

IOWA HOSPITAL FOR THE INSANE,
MT. PLEASANT, IOWA, July 1, 1891. }

To his Excellency, HORACE BOIES, Governor of the State of Iowa:

SIR—I have the honor herewith to transmit to you on behalf of the Board of Trustees of the Iowa Hospital for the Insane at Mt. Pleasant, their sixteenth biennial report, together with the report of the Superintendent and statistical and other exhibits, showing operations of the period and the present condition of the institution.

J. H. KULP, *Secretary.*

OFFICERS OF THE HOSPITAL.

BOARD OF TRUSTEES.

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TREASURER.

C. V. ARNOLD,	-	-	-	-	Mt. Pleasant.
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RESIDENT OFFICERS.

H. A. GILMAN, M. D.,	-	-	-	Superintendent and Physician.
M. E. WITTE, M. D.,	-	-	-	First Assistant Physician.
F. P. PECK, M. D.,	-	-	-	Second Assistant Physician.
E. F. STROHBEHN, M. D.,	-	-	-	Third Assistant Physician.
E. N. NELSON,	-	-	-	Steward.
MRS. F. V. COLE,	-	-	-	Matron.
DR. E. H. HOUSE,	-	-	-	Apothecary.

TRUSTEE'S REPORT.

IOWA HOSPITAL FOR THE INSANE, {
MT. PLEASANT, IOWA, July 1, 1891. }

To the HON. HORACE BOIES, Governor of Iowa:

We, the trustees of the hospital for the insane, at Mt. Pleasant, Iowa, would respectfully herewith submit this, the sixteenth biennial report of the aforesaid hospital, together with the report of Supt. H. A. Gilman, made to us in his official capacity, which is by us fully approved and adopted and made part of this report, and we attach hereto the report of the treasurer, Mr. C. V. Arnold and of the steward of the hospital, Mr. E. N. Nelson, as exhibits showing a minute detailed statement of the receipts and expenditures during the last biennial period.

The twenty-third general assembly made special appropriations for the improvement of the hospital in the sum of thirty-seven thousand, one hundred dollars, for the following specific purposes:

For cold storage building.....	\$ 6,000
For chapel and amusement hall	15,000
For general repairs and contingent fund.....	7,000
For ice house.....	2,000
For slaughter house.....	1,500
For steam engine.....	2,600
For improvement of grounds, etc.....	1,000
For greenhouse.....	2,000

Of these proposed improvements, the cold storage building, the chapel and amusement hall and the ice house have been built, and are now ready for use, and the steam engine has been purchased and properly and securely placed, and is now in use. And all these improvements have been made at a cost not to exceed the appropriation made for each.

The purchases and building of the same have been superintended and directed by Dr. Gilman, and it has been excellently well done, and with such care and economy as would satisfy any one that the State has received full value for the money expended. The work

on the other improvements for which special appropriations have been made, has been fairly well begun. We have felt somewhat embarrassed during the prosecution of the work on the improvements made and now making, on account of the provision of the law under which the appropriation was made. It appears the legislature saw fit to direct that not more than one-half should be drawn in the year 1890, and one-half of the remainder not before the 15th day of May 1891, and the last not earlier than October 15, 1891. This limitation would have made it impossible to complete the improvements intended by the appropriations during the biennial period, but for the assistance of the First National Bank and the National State Bank of Mt. Pleasant, which kindly advanced the money necessary to complete the improvements now finished, which they did without any charge for the use of the money so advanced.

The limitation placed upon the drawing of the money may be necessary for the public weal, but it does not seem to us to be necessary to make such unreasonable restriction.

We feel called upon to ask you to recommend to the next general assembly an appropriation for the purposes set forth in the report of Dr. Gilman, which are:

For better fire protection.....	\$10,000.00
For water supply.....	13,000.00
For repairs.....	12,000.00
For painting.....	2,000.00
For flower conservatory.....	2,000.00
For improvements of grounds.....	2,000.00
For repairing sewer.....	2,500.00
For industrial building for men.....	5,000.00
For infirmary buildings.....	25,000.00
Total.....	\$73,500.00

We can make no better argument, if argument is necessary, than that set forth in the report of Dr. Gilman hereto attached, which is fully approved and adopted.

Yet we cannot resume the subject without reminding the people of the State of the great and grave responsibility voluntarily assumed by them in the care of the insane of our State. Self-protection would alone have been a sufficient reason for us to undertake the responsibility of such care, but great as is the instinct of self-protection, yet added to that and bound up with it as the greater mainspring of action in a christian country like ours, is the historic question propounded many centuries ago and answered in

the affirmative by all christian people, "Am I my brother's keeper"?

And when we consider the fearfulness of this most fearful malady, the dread hallucinations it engenders, the awful forebodings it awakens, the high hopes it blasts, the happy Iowa homes it pervades with its impenetrable gloom, and the fact that it lays its blighting hands upon the young and old, the strong and infirm, the rich and the poor, the native as well as those of foreign birth, it must appear to all that it is our duty from our abundance to make sure that everything is done that the powers of man can do to make the burdensome life of every patient in our State less burdensome. Let us hope that the next general assembly of Iowa may carefully investigate the matters herein asked of it, and if such investigation is made, we will feel assured that what we ask will be granted.

We have during the time we have acted as trustees of this institution endeavored to bring to our aid our clearest judgment upon all matters connected with its management, and we feel it is no exaggeration to say that Dr. Gilman is thoroughly competent for the office we have called him to fill, and we are united in saying that all he has done has been for the best interests of the patients. The other physicians and employes have performed their duties nobly and well, and we invite the closest scrutiny into all the affairs of the institution, and all its appointments and in every detail.

Respectfully submitted,

D. A. HURST, *President*;
J. H. KULP, *Secretary*;
G. W. CULLISON,
G. H. SPAHR,
S. KLEIN,

Trustees.

