

## IOWA HOSPITAL FOR THE INSANE,

 Mt. Pleasant, Dec. 6, 1871.To His Eivellency, Samuel Merrill, Governor of the State of: Iowa:

Sir:-I have the honor herewith to transmit to you the Sixth Biennial Report of the Board of Trustees of this institution, with the Report of the Superintendent, and accompanying documents.

I have the honor to be, very respectfully,

## Your obedient servant,

M. L. EDWARDS, Secretary of the Board.

## REPORT.

## To his Excellency, Samuel Merrill, Governor of the State of Iowa:

Another biennial period in the history of the Iowa Hospital for the Insane, at Mt. Pleasant, having transpired, in compliance with the requirements of the statute, the trustees of the Institution would respectfully submit their Sixteenth Biermial Report. In so doing, they are happy to acknowledge indebtedness to that providential rule under which general prosperity has been experienced. The period has been one of ordinary good health, and marked by no calamity to the inmates of the institution.
The report of the medical superintendent in regard to the general management and the present condition of the hospital, and in regard to the improvements made and in progress, herewith sub mitted, is so full as to render any detailed recital on our part superfluous.
As provided by law, the trustees, since their last report, have held their regular meetings at the hospital; and during the intervals between these meetings, monthly visits, and special visits as occasion required, have been made by one or more of the trustees. At such meetings and visits, they have made careful inspection of the different departments; have inquired into the condition and treatment of the patients; into the domestic and other industrial operations; into the financial management, accounts, and records of the officers; have observed the progress and character of the varions improvements in process; and have made such orders, and given such counsel, from time to time, as circumstances and the interests of the institution seemed to demand.
The trustees are happy to commend, as heretofore, the ability, fidelity, and unremitting care and watchfulness of the superintendent and matron, and the assistant-physicians, the resident officers
of the hospital, and also of the general faithfulness and efficiency of their immediate assistants, and of the other employees of the institution. They doubt whether, on the whole, any similar institution in the land, whose patients are as well supplied and provided for, is conducted with more ability, or managed with better economy.
The trustees cordially indorse the tribute paid in the superintendent's report to the moral worth and valuable services of Dr. George W. Dudley, late assistant-physician of the hospital.

A $\bar{t}$ the date of our last report there remained, unexpended, of the appropriations made by the Twelfth General Assembly, for the purchase of land and for making certain improvements, the sum of $\$ 3,578,55$. The title to one of the parcels of land, the purchase of which had been contemplated and contracted for, was found imperfect and invalid, and we gave up all thought of purchasing it, unless it might be at some distant day. As there seemed to be no legal impediment in the way, we thought advisable to purchase, in lieu thereof, a very desirable tract immediately in front of the hospital and adjoining the avenue, which we did. This tract comprises ten acres and was purchased for $\$ 2,600$. The title was found good, and the requisite deed for the same was taken and placed on record.
After such purchase had been made, the parties interested in the other tract, by decree in court, and by agreement between themselves, placed the title to the same in such a shape as to make its purchase safe; and thereupon, on application to that effect, the Thirteenth General Assembly, in the act making appropriations for the benefit of the hospital, chapter 98 , granted the sum of $\$ 2,500$ for its purchase. The tract comprises about 38 acres, and was purchased for that sum. The necessary deeds were taken and placed on record.
The appropriations made for various improvements, as specified in the act referred to, have been applied according to the provisions of the act, as shown by exhibit A, appended to this report. These improvements were much needed, are of a very substantial character, and add much to the effectiveness of the working forces of the institution, and to convenience in its management. The barn, the chimney, the boiler-house, and the new boilers are completed and in use, and doing admirable service. The reservoir is incomplete. As
stated in the superintendent's report, the appropriation therefor proves insufficient.
Some improvements have been made in the east wing of the building, occupied by the male patients, the expenses of which have been defrayed out of the fund for current expenses. These improvements seemed to be indispensable to the health and comfort of the patients, and to be made especially necessary in consequence of the exceedingly crowded state of the hospital-the number of patients now in it being donble the number it was planned to accommodate. They were needed to give more room for patients, to throw more light into dark corridors, and to afford better ventilation-the over-crowded state of some of the wards rendering them almost iusufferable. It was felt that this portion of the building could not be left as it was, another winter, without peril to the health and lives of the patients who must occupy it. Like changes are needed in the west wing, but not quite so imperatively.

The price fixed for the board and care of the patients in the hospital, has been four dollars per week for all patients, except epileptics, and for the latter, four dollar and fifty cents, since January 1st, 1868. It might have been reduced somewhat before this, but for the necessity of making the infprovements just mentioned, and the necessity of providing additional furniture for the accommodation of the increased number of patients. If the General Assembly, at its approaching session, shall grant the appropriations we ask, we hope to be able to make some deduction in the future.

The act passed by the last General Assembly for the government of hospitals for the insane, etc., seems to work well in general, and to answer the purposes for which it was intended. So far as the trustees 'are advised, excepting in cases in which some of its provisions have been overlooked or misapprehended, it has given very general satisfaction.

The trustees concur essentially in the views expressed by the superintendent in his report touching the propriety and necessity of making the improvements recommended by him; and in order that such improvements may be made, they respectfully ask that the necessary appropriations be granted, for which estimates are made as follows:
commend it to the fostering care of the State, and the confidence of their fellow-citizens.

MATURIN L. FISHER, LUKE PALMER, ANDREW W. MoClure, MIOAJAH T. WILLTAMS, GEORGE ACHESON, BENJAMIN ORABB, MARTIN L. EDWARDS.

Iova Hospital for the Insand at Mt. Pleasant, Dec. 6, 1871.

# SUPERINTENDENTTS REPORT. 

## To the Board of Trustees of the lowa Hospital for the Insane, at Mt. Pleasant, Iowa:

Gentlemen : At the close of another period in the history of the Hospital, I take pleasure in presenting to you the sixth biennial report, as required by law; and in so doing I think I may say that the degree of success attained has been in some measure commensurate with the wishes and expectations of the warmest friends of the institution. A larger number of patients have been admitted, and under care and treatment, than during any similar period in its history, and during most of the time the wards have been uncomfortably crowded. Although we have received so large a number, many applications have been declined, only, however, because it seemed impossible to afford room for them. But no person has been refused admission whose condition and symptoms gave reason for hope of recovery, or much relief from treatment. Some of these unfortunate persons we could not receive for want of room, $I$ have been informed, are in jails, some are in such poor houses as exist, and some are still with their friends, who are, in some instances, I have reason to believe, not very well able to bear the usual burden of an insane relative. Some persons afflicted with chronic incurable insanity, have been received, who were represented as dangerous to be at large, notwithstanding the hospital has been so greatly crowded, believing that their care, and the protection of the community are some of the functions of the hospital, if it is not the highest.

The impossibility of providing for all the insane of this growing population much longer in this institution was foreseen and reported to you four years ago, but the actual result has exceeded my expectations; and the number then under care about fifty more than a full household, and by that number greater than the number should be for the highest welfare of all the patients under care, has since been
increased by more than one hundred and fifty. The proper limit of sleeping-rooms and dormitory, and dining-room accommodations were passed long ago, and for a period longer than that embraced in this report, many rooms intended for only one person, and none too spacious for one, have had two or more occupants at the same time; dormitories, that were originally designed for parlors and readingrooms, have been crowded with eight or ten beds, when half as many would be a more proper number; and many patients have been obliged to take their meals on chairs and settees outside of the din-ing-rooms. During meals some of the wards have had more the appearance of a pic-nic party, deprived of the surroundings and conditions that give so much pleasure and zest to those gatherings, instead of the social, orderly, appropriate arrangements which should be the invariable rule. Under such circumstances it is simply impossible to serve meals as warm and palatable, especially in winter, as we wish to do, and the complaints of this that are sometimes made are but too well founded. Generally, however, the patients have pretty cheerfully complied with what has been required of them in this and other things, and submitted to inconveniences that cannot be avoided in a crowded hospital.

It is well known to yon that the hospital was designed to accommodate not more than three hundred patients, and even that number only by using parlors as dormitories ; while for several months, more than five hundred patients have been under care. Such crowding has subjected patients to many inconveniences and some discomforts ; has given rise to personal conflicts among patients, which no vigilance can wholly prevent ; has cansed, it is to be feared, sickness and death; has increased the restlessness and irritability that is one of accompaniments of insanity, and which the associations and surroundings of hospital life should tend to allay. Classification, so important in the treatment of insanity, according to the stage or character of the disease, or the disposition, taste, and cultivation of the individual, has been rendered less perfect than it should be ; and, perhaps, there is not one of the manifold means and appliances, that classed together constitute the moral treatment of the insane that we could use as effectively for their welfare or restoration as in wards less crowded with suffering humanity. The
noisy and furious have been in too close proximity to the quiet and harmless, who otherwise would have enjoyed refreshing sleep. It has seemed necessary to resort to mechanical restraint oftener, proportionally, to secure safety from insane fury and violence, than when we had fewer patients. All mechanical restraint is to be avoided as far as possible, and it is much less required in institutions that are not crowded than in those that are crowded. Properly applied, it is often of great benefit in restraining violence, and preventing self-hurt, but any unnecessary restraint may produce highly injurious effects. In our crowded wards the ventilation has been insufficient, and patients, both the recent and curable, and the chronic incurable, have been subjected to the deleterious, depressing influences of air unfit to breathe. Such, in brief, are some of the evils attending the crowding of institutions of this kind ; and the only remedy for this institution is the speedy completion of the Hospital at Independence, and for this purpose abundant means should be provided with the least delay.

Among those sent to the hospital, as in former years, have been some persons whose disorder, presenting no symptoms at the outset unfavorable to recovery, had passed into the chronic stage. Instead of being placed in the hospital during that early period most favorable for recovery, various expedients had been tried that in the popnlar mind hold out such flattering inducements,-journeyings to various places, and visits among friends,-everything that neighborhoodadvice, abundant enough at such times, could suggest, including the incantations of the "faith," or the "traveling doctor," or the dangerous advice of some form of quackery, in the vain hope of restoration. After several months, or a year or two, have been in this manner frittered away, and the patient has been growing worse, or at least no better ; and, perhaps, as frequently happens, violent, destructive, and disorderly habits, perverted feelings, obstinate will, irregular appetite, or abstinence from food have appeared, then that is done which should have been done in the beginning,-they are sent to the hospital. For such persons less can be done, in a majority of instances for their permanent benefit than the public often seem to expect. Yet to some of this class-and every case is worthy of a
trial-the treatment pursued in the hospital, if the requisite perseverence is exercised, may be of great benefit. Generally they are the most difficult patients to please, satisfy, or control, that come under our care. Often obstinate, willful, disorderly, and exacting in the last degree, it is difficult to keep them neat and tidy, or secure an orderly observance of the common rules with which we endeavor to govern the household, withont provoking resistance that we dislike to incur. Often very confident in the belief that they are well and capable as ever before of taking care of themselves, and that they have been needlessly or through malice sent to the hospital, they chafe and fret under any form of restraint, perhaps, misinterpret everything done for them into acts of unkindness or abuse. Unsettled and discontented, and irritable, they tend to make others so, and thus it may be that their associations cannot be the most pleasant withont doing injury to others. Although the integrity of their mind is so seriously impaired, these persons can make the most plausible appeals and complaints to their friends, and thus often secure their removal before sufficient time has elapsed for the accomplishment of any obvious good result; and, if, as has sometimes been the fact, striking results have been expected, regardless of the direction of the disorder, disappointment, censure and distrust follow the insufficient trial, when credit should be given for such effort as might, after more persevering treatment, prolong, in some degree, corresponding with the duration of the disorder, effect some durable benefit, where recovery may be impossible. And therefore I feel it a duty to say, what has been said a hundred of times in the reports of hospitals for the insane throughout the country, so that it might be supposed to have come to the knowledge of every physican, if not every household, that insanity is only certainly curable in its earlier stages, and that the modern hospital affords the best known means for its successful treatment. A few will recover, however managed, or mismanaged; but only under favoring ciscumstances will a majority of those who become insane get well. Chief among the favorable circumstances, and, perhaps, the foundation of successful treatment, may be mentioned, removal from home and those associations and surround. ings, in the midst of which mental derangement appeared, and which generally have a tendency to perpetuate it. And this object is
not accomplished by journeying or visiting with the company of friends. There is wanting the guiding influence that only a considerable acquaintance with insanity can supply, which alone can be found in the well regulated hospital or asylum, as well as the quiet, rest, care, and all the hygienic influences conducive to health. It is the want of these influences and conditions that has made the oft-repeated experiment of journeys and visits the relief of mental derangement, end only in disappointment and confirmed disease. It is through delay and these well intended, but ill judged experiments for the care and cure of mental disease that is found the explanation of the fact of serious import to any community, that of all who have been admitted to the hospital, only 35.06 per cent have recovered, while of those who came under treatment here within one year from the commencement of their disorder, 70.02 per cent. have recovered; and if, in a reckoning, only those were included whose disorder was of not more than six month's duration, the results would appear still more favorable for the advantages of early treatment.

