $\frac{1}{3}$	Upper 4th, South,..	12	75	63	69 $\frac{2}{3}$
Middle 1st, North,..	12	70	63	67 $\frac{2}{3}$	Middle 1st, South,..	12	74	66	69 $\frac{2}{3}$
Middle 2d, North,..	12	74	68	69 $\frac{2}{3}$	Middle 2d, South,..	12	76	70	71 $\frac{2}{3}$
Middle 3d, North,..	12	72	66	68 $\frac{2}{3}$	Middle 3d, South,..	12	74	68	70 $\frac{2}{3}$
Middle 4th, North,..	12	75	64	69 $\frac{1}{3}$	Middle 4th, South,..	12	76	67	71 $\frac{2}{3}$
Lower 1st, North,..	12	72	65	69 $\frac{2}{3}$	Lower 1st, South,..	12	74	68	71 $\frac{1}{3}$
Lower 2d, North,..	12	73	64	68 $\frac{2}{3}$	Lower 2d, South,..	12	74	67	70 $\frac{2}{3}$
Lower 3d, North,..	12	79	68	73 $\frac{1}{3}$	Lower 3d, South,..	12	77	71	73 $\frac{1}{2}$
Lower 4th, North,..	12	79	64	72 $\frac{1}{3}$	Lower 4th, South,..	12	77	60	72 $\frac{2}{3}$
Average,				69 $\frac{7}{8}$	Average,				70 $\frac{1}{2}$

ON MORAL INSANITY.*

BY DR. JULES FALRET.

II. *Pathological or Clinical.*—Does reasoning or moral insanity as to day, in France and elsewhere, admitted in mental pathology, really exist as a distinct form of mental disease, or is it only an artificial and provisional name for incongruous facts, belonging to different categories? This is the question now before us, and, in my opinion, a decisive answer is given in clinical observation, which shows us a great variety of facts confounded together under a phrase, the meaning of which is far from being clearly defined.

*Continued from page 424.