SUPERINTENDENT'S REPORT.

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

GENTLEMEN—In accordance with the Code I herewith submit to you the sixteenth biennial report of this hospital, showing the operations of the past two years. The wing for females has continued to be very much crowded during the entire biennial period, and we await the relief to be afforded by the completion of the wing for females at Clarinda, with gratification. The total number under care during the biennial period has been fourteen hundred and two:

Six hundred and forty-three patients have been admitted, three hundred and twelve men and three hundred and thirty-one women. Five hundred and eighty-six have been discharged during the biennial period; two hundred and seventy-five men and three hundred and eleven women. Of this number, two hundred and twenty-eight—one hundred and ten men and one hundred and eighteen women—recovered; one hundred and seven—fifty-eight men and forty-nine women—were much improved; ninety-seven—forty-seven men and fifty women—were unimproved; one hundred and fifty-four—sixty men and ninety-four women—died. The number of deaths has been larger than usual, and the death rate was largely increased by the epidemic of influenza or La Grippe, which was very general throughout the hospital during the winter and spring of 1890. The deaths from the disease itself were but few, but cases of pneumonia as a sequel, and the direct effect upon persons suffering from consumption and otherwise enfeebled hastened their demise, while many new cases were admitted suffering from the effects of the disease, from which it was impossible for them to rally. A large number of persons have also been admitted of extreme age (from seventy to ninety years), very much enfeebled, and in some cases

almost moribund. But few recent cases of brain disease are numbered among the deaths, a large proportion being cases of chronic insanity.

EXPENDITURE OF APPROPRIATIONS.

As in the twenty-first and twenty-second general assemblies, so in the twenty-third, the law authorizing the appropriations was so constructed as to prohibit the drawing of certain portions of the amount appropriated for special purposes, until after the close of the biennial period; thus delaying the work and causing much inconvenience and some extra expense.

REPAIR AND CONTINGENT FUND.

There was a small balance reserved for contingent purposes at the close of the biennial period, out of the appropriations made by the twenty-second general assembly. An itemized statement of this expenditure and all other special appropriations, appears in, and is a portion of, this report. The amount appropriated by the twenty-third general assembly has not been sufficient for the repairs needed, in properly preserving so large an establishment, but as much as possible has been done. Eight wards have been painted, and the sash and frames to all the windows on the south side of the east wing and a portion of the rear center. Walls and ceilings have been replastered and some carpenter work repaired. There is much more work of like character to be done, and but a small balance remains undrawn for contingencies, until further provision is made by the next legislature.

INDUSTRIAL BUILDING.

The construction of this building had been commenced previous to presenting the fifteenth biennial report, and it was pushed forward to completion as rapidly as possible. This was accomplished within the appropriation. It is connected by a corridor to the west or female wing, so that the patients employed in the ironing, sewing and dressmaking departments can go to and from their work at all seasons of the year, whatever the weather, without exposure.

KITCHEN.

The appropriation for this purpose was sufficient to complete the work and furnish it with a new sixteen-foot range, steam roasters,

steam kettles, hot water heater and tea and coffee urns, and affords facilities for far better service than before.

ICE HOUSE.

The appropriation for this purpose enabled us to complete a substantial brick structure, having stone foundation and base. The walls are hollow with a four inch air space, and the building is lined inside with wood, leaving another air space of four inches. This will afford us room for a year's supply of ice.

COLD STORAGE.

The amount appropriated for a cold storage building was reduced one thousand dollars, which necessitated changing the plans, and six rooms were petitioned off with a tank room for ice, in the building formerly used for boiler house. These rooms will be used for the storage and preservation of butter, eggs, apples and other fruit and perishable supplies, while a cold storage or packing room for beeves, mutton and other fresh meats is being constructed in connection with the slaughter house, thus making the necessary provision for all cold storage within the amount appropriated.

CHAPEL AND AMUSEMENT HALL.

The extension to the rear center was enclosed during the summer and autumn of 1890, so that the work of finishing the chapel and amusement hall could progress during the winter. These rooms are now completed, with a seating capacity sufficient to accommodate all the patients in the hospital, able to attend the services in the chapel and entertainments in the hall. The chapel is finished in white, with oak trimmings, for wood work, with a main audience room and gallery, and seated with pews, also of oak. We saved enough from the construction fund to partially pay for a fine pipe organ, the balance being paid for by the donations from kind friends and by funds from the sale of articles in our show case to visitors, made by the patients, and an organ fund accumulating for years, has finally been used, as has long been anticipated. This instrument was manufactured by Johnson & Son, Westfield, Mass., and is perfect in tone and volume, and will be a source of constant gratification to our people for all time to come. The amusement hall has been completed, with main audience room, so arranged that the seats can be removed for the dancing parties of our patients, which occur weekly, and there is also a gallery seated

with chairs for those who desire to witness the entertainment, but do not participate. We have a spacious stage, with eight complete changes of scenery for dramatic entertainments, concerts, etc.; this room is frescoed and made as bright and cheerful as possible. We have placed here a Knabe concert grand piano, which has a sweet tone, with sufficient volume to fill the hall. The appropriation for these improvements has been sufficient for their completion, and the balance on hand will finish the dressing-rooms and rear stairways. The latter being required in order to prevent accident in case of fire. This provision has made this institution as well equipped in this direction as any hospital in the country.

ENGINE.

The appropriation for a new engine could not be drawn until October, but the firm who secured the contract agreed to place it in position, payment to be made at that time. The Hamilton-Corliss Company of Hamilton, Ohio, were the lowest bidders, and have constructed and put in our engine-room a one hundred and fifty horse power engine of the Corliss pattern, and it performs its work most satisfactorily, and will give the institution all the necessary power for all future purposes, including laundry, machine shop and carpenter shop.