Although, so far as I could, I have endeavored to restrict the admission to the first class mentioned in the statute,-those whose disorder is of no more than one year's duration, many persons afflicted with chronic and incurable epilepsy have been sent to the hospital by the commissioners of insanity. The greater number of these persons were sent because they were regarded as violent and dangerons, as many epileptics really are. A few have been sent during the early stage of the disease, before the intellect was mucl. destroyed or impaired, for carative treatment. It is only during this stage that they should be sent to the hospital, if at any time. Crowded as the hospital has been during the past four years, their presence has been a serious inconvenience, if not productive of much harm to curable or convalescent patients. Besides being generally irritable and often disposed to strike particularly about the time of the oceurrence of their fits, and restless and uneasy under restraint-the ordinary restraint of the hospital-they are a sad spectacle to those whose nervous sensibilities are easily disturbed by outward influences. It requires long years of familiarity with the phenomena of epilepsy to behold them with composure. The shrill scream, sudden unconsciousness, and heavy fall; the frightful
convulsions, and upturned, glossy eyes; the obstructed breathing, frothing at the mouth, and livid countenance, present a picture that is trying to the stoutest nerves. Temporary shock is the least effect upon most persons, and yet such is the number of this class here that many persons must witness such scenes almost every day. With our limited means of classification for the large number in the hospital we cannot wholly separate them from others, and so they must be distributed through several wards. With a more extended means of classification, such as would be afforded by the construction on these premises of a separate building for men or women, for the more complete separation of the sexes-an arrangement that has some striking advantages-we could separate and classify the victims of epilepsy, to the mutual advantage of all patients. But a better provision, probably, would be an institution for the treatment and care of epilepsy, centrally located so as to be easily accessible from all parts of the State, to which persons afflicted might resort for treatment during the curable stage of the disorder, before the mind is deranged or seriously impaired, at a period when, if it be proper, they are rarely sent to the hospital because they do not need the peculiar restraints and care necessary for the insane. In a separate institution, early treatment would probably restore many, perhaps a majority of these unfortunate persons, to health; at any rate it could afford them a more suitable home than is to be found in the lospital for the insane. The chronic and insane epileptics conld also there receive such treatment and care, and regulated diet, as will tend to mitigate the severity of their disorder, if they cannot effect a cure. I have been led to speak encouragingly of the cure of epilepsy, if the proper treatment is applied in the early stages of the disorder, from some results obtained here during the last two years. Within this period three persons-two males and one female-all youns persons, sent to the hospital for treatment, in less than a year from the attack of epilepsy, have been discharged, apparently recovered, and three others now under treatment present most encouraging indications. The duration of treatment of those discharged was twenty-four, twenty-seven, and fifty-three months respectively. The same gratifying results would probably attend
the early treatment of many others of this class, who will otherwise inevitably drift into hopeless dementia.

Since the opening of the hospital five insane convicts have been sent to it from the penitentiary ; three persons under arrest, charged with homicide, have been sent to the hospital by the courts, for observation and treatment. Many others who had committed or attemptud homicide have been sent here in the usual way, they being obviously insane at the time of committing the act. Of those from the Penitentiary, three have died and one remains. As a general rule, they have proved incurable, and many of them have displayed viscious propensities during the greater part of the time they have been under care in the hospital. It seems probable that the number will increase with the increase of population, and if the practice of sending them here is continued their presence may seriously interfere with the welfare of those for whom the hospital was mainly founded. It is scarcely necessary to point out to a reflecting mind the bad results that may follow the association of this class of persons with other patients. They are usually among the most troublesome class of persons we have to take care of; and they need more secure arrangements to prevent escape than is ordinarily required for insane persons, or than have been provided here. Consequently we have been often obliged to keep them in a good deal of seclusion, or under special surveillance to prevent escape and preserve order and quiet. Their associations with other patients may be most prejudicial. The young and innocent may have for the first time come in contact with influences, while the mind is peculiarly susceptible, that may unfavorably affect their future lives. For the insane convict, and those with homicidal propensities, custody is as much an object as treatment, and both can be as well or better secured under other and altogether suitable provisions. I would suggest that a hospital for these persons be constructed in connection with the Penitentiary ; and if it should be deemed advisable, an arrangement, sometimes adopted, the superintendents of the hospitals for the insane may be constituted a board of consultation to visit such persons at stated intervals, or oftener if called upon by the proper authority, for advising proper treatment. This would secure the care and custody for those who may be incurable, the needful
treatment for such as are curable, and the needful observation for the information of the courts of those who may be sent there for that purpose.
In some States separate institutions for the criminal insane have been built, and organized like the other hospitals for the insane, and this may ultimately be needed here, but for the present the method suggested may be everyway suitable, and at the same time more economical.

This seems to me a matter of much importance, for no one so unfortunate as to need to be sent here ought to bear the additional misfortune of being associated in any way with criminals, perhaps these possessing the worst moral characteristics.
Almost every year we are called to witness much injury done to some patients by capricious or premature removal from the hospital. 'Some have been capriciously removid within a few weeks from the time of their admission, whose recovery in the course of a few months seemed almost certain. Others have been removed during the advanced stage of convalescence, where they seemed to their anxious friends to have recovered, at least from the prominent symptoms of insanity, in the mistaken belief that there was nothing more that could be done for them in the hospital that conld not be as well done elsewhere. The morbid restlessness that nsually attend the earlier stages of convalescence from mental derangement, and perhaps the last symptom to disappear, is often mistaken for a strong, healthy desire to return home, and the conclusion is formed that a longer residence in the hospital may do more harm than good. Some of the former have been reported to have recovered while some have been re-admitted after their disorder had become chronic and incurable, whose symptoms in the beginning had no unfavorable aspect. Of the latter several have been re-admitted who probably would have remained well, for a much longer period at least, if recovery could have beell made more perfect by a few weeks longer treatment at the outset. The same principles that seem to govern recovery from many other diseases may be applied to recovery from mental derangen ut. It is well enough known that before complete recovery from diseases of the lungs, or the stomach, has taken place, it would be the height of imprudence to
brave exposure to inclement weather, or indulge in improper food, however small the risk might be in the individual's ordinary state of health. Now, the brain is a far more delicate organization than either the lungs or the stomach, its health of more importance in the animal economy, and its recuperative treatment requires no less careful management. It will not bear exposure to improper influences or the canses of its disease, while it is not perfectly sound, any better than the other bodily organs ; and to remove a convalescent patient from hospital treatment, before he has recovered from the cerebral disease that caused insanity, to the surroundings that may have had more or less to do with bringing on the disease, is no less absurd or dangerous than to expose phthisic or pneumonia to vicissitudes of weather, or treat dyspeptics to hearty, highly seasoned food.

Insanity, or derangement of mind is a symptom of a cerebral malady that is usually chronic in its character, as compared with many other diseases, though, perhaps, in some measure, self-limiting under favorable circumstances. It often happens that weeks and months may pass without any of the marked favorable changes that are sometimes supposed to be the only criterion of benefit derived from hospital treatment ; and yet, all the while, silently, and almost imperceptibly to any but the experienced observer, the favorable changes are going on, that are a necessary prelude to convalescence and recovery. If the proper conduct of the patient is interfered with during this period, or during the later stage of convalescence, before the last and least obvious indications of aberration have passed away, by injudicious visiting, correspondence, or the removal of the patient, as frequently happens, from the care and usages of hospital life, a lasting injury may be done. A few years of apparent health may follow, only to be succeeded by another attack of active disease, from which complete recovery may be impossible, and, perhaps, end in the form of disorder, called periodic mania, being established. A few weeks or months during the curative period, which seldom extends beyond the first year, may thus affect the whole future life, for better or worse, according as the course of treatment is persistent or vacillating. So seriously does this matter bear upon the welfare of individuals, and families, and
even succeeding generations, that I feel it cannot be set forth in too strong and emphatic terms.

In my last report I alluded to the prevalence of suicide in the State, and gave the number of suicides that had been ascertained to have occurred during a little more than the period covered by that report. The record has been continued since that time, and it appears that during the past two years, one hundred and seventy-seven persons have committed suicide within the State ; and thirty-four others have attempted suicide in various ways, the final results of which are unknown to us. Several others who had attempted suicide have been sent to the hospital, and have recovered, or seem likely to recover from the mental alienation that is the more or less obvious precursor of the unnatural disposition to self-destruction. Except in a few instances, where crime or misdemeanor has been committed, and the dread of exposure and public condemnation is greater than the love of life, the act of suicide has its origin, I believe, in a pathological state of the brain, the outward manifestations of which, however slight, may be discovered by close observation, and sometimes, perhaps generally, are very obvious to the casual observer, and belong to that form of mental desease known as melancholia. Depression of spirits, sadness, less than the usual mental and physical activity, mark the usual state of mind in the least obvious form. It may not attract much attention beyond the family circle, but it cannot fail, except in rare instances, to be observed there, some derangement of the health, indigestion, or the imperfect performance of some of the bodily functions, a reverse of fortune, the non-fulfillment of some expectations, some undue religious excitement, will probably, upon careful inquiry, be found to have been the remote or exciting canse. No other features of this propensity are so common as the fear of coming to want while in the possession of abundant means, and the sense of unworthiness and self-abasement. In all, some degree of gloom and despondency, not very difficult to be discerned, a state of mind unnatural to the individual, is present, and should lead to watchful attention. Such disorder of the mind may be most successfully treated in the hospital, if early recognized, and early sent to its care, and thus every year many valuable lives be saved. Nearly as many persons with suicidal inelinations obviously
manifested, or aftlicted with the melancholy that so frequently leads to suicide, have been under care during the past two years, and only one has sncceeded in eluding vigilance, while a large proportion have recovered, or will recover in the future. There need be no dread of commitment to the hospital to deter the friends of such persons from promptly taking the only course that can lead to the most favorable result, or preserve life, and it is to be hoped that this record in the future will be less startling than it has been in the past few years.

Notwithsanding the patients have generally been in pretty good heaith, and there has not been much acute sickness from general diseases, the death rate has been 12.20 per cent of the total population; 21.53 per cent of the number of admissions ; and 26.85 per cent on the number discharged. Three-fourths of the deaths may be attributed to five causes: Consumption, thirty-six; epilepsy, sixteen; chronic insanity, fourteen; acute mania, and acute delirious mania, eighteen. Thirty-six of the deaths occurred in the eight wards most crowded with patients, and were chiefly caused by consumption, epilepsy, and chronic insanity. I can but believe that the death of some of this number was caused or hastened by the impure air from imperfect ventilation, in these wards so greatly over-crowded -the wards for men in particular. A few patients who died of consumption were sent to the hospital in an advanced stage of the disorder, and lived but a few weeks or monthis after admission-not long enough for recovery from the mental disorder if it had been uncomplicated with fatal disease.
The deaths from epilepsy occurred suddenly and unexpectedly, as they usually do from this disorder. In not a single instance of death from this canse was there any other prospect, had they lived, than the frequent occurrence of the same terrible convulsions, and a steady descent towards a helpless, pitiable, fatnons state of mind.

The deaths attributed to acute mania, and acute delirious mania, were nine of each class. In the former the disorder was a high degree of intensity, much protracted, and accompanied with much loss of sleep and capricious appetite, and apparently complicated with some defect of health, or constitutional vigor, which diminished the power of resistance to the exhaustive influence of protracted maniacal
excitement. In some the disorder had been neglected, and the patient retained at home till much reduced in health and strength from want of sleep and sufficient nutrition. All the cases of acute delirious mania terminated within a few days of their admission. This disorder, if recognized by its sudden access and rapid development,complete loss of sleep, nearly or quite complete delirium, great restlessness, rapid pulse, increased proportion, coated tongue inclined to be dry, general disinclination to take food, but at irregular intervals eating and drinking with avidity, a chaotic incoherence of the operations of the mind, should not be sent to the hospital from long distances, as they often are sent. A long journey under such circumstances only tends to aggravate the disorder which, even under the most favoring influences, is pre-eminently fatal. In three or four weeks at farthest it will usually end in death or convalescence; and it would be well to wait that length of time before removing the patient to the hospital, than incur the hazard of a long journey while suffering under severe cerebral disease. Except among those who died from acute mania in its various forms, there were none whose prospecte for recovery were favorable. Some were aged persons-all had been insane for many years, and a majority were much enfeebled in mind and body, and less capable of resisting any influence affecting health than persons who had not been afflicted in like manner.
The death rate ranged from one in February, 1871, to fourteen in July, 1870. The next highest death rate was eight in September, 1871. The fourteen deaths in July, 1870, occurred between the 16th and 28 th day, the weather during most of the time being extremely hot. Four of the deaths occurred from acute mania, aggravated no doubt by the extreme heat of the period; four from chronic insanity, death also, doubtless, with them hastened by atmospheric conditions prevailing at the time; three from epilepsy, and one each from apoplexy, consumption, and suicide.

During the period, we have had the pleasure of witnessing, on the average, nearly two patients every week discharged recovered, who went to their homes and firesides, in many instances, about as capable as ever before of pursuing accustomed avocations. I presume every one of this class will be pronounced fully recovered by the public; and while I believe they fairly represent the class usually tabulated
as recovered, it may be a question if a person once decidedly insane is ever again found to display, under all circumstances, the same degree of mental integrity as before. Nor is this at all strange. The brain is no exception to the general rule in the animal economy that when an organ has been once the seat of diseased action, it is ever aftermore liable, probably, to pathological states of some kind. A large majority will probably go through life and remain apparently well, if no one of the more prominent physical or moral causes of insanity are encountered, while others will, after an interval of mental health more or less protracted, as influences are favorable or unfavorable, have a subsequent attack, or perhaps more than one. The question of subsequent attacks is probably closely connected with the completeness of recovery from the first attack, which can nowhere be so well accomplished as by hospital treatment, that is in no way abridged by injudicious haste in removing the patient during convalesence, or before every vestige of the disease, if possible, has been removed. The question of recurrence of insanity and the danger of a subsequent attack, always imminent through some of the numerous causes to which all are exposed, is also closely connected with the other question of marriage and hereditary transmission of nervous and mental disease. Every one about to contract marriage should be informed of this liability of every one who has once been insane to subsequent attacks, and of the unquestioned fact of, once established, its strong tendency to become hereditary. It may not appear in the first generation, but it will almost certainly appear in some form of cerebal or nervous disease in some subsequent generation. If due caution is observed in this matter, much suffering may be avoided that will otherwise surely follow. The rule and the penalty that applies to insanity in its tendency to hereditary influence, applies equally to some other forms of nervons disorderepilepsy and hysteria, for example; and the hospital director would be almost remiss in his duty, if he did not often and loudly sound the note of warning.

## REPAIRS AND MPPROVEMENTS

The repairs that are constantly required in every institution of this kind, have been made as they were called for, and it will not
appear to you, I think, upon the most careful examination, that there has been any noticeable or appreciable deterioration in furniture or fixtures. Besides the ordinary repairs somewhat in excess of former years, by reason of the crowded condition of the wards, and the turbulent, violent and destructive propensiries of a large number of the patients, a considerable number of bedsteads and settees have been made to accommodate the increased number of patients. The furniture that has been made in the carpenters' shop has been of the most substantial and durable character, and is, though perhaps somewhat more costly than similar furniture, as usually made, much superior for use here. Still the furniture and furnishing, while it has swelled the current expense account considerably, has hardly kept pace with the increasing population.
Several of the wards have been repainted with some variation of colors that produces a pleasing effect; and the whole roof, cupolas and cornice have received two, and on some parts three, coats of paint. The constant service of one painter has been required in painting and glazing, and oiling floors, and oiling and finishing furniture.
A considerable expense is incurred every year in repairing the lath and plaster partitions, that are too numerous in every ward. These partitions looked as well as any while the institution was new, and diminished the first cost of construction in the sum of many thousand dollars ; but they afford no barrier to violent and mischievous patients, of whom we have many, and they should be replaced with strong and durable brick walls, which has been done in the third section of the east wing. The improvement is so obvious in that section, that it may be taken as sufficient evidence that the same improvement-the substitution of brick for the present slender par-titions-should be made wherever they occur. The repairs now required are numerous and costly; and nothing can more seriously interfere with the proper working of the hospital, than the presence in the wards of a plasterer and his attendant. Whenever this change can be completed, the annual expenditure for repairs will be much lessened, and a good deal of inconvenience avoided.

A complete topographical survey and map of the premises have
been made by C. Beauman, C. E., from which a plan has been prepared by H. W. Oleveland, Esq, an experienced landscape engineer, for the ornamental planting of the grounds, and the construction of a carriage road and walks for the use of the patients, and suitably dividing the premises into lawns, tillage, and pasturage. The first steps toward working out this design, which will be the labor of years, were taken last season, and carried on to the extent of our means. It seemed to me so desirable that a beginning should be made, in order that another year might witness a greater progress, I ventured to do some work that has been paid for out of current funds. The patients have also given a good deal of assistance that has advanced the work of preparation for the next season. The ground for several ornamental groups of trees, has been thoroughly trenched and made ready for planting next spring.

A stone road, on a graded bed, has been constructed most of the way from Washington street to the rear of the hospital, a distance of about two hundred and fifty rods. The road bed is crowning, and eighteen feet wide.

On this bed there was placed rubble rock to the depth of eighteen inches in the center, diminishing to twelve inches in depth at the sides, the larger rocks being compactly laid on the bed, with spalls, on top, the upper three or four inches being broken to small size with hammers. Over the rock was spread a thin coating of coal cinders in lieu of gravel.

A portion of this road which has been used a year has done good service and worn well, under a usage to which roads in this locality are rarely subjected. One considerable filling, to give a desirable grade over a low place, remains to be completed with the earth to be removed in the construction of the ventilating duct from the west wing, the earth used in the construction of the duct from the east wing to the chimney having been used for this purpose. Five substantial stone culverts were made under this road in the low places to give the necessary surface drainage at certain seasons of the year. When completed about three thousand and five hundred yards of rock will have been used in its construction. This work has been done to meet the difficulty we have every year encountered in hauling coal and other heavy supplies, during the season
when the roads are often very bad-the season when we have the greater part of this work to do.
Several hundred yards of hard flar-stone have been purchased and partly laid in the walks connecting the rear center with the farm buildings, a necessary convenience when the ground is wet and muddy.
The long hall in the basement between the enlinary departments and store rooms has been paved with cut flag-stone, replacing the worn out brick pavement-a much needed improvement.
The rotten wooden floor of the employees dining-room adjoining this hall has been replaced with the same material in the hall; at the same time an opening was made through the south wall of the dining-room into the market hall, a portion of which was partitioned off for a wash-room for employees, no suitable place forthis purpose ever having been provided, the need of which had been felt for many years. Into th 8 room hot and cold water has been brought, iron sinks set, and water pipe laid comnecting with the main sewer. This proves to supply what has been much needed since the opening of the hospital.
A conservatory has been built adjoining the west or female wing. An excavation was made outside of the building, about fifteen feet wide, seventy-five feet long, and four or five feet deep-to the level of the basement-the banks walled up, and the whole covered with a glazed lean-to roof. Portions of the basement wall of the wing under the water-table were taken out and the superstructure supported by iron columns, in order to get an entrance from the basement, and obviate the necessity of going out of doors to reach the conservatory in cold weather. To give a greater area a small portion of the basement was partitioned off, the connection into that portion outside of the walls of the building being the opening made in the basement wall. The proper temperature is secured by means of the circulation of hot water through pipes connected with a tank into which steam is carried from a steam distributing pipe passing near this place. Here perpetual and almost tropical verdure and bloom can be maintained during those seasons of the year when there is so little vegetation abroad to refresh and gladden the heart and feelings. The stock of choice and vase plants now in the conservatory-many
of them the gift of friends,-some obtained by purchase,-but largely increased by propagation, already are a source of much interest to a majority of the patients, as they visit the place from time to time. The conservatory has been completed but a short time, and first used this season, and many of the plants are still small, but when they have attained a larger size and more abundant bloom, the interest felt in them will doubtless be far greater than it now is, and the good influence exerted fully justify the outlay, and the care and attention the plants must receive from year to year for their preservation. Patients from all the wards can reach this place without going out doors, a great convenience in cold weather; and short experience seems to shov that this structure will prove to be a valuable addition to our means for treating mental disease, in substituting healthy and pleasing thoughts and feelings for the morbid, irritable and unhappy feelings that so often prevail.
Last winter the Shaker Washing Machine, which had been in use about ten years, was found to be worn out and useless, and was replaced with the Hydraulic Washing Machine, regarded by many as the most approved machine in use, although quite expensive. It does washing well; but I apprehend it will not be very durable, and it seems to be quite liable to get out of repair. When the next change of machines is to be made, some other kind of apparatus may serve our purposes as well or better.
Since the boiler-house was enlarged, shafting has been put up to enable us to use the large engine for driving all machinery. The small engine has been re-set and can also be used for the same purpose, and now we have two engines, either of which can be used if the other is disabled or out of repair. Both engines have been thoroughly repaired and are in good working order.

A "Stillwell" heater and lime extractor has been set up in the boiler-house, to purify the water as far as possible, that is not used generating steam, and prevent injurious action upon the boilers and steam pipes. It appears to do what its inventors have claimed for it. The water, in passing through it, comes in contact with a portion of the exhaust steam from the engine, and, being heated, parts with some portion of the miseral and vegetable matter held in solution or suspension, which is retained in the straw filter, through which the water then passes.

The greatest improvement of the two years, as well as the most expensive, has been the change in the third section of the east wing. Here there were many lath and plaster partitions that mischievous patients seemed to take delight in defacing or breaking through, leading to frequent, troublesome, and costly repairs. There were also associate dormitories without a ventilating flue, or any means for the ingress or egress of air but open doors and windows. These rooms were bad enough-quite behind the age - when there was plenty of rooms and they had few occupants, but as soon as the hospital became crowded, they were well-nigh intolerable, during the season when windows conld not be left open. Neither were the windows as well ventilated as they should be; and in the coldest weather it was always difficult to make them comfortable, because the warm air admitted passed off so quickly through the flues leading from the top of the corridor and rooms to the attic. Some additional warmth was secured by stopping some of these flues, but it rendered the ventilation so imperfect as to be at best but a choice of evils.

To remedy these defects, the lath and plaster walls were taken out from basement to attic, the original plan considerably changed and improved, wards 3, 7, and 11 are extended to the front, and now have, in common with the other wards, a large window at the end, in addition to the side orbay window, that, prior to this change afforded the only outlook. The old partitions were replaced with brick walls containing suitable heating and ventilating flues, so arranged that hot air will be admitted at a point about eight feet from the floor, while the ventilating flues commence at the floor and terminate in the great duct in the basement that leads to the chimney. To make this change uniform throughout the corridors, some additional flues were constructed by taking down old brick walls and building up anew. One of the partitions taken down separated the second and third sections of wards, and this was re-built with a view to setting iron doors to prevent a spreading of fire from one section to the other, if a fire should sometime occur. This wall was carried up through the attic to the roof; the door-sills and caps being of stone; and with iron doors ready for use this wall will be nearly fire-proof.
The steam pipe under this part of the house was found to be very defective. Besides extensive deposits of calcareous matter-a
legacy, probably, of the old artesian well-on the inner surface that seriously interfered with radiation of heat: they were much corroded in many places and leaking badly. Having been put up in coils fifteen or twenty feet long, enclosed in a chamber from which flues led to the several stories, it had never been possible to regulate the heat so that the different stories would be warmed alike. Sometimes the heated air would all, or nearly all, go to one of the stories, and sometimes to another, making some wards uncomfortably warm and leaving the rest uncomfortably cool. Generally, though not always, the upper wards were most favored by heat. In making the changes in warming and ventilating, it was determined to avoid those errors, if possible, by constructing smaller heaters, one for each flue leading to the separate wards, to be enclosed in a chamber by itself, into which fresh air should be admitted from the fan duct. The working of the new arrangement is almost perfect, certainly quite satisfactory. Each ward can now be warmed to just the desired degree in the most inclement weather, and if it is wished either end of the long corridor can be warmed more than the other. The ventilation can be managed equally well.

The system of warming and ventilating in the reconstructed wards is one now approved by high authority, and sufficiently tested by experience. A large rotary $\tan$ forces fresh air with a gentle current through small tubes set in an iron steam box, enclosed in a brick chamber, where the air is warmed to the required degree, and then passes upward through flues, eight by twelve inches in dimension, which open into the corridor about eight feet above the floor. There are eight such flnes for each ward. From the floor of the corridors six flues, and from each of the new dormitories two flues, each of the same dimension as the warm air flues, lead downward to a large duct in the basement, of the aggregate dimension of all the flues opening into it ; from the basement passing under ground to, and terminating in the foul air, or ventilating shaft of the new chimney. The strong upward current in this air shaft which surrounds the smoke pipe from the boiler, cansed by the rarefaction of the air $\mathrm{f}_{\text {rom }}$ the waste heat, gives excellent ventilation to the wards during both night and day, and operates without any cost attending the rumning of machinery, affording a purer air than has been found in
those wards, since they became crowded, if not during a longer period. The general current of the air in the wards is downwardthe reverse of what it has been-the coolest air, and probably the foulest, being taken out, drawn off by the exhaustion power of the chimney, instead of the warmest air being allowed to escape directly into the attics. And this leads me to believe, what appears to be supported by limited experience during the short time since this arrangement went into operation, and perhaps supported by experience under similar circumstances elsewhere, that this method of warming and ventilating will prove so economical as to justify the expenditures on that account alone.
During a severe gale of wind from the sonth last spring, a portion of the iron roof of the main centre building was torn off, and the roofing loosened in many places. A good deal of apprehension was felt for a few hours that we might lose a large portion of the iron roofing. It was loosened quite extensively, and for a time vibrated fearfully, but the gale happily subsided before any serious damage was done. The cost of this repair was about five hundred dollars.
The west chimney of the main center has been mainly cured of smoking, after repeated unsuccessful experiments, by placing over it a wind cap. It will still sometimes smoke, but the annoyance is a much less than it used to be.

## EXPENDITURE OF APPROPRLATIONS MADE BY THE THIRTEENTH GENERAL ASSEMBLY.

The new barn is one hundred and ten feet long by forty feet wide. Near the center of one side is a projection eight feet by fifty feet to give breadth to a drive-way and threshing floor. Under the whole of the principal store is a well lighted basement nine feet high. In the principal story is a stable with ten stalls for the farm teams; drive-way and threshing-floor; bay for hay; tool-room, and six bins for feed and grain. Above them is extensive storage room for hay and grain.

The ground where the barn is located having a considerable desent it was impracticable to leave a drive way through it from
opposite ends or sides, and one was therefore made in a semicircle, the entrance and exit being on the same side; and all the trouble and damage, sometimes unavoidable in backing a team out of the barn is prevented. The barn is found to be convenient, and serve well the purposes for which it was designed, and a much needed and valuable improvement. About seven hundred and fifty yards of earth was removed to make the basement, about one hundred yards of rock was used in the basement wall, and about ninety-five thousand feet of lumber used in the construction.

The new chimney rests on a foundation of solid masonary, eighteen feet square and fourteen feet deep, the lower two feet being concrete. In the foundation, below the surface of the ground, are openings for the smoke-flue, and the ventilating ducts.

The chimney is constructed of stone and brick, and the masonary is one hundred and twenty-six feet high. Twelve feet above the foundation is range work backed up with brick, surmounted with a heavy coping. The stone and brick work are well secured with iron anchors. Above this coping rises panel brick work in double walls for about forty feet, supporting five feet of heavy ornamental cornice of cut stone. Upon this stone cornice rests a plastered brick shaft about fifty-six feet high, the pilasters being capped with courses of stone masonry, and continued in brick work six feet higher, between them, the space being left open for the escape of the foul air from the ventilating shaft. These openings are of the same area as the ventilating shaft. Over these openings and resting on the pilasters is about five feet of stone masonry, the several courses projecting in such a manner as to form a suitable architectural top, and cap to the work. All the brick and stone work is securely bound together with frequent bands of two and a half by one-fourth inch iron. In the centre of the chimney is a smoke flue of boiler iron, three feet six inches in diameter, surrounded with an expanded cast iron top, and one hundred and thirty-four feet above the level of the ground, or about eight feet higher than the masonry of the chimney. It is securely held in its place by iron braces. I think every part has been built in the most workmanlike manner. It was commenced in July, 1870, and completed in October, 1871. After completion, in plumbing the work, no deviation could be discovered from the
lines to which it had been builit. The draft in the smoke flue is excellent, and the current in the ventilating shaft is strong. I cannot see why it will not fulfill all the purposes for which it was designed. The cost of this most desirable and important improvement has been somewhat greater than the estimate presented in the last report, owing, chiefly, to the greater cost of cutting the stone used, the quality, I believe, being superior to, and more difficult to work than the stone used in building the hospital, the cost of which was taken as the basis for the estimate.
The improvement in the boiler-house was made in accordance with the plans proposed. With some alteration in the future that experience has suggested, I believe the improvement will be most satisfactory. It gives the needed facilities for driving carpenters' and engineers' machinery, and facilities for storing and drying lumber, and storing coal.
The new reservoir is in process of construction, but I feel much regret in finding that the estimated sum asked for and appropriated, -the estimate being made by a distinguished hydraulie engineer, who, however, was never able to visit the location,-will not be sufficient to complete the work. Upon looking into the matter recently, to ascertain, if possible, the cause of the wide difference between the estimate and the probable cost, I find that no estimate was made for a stone lining of the bank,-a very necessary part of the work, to protect the bank from the action of frost and prevent the growth of weeds and grasses. It was quite over-lorked by myself, and, doubtless, over-looked by the engineer. It is estimated, about $\$ 8,000$ will be required for its completion. I look forward to it as a complete relief from the annoyance and inconvenience, not to mention the sources of ill-health from, 1st, the artesian well water; and, $2 d$, the turbid water we have been obliged to use, often for weeks together, since the artesian well was abandoned.
Three of Branagan's patent upright tubular boilers were procured in 1870. The contract price was the same as the amount of the appropriation, but embarrassments in business made it difficult for the contractor to meet his engagements, and they therefore cost a little more than that sum.