SLAUGHTER HOUSE.

The foundation for this building is laid, the brick work of the first story completed and the joists placed in position. It will be completed within the appropriation according to the plan adopted, and would have been nearly so at this time if the necessary amount could have been drawn from the treasury.

GREENHOUSE.

This appropriation cannot be drawn until October, consequently the work of construction has been delayed. The amount asked was reduced and we shall build only such portion as the appropriation will warrant, hoping that the remainder will be granted by the next general assembly.

IMPROVEMENT OF FENCES AND GROUNDS.

This amount was reduced so that little can be done except to replace airing court fences and extend airing courts for patients in

the rear of the buildings, and this appropriation cannot be drawn until October.

IMPROVEMENTS AND REPAIRS DESIRABLE DURING THE NEXT BIENNIAL PERIOD.

The attention of your board, and the general assembly of the State, has previously been called to the necessity for further fire protection for this institution, and we cannot feel that we have performed our duty at this time without reiterating the needs in this direction. There should be a line of fire-pipe around the entire building with fire plugs at convenient distances, with hose for attachment and hose carts. The connection could then be made to the pipe from the water-works, and by telephone we could have direct pressure from the pumps located there. The hose inside in each ward has become rotten by age and unfit for use and should be renewed throughout, this being connected with our pumps at the boiler house. There should also be outside fire escapes of iron from each section of the wings and elevators. For these purposes of fire protection, a conservative estimate requires the sum of \$10,000. As has been indicated, our reservoir, which is much too small has been in a leaky condition for several years, and an appropriation was asked of the twenty-third general assembly, but deferred on account of the lack of funds in the treasury. This would cost about \$3,000, and our experience with the drought of 1890, when for weeks we were compelled to haul water in wagons and then suspend general bathing, delay washing of soiled clothing and necessary house-cleaning for the lack of water, has emphasized the demand for a reservoir sufficiently large to store 10,000,000 gallons of water, in close proximity to the boiler-house. This would cost about \$10,000, and would place us beyond the possibility of such a dreaded calamity as having no water in such an establishment for all time to come. It seems that the suggestion of the necessity of ample fire protection and water supply, need only be indicated to be remedied by the necessary appropriation being made. For the necessary repairs of this extensive building for the next two years, there should be appropriated the sum of \$6,000 per annum.

As has been indicated in former reports the repairs needed in such an institution are constant, from the very nature of the patients cared for here. Many are destructive, and unless the necessary daily breakage and destruction is immediately attended to, it causes

a much larger outlay and sometimes attendant danger. It is to be hoped if any reduction is made in the requests herein stated it may not be in connection with this item.

We would also ask for an appropriation of \$2,000 for painting, as the roof of the entire building will need to be painted to protect it from rusting during the next biennial period. All the window frames on the north side of the hospital and one half the south side and in all the rear buildings should be painted to prevent the wood work from decaying. The extreme wards in the west wing should also be thus treated, not only to improve their appearance, but as a hygienic measure. There should be an appropriation of \$1,000 per annum for the improvement of the grounds, thus giving more walks for female patients, and opportunities for out of door exercise in damp weather and in the winter time. There should also be a pavillion for shelter in rainy weather, in order that the patients may not be confined in the wards when unpleasant. The appropriation for conservatory for flowers was insufficient to construct a building according to the plan submitted, it having been cut down by the committee having it in charge. We would request \$2,000 to complete it. This will be a daily source of comfort and recreation to patients from every ward in the hospital and lighten the burden which comes with the beclouded intellect and diseased brain. Especially will this be a bright spot during the dreary days of the winter. The old brick sewer, which is constantly caving in, should be entirely renewed and ought to be carried to a point, if possible, where it will be offensive to no one. We would ask for an appropriation of \$2,500 to be used to accomplish this in the best practical manner.

In that portion of the sewer that has been renewed, where connections have been made with the new wings, the vitrified fifteen inch tile has been put in, and has always given satisfaction. A cess pool has been made near a point where the sewer enters the branch to the creek, which collects all solid matter. In considering the industrial feature of the hospital and putting it into practical operation, it will be necessary to construct a building to be used as workshops for mattress making, broom-making, shoe shop, etc., etc. This could be done nicely by extending an addition south of the carpenter's shop, which could be intersected by the main shaft of our present engine, and any necessary power for any purpose utilized conveniently. To put up such an extension in a permanent manner, and furnish it with proper tools and appliances, would cost

about five thousand dollars. This hospital, with a population of nearly one thousand people, has no building apart from the main structure where persons who may suffer from contagious or infectious diseases, when admitted here, can be cared for without exposing the entire household to such contagion. There should be an infirmary building for both sexes, for this purpose, and they might be constructed so as to accommodate fifty patients, and whenever not required for infected cases, could be used for old and feeble persons, who could thus more conveniently go out of doors without going up and down stairs. Such buildings could be substantially constructed, furnished, heated and lighted, with a separate kitchen for each building, for about \$500 *per capita* or \$12,500 for twenty-five patients, or \$25,000 for fifty. This will of course also increase the capacity of the institution to that extent for caring for patients. Your attention has been called to the cracked condition of the walls and foundation of the second and third sections east of the old building, and I feel that I should not do my duty did I not again urge early repair to avoid future possible disaster.

INCREASED HOSPITAL ACCOMMODATIONS.

There remain in the State outside the State hospitals, mostly in county poor-houses, nearly or quite one thousand five hundred insane, many of whom have been returned there as chronic cases from the hospitals, in years past, as it has become necessary on account of the over-crowding, and this accumulation is constantly increasing.