Before this was known the old boilers had been removed and
applied to other uses, and apprehension was felt at one time that we might fail to get the new ones before winter. They were all set up, however, and two of them in use before the coldest weather appeared. Since they have been in use they have given entire satisfaction ; the workmanship appears to be excellent ; and I think we could not have procured boilers better adapted to our wants.

The sum appropriated for fencing and improving the grounds has been used for fencing the Muldowny estates, described in the Aet making the appropriation for its purchase as the " $37 \frac{1}{2}$ acre tract;" for a new fence on the eastside of the entrance to the hospital ground, for extending of the boundary hedge, and for a portion of the work done on the grounds in front of the hospital before described.

The $37 \frac{1}{2}$ acre tract was procured for the sum appropriated; and also the ten acres on the west side of the avenue, to give a new and better approach to the hospital, for the sum agreed upon with the owner. A carriage drive-way to the front, separate from the team road, has been laid out with gentle curves among groups of trees and shrubbery, and I hope it will be in our power to construct it during the next season.

## ADDITIONAL IMPROVEMENTS NEEDED.

The favorable results attained in the alterations made in the east wing lead me to earnestly recommend that similar alterations be made in the west wing, and tor similar reasons,-the impossibility of preventing violent and mischievous patients from breaking down or defacing weak lath and plaster walls, giving rise to frequent and costly repairs ; and the inadeqracy of the pretent system of warming and ventillation.
The same improvement should be made in the west wing water closets that have been so successfully made in the east wing,-the substitution of slate and marble floors that will not leak, for the leaky wooden floors, and larger soil pipe, that will not close up with some slight obstruction, overflow and create bad odors that may not be got rid of for many hours.

A bath room in the basement of the west wing, similar to the one in successful use in the east wing is a much needed improvement.

Besides doing away with bath-room odors in the wards, the annoyance that will sometimes arise from an overflow of water, the leaks that will sometimes occur in water-pipes, it will give some additional room in the wards, and afford some needed facilities for sending clothing to the wash-house and receiving them back from the ironing room.
A good deal of painting - the outside of all the windows and window guards and doors, and some of the wards-will be required during the next two years, and the means for this work must be provided.

As a partition wall has been constructed between the second and third sections of the east wing that needs only some iron doors to make it a strong barrier against a spread of fire,-I would recommend they be procured, with the same number for the west wing if improvements are made there.

We have never had a safe for keeping money, or valuable records, and I think we should not do without one much longer.

A moderate sum will be needed for some additional furniture and furnishing to adequately provide for the increased number of patients. A considerable expenditure on this account has been made during the past two years and charged to current expense account, but something more will be needed very soon, as the furnishing has not quite kept pace with the increasing number of patients.

The needed land having been procured, and a plan having been made by a skillful landscape gardener, the grounds in front of the hospital should be graded and ornamentally planted with trees and shrubbery, and the permanent drive way to the front be made. It will also be a great improvement and add to the means of successful treatment, if the drive-way through the southern portion of the grounds, as arranged in Mr. Cleveland's plan, can be constructed without much delay, or made passable at an early day, and finished in a permanent and durable manner as time and means will permit. There are always many patients upon whom carriage exercise exerts a beneficial influence, and yet are too exciteable to go out on the public streets without incurring the liability to become more excited and sustain some injury ; but within the grounds, over the nearly three miles of shady, winding road that has been projected, through as pleasant scenery, affording views as varied and attractive as any to
be found in this part of the State, carriage exercise will doubtless be free from such liability, and become a source of much benefit to many patients from year to year. A considerable expenditure for this purpose at once wonld be, I believe, a wise one .

## FARM AND GARDEN.

Daring the past two years the products of the farm and garden have shown an increase over previous years. Besides the crops raised and gathered in, a good deal of pasturage has been afforded for the stock. An exhibit of the products and their estimated value will be found in the appendix. The real value of the garden products for use in the hospital is doubtless greater than their estimated value, and it seems to me probable, if we had to obtain them by purchase, they would cost more than the price carried out. Many of the patients give some assistance in putting in and gathering the crops, and in various other ways. There is scarcely any department or any kind of work carried on that does not receive some assistance from them.

## OHAPEL EXERCISES

Upon the taking effect of the law authorizing the appointment of a Chaplain, Rev. Milton Sutton was engaged to perform the duties of that office, which he has since done very acceptably. On four evenings of each week he has conducted a school in which the common English studies were pursued with interest and profit. From forty to fifty patients attended. I feel pretty confident this school is a source of much benefit to those who attend, and worthy of being sustained.

## AOKNOWLEDGMENTS.

The following newspapers and periodicals have been kindly sent to the hospital for the use of patients during the past two years, and have afforded much interesting reading for them that would not otherwise have been within their reach; and in their behalf I return thanks to the givers, and respectfully solicit a continuance of the same favors in the fu'ure:

Burlington Hawk-Eye, daily; Iowa State Register, daily; Davenport Gazette, daily; Mt. Pleasant Journal, Henry County Press, Muscatine Journal, Muscatine Courier, Vinton Eagle, Fairfield Ledger, Sioux City Journal, Gate City, Iowa State Press, Iowa City Republican, Adair County Register, Fort Madison Plain Dealer, Pella Blade, Buchanan County Bulletin, Delaware County Union, Albia Union, Lyons Mirror, De Witt Observer, Lansing Mirror, Waverly Republican, Montezuma Republican, Iowa Homestead, Dié Iowa Tribune, Dër Demokrat, Dubuque National Demokrat, Das Möclentlichee Banner, Anamosa Enreka, Indianola Journal, Mitchell County News, Glenwood Opinion, Marshall Republican, The Shady Side, Iowa Classic, The Independent, Ladies Repository, Cincinnati; Friend's Review, Philadelphia; New Covenant, Chicago; The Standard, Chicago; Liberal Christian, New York; The St. Louis Herald, St. Louis.
From John S. Pierson, Esq., of New York, we have received a seeond gift of abont seventy-five volumes of books and magazines, and a large number of beautiful stereoscopic views. As this valuable gift comes from an entire stranger we feel laid under peculiar obligations. Several of the volumes of most enduring interest have a permanent place in our gradually increasing and already valuable library, while other volumes, in accordance with his wishes, have been circulated among those patients who will sometimes capriciously or wantonly destroy or deface a book, however valuable it may be.
Mr. H. Kronheimer, has given a large fig tree, and several friends have given other valuable plants.

George W. Whittle, Esq., presented to the hospital a fine pair of Yorkshire pigs.

Messrs. John \& S. H. Thomas, and Mr. \& Mrs. Wm. Branagan have given interesting Indian relics and specimens of fossils and minerals.

Some of the employees have been here during the whole of my administration of the affairs of the hospital, and still render valuable service.

To the employees generally, and to many not now here, the public are under obligations for a valuable aid in alleviating the suffering
and promoting the recovery of the unfortunate persons entrusted to our care.
Dr. Bassett still holds the place of first Assistant Physician, and is no less industrious, efficient and zealous as an officer than in past years.
The statistical tables appended have been prepared by him with great care, and are as accurate, doubtless, as it is possible to make them.
Dr. Dudley, after five years of valuable service in this interesting field of labor, having accomplished an amount of good work and relieved suffering that but few persons have an opportunity to do at his age, was obliged to relinquish his duties as second Assistant Physican, in March last, after a severe pulmonary hemorrhage. His health continued to decline, and he died in May, a short time after reaching the home of his friends.

Dr. Dudley was a well read physician, and possessed great kindness of heart and unwavering integrity, and other qualities that peculiarly fitted him for his duties here, and he will long be kindly remembered by those associated with him.

The duties of second Assistant Physician were discharged by Mr. John H. Kulp, a medical student, from the 1st of April till the latter part of September last, and since September by Dr. O. W. Archibald.
In looking back over the six years I have been associated with you, gentlemen, I find abundant reasons to thank you for the uniform support, valuable advice and assistance, and personal kindness I have received at your hands, and I hope the favor of Providence will attend all your deliberations and the future conduct of the institution under your care.

## MARK RANNEY, Superintendent.

## Iora Hospital for the Insane,

M. Pleasant, Iowa, Nov. 1, 1871.

## TABLE I.

MOVEMENT OF THE POPULATION.

|  | males. | Females, | total. |
| :---: | :---: | :---: | :---: |
| Tumber at the beginning of the period | 208 | 190 | 398 |
| Number at the Admitted during the period........... | 300 | 220 | 520 |
| Admitted during the period.. | 508 | 410 | 918 |
| Total present during the perio | 116 | 87 | 203 |
| Discharged-recover | 36 | 31 | 67 |
| Improved... | 18 | - 17 | 35 |
| Unimproved | 74 | 38 | 112 |
| Died | 264 | - 237 | 501 |
| Remaining at the end of the period | 228.13 | - 213.32 | 441.45 |

## TABLE II.

ADMISSIONS AND DISOHARGES FROM THE BEGINNING OF THE HOSPITAL.

|  | MaLEs. | females. | total. |
| :---: | :---: | :---: | :---: |
| Admitted. | 1041 | 904 | 1945 |
| Discharged-recovered | 356 | 326 | 682 |
| Improved... . . . . . . | 115 | 113 74 | 157 |
| Unimproved. | 83 | 156 | 377 |
| Died...... |  |  |  |

TABLE III.
number at each age when admitted in the period.

| AGE. | When admitted. |  |  |
| :---: | :---: | :---: | :---: |
|  | males. | females. | Total, |
| Under 15. | 3 | 3 | 6 |
| 15 to $20 \ldots$ | 22 | 14 | 36 |
| 20 to $25 .$. | 45 | 44 | 89 |
| 25 to $30 .$. | 48 | 32 | 80 |
| 30 to 35 | 43 | 39 | 82 |
| 35 to 40 . | 42 | $\bigcirc 5$ | 67 |
| 40 to 45 , | 34 | 16 | 50 |
| 45 to 50. | 20 | 18 | 38 |
| 50 to 60. | 27 | 18 | 45 |
| 60 to 70. | 12 | 11 | 23 |
| 70 to $80 \ldots$ | 3 |  | 3 |
| 80 and over. . | 1 |  | 1 |
| Unknown... |  |  |  |
| Total . | 300 | 220 | 520 |

## TABLE IV.

NUMBER AT EACH AGE FROM BEGINNING OF THE HOSPITAL.

| AGE. | WHEN ADMITTED. |  |  |
| :---: | :---: | :---: | :---: |
|  | males. | females. | total. |
| Under 15.. |  |  | 30 |
| 15 to 20. |  |  | 152 |
| 20 to $30 .$. |  |  | 612 |
| 30 to 40 . |  |  | 528 |
| 40 to 50. |  |  | 333 |
| 50 to 60. |  |  | 166 |
| 60 to 70. |  |  | 74 |
| 70 to 80. . |  |  | 15 |
| 80 and over |  |  | 2 |
| Unknown. |  |  | 33 |
| Total |  |  | 1945 |

TABLE V.
NATIVITY OF PATIENTS ADMITTED.

|  | WITHIN THE PETIOD |  |  | FROM THE BEGIN-NING. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\stackrel{\text { S }}{\underset{x}{x}}$ |  | $\begin{aligned} & \text { Eूँ } \\ & \text { H } \end{aligned}$ | 害 |  | $\begin{aligned} & \text { ज्ञा } \\ & \stackrel{0}{6} \end{aligned}$ |
| Maine., |  |  | 5 |  |  | 20 |
| New Hampshire |  |  | 3 |  |  | 9 |
| Vermont..... . |  |  | 7 |  |  | 23 |
| Massachusetts.. |  |  | 6 |  |  | 28 |
| Rhode Island. Connecticut. |  |  |  |  |  | ${ }_{10}^{2}$ |
| Connecticut. <br> New York.. |  |  | 45 |  |  | 145 |
| New Jersey |  |  | 4 |  |  | 7 |
| Pennsylvania. |  |  | 31 |  |  | 151 |
| Delaware..... |  |  |  |  |  | 3 |
| Maryland. |  |  | 1 |  |  | 17 |
| Virginia. |  |  | 18 |  |  | 49 |
| North Carolina. |  |  | 2 |  |  | 17 |
| South Carolina. Georgia |  |  | 2 |  |  | 4 |
| Leorisiana. |  |  | 2 |  |  | ${ }_{1}^{2}$ |
| Ohio... |  |  | 99 |  |  | 359 |
| Indiana.. |  |  | 30 |  |  | 148 |
| Illinois. |  |  | 23 |  |  | 72 |
| Kentucky. |  |  | 11 |  |  | 54 |
| Tennessee. |  |  | 8 |  |  | 20 |
| Missouri. |  |  | 5 |  |  | 22 |
| Michigan. |  |  | 3 |  |  | 9 |
| Wisconsin |  |  | 1 |  |  | 2 |
|  |  |  | 41 |  |  | 114 |
| Minnesota. |  |  | 1 |  |  | 1 |
| Canada.... |  |  | 6 |  |  | 25 |
| Great Britai |  |  | 66 |  |  | 248 |
| Germany. |  |  | 62 |  |  | 210 |
| Austrin. |  |  | 6 |  |  | 14 |
| Holland. . <br> Denmark |  |  |  |  |  | 6 1 |
| Norway |  |  | 8 |  |  | 20 |
| Sweden. |  |  | 11 |  |  | 22 |
| France.. |  |  | 2 |  |  | 12 |
| Portugal. |  |  |  |  |  | 1 |
| Belgium... |  |  | 1 |  |  | 1 |
| Switzerland. |  |  | 8 |  |  | 16 |
| Unknown. |  |  | 2 |  |  | 80 |
| Total. |  | 22 | 520 |  |  | 1945 |