The condition of such persons in illy constructed, poorly ventilated places, without any proper appliances for their care, and with little or no medical supervision, and no State inspection, is often uncomfortable in the extreme, as has time and again been rehearsed, and it would seem, now that our State is out of debt, provision for the care of all the insane of Iowa should be made by the State. We are now in that condition that if prompt action is taken, this can be accomplished, without the expense being felt as a burden by the individual tax-payer, and I believe the great heart of the people desire that this should be done without further delay. As indicated in previous reports the most feasible way to accomplish this is, to complete the institution at Clarinda during the next biennial period; then commence the construction of another hospital in northwestern Iowa and push it to completion as rapidly as possible, thus making the necessary provision for the insane of the whole State, and at the same time giving accommodation to that section

and saving to all the counties in that portion of the State large expenditures in transportation to and from the present hospitals on account of the distance. Those of us who are engaged in this work see the necessity of this step as none others can, as the demand is made upon us for the admission of these cases. The overplus that some counties of the State have had has almost forced them to make some other provision for them outside the hospitals, and some have even advocated county care. I can not better controvert the fallacy of this position than by quoting from the report of Dr. H. F. Carriel, the eminent superintendent of the Central Hospital for the insane of Illinois. He says:

This system, if it is worthy of the name, is in practical operation in the State of Wisconsin, and while some claim for it a complete success, others who have given the subject study and intelligent thought, declare county care a failure. There are several reasons why such care cannot be equal to State institutions. In the first place, the buildings are not as good, nor so well located for health and convenience, embracing drainage, water supply, ventilation, accessibility by railroads, etc. Then, such buildings are not large enough to give anything but the most primitive classification, a matter of prime importance in caring for insane persons, both for their comfort and hope for successful treatment; the quiet should be isolated from the noisy, the vulgar separated from the refined, and such persons associated together as will be agreeable to each other and mutually helpful. Then, such institutions cannot be so economically managed as in large buildings, where large numbers are congregated, and where supplies of all kinds can be procured of first hands and at wholesale prices. The necessary appliances for heating, washing, and carrying on all of the domestic arrangements of an establishment, can be more complete in a large asylum, and the laundry work, heating and cooking can be done more economically than in a small establishment. As to the matter of economy in buildings, there is at least one county in this hospital district, putting up a building for its insane that will cost much more per capita than the buildings put up by the State of late years have cost. The State buildings are, and will continue to be better arranged, will have better sanitary arrangements and surroundings, such as ventilation, sewerage, water supply, drainage, etc., than does prevail or ever will be secured in any county buildings. Then again, the organization of the State hospitals or asylums is more in accord with the humane ideas of the day. A board of trustees, nominated by the governor and confirmed by the senate, composed of men of high character, without a pecuniary interest in the erection of buildings or in furnishing supplies, is given control and management.

A medical superintendent, specially fitted for his position by education and practical experience, with such medical assistants as may be necessary; a steward and matron should be added to complete the list of officers. Such an organization has the approval of those who have had the most experience in the work, and, therefore, ought to be the best qualified to judge of the requirements needed for the best results. Such an arrangement of work and

division of labor would of necessity be wanting and impracticable in the ordinary county asylum.

It is not denied that, when a county is so populous, and her insane so numerous, as to require a large building, but what it would be possible to obtain the desired classification and organization under county control; but there is not more than one county in this State that has these numbers, and their management of their county asylum in the past, does not give hope of complete success in this system of county care if extended.

In the conduct of State hospitals or asylums there is as much superiority as in the buildings and organizations. They have a medical head, who lives in the hospital; a corps of trained attendants, to minister to the wants of those under their charge; attention to uniform heating and ventilation of the wards; good food, well cooked and well served; diversions, dramatic entertainments, schools, employments in out door work, or in the sewing or ironing rooms, or in some fancy work on the wards—in short, all those things that come under the head of the moral treatment of the insane. Some have taken the ground or made the assertion that no physician was needed in an asylum for the chronic insane; but some chronic cases need as much medical attention as the recent, to meet all the requirements of the case, though all hope of cure may have departed. Insanity is a bodily disease, and needs the same medical oversight as diseases of other organs of the body.

No one not a physician would feel competent to treat a case of cancer or of heart disease, though such cases are incurable; why should they be competent to manage, and guide and treat a diseased brain?

The Board of Charities of New York, and the State Medical Society for years labored to this end, and finally succeeded in 1890, in securing the passage of a law, making it obligatory that all the insane should be removed from the county houses and placed in the State hospitals, and provision has been made for all of the insane in the State in that manner.

The fourteenth annual report of the board of charities, says:

While it is probably true that a small portion of the chronic insane may be cared for in connection with the county houses, the mass require a supervision and oversight which cannot be extended to them in association with the paupers. Hence the erection of buildings adapted to the condition and needs of this class becomes a public necessity. When these buildings are erected in connection with the county poorhouses, and are, as is usual in such cases, under the same supervision, the standard for the care of the insane varies according to the individual views of the officers in charge, instead of being based upon, and adapted to the real needs of this class. If the keeper be a person of kind and humane sympathies, he spares no effort to provide a suitable diet, proper attendants, and every needed facility for the comfort and welfare of the insane. The kindly interest shown by him to this class extends also to the paupers in the poorhouse, and as a result the standard of care for them is raised beyond their actual requirements. The whole establishment in consequence becomes expensive and burdensome, and soon excites criticism and distrust in the community,

on the part of those taxed for its support. On the contrary, if the keeper, as is not infrequently the case, be governed by motives of economy only, the standard of diet and care for the insane is lowered to that fixed for the poorhouse inmates, and is therefore inadequate to its purposes. The insane, as a consequence, soon become impoverished, violent, filthy and disturbed, and the efforts at economy, in the end, lead to increased and expensive burdens, moreover in the frequent change of keepers, occurring in counties thus providing for their chronic insane, great abuses imperceptibly creep into the management, which result in irreparable injury to the insane, and becomes a matter of deep regret and mortification to its citizens. For these reasons, the board in authorizing counties to retain their chronic insane, has invariably advised the erection of separate buildings and placing the insane, whenever practicable, under management apart from the poorhouses. In counties where the number of insane under care reaches 100, the employment of a resident physician is required by the rules of this board.