## TABLE VI.

RESIDENCE OF PATIENTS ADMITTED.


|  | WITHIE THE PERIOD. |  |  | FROM THE BEGINNING. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { 递 } \\ & \stackrel{0}{6} \end{aligned}$ | 量 |  | $\begin{gathered} \text { E } \\ \text { E } \end{gathered}$ |
| Jones | 3 |  | 9 | 11 | 18 | 29 |
| Keokuk. | 8 |  | 11 | 29 | 15 | 44 |
| Lee . . | 14 |  | 22 | 58 | 59 | 112 |
| Linn | 5 |  | 7 | 24 | 22 | 46 |
| Louisa | 1 ! |  | 6 | 13 | 16 | 29 |
| Incas........ |  |  | 1 | 9 | 8 | 17 |
| Madison . . . . . | 2 |  | 9 | 12 | 11 | 23 |
| Mahaska. | 6 |  | 10 | 17 | 18 | 35 |
| Marion. | 9 |  | 15 | 32 | 20 | 52 |
| Marshall.... | 2 |  | 5 | 7 | 10 | 17 |
| Mills.... ... | 4 |  | 4 | 10 | 4 | 14 |
| Mitchell . |  |  |  | 1 | 1 | 2 |
| Monona.... |  |  |  | 1 | 2 | 3 |
| Monroe | 2 |  |  | 21 | 8 | 29 |
| Montgomery | 2 |  | 2 | 4 | 3 | 7 |
| Muscatine... | 4 |  | 7 | 19 | 11 | 30 |
| (9'Brien... |  |  | 1 |  | 1 | 1 |
| Page.. | 3 |  | 8 | 11 | 2 | 13 |
| Pocahontas | 2 |  | 2 | 2 | 1 | 3 |
| Polk...... | 6 |  | 11\| | 21 | 26 | 47 |
| Pottawattamie. | 6 |  | 9 | 11 | 7 | 18 |
| Poweshiek. | 3 |  | 7 | 6 | 11 | 17 |
| Ringgold. . | 1 |  | 1 | 3 | 2 | 5 |
| \& cott..... | 3 |  | 9 | 23 | 38 | 61 |
| Shelby | 1 |  | 1 | 2 |  | 2 |
| Story. . | 2 |  | 2 | 4 | 6 | 10 |
| Tama. | 3 |  | 4 | 10 | 5 | 15 |
| Taylor.. | $1)$ |  | 2 | 5 | 4 | 9 |
| Union...... | 2 |  | 3 | 3 | 2 | 5 |
| Van Buren. | 7 |  | 14 | 26 | 26 | 52 |
| Wapello... | 6 |  | 12 | 23 | 25 | 48 |
| Warren ... | 7 |  | 10 | 12 | 7 | 19 |
| Washington | 7 |  | 17 | 37 | 22 | 59 |
| Wayne.... | 1 |  | 2 | 4 | 8 | 12 |
| Webster . . | 1 |  | 2 | 2 | 4 | 6 |
| Winnebago |  |  |  |  | 1 | 1 |
| Winneshiek | 2 |  | 4 | 17 | 9 | 26 |
| Woodbury.. | 1 |  | 3 | 2 | 2 | 4 |
| Worth.... | 1. |  | 1 | 2 |  | 2 |
| Wright. . |  |  |  | 1 |  | 1 |
| From Minnesota. |  |  |  | 30 | 25 | 55 |
| From Nebraska. | 10 |  | 13 | 31 | 19 | 50 |
| From Illinois.. |  |  |  | 5 | 3 | 8 |
| From Missouri. . |  |  |  | 5 | 2 | 8 |
| From Wisconsin |  |  |  |  | 1. | 1 |
| From Indiana |  |  |  |  | 1. | , |
| From Louisiana |  |  |  | 1 |  | 1 |
| From Montana Territory |  |  |  | 1 |  | 1 |
| From Colorado Territory |  |  |  |  | 1 | 1 |
| Total.. | 300 | 22 | 520 | 1040 | 905 | 1945 |

table VII－Continued．

TABLE VII．
OCCUPATION OF THOSE ADMITTED．

| OCCUPATION． | WITHIN THE PERIOD． |  |  | Fxom | THE BEGIN－ NING． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\sqrt[g]{g}}{3}$ | $\begin{aligned} & \text { 追 } \\ & \text { E } \\ & \text { E } \\ & \hline \end{aligned}$ | $\underset{\sim}{\text { En }}$ | $\stackrel{\text { n }}{\underset{3}{3}}$ | $\begin{aligned} & \text { 总 } \\ & \text { 炭 } \\ & \text { 号 } \end{aligned}$ | 3 |
| Accountant．．．．．．．．．．．．．．．．．．．．．．．． $\mid$ ．．．．．．．．．$\|\mid$ |  |  |  |  |  |  |
| Actress．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Artist ．．．．． |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Barber ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Brickmaker．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |
| Broommaker．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |
| Cabinet－makers <br> 2 $\begin{aligned} & 2 \\ & 2 \\ & 0 \end{aligned}$ $\square$ ．．．．．．．． |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Carpenters ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．Chair－maker．C |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Uivil officer．．．．．．．．．．．．．．．． |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Confectioners ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Hairbraiders．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Hatter ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． $\mid$ ．．．．．．．．．．． |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Machinists． |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Millwrights．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |
| Miners |  |  |  |  |  |  |
| Musicians ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 4 ．${ }^{\text {a }}$ ．．．．．．．．．．． |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| No employment．．．．．．．．．．．．．． 80 ． 13 ． 43 ．． |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Painters． |  |  |  |  |  |  |
| Peddler |  |  |  |  |  |  |
| Photographer． |  |  |  |  |  |  |
| Physicians．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |



TABLE VIII．
CIVIL CONDITION OF THOSE $\triangle$ DMITTED．


## TABLE IX.

HOW COMMITTED.

|  | WITHIN THE PERIOD. |  |  | FROM THE BEGIN-NING. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\dot{B}}{\stackrel{y}{3}}$ | $\begin{aligned} & \text { 总 } \\ & \text { g } \\ & \text { E } \end{aligned}$ | E | $\frac{\dot{0}}{\frac{0}{3}}$ |  | E゙ है |
| By Commissioners of Insanity . . . . . | 210 | 161 | 371 |  |  |  |
| By Judges of the Circuit Court..... | 34 | 21 | 55 |  |  |  |
| By Clerks of the Oircuit Court..... | 25 | 17 | 42 |  |  | ..... |
| By Judges of the Connty Court. ... | 7 | 4 | 11 | ..... |  |  |
| By Judges of the District Court.... | 2 |  | 2 | . . . |  | ...... |
| By friends . . . . . . . . . . . . . . . . . . . . . . | 10 | 14 | 24 |  |  |  |
| By Governor's order . . . . . . . . . . . . . . | 2. |  | 2 |  |  |  |
| From Nebraska. . . . . . . . . . . . . . . . . | 10 | 3 | 13 |  |  |  |
| Total.. | 300 | 220 | 520 | . |  |  |

TABLE $X$.
HOW SUPPORTED OF THOSE ADMITTED.


TABLE XI.
FORM OF DISEASE IN THOSE ADMITTED.

|  | WITHIN THE PERIOD. |  |  | $\begin{aligned} & \text { FROM THE BEGIN- } \\ & \text { NING. } \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\underset{y y}{3}}{\underset{y}{3}}$ |  | $\begin{aligned} & \text { हुँ } \\ & \text { ㅇ } \\ & \text { F } \end{aligned}$ | $\stackrel{\text { e. }}{\stackrel{y y}{\Xi}}$ |  |  |
| Mania, Acute . | 128 | 871 | 215 |  |  | ...... |
| Mania, Chronic | 58 | 41 | 99 | . $\cdot$. | . | ..... |
| Mania, Epileptic. | 20 | 2 | 29 | . | . . . . | . . . . . |
| Mania, Puerperal |  | 28 | 28 | . . . | . . . . |  |
| Mania, Homicidal | 8 | 1. | 9 | . . . |  |  |
| Monomania. . | 1 | 3 | 4 |  |  | ...... |
| Melancholia, Acute. | 89 | 29 | 68 | . . . . |  | . . . . . |
| Melancholia, Chronic . . . . . . . . . . . . | 6 | 8 | 14 | . . |  |  |
| Melancholia, Suicidal. . . . . . . . . . . | 18 | 8 | 26 | . . . . |  |  |
| Dementia, A cute. . . . . . . . . . . . . . . . | 4 | 8 | 7 | . . . . |  | ..... |
| Dementia, Chronic . . . . . . . . . . . . . . | 18 | 9 | 22 |  |  |  |
| Dementia, Senile. . . . . . . . . . . . . . . . . | 4 | 1 | 5 |  |  |  |
| Imbecility . . . . . . . . . . . . . . . . . . . | 1 |  | 1 |  |  |  |
| Total. . . . . . . . . . . . . . . . . . . . . | 300 | 220 | 520 |  |  |  |

TABLE XII.
alleged causes of insanity of patients admitted.


TABLE XII－Continued．

|  | WITHIN THE PERIOD． |  |  | FROM THE BEGIN－ NING． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\dot{B}}{\frac{3}{y}}$ |  | 宮 | $\frac{\infty}{\underset{y y}{z}}$ | $\begin{gathered} \text { 昜 } \\ \text { 䒤 } \\ \text { E } \end{gathered}$ | $\begin{gathered} \dot{\pi} \\ \frac{5}{6} \end{gathered}$ |
| Vacciunation． |  | ．．．． |  |  |  | 1 |
| Concussion．． |  |  |  |  |  | 1 |
| Spiritualism． | 1 | 1 |  |  |  | 10 |
| Bodily injuries．． | 3 |  |  |  |  | 14 |
| Business anxicties．． | 9 |  | 9 |  |  | 39 |
| Jealousy．． |  |  |  |  |  | 6 |
| Exposure to cold．．．．．．．．．．．．．．．． | 1 |  | 9 |  |  | 10 |
| Fright．．．．．．．．．．．．．．．．．．．．．．． | 1 | 1 | 2 |  |  | 7 |
| Masturbation | 31 |  | 31 |  |  | 99 |
| Political excitement．．． | 1 |  | 1 |  |  | 3 |
| Meningeal Inflammation．． |  | 1 | 18 |  |  | 3 |
| Domesic troubles．．．．．．． | 7 | 11 | 18 |  |  | 90 |
| Religious excitement．．．．．．．．．．．． | 20 | 9 | 29 |  |  | 88 |
| Ill treatment．．．．．．．．．．．．．．．．．．．．． |  | 4 | 4 |  |  | 15 |
| Blindness，． |  |  |  |  |  | 1 |
| Use of tobacco． |  |  |  |  |  | 1 |
| Uterine disease．．． |  | 2 | 2 |  |  | 20 |
| Novel－reading． |  |  |  |  |  | 1 |
| War excitement．．． |  |  |  |  |  | 8 |
| Over－exertion．．． | 11 | 2 | 13 |  |  | 41 |
| Spermatorrbæ3 ．．．．．．．．．．．．．．． |  |  |  |  |  | 1 |
| Scarlet fever，．．．．．．．．．．．．．．．．．． |  |  |  |  |  | 2 |
| Grief，loss of friends，\＆e | 8 | 4 | 6 |  |  | 7 |
| Constitutional．．．．．． | 5 | 8 | 8 |  |  | 13 |
| Nostalgia．． |  | 1 | 1 |  |  | 1 |
| Lactation too long continued |  | 3 | 3 |  |  | 3 |
| Syphilis ．．．．．．．．．．．．．． | 3 |  | 3 |  |  | 3 |
| Loss of property．．．． | 1 |  | 1. |  |  | 1 |
| Typhoid fuver．． | 8 | 4 | 7 |  |  | 17 |
| Disordered menstruation． |  | 11 | 11 |  |  | 83 |
| Uhange of life． |  | 2 | 2 |  |  | 12 |
| Pecuniary anxiety | 10 |  | 10 |  |  | 98 |
| Intemperance．．．． | 24 | 5 | 29 |  |  | 90 |
| Disease of the brain． |  |  |  |  |  | 9 |
| Paralysis． | 2 | 2 | 4 |  |  | 7 |
| Hemiplegia． |  | 1. | 1 |  |  | 6 |
| Apoplexy ．． |  |  |  |  |  | 8 |
| Hysteria．．． |  |  |  |  |  | 3 |
| Measles．．． | 1 |  | 1 |  |  | 2 |
| Senile dementia． | 3 | 1 | 4 |  |  | 8 |
| Original defect．．．．．． | 6 | 1 | 7 |  |  | 15 |
| Disappoiuted affections |  |  |  |  |  | 12 |
| Loss of health in military service．．． | 3 |  | 3 |  |  | 23 |
| No satisfactory cause assigned．．．．． | 98 | 78 | 171 |  |  | 640 |
| Total ．．．．．．．．．．．．．．．．．．．． | 300 | 220 | 520 |  |  | 1945 |

TABLE XIII．
NUMBER OF ATTACKS IN THOSE ADMITTED．

|  | WITHIN THE PERIOD． |  |  | FROM THE BEGIN－ NING． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { ® }}{\text { ¢ }}$ |  | E | 憲 |  | E |
| First．． | 145 | 111 | 256 |  |  |  |
| Second． | 27 | 37 | 64 |  |  | ． ． |
| Third．． | 7. | 2 | 9 |  |  | ．． |
| Fifih． | 1 |  | 1 |  | ． | ．．．．．． |
| Sixth．．． |  |  |  |  |  | ． ． |
| Seventh． |  |  |  |  | ． | ．．．． |
| Eighth．．． |  |  |  |  |  | － |
| ＂8everal＂． | 23 | 19 | 42 |  |  | ．．．．．．． |
| Unknown．． | 97 | 51 | 148 |  |  | ．．．．． |
| Total．．．．．．．．．．．．．．．．．．．．．．．． | 300 | 220 | 520 | ． |  |  |

TABLE XIV．
Death and the causes．


TABLE XIV-Continued.


DAILY AVERAGE OF PATIENTS.

| DAILY A | AVERAGE-1869 | AND 1870. | DAILY AVE | ERAGE-1870 | AND 1871. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| November | 1869. | 401.16 | November | 1870. | 439.68 |
| December | " | . 403.38 | December | 4 | . 832.88 |
| January | 1870. | . 401.70 | January | 1871 | 446.73 |
| February | \% | . 405.31 | February | 4 | . 456.45 |
| March | 4. | . 397.80 | March | 4 | . . 467.67 |
| April | " | . 398.62 | April | " | . 469.68 |
| May | " . . | . . 400.99 | May | " | . . 476.44 |
| June | 4 . . | . . 405.19 | June | " | . 48553 |
| July | ${ }^{1}$ | .. 418.77 | July | 4 | . . 490.47 |
| August | " | . 420.05 | August | 4 | . 492.90 |
| September | 4 | . 43126 | September | 4 | . 505.60 |
| October | " . . . . . | . 448.70 | October | 4 | . 503.15 |

## EXHIBIT A.

## LAND AND IMPROVEMENT FUND.

Exhibit of Superintendent from Nov. 1st, 1869, to Dec. $18 t 1871$. OLD APPROPRIATION.

## $\mathrm{D}_{\mathrm{R}}$.

To balance on hand Nov. 1, 1869
887855
To Auditor of State
270000
To balance.
847 - $\$$
358702

## Or.

By land
260000
By ironing room. ........................... 13200
By fencing and improving grounds....... 10202
By furniture and furnishing............. $75300-8 \quad 358702$

NEW APPROPRIATION.
Dr.
To Auditor of State $\$ 3650000$
To old boiler and old iron sold
$60258-83710258$

## Or.

By balance from old account ..... 847
By boiler-house ..... 276099411654
By chimney ..... 1211440
By boilers ..... 461425
By fencing and improving grounds . ..... 256521
By land ..... 250000
By contingencies. ..... 150874
By reservoir$650000-\$ 3668860$

Balance on hand, Dec. 1, 1871..
$\$ 41398$

## CURRENT EXPENSE FUND.



## EXPE NDITURES.

| For salaries.. | \$ 374401 |
| :---: | :---: |
| For wages. | 2687069 |
| For provisions. | 276897 |
| For fuel. | 322319 |
| For furniture and furnishing. | 449105 |
| For drugs and medicines. | 156054 |
| For freights. | 242460 |
| For postage and stationery. | 49098 |
| For library and diversions | 83306 |
| For clothing | 596503 |
| For contingencies. | 381865 |
| For farm. | 264319 |
| For stores. | 694457 |
| For repairs and improvements. | 1113184 |
| For meat. | 360339 |
| For feed. | 1600579 |
| For groceries. | 267840 |
| For lights. | $86855-\$ 10006650$ |
| Balance | \$2265 84 |

## CURRENT EXPENSE FUND. <br> CURRENT

## RECEIPTS. <br> RECEIPTS.

Exhibit of Superintendent for year ending Nov. 1st, 1871.

| Balance on hand Nov. 1st, $1870 \ldots \ldots \ldots 2,26584$ |
| :--- |
| From Auditor of State... $\$ 111,88237$ |
| From private patients..... 10,77108 |
| From articles sold....... 2,423 |

From Auditor of State.... $\$ 111,88237$
From articles sold $2,42321-125,07666-127,34250$
EXPENDITURES.
For salaries ..... \$ 4,124 38
For wages ..... 28,958 71
For fuel. ..... 8,597 42
For furniture and furnishing ..... 2,586 05
For drugs and medicines ..... 1,778 72
For freight ..... 2,327 01
For postage and stationery ..... 41366
For library and diversions ..... 44111
For clothing ..... 4,336 85
For contingencies ..... 5,406 72
For farm ..... 2,727 44
For stores ..... 8,240 76
For repairs and improvements ..... 21,804 07
For meat ..... 10,662 53
For feed ..... 7,865 71
For groceries ..... 3,966 89
$45295-117,61182$

## TREASURER'S EXHIBIT.

| Carrent Expense Fund, from Nov. 1st, 1869, to Nov. 1, 18 |  |
| :---: | :---: |
| Balance, Nov. 1st, 1869 ............... \$ 2703 |  |
| Receipts, to Nov. 1st, 1870.............. 9962 | 2332 |
| Payments, to Nov. 1st, | 0006650 |
| Balance on hand, N | 2265 |

Current Expense Fund, from Nov. 1st, 1870, to Nov.1st, 1871.


Land and Improvement Fund, from November 1st, 1869, to Dec. $18 t, 1871$.


## EXHIBIT B.

COST OF THE IOWA HOSPITAL FOR THE INSANE AT MT. PLEASANT.
Total of sums appropriated and expended up to Dec. 1,
1863, as per report of the Board of Trustees, of
Dec. 3, 1863.
$\$ 359,666.72$

[^0]Amount appropriated by the Tenth General Assembly, and expended as per report of Trustees of Nov. 1 , 1865
Amount appropriated by the Eleventh General Assembly, and expended as per report of the Trustees of Dec. 6,1867 , less $\$ 1,800$ for gas-works, undrawn. .
Amount appropriated by the Twelfth General Assembly, and expended as per report of the Trustees of Dec., 1869
Amount appropriated by the Thirteen General Assembly, and expended as shown in this report.
$36,500.00$
$\$ 461,966.73$
Add the amount appropriated by the act for the incorporation of the Hospital, passed by the Eighth General Assembly-chap, 161 of the Revision of 1860
$8,000.00$
Total
$\$ 469,966.72$

Nore.-As shown by the report of the Trustees, of December, 1861, a portion of the 88,000, appropriation last named, was applled to pay current expenses. On the other hand, some improvements have been made, from time to time, out of the last named
fand, of which no separate account has been kept. The foregolng statement show fund, of which no separate account has been kept. The foregoing statement shows all the funds drawn from the State Treasury on acceunt of the Hospital; for all lands,
about 850 acres; for all buildings; for all furnlture and furnishtug: and for all imabout 350 acres; for all buildings; for all furniture and furnishlug; and for all imdrawn to defray current expenses, and to pay the expenses and compensation of the Trustees.

## EXHIBIT "C."

The following are the products of the farm and garden for the year 1870:
Asparagus, 708 bunches at 10 cents . . . ................. \$ 7080
Beans, Lima, $5 \frac{3}{4}$ bushels at $\$ 3 \ldots . .$. . . . . . . . . . . . . . . . . 17 25
Beans, string, $153 \frac{1}{2}$ bushels at 75 cents. .................. . . 11512
Beets, 1231 bushels at 75 cents . . . . . . . . . . . . . . . . . . . . . . 9262

Oabbages, 1674 heads at 5 cents. .......................... . . . . 8370
Cucumbers, 122 1-5 bushels at $\$ 2$ ..... $\$ 24440$
Cucumbers, Martins, $11 \frac{1}{2}$ bushels at $\$ 2$ ..... 2300
Corn, 1440 bushels at 40 cents ..... 57600
Corn, sweet, $31 \frac{1}{2}$ bushels at $\$ 1$ ..... 3150
Corn, broom, 450 tbs at 5 cents. ..... 2250
Cornstalks, 980 shocks at 16 cents ..... 15680
Celery, 350 heads at 5 cents. ..... 1750
Currants, 85 quarts at 20 cents. ..... 1700
Egg plants, 331 at 3 cents. ..... 993
Grapes, $1946 \mathrm{\# bs}$ at 10 cents ..... 19469
Hay, 55 tons at $\$ 13$ ..... 71500
Lettuce, 4080 heads a 1 cent ..... 4080
Milk, 78552 quarts at 5 cents ..... 392760
Oats, 450 bushels at 35 cents ..... 15750
Onions, 62 bushels at 90 cents ..... 5580
Potatoes, 1445 bushels at 40 cents ..... 57800
Peas, pods, 68 bushels at $\$ 160$ ..... 10880
Pork, 11437 Hbs at 8 cents ..... 91496
Raspberries, 53 quarts at 20 cents ..... 1060
Radishes, 22 pecks at 50 cents ..... 1100
Rhubarb, 100 bunches at 10 cents ..... 1000
Strawberries, 337 quarts at 20 cents ..... 6740
Squash, 23423 \#bs at 1 cent ..... 23423
Straw, 9 loads at $\$ 3$ ..... 2700
Turnips, 1895 bushels at 30 cents ..... 56850
Tomatoes, 410 bushels at 85 cents ..... 34850
Sundry vegetables, seeds, \&c ..... 1500

## FOR THE YEAR 1871.

Apples, 100 bushels at 45 cents ..... $\$ 4500$
Asparagus, 461 bnnches at 10 cents ..... 4610
Beans, lima, $6 \frac{1}{2}$ bushels at $\$ 3$ ..... 1950
Beans, string, 75 bushels at $\$ 2$. ..... 15000
Beets, 190 bushels at 60 cents ..... \$ 11400
Cabbages, 3155 heads at 7 cents ..... 22085
Currants, 166 quarts at 20 cents ..... 3320
Celery, 375 bunches at 6 cents. ..... 2250
Cucumbers, 32 bushels at 60 cents ..... 1920
Cucumbers, Martins, 17 bushels at 60 cents ..... 1020
Corn, 1495 bushels at 25 cents ..... 37375
Corn, sweet, 34 bushels at 50 cents. ..... 1700
Cornstalks, 600 shocks at 10 cents ..... 6000
Corn, broom, 1850 Hs at 10 cents ..... 18500
Egg plants, 45 at 3 cents ..... 135
Grapes, 5601 Hbs at 4 cents ..... 22404
Gooseberries, 59 quarts at 20 cents ..... 1180
Hay, 188 tons, at $\$ 750$ ..... 141000
Lettuce, 3915 heads at one cent ..... 3915
Milk, 68,064 quarts, at 5 cents. ..... 340320
Oats, 1,312 bushels, at 20 cts ..... 26240
Onions, 154 bushels, at $\$ 1$, ..... 15400
Onion sets, 32 bushels, at $\$ 250$ ..... 8000
Pork, $20,747 \mathrm{lbs}$, at 6 cents ..... 124482
Potatoes, 1,568 bushels, at 40 cents ..... 62720
Peas, pods, $29 \frac{1}{2}$ bushels, at $\$ 150$ ..... 4425
Peppers, 20 dozen, at 8 cents ..... 160
Radishes, 110 bunches, at 6 cents ..... 660
Rhubarb, 111 bunches, at 8 cents ..... 888
Raspberries, 115 quarts, at 20 cents. ..... 2300
Strawberries, 400 quarts, at 20 cents ..... 8000
Squash, $18,750 \mathrm{lbs}$ at 1 cent ..... 18750
Straw, 20 loads, at \$2. ..... 4000
Turnips, 159 bushels, at 20 cts. ..... 3180
Tomatoes, 158 bushels, at 60 cents ..... 9480
Sundry vegetable seeds, etc ..... 1500
Total ..... \$9,327 69

| Exhibit of Stock, Supplies, etc., on hand, at the Nov. 1st, 1871. | ed Value, |
| :---: | :---: |
| 31 milch cows. | 240 |
| 11 heifers... | 124000 |
| 12 yearlings. | 12000 |
| 82 fat cattle | 899700 |
| 67 sheep (fat). | 40200 |
| 36 fat hogs... | 50400 |
| 127 store pigs. | 53800 |
| 10 horses and 8 mules. | 272000 |
| Farm wagons, carts, and implements. . | 110955 |
| Harness.. | 38700 |
| Carriages... | 95500 |
| Carpenters' machinery | 50500 |
| Corn, oats, and prairie hay (not raised on farm). | $34770$ |
| 100,000 brick.... | $65000$ |
| Wood... |  |
| Coal. | 45000 52500 |
| Gas and steam pipe fixtur | $\begin{array}{r} 52500 \\ 2274 \quad 23 \end{array}$ |
| Lamber . . . . | $\begin{aligned} & 227423 \\ & 200000 \end{aligned}$ |
| Groceries... | $165000$ |
| 8750 lbs butter, average price paid, 16 cents. | 140000 |
| Olothing and furnishing goods......... | 150000 |
| Lead, oils, turpentine, etc.. | 34665 |
| Glass. | 25850 |
| Flag | 50800 |
| Total. | 960763 |

## EXHIBIT D.

## [Extracts from Mr. Palmer's Report.]

the asylum at longview, near oinoinnati.
The principal object in visiting this institution was to see the plan and construction of the chimney connected with the building,
and the process of ventilation. The chimney is octagonal in shape, about thirteen feet in diameter, and one hundred and twenty-fire feet high. There is an iron flue leading from the boiler to the large cast-iron flue in the center of the chimney. This latter flue is nearly three and a half feet in diameter, is from one-half to fiveeighths of an inch in thickness, and cast in sections of three feet each. There are four smatler flues in the angles of the chimney, each about fifteen inches in diameter, which connect with the washroom, kitchen, gas-works, etc. These flues heat the air in the chimney, creating a strong upward current, and a sufficient draft through the cold-air duct, and the doors and windows, to furnish pure air through the bnilding. Foul air ducts and pipes also connect the water closets with the chimney, rentilating them in manner. The cold air duct is quite large, equal, I should think, to from sixty to seventy square feet. Dr. Langdon informed me that the fan is not used in this building.

THE ASYLUM AT UTICA, N. Y.
The buildings are located on high grounds, near the outer limits of the city. No pains have been spared to make the surroundings attractive. There are eourt-yards with high fences, adjacent to the building, where the patients are permitted to pass a few hours in the open air, and take exercise in various amusements. There are walks, shade trees, booths, and plenty of seats, where they may enjoy themselves at leisure, and yet be secure from harm or trouble. I was here shown a ventilator and heater combined, one of their own recent inventions. In form it is like a box stove, four feet long, one foot wide, and one foot eight inches high, and made, I believe, of boiler iron. It has one hundred and twenty-three perpendicular pipes, one and a half inches in diameter, reaching from the top to the bottom plate of the heater. Each pipe has a piece of hoop-iron inserted in it, one and a half inches wide, which is twisted twice round. The hot air passes into the heater around the pipes, and pure cold air is heated while passing through the pipes. The small pipes in the heater are connected with a cold-air flue four feet wide and six inches deep. There is an iron guard around the heater for protection. This piece of furniture placed in one of the
wards, affords great comfort to the patients. Two fans are used in this building to force ventilation; yet they have cut openings in the ceilings in the halls in the upper story, where the air is most impure. These afford great relief.