From a careful and extended examination of the subject in all of its varied aspects, the board early reached the conclusion that the proper care of the chronic pauper insane, could be better and more economically secured in institutions controlled and managed by the State than in institutions under the control and management of counties. The grounds upon which this conclusion is based have, from time to time, been set forth to the legislature, and may be briefly summed up as follows:

1. In the erection of buildings for the chronic insane by the State, a much larger number may be provided for in one institution than in the case of a single county; fewer administrative apartments proportionally are required, and a lower per capita expenditure for shelter may therefore be attained.
2. The supervision of a large number of chronic insane under one management by the State, is less expensive than when such insane are diffused in numerous county institutions.
3. The supplies, clothing, etc., for the chronic insane in State institutions may be purchased in large quantities, and wholesale prices be thus secured; whereas, in county institutions the needs in this direction are so limited that retail prices must necessarily be paid for these articles.
4. The standard of care for the chronic insane in State institutions is based upon their real needs, and it is fixed and staple; in county institutions it is regulated in accordance with the views of the officer who, for the time being, may be in charge, and it is therefore liable to frequent changes and interruptions.
5. In the State institutions the chronic insane may be classified so as properly to meet their varied conditions, and thus promote cleanliness and good order, and secure the enforcement of wholesome rules and regulations. In the county institutions little or no classification can be effected, and the intercourse of the noisy and disturbed, with the quiet and well behaved engenders violence, confusion and disorder.
6. The chronic insane in the State institutions are under the oversight and care of medical officers, selected because of their familiarity with the disease, and the highest ratio of improvements and recoveries is likely to be secured; in the county institutions the medical attendant generally visits the

insane only on stated intervals and large curative results cannot therefore be anticipated.

7. In the State institutions the chronic insane are safely sheltered and secured against bodily harm and society is protected from their intrusions. In the county institutions the shelter is often insecure and the community is at all times liable to be disturbed by their inroads.

8. In providing for the chronic insane, the State relieves the counties of the most troublesome and expensive class of dependents, and thereby enables the proper county officers to devote their time and attention to dealing more effectually and economically with the other varied classes of public burdens.

It should be added that some of the advantages here referred to, in regard to the care of chronic insane in State institutions, may be secured in the more populous counties, where the number of such insane is sufficient to warrant the erection of separate buildings for them. In less populous counties, however, with small numbers of chronic insane, the attempt properly to provide for them under local management must, for the reasons here stated, be expensive.

The Association of Superintendents of the United States and Canada, a body of men who have charge of all the hospitals for the insane in this country and whose large and varied experience ought to emphasize the weight of their opinion, have time and again placed themselves on record as favoring State care and supervision of *all* the insane. At their annual meeting in 1890 they adopted the following resolution:

WHEREAS, the members of this association have witnessed with great satisfaction the enactment in New York State of a law providing State care for all the dependent insane, and are deeply impressed with the merits of the State, as against the county system of care,

RESOLVED, that it is the sense of this association that the principle that the insane are the wards of the State should receive universal recognition, and that efforts should be made by its members looking to the adoption of a like humane policy in other parts of the country.

INDUSTRIAL INTERESTS.

Occupation for inmates of a hospital for the insane is as important as it is for any other class. This matter has been quite fully discussed in former reports, and so far as possible with our appliances, we have adopted and practiced a system of occupation for a large per cent of patients. This has, however, among the men, been largely by engaging them in agricultural pursuits, and the winter season necessarily limits their operations. For this reason diversified occupation has been advocated and is certainly practicable within proper limitations. Brooms, brushes, mattresses, boots,

shoes and harnesses can be made and repaired; blacksmithing and repairing of tin ware can be done and making of mats and rugs, etc. In many cases, however, there arises in the mind of the patient, and naturally, too, the question, why should I work without compensation, and the true and proper argument which may be used, to induce him to occupy himself, because it is for his benefit, falls upon unwilling ears. It has often occurred to me that if some system of compensation could be arranged for, small though it be for the individual, it would be an inducement, and the proceeds sent to the families, where there may be such, or used for personal comforts to the individual, if without anyone dependent, or saved for future needs. With an arrangement for shops, such as has been indicated, some such system might be inaugurated.

MEDICAL TREATMENT.

Nearly all cases admitted to the hospital are more or less enfeebled physically and depleted by exhaustion from brain disease. Supporting treatment is indicated in most cases, the general health being improved thereby and the nervous system toned up to a normal condition. For these purposes tonics should be employed, to support and build up the debilitated and wasted energies of the individual. Quinine or Cinchona, as may seem best, gentian, nuxvomica or strychnine, columbo and syrup of hypophosphites, cod liver oil, and in cases of extreme exhaustion, to tide over the danger line in moderation, the malt liquors and alcoholic stimulants. Phosphorus in small doses is indicated in cases of acute dementia, and in some cases of melancholia; citrate and pyrophosphate of iron and the muriated tincture, are demanded in case there is an anaemic condition or any impoverishment of the blood. While animal broths and beef essence are sometimes acceptable to the patient, there is nothing that can be so safely depended upon for nourishment in these cases as milk, and it must be given freely, and sometimes an egg may be added. In cases of cerebral congestion it is important to envelope the head in applications of ice, either by the use of the ice-cap or bag or if a nurse can be with the patient constantly, direct applications to the head, and this must be persisted in as long as there remains rise of temperature or indications of inflammation. In all these cases it is important to secure protracted rest and economy of the vital forces, which can best be accomplished by placing the patient in bed at once upon his arrival at the hospital. In each case, of course, it is important that the secretions be natural as soon as possible, as they are usually interfered with.