THE ASYLUM AT MIDDLETOWN, CONN.
The center portion only of this is finished. It is over three hundred feet front, and will now accommodate two hundred and fifty patients. The whole structure, when completed, will be over one thousand and fifty feet front, and will contain six hundred rooms. The building thus far shows substantial but plain work. The ceilings are quite high, and great pains been taken to secure good circulation of air through the building.

## THE MO'LEAN ASYLUM AT SOMERVILLE, MASS.

The cluster of asylum buildings at Somerville presents a fine appearance as viewed from a distance, nestling among noble old elms which tower aloft, and spread far, affording delightful shade. Such beauty of scenery can only be obtained by much labor and great care. I was surprised at the richness and elegance with which some of the rooms of this institution are furnished. Several of the patients pay as high as from forty to fifty dollars per week.

## THE ABYLUM AT TRENTON, N. J.

This may be regarded as a model institution in regard to possessing those improvements which minister to the comfort and happiness of the patients, and give satisfaction to those connected with its operations. In this institution is an apartment for ironing and airing clothes, in which the residuum of the gas manufactured from gasoline for illuminating the building is used for heating the irons, etc., conveniently and economically, it is thought. The institution is furnished with ærated bread, manufactured by machinery.

GENERAL REMARKS.
In the institutions visited, there is a similarity in some respects, and a description of one may suffice for many. The pleasure grounds
are usually laid out in walks and driveways that frequently extend for miles, made of plank, brick, or stone. There is no doubt that these walks and ways are of great benefit, and necessary to the health of the patients, who require exercise in open air. The in-door attractions are still greater, and more beneficial to those who are not permitted to enjoy out-door exercises. They are such as readingrooms, libraries of books and periodicals, bowling alleys, rooms for gymnastic exercises, billiards, and various kinds of innocent games. Other interesting and valuable features consist in the decoration of the halls and principal rooms with various kinds of pictures, paintings, photographs, etc., also with flowering plants and shrubs, fern cases, aquariums, etc. All these things attract the attention of the patients, afford them much satisfaction, make them more cheerful and greatly aid many in their recovery. My attention was called to the case of colored patients placed in the wards with the whites. I thought it embarrassing to both parties, and more paticularly so the negro. The prejudice that naturally exists between the two races, is no less manifested in the diseased minds. In some States there are separate buildings provided for this doubly unfortunate class. But where the number is small a separate department should be provided where they may be free from the irritation and annoyance to which they are otherwise exposed.

THE MEETING AT HARTFORD.
It was gratifying to witness in the association the earnestefforts of the members to impart to each other the knowledge acquired by long experience in the institution over which they severally preside. There is a large debt of gratitude due to those good men, who, from kindness of heart, have conceived the plans, and founded and conducted the institutions by means of which so much relief is given to the large elass of mankind who fall victims to a disease more to be dreaded than any other to which the human family is subject. With the experience of the past, and the great improvements of the present, we may hope that the future will witness still more beneficial results.

## EXHIBIT E.

## REPORT OF COL. CRABB.

## Mr. President and Gentlemen of Trustees of the Iowa Hospital for the Insane:

After thanking you for the honor of being appointed a delegate to attend the annual meeting of the Association of Medical Superintendents of the American Institutions for the Insane, and also to visit such Insane Hospitals of the country as I might deem best, I would beg leave to lay before you a condensed report of what I have seen and learned. To describe the different institutions visited in detail would make this report too lengthy. I will confine myself more particularly to statements regarding the financial management, and also to other statistics of interest, of each Hospital, with a view of comparing the several institutions with each other.

INDIANA HOSPITAL FOR THE INSANE, AT INDIANAPOLIS, IND.
This Hospital is located about three miles from the city, on a beautiful plat of ground embracing about 200 acres of land. The building is of brick, large, and massive; but it looks old and not very prepossessing in its general appearance. There are several old, forsaken, dark, and damp cells or rooms in the basement, which were once used as abodes for patients. There remains one ward in this basement, and is used for hospital purposes. The Superintendent remarked that he felt ashamed that he was compelled to treat his patients in that manner; that he had not the means to do otherwise on account of the crowded condition of the Hospital. The wards were all neat and clean, and the patients looked comfortable. They have the "Holly Water Works" for furnishing them water and for extinguishing fires. These water works cost between fifteen and sixteen thousand dollars.

Number of patients under treatment during the year, 792.
Number discharge 1 cursd during the year, 187, or $23-61$ per cent of the whole number treated.

Died during the year, 51 , or 6-43 per cent of the whole number treated.
Current expenses, $\$ 123,745.96$.
Cost per week for each patient, about \$4.61-100.
Superintendent's salary, $\$ 1,800$ a year.
1st Assistant Physician, \$1,200.
2d Assistant, $\$ 1,000$.
Matron, $\$ 500$.
Steward, \$1,000.
Male heip receive from $\$ 18$ to $\$ 23$ per month; females from $\$ 12$ to $\$ 13$ per month.
They purchase their coal and meats by contract, and everything else by private purchase.

Beef costs $9 \frac{3}{4}$ cents per pound, net, and mutton 5 cents per poind, net.

Fuel costs $\$ 10,000$ a year.

## Longyiew, near cincinnati, ohio.

This is a very large, fine, and imposing building, built of brick, and beautifully located. The grounds are handsomely laid out, and well ornamented. The wards are large, airy, neat, clean, thoronghly ventilated, and handsomely furnished.

Superintendent's salary, $\$ 3,500$.
1st Assistant, $\$ 1,200$.
2d Assistant, $\$ 1,000$.
Steward, \$1,400.
Matron, $\$ 600$.
Number of employes, 61, at an average cost of $\$ 27.86$ per month each.

Number of patients treated during the year, 784.
Number discharged cured during the year, 165, or 21.04 per cent of the whole number treated.
Number died during the year, 62 , or 7.90 per cent of the whole number under treatment.

Current expenses, $\$ 142,68616$, at an average cost per week for each patient of $\$ 5.10$.

Cost of fuel, $\$ 9,451.31$.
Cost of meats, $\$ 11,414.44$.

SOUTHERN OHIO LUNATIC ASYLUM, AT DAYTON, OHIO.
This is a very fine, large, and imposing stracture, built of brick, and located on high, rolling ground. This hospital has all the modern conveniences of such an institution. It is well furnished, well officered, and everything is neat, cleanly, and orderly. Not excelled by any public institution coming under my notice.

Number under treatment during the year, 753.
Number discharged cured during the year, 160, or 21.24 per cent of the whole number treated.

Died during the year, 34 , or 4.51 per cent of the whole number treated.
Current expenses, $\$ 99,24020$, or $\$ 3.97$ per week for each patient.
Cost of fuel, \$9761.65.
Cost of meats, $\$ 17,690.04$.
Beef, per lb., 11 cts., net.
Mutton, 8 cts per lb., net.
Number of laborers, 64, at an average cost per month, of \$22.29. Superintendent's salary, $\$ 1200$.
1st Assistant Physician, $\$ 700$.
2d Assistant Physician, $\$ 700$.
Matron, 8400 .
government hospital, at wasmington oity, d. c.
This hospital is built of brick, and is one of the largest in the country. At the present time, it is less crowded with patients than any one of the public hospitals visited. It has about 400 acres of land belonging to it. There are separate buildings for the use of colored patients, who are well cared for, Dr. Nichols, the Superintendent, prides himself on raising fine stock and poultry. The ventillation was not very good in some of the wards ; but taken altogether, the ventilation will compare favorably with other hospitals.
Number of patients treated during the year, 549.
Number discharged cured during the year, 41 , or 7.46 per cent of the whole number treated.

Number died during the year, 18 , or $3 \frac{1}{2}$ per cent of the whole number treated.

Current expenses, $824,752.43$.
Cost per week for each patient, $\$ 5.00$.
Cost of fuel, including lights, $\$ 7,24760$.
Cost of meats, $\$ 14,943.80$.
Cost of beef, per lb., net, 12 cts.; mutton, 12 cts.
Number of laborers, (officers and all), 100 , at a cost of $\$ 36,329.14$.
STATE LUNATIC ASYLUM, AT TRENTON, N. J.
The original building looks rather old and unpreposessing. They have recently been making important additions to the hospital, which adds very much to its appearance, and now in all its appointments it is a very fine hospital and well conducted. Their kitchens, three in number, laundry, and bakery, are very fine. They have machinery for making and baking ærated bread, which is one of the peculiarities of this institution.
Number of patients treated during the year, 814 .
Number discharged cured during the year, 68; or 8.35 per cent of the whole number under treatment.

Number died during the year, 44 ; or 5.40 per cent of the whole number treated.

Current expenses, $\$ 157,029.16 ; \$ 4.66$ per week for each patient.
Cost of fuel, $\$ 13,261.88$.
Cost of laborers, $\$ 21,65594$.
Number of employes not ascertained. Cost of meats are included in the general provision account. The report of this institution is rather meagre in its details.

## STATE LUNATIC ASYLUM, AT UTICA, N. Y.

This is one of the largest hospital buildings in the country. It is built of brick and stone. It has six wards, each about two hundred and ten feet long; it is built in such a manner as to form a large square in the rear of the main building; there are several nice and comfortable strong wards for the worst patients, with large, enclosed courts adjoining, with shades, arbors, \&c., for the use of this class of patients. Ventilation is forced, and upwards into the attic, and through the comb of the roof, and I think excellent. They have a very large conservatory filled with choice flowers, \&c.

Number of patients treated during the year, 1033.
Number discharged cured during the year, 156 ; or 15 per cent of the number treated.

Number died during the year, 64 ; or 6.20 of the whole number freated.

Current expenses, \$212,371.32.
Cost of board, per week, $\$ 4.00$.
Cost of fuel and light (exclusive of gas), $\$ 15,801.60$.
Superintendent's salary, $\$ 3,000$.
First Assistant Physician, $\$ 1,500$.
Second Assistant, $\$ 1,250$.
Third Assistant, $\$ 1,000$.
Steward, \$1,250.
Matron, $\$ 500$.
NORTHERN OHIO LUNATIC ASYLUM, NEAR CLEVELAND, OHIO.
This asylum is located on a high eminence with a clear and beautiful stream of water running at its base. It is built of brick, faced with rough stone, for the first story, and the remainder with dressed stone. They are just adding new wards to the east and west wings. These are intended to be fire proof; the halls and rooms are arched over with brick, and the stairways are of iron. The ventilation is upward (not forced) and rather poor. They get their water from the stream by means of a common pump. They have erected a water tower in the rear of the main buiiding sixty-one feet high, (built of brick), twenty feet in diameter, inside. The walls are eighteen inches thick up as high as where the tank rests, the remainder twelve inches thick; with pilasters two feet square at the base and tapering up as high as the tank. The water tank is made of boiler iron. It is eighteen feet in diameter, and 17 feet high and is said to hold about 3000 barrels. There are water-pipes leading to different points about the building and grounds; with water plugs for the purpose of attaching hose, to be used either for putting out fires, or for watering the grounds, etc., all of which is a very wise and useful appendage. It cost about $\$ 6,000$.
Number treated during the year, 509.

Number discharged and cured during the year, 103 , or 20.24 per cent. of the whole number treated.
Number died during the year, 23 , or 4.52 per cent of all treated.
Current expenses, $\$ 64,576.71$.
Cost of board per week, each, $\$ 3.80$.
Cost of fuel, $\$ 5,550.69$.
Costs of meats, $\$ 10,730.19$.
Beef, $10 \frac{8}{4}$ cents per pound, net.
Mutton, $9 \frac{1}{4}$ cents per pound, net.
Number of employes, 55 , at an aggregate cost of $\$ 14,037.22$, or $\$ 18.16 \frac{1}{3}$ per month each, on the average.
Superintendent's salary, $\$ 1,200$; first Assistant, $\$ 700$; second Assistant, \$700; Steward, \$800; Matron, \$289.
mohigan asylum for the insane, at kalamazoo, mich.
This hospital is located on a very high hill overlooking the city. The M. C. Railroad runs at the base of this hill. There is a side track for the use of the hospital, and from this they have graded and laid a track 850 feet long, with an ascent of one toot in nine, between the railroad and the boiler-house. Upon this track is a dumping car drawn by means of a wire rope coiling over a large wooden drum which is moved by the laundry engine, and thus the coal is drawn up and dumped into the coal-house. The hospital building is made of brick. They have recently been adding some fire-proof wards to the north wing. This new part is nicely furnished, and neat and clean. The original part of the hospital is not so good. There is now in process of construction a new building a short distance to the south of the old one. When completed, the intention is to place the male patients in one and the females in the other. They have a "No. 7 "Knowles' steam pump stationed at a large spring, where they procure all the water for hospital use, with 1300 feet of three and four inch iron piping, two hundred feet of rubber hose, and seven hydrants for use against fire, etc. They have an asylum fire guard, equipped with uniforms and a hose cart They have a large and finely furnished kitchen and laundry.

Number of patients treated during the year, 543 .

Number discharged cured during the year, 94 , or 17.31 per cent of the whole number treated.

Number died during two years, 46 , or 8.47 per cent of the whole number treated.

Current expenses, 1870, \$72,575.68.
Cost per week each for county patients, $\$ 3.50$; but the actual cost is about $\$ 3.98$ per week,-the State makes up the deficiency.
Fuel cost \$13,455.40.
Meats cost $\$ 7,857.90$. Beef and mutton cost on an average $9 \frac{1}{5}$ cents per pound, net.

Attendants and assistants, fifty in number, cost $\$ 11,413.45$, an average of $\$ 1902 \frac{1}{4} .100$ per month.

Superintendent's salary, $\$ 2,000$.
1st Assistant, \$1,000.
2d Assistant, $\$ 800$.
Steward, $\$ 1,000$.