In a large majority of recent cases there is marked insomania, and the first indication is, to secure refreshing sleep. Many times this may be done without the aid of drugs by giving a warm bath just before retiring, and if there is an anæmic condition, as is frequently the case, a glass of milk, or if much exhausted, milk punch. If, however, more active medication in the way of hypnotics is required, in maniacal cases the most prompt agent is the hydrate of chloral in from twenty to thirty grain doses. Sulfonal in twenty grain doses is sometimes preferable, and acts more happily in its after effects. It, however, must be administered an hour or two before its effect as a hypnotic will be noticeable. In cases of melancholia some form of opium is more frequently indicated, either the deodorized tincture or a solution of morphia. Hyoscyamin, canabis indica and a long list of remedies may be drawn from where opiates seem to be contra-indicated, or where there is some idiosyncrasy present. The importance of early securing sleep by some such aid cannot be too strongly emphasized. And it has seemed as important sometimes to act wisely in the withdrawal of the drug at as early a time as it is safe to do so. It seems to me that there is always danger in protracting the use of any of these aids to nature, beyond a necessary limit. In cases of cerebral hemorrhage, or an inflammatory condition of the brain the use of fluid extract of ergot or ergotine is invaluable, promptly securing contraction of the vessels in a large per cent of cases, and thus relieving the patient when in a most critical condition. The extract of gelsemium is a valuable remedy in cases of violent maniacal attacks to control and relieve the excitement resulting from the cerebral irritation. The bromides of potassium and sodium are indicated in many cases and are invaluable remedies, also the iodide of potassium. For epileptic patients there is no better formula than that of Brown-Sequard to modify the severity of the attacks and lessen their frequency. The list of drugs used to assist nature in the restoration of health of the diseased brain and nervous system could be extended almost indefinitely, but space forbids. In many cases no drugs are required, and the moral treatment with hygienic measures and regularity of life is all that is needed; the various diversions and occupations working wonderful improvement when properly guarded.

TRAINING SCHOOL FOR ATTENDANTS AND NURSES.

Attention has been called to this important matter from time to time in our reports, and while efforts are constantly being made by the several hospitals to instruct and educate attendants as far as

possible, there should be some more systematic plan for this purpose. Every hospital superintendent is painfully aware of the difficulty of securing proper persons as companions and nurses for the insane, and it is perhaps a matter which causes more anxiety than all others in connection with the management of a hospital. Compelled as we are to select from the young men and women of the country and town, those who have had no experience, it requires constant training and weeding out the inefficient and unworthy. It has been proposed to construct a hospital in connection with the medical department of the State University, under the control of the State, where the indigent sick and subjects for the clinic may be cared for, and in connection with this to have a training school for nurses and attendants, who shall have a thorough training and course of study for a definite period. From the graduates of this training school we may be able to select such persons as are best adapted by nature and education for the vocation so important and sacred as to call for the best possible efforts of those who undertake it as a profession. The lectures on anatomy, physiology, hygiene and chemistry, can be supplemented by those of the chair of mental diseases and practical nursing at the bedside, so as to fortify the individual for practical service in our wards, and bring to our service only such as are worthy of such a trust. It is to be hoped this important matter may receive prompt action, and also that we may be able to command for such service proper remuneration to retain worthy persons for a long term of service.

AMUSEMENTS.

The programmes for our literary society, dramatic exercises, magic lantern lectures and dances have been arranged with regularity during the past two years, and all of these entertainments have been zealously managed with much labor by Drs. Witte, Peck, Straub and Ludwig, assisted by the attendants and other employes. The cornet band has been kept organized and it is now certainly furnishing better music regularly twice a week for the gratification of our patients than ever before. The orchestra for our inside entertainments has also been kept up. The customary observance of all the holidays has afforded much pleasure to our people, and are bright spots of anticipation and retrospection covering periods of weeks. Especially are the Christmas holidays a source of joy, when each individual through the kindness of relatives, or where there are no friends, supplied by the benevolence of philanthropic individuals, who, following the Master's example, by their mementoes

or the means to supply them, in reality visit the sick. The dance on Tuesday evening of each week continues as popular as any entertainment we have, and a large number participate. All of these amusements will now be multiplied and very materially improved by having a commodious and convenient place for assembly. The chapel exercises are always attended by a large number of interested spectators, and with the enlarged capacity of our chapel building many more can enjoy the services, which will be aided by the tones of the beautiful pipe-organ which we now have. The pastors of the several churches of the city have taken turns monthly in filling our desk as follows: Methodist, Presbyterian, Episcopal, Catholic, Christian, Baptist and Congregationalist, and all have comforted and entertained their hearers and helped to lift depressed and desponding souls to the Heavenly atmosphere of Him who offers to us our best gifts. We are indebted to many kind friends for assistance in preparing and executing musical programmes, which have been greatly appreciated by our household.

The usual number of religious papers on the Sabbath and secular papers during the week, have been distributed and are eagerly grasped and read.

FINANCES.

The same amount per capita, drawn from the State treasury for current expenses, during this biennial period, has been fourteen dollars, as we indicated in previous reports would be the case, after the number of patients reached eight hundred. Thus, for about forty-six cents a day, we are providing board, clothing, bedding, fuel, lights, medical treatment, and salaries and wages of all the officers and employes.

The amount appropriated for the cold storage building, necessitated a change in the plans, but we have secured good facilities for this purpose, which will be a great help, in our domestic economy for all future time. The amounts for the chapel and amusement hall, ice house and engine, have been sufficient for the purpose. We have used the funds appropriated for repairs, for that purpose, except a small balance, which we are retaining for contingencies, which may arise before the next legislature assembles. The amounts for slaughter house will be sufficient to complete it, and we shall construct as much of a conservatory for flowers as the appropriation will admit of. The collections shown in the steward's and treasurer's exhibits are mostly from the sale of hides, tallow, old iron, rags, etc.

FARM.

In 1889 the crops were abundant, but in 1890 we suffered with others in this vicinity, from the effects of the drought. This made sad inroads upon our otherwise fertile fields, which gave promise of abundant harvest. Below is a table showing the amount of farm products harvested each year and supplied to our household.

ARTICLES.	1889.	1890.
Asparagus, dozen	40,884	6,665
Apples, bushels	3.5	2.5
Beans, Lima, bushels	87.5	130
Beans, string, bushels	195	198
Beans, shelled, bushels	9,240	7,375
Beets, green, bushels	3,984	1,120
Beeves, slaughtered and sold, pounds	9,146	7,737
Blackberries, quarts	105	239
Cabbage, heads	2,465	900
Caulliflower, heads	86.5	86
Celery, bunches	1,015	1,942
Carrots, bushels	2,069	2,339
Cucumbers, dozen	727	435
Corn, bushels	1,000	1,330
Corn, sweet, dozen	467	1,230
Cornstocks, shocks	5,200	756
Calves, pounds	334	1,062
Eggplant	36,626	312
Grapes, pounds	2,106	30,298
Hay, tons	8,200	235
Hogs, slaughtered and sold, pounds	7,371	33,600
Horseradish, roots	262,412	7,297
Lettuce, heads	890.5	313,500
Lard, pounds	205	60
Milk, quarts	600	204
Oats, bushels	511	274
Onions, bushels	285	285
Parsley, bunches	55	61
Potatoes, bushels	62	400
Parsnips, bushels	3,970	2,515
Peas, bushels	656	580
Peppers, dozen	50	20
Raspberries, quarts	2,072	4,275
Rhubarb, dozen	163	15
Straw, tons	71	91
Strawberries, quarts	6,831	2,550
Salsify, bushels	153	168
Spinach, bushels	348	45
Squash	597	270
Sage, pounds		
Turnips, bushels		
Tomatoes, bushels		

PATHOLOGICAL WORK.

The investigations in this department have been continued by Dr. Peck, who has been assisted by Dr. J. M. Parker, Jr., during the last winter and spring. Dr. W. H. Ludewig assisted greatly in the photographing of microscopical specimens, some of which appear in this report, after having been lithographed.

We present four cases, giving history of cases before admission, while in the hospital and autopsy after death, with microscopical examinations following, illustrated as above indicated.

MELANCHOLIA.

CASE NO. 5,502.

Admitted June 25, 1884. Age thirty-five. Male. Farm laborer. Born in Sweden. Residence unknown. So far as known this is the first attack. The first symptoms were manifested about two weeks ago, in constant dread of being killed and great nervousness. The disease is increasing with no rational intervals. He is constantly afraid of being shot and hanged. He has hidden under beds; has climbed trees and lain in grass in dread of this. He has shown no disposition to injure others, but has talked as if he contemplated suicide. He wants to go naked. Not intemperate. There is nothing known of this man except for the last two or three months, and he has been in durance several times during that time on account of his insane actions.

July 10, 1884. This man was admitted in a state of profound melancholia. He was very despondent and fearful, restless and ill at ease, ever apprehensive of some harm about to befall him. His ideas were very confused and his actions disorderly. He tore off all his clothing, was sleepless and had a very poor appetite. After a few days he became quieter, ate and slept better, tolerated his clothing and expressed himself as feeling better, but he is still very much confused and inactive in mind.

August 21, 1884. This man, though still dejected and confused has made decided improvement mentally. He is not so actively disturbed and miserable as at the time of his coming here. He is now on No. 2 and has good care of his clothing and person. His bodily health did not improve very much, and some two weeks ago he suffered a severe attack of dysentery, and for a time was in a typhoid condition, but he rallied and recovered from the disease. He is now able to be up and about, but he is yet weak and anaemic.

September 30, 1884. This man is steadily gaining in flesh and strength, but is still depressed mentally. He complains constantly of a feeling of oppression in epigastric region. He goes out to work.

November 30, 1884. Patient is well nourished and strong, but his mind is yet depressed and inactive.

January 10, 1885. Patient looks comfortable but his melancholia is still very marked. He feels oppressed and gloomy at all times, but he is quiet and orderly and has good care of his person. He works steadily.

March 15, 1885. There has been no change. He has been on No. 1 for a long time.

April 30, 1885. Patient is in a stationary condition.

June 3, 1885. No change; patient's bodily health is good. He sits about in his room.

September 30, 1885. Patient has not changed in any respect, and he still complains of a feeling of misery and oppression in the epigastric region. Is moderately depressed at all times. He is neat and careful about his person and in good bodily health.

May 29, 1886. Continues in a stationary condition. He is orderly and well behaved, and not troublesome in any way. He is wanting in energy and ambition. His bodily health is good.

March 1, 1887. He is always very quiet and orderly. Sits about idly and seems quite well satisfied. His bodily health is good.

April 15, 1888. He continues in the same condition as described above. He is inclined to be hypochondriacal and rarely does anything useful. He is strong and vigorous.

March 21, 1889. No change of any kind can be recorded. He is dull and inactive and moderately depressed. He is always very orderly and well behaved. His bodily health is good.

September 14, 1889. Continues in above described condition.

December 12, 1889. He is quiet and orderly always and has but little to say to anyone. He is in good physical condition but continues to be inactive.

May 4, 1890. No change of any kind. He is in good bodily health.

August 21, 1890. He has been in poor bodily health lately. Has been losing in flesh and strength. Both eyes are turned to the right. Says he cannot move them outwards. He is dull and inclined to be melancholic.