PENNSYLVANIA HOSPITAL FOR THE INSANE, AT PHILADELPHIA.-

## a private institution.

This Institution consists of two separate hospital buildings, located on two high hills or plats of ground, with a deep gulley dividng them. The one for the male patients is a very large building, built of brick, and very massive. The grounds are laid out in beautiful walks and driveways, and ornamented in the highest style of art. There are 16 wards. Some of them 190 feet in length, with halls 12 feet wide, and about 26 rooms to each ward, varying in size from $9 \times 11$ to $14 \times 25$ feet, and a large parlor to each ward. The whole well furnished, neat and very clean. The finest retreat for the insane, I presnme, in the United States. The building for the females is one among the oldest in the country. The original building has been added to from time to time, so that is looks like a succession of cottages joined together. In passing through the main building, it scems more like the different private apartments of an extensive mansion than an insane hospital. Everything looks homelike. The rooms and halls are large, neat, airy, clean, and the best furnished of any I have seen. There are enclosed private courts to both of these buildings, for the benefit of that class of
patients who cannot be allowed to roam over the more public grounds.
Number of patients treated during the year, 574.
Number discharged cured during the year, 94 , or 16.37 per cent. of the whole number treated.

Number died during the year, 35 , or 6.10 per cent. of the whole number treated.
Current expenses, $\$ 148,165.51$. Cost per week for each patient, $\$ 8.26$. Cost of fuel for both buildings, $\$ 15,983.98$ Beef, per tb, net, 15 cents; mutton, 12 cents.
Wages.-Girls, $\$ 9$ to $\$ 14$ per month; males, $\$ 16$. Supervisors of wards, $\$ 22$ to $\$ 25$ per month. Superinteudent's salary, $\$ 4,000$, and house found him, but he boards himself and family. Superintendent of male department, $\$ 1,500$; assistant, $\$ 1,000$. Two stewards, $\$ 800$ each. Matrons, $\$ 360$ in one, and $\$ 450$ in the other.
m'olain hospital, boston, mass.
This is a private institution. The original building was erected in 1818, and used as a private residence. Since which time it has been converted into a hospital for the insane. Several additions have been added to the main building, and also other buildings have been erected separately and some short distance from the main one. There is one large nice building called "The Appleton Building, which is finely furnished The rooms are very large. That part of the hospital occupied by the females is very nicely furnished, and looks home-like. There are 130 acres of land helonging to the hospital, which is laid out in drive ways and walks, adorned with a profusion of shrubbery and forest trees.

Current expenses, $\$ 134,339.63$. Cost of each patient per week, on an average, $\$ 13.81$. Superintendent's salary, $\$ 3,000$; first Assistant, $\$ 1,500$; second Assistant, $\$ 1,000$; third Assistant, $\$ 700$. Steward, $\$ 1,200$. Matron, $\$ 500$. Supervisors, males, $\$ 500$ a year; females, $\$ 400$. Male attendants, $\$ 20$ to $\$ 35$ a month; females, $\$ 10$ to $\$ 16$ a month.

Number of patients treated during the year, 263.
Number discharged eured during the year, 33 , or 12.54 per cent. of the whole number treated.

Number died during the year, 12 , or 4.56 per cent of the whole nuraber treated.

Cost of fuel, $\$ 5,334$.
Total cost of labor, $\$ 22,308.37$.

> RETREAT FOR THE INSANE, AT HARTFORD, CONN.

This hospital is located on beautiful grounds, but the building looks old and quaint in appearance. Some of the wards for females are handsomely furnished. In the cellar or basement, I saw a hall and several small cellars or rooms, which I was informed were at one time used for patients. It looked more like a place for criminals than the insane.

They have a very fine Hall, called "Ives' amusement Hall," which has a large stage and fine scenery. It is used for concerts, theatrical performaices, \&c, for the amusement of the patients. They have recently been making many additions and alterations in the building, so that it is very complete in all its parts. The ventilation is most excellent.

Number of patients treated during the year, 258 ,
Number discharged cured during the year, 41 , or 15.89 per cent of the whole number treated.

Died during the year, 25 , or 9.66 per cent of the whole number treated.

Superintendent's salary, $\$ 3,000$.
1st Assistant's salary, $\$ 1,500$.
2d Assistant's salary, $\$ 700$.
Wages of males fr m $\$ 20$ to $\$ 25$ per month.
Wages of females from $\$ 14$ to $\$ 20$ per month.
No Current Expense account given in their report.
While at Columbus, Ohio, I visited the school for idiots and weak-minded children. It is located about three miles west of the city, on high and rolling ground, in a grove of large and stately forest trees. The building is of brick trimmed with stone, and makes a very fine appearance. This institution was established by the General Assembly of the State of Ohio, in the year 1857. Its
object is to teach the pupils the simple elements taught in the common schools, aid them in matters of every day life, such as "cleanliness, propriety, self-management, self-reliance, and the development and enlargement of capacity for useful occupation." There are 170 pupils in the Institution. They are admitted between the ages of six and fifteen years. I visited them in their school-rooms and witnessed their different exercises. I was happily disappointed.

They all had the look peculiar to that class of persons, yet when questioned, they would brighten up with a gleam of intelligence in their eyes, and would give ready answers to questions which would be difficult for children of sound mind and body, (of like age), to answer. They all looked remarkably neat and clean.

In the gymnasium I witnessed their gymnastic exercises, and I must say they were wonderful to behold. I saw Dr. Kirkbridge's patients put through their gymnastic performances in the Pennsylvania Hospital, under the leadership of an experienced teacher, yet these poor, weak-minded children, far excelled them in the promptness and accuracy of execution of every movement. Their movements were timed by music; and, although there were about one hundred children on the floor at the same time, each movement was executed to accord with the music, and so exactly together that I was unable to detect the least discord in the whole. The cost for maintaining these pupils is about four dollars a week each.

From the great benefits arising from an institution of this kind, I should think that every State in the Union would have a similar one. We have a great number of that class of unfortunate children in Iowa, and I hope the time is near at hand when this noble State will properly provide for them.

I did not attend the meeting of the "Association of Medical Superintends of the American Institutes for the Insane," believing that I could more profitably employ my time in visiting Insane Hospitals, therefore I have nothing to report about said meeting.

## TABLE No. 1.

Table showing the whole number of patients treated, number and per cent. of recoveries and deaths, in 12 Insane Hospitals for 1870.

| name of hoseital |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "Indiana Hospital," Indianapolis | 792 | 187 | 23.61 | 51 | 6.43 |
| "Long View," Cincinnati, O. | 784 | 165 | 21.04 | 62 | 7.90 |
| "Southern Ohio Lanatic Asylum," Dayton. | 753 | 166 | 21.24 | 34 | 4.51 |
| "Government Hospital,"Washington City, D. C... | 549 | 41 | 746 | 18 | 3.50 |
| "State Lnnatic Ásylum,"Trenton, N. J. | 814 | 68 | 8.35 | 44 | 5.40 |
| "State Lunatic Asylum,"Utica, N. Y. | 1033 | 156 | 15.00 | 64 | 6.20 |
| "Northern Ohio Lunatic Asylum," Cleveland, Ohio | 509 |  | 20.24 | 23 | 4.52 |
| "Michigan Asylum," Kalamazoo, Mich. | Bien'al 543 | Biennial. <br> 94 | 17.31 | Bie'l | 8.47 |
| "Pennsylvania Hospital for the Insane," Philadelphia. | 574 | 94 | 16.37 | 35 | 6.10 |
| "McOlain Hospital," near Boston, Mass. | 263 | 33 | 12.54 | 12 | 4.56 |
| "Retreat for the Insane," Hartford, Conn. . . . . . . . . | 258 | 41 | 15.89 | 25 | 9.66 |
| "Iowa Hospital for the Insane" | 642 | 81 | 12.60 | 63 | 9.81 |
| Average on the 12 hospitals | 626 1-6 | $10111-12$ | 15.97 - 1 | $39 \frac{8}{4}$ | $6.42 \frac{1}{6}$ |

Table No. 1, exhibits the following:
1st. That the "State Lunatic Asylum," at Utica, N. Y., had the greatest number of patients treated, and the "Retreat for the Insane," at Hartford, Conn., the smallest nnmber.

2nd. That the "Indiana Hospital" has the greatest number and largest per cent of recoveries; the "Government Hospital" the least per cent of recoveries.

3rd. The "Government Hospital" has the least per cent of deaths, and the "Iowa Hospital" the largest per cent of deaths.

The Iowa Hospital is below the average of recoveries and above the average of deaths. This I think can reasonably be accounted for from the fact that there was a large number of the worst kind of epileptics (60) in the hospital, and more old, chronic cases than in any other; and taking into account the space occupied, vastly more crowded, having nearly double the number of patients it should have, considering their health and comfort.

TABLE No． 2.
Table Showing the Current Expenses，Cost of Fuel，Meats，etc．，of Eleven Hospitals，for 1870.

| NAME OF HOBPITAL． |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indiana Hospital | \＄122，745．96 | ＊ 4.61 | \＄10，000．00 | Not given． | 99／4 cents． | 5 cents．．． |
| Longview ．．． | 142，676．16 | 5.10 | 9，451．31 | \＄ $11,414.44$ | Not ascert | ained．．．． |
| Southern Ohio．．．． | 99，240．20 | 3.97 | ＊，761．65 | 17，690．04 | 11 cents． | 8 cents．．． |
| Government Hosp tal | 124，752．43 | 5.00 | ＊7，24760 | 14，94380 | 12 cents． | 12 cents．．． |
| State Lunatic Asylum，Trenton，New Jerse | 157，029．16 | 4.66 | 13，271．88 | Cost of me | ats in gene | ral account |
| State Lunatic Asylum，Utica，New York．． | 212，371．32 | 4.00 | 15，801．60 | Cost of me | ats in gene | ral account |
| Northern Ohio Lunatic Asylum | 64，576．71 | 380 | 5，550．69 | $10,730.19$ | $10^{3} / 4$ cents | 91．cents． |
| Michigan Asylum，Kalamazoo． | $72,575.68$ $148,165.51$ | 3.98 8.26 | $18,455.40$ $15,988.98$ | $7,857.90$ | $+91 / 3$ cents 15 cents． | $91 / 3$ cents． <br> 12 cents． |
| Mennsyivania Hospital，Hospital，Bosio．1．．．．．． | 184，339．63 | 13．81 | $18,988.98$ $5,354.00$ | Not given． | ained．．．．． |  |
| Iowa Hospital ．．．．．．．．．．．．．．．．．．．．．．．． | 100，066．50 | 4.00 | 5，910．21 | N＇t known | 101／3 cents． | N＇t knowa |

－Lights included．
＋Average．

TABLE No． 3.
Eachibiting the Number of Employees，their Cost，Salaries of Officers，etc．，of 12 Hospitals，for 1870.

| NAME OF HOSPITAL． |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indiana Hospital | 100 | \＄ 2054 | \＄ $2483114{ }^{8}$ | 180000 | － 120000 | \＄1000 00 | 00\＄ | 100000 | 50000 |
| Lengview ．．．． | 61 | 2786 | 3089210 | 350000 | 120000 | 1000 | 0 | 140000 | 60000 |
| Soutbern Ohio．．．．．．．． | 64 | $22 \quad 29$ | 1728577 | 120000 | 70000 | 70000 | 0 |  | 40000 |
| Government Hospital．．．．．．．．．． | 100 | 2500 | 3682914 | ．．．．not | ascertain | ed ．．．． |  |  | ， |
| Slate Lunatic A sylum（＇Trenton，N．J．）．．．．．． | nut | repor vd．．．． | 2165594 | ． bot | nscer ain |  |  |  |  |
| State Lunatic Asylum（Utica，N．Y．）．．．．．．．． Northern Ohio．．．．．．．．．．．．．．．．．．． | 130 55 | ${ }_{18}^{2000}$ | 3798349 | 300000 | 150000 | 125000 | 00 | 125000 | 50000 |
| Northern Ohio．．．．．．．．．．．．．．．．．．． Michigan Asylum（Kalamazoo） | 55 50 | $18161 / 3$ 19 | 14037 11418 | 120000 2000 | 70000 1000 | 700 800 |  | $\begin{array}{r}804 \\ 1000 \\ \hline 00\end{array}$ | 28900 |
| Michigan Asylum（Kalamazoo）． | 50 | Male 1902 | 1141845 | 200000 | 100000 | 80000 |  | 100000 |  |
| Pennsylvania Hospital（Philadelphial）．．．\｛ | ．．．．． | Male <br> Females 89 to 14 | not given． | 400000 | 150000 | 100000 |  | 120000 | 45000 |
| McOlain Hospital，（Boston）．．．．．．．．．．．．．．．．\｛ |  | Males， 20 to 35 Females， 10 to 16 | 2230887 | 300000 | 150000 | 100000 |  | 120000 | 50000 |
| Retreat for the Insane（Hartford，Conn．）．． |  | Males， 20 to 35 |  | 300000 | 150000 | 70000 |  |  |  |
| Iown Hospital．．．．．．．．．．．．．．．．．．．．．．．．．． | 85 | Females， 142293 | 2687069 |  |  |  |  | steward | 40000 |

Most of the hospitals visited are larger than the Iowa hospital, but they are not made of as good material, or so finely finished. Many of them are better furnished, but not one of the public institutions has as good and substantial furniture as the Iowa hospital. At every place visited, I was most cordially received, and every facility given me to acquire information. I would make especial mention of Dr. Everts, of the Indiana hospital, Dr. Grundy of the Southern Ohio hospital, Dr. Nichols, of the Government hospital, Drs. Kirkbride and Jones, of the Pennsylvania hospital, Dr. Buttolph, of the State Lunatic Asylum, at Trenton, N. J., and Dr. Gray, of the State Asylum, at Utica, N. Y., who have my warmest thanks for kind favors bestowed.

Respectfully submitted,
B. ORABB, Trustee.
of the

## JOINT COMMITTEE

OF THE

FOURTEENTH GENERAL ASSEMBLY

## APPOINTRD TO VISIT THE

HOSPITAL FOR THE INSANE AT MT. PLEASANT.

DES MOINES:
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[^0]:    (Note,-The foregoing amount includes what was drawn from the saline innd fund, and also all interest recelved on State
    warrants.)