September 7, 1890. This patient has steadily failed since the date of the last record, and it is evident he is suffering with pulmonary tuberculosis. There are also marked symptoms of organic disease of the brain at its base and probably tubercular in nature, involving the centers from the root of the motor oculi of the right eye and the abducens of the left, since both eyes are fixedly drawn to the right and upward. The last few days also the respiratory center of the fourth ventricle has been involved in the degeneration, since there has been marked dyspnoea depending on defective enervation. The tubercular lung disease is not sufficient to account for the embarrassed respiration besides there being disorder

of the stomach sufficiently so to indicate serious mischief at the origin of the pneumogastric nerve. He failed rapidly and died today at 7:30 p. m.

AUTOPSY.

The autopsy was held forty-five hours after death. There is found to be passive congestion and thickening of the pia mater. No other microscopical evidences of disease of the membranes surrounding the brain. A tumor about one half inch in diameter horizontally and one inch vertically is found in the floor of the fourth ventricle at union of pons varolii with the medulla. This tumor is firm in consistence, and by direct pressure it can be easily felt through the whole substance of pons and medulla *i. e.*, it can be felt from the opposite or posterior side. Other portions of the encephalon seem to be normal.

Lungs. Both lungs are markedly tubercular with strong pleuritic adhesions throughout.

Spleen. The spleen is one-third larger than normal. Shape and consistence normal.

Heart. Walls of heart and valves are normal; pericardial fluid in excess.

Portions of the different regions of brain, lung and spleen retained for microscopical examination.

MICROSCOPICAL EXAMINATION.

Cross-sections of the pons varolii reveal a glio-sarcoma. This tumor is round and measures three-eighths of an inch in diameter. It is to the left of the raphie (median line), extending nearly to the surface of the pons, separated from the floor of the fourth ventricle by a thin layer of gray matter. The tumor is so plainly outlined, the sections can be studied macroscopically.

Fig. I. represents a cross-section of the pons showing distinctly the glio-sarcoma mentioned above. It will be observed that this section is magnified about two diameters. An amplification of three hundred diameters reveals in the *lemniscus* or *fillet tract* (tract connecting the olivary body with the optic thalamus and corpora quadrigemina) a hemorrhagic point. This is observed in Fig. I only as a small black point. A small quantity of blood is found to have escaped from the vessel, and has displaced the adjacent tissue, causing some enlargement of the peri-vascular space. Continuing the examina-

FIG. I.



Section of the pons Varolii showing a glio-sarcomatous growth extending into the medulla.

FIG. II.



A. Hemorrhagic area as found in optic thalamus. B. Perivascular space. C. Cross section of blood vessel. ($\frac{3}{4}$ objective.)

tion with the one-fifth objective near the margin of the section, sub-millinary tubercles are distinctly seen. These can not be seen in cut as the tissue is magnified but two diameters. To see these tubercles plainly requires an amplification of about three hundred diameters. The blood vessels are well filled, but not nearly to the degree that is found in cases of mania, illustrated by Fig. III. of the fifteenth biennial report. Sections of the brain of this case and of the three cases of melancholia to follow show no extravasation of the corpuscles, as in acute delirious mania, nor the engorgement of the vessels as found in acute mania. The vessels may be well filled with blood in melancholia, but not to such a degree but that the surfaces of the corpuscles may be seen, while in mania the vessels are so filled to repletion that, especially in those whose calibres exceed but little the diameter of the blood corpuscles, the edges only are seen, their surfaces being closely approximated by pressure as in rouleaux formed by attraction. The gliosarcoma takes a deeper stain than the adjacent tissue. Sections were stained with carmine, haematoxylin, and some were double stained. In one of these sections we find a group of spindle cells near the floor of the fourth ventricle. Rosette crystals are seen under polarized light and selenite plate. These are adjacent to the tumor. Examination with one-fifth objective shows fatty degenerations at these points.

Optic thalamus. Fig. II shows a hemorrhagic area as found in cross-section of optic thalamus. The blood clot has dropped from this in sectioning. This area is three millimeters long and one millimeter wide, and is near the margin of the internal capsule.

It was impossible to retain the coagulum entire while making the section, but some red corpuscles may still be seen adhering to the margin of the vacated area.

Cervical cord. In the microscopical examination of the cervical region of the cord, there is nothing found worthy of record.

Occipital lobe. Many cholesterin crystals are found in the sections from this region. Some fields present as many as twenty or more. Some are irregular in contour and quite large. The most of them being of the usual size and contour.

Parietal lobe. Examination of the sections from these lobes reveals nothing of interest.

Lungs. Sections of the lungs reveal very extensive tubercular deposits, cellular thickening of the alveolar walls, and accumulation (cellular) within the alveolar spaces.

MELANCHOLIA.

HISTORY BEFORE ADMISSION.—CASE NO. 6873.

Admitted April 3, 1888. Age forty-two. Widower. Barber. This is the first attack; first symptoms were manifested about three months ago by neglect of his business and person. Disease is increasing and constant. Mind seems blank but he seems desirous of hiding from something. Took some sedative medicine. Recent death of wife is assigned as cause.

HISTORY AFTER ADMISSION.

April 23, 1888. This man was admitted in a state of great mental confusion and inactivity, and he is careless in his habits and about his clothing. He does not speak in answer to questions and does not seem to suffer any discomfort. He has not made any progress whatever and is quite stupid. His bodily health is good.

May 31, 1888. He has been in a stationary condition of mental inactivity and indifference and does not speak of his own accord. He is inclined to be careless and slovenly in his habits, but aside from this is not disorderly. Bodily health is good.

August 2, 1888. He is brighter and somewhat more active in mind and occasionally converses with others. He is in good spirits much of the time. His bodily health is good and he is well behaved.

September 8, 1888. Not any material change has occurred since date of last entry. He is in excellent bodily health; rather pleasant and cheerful in disposition and goes out to work.

October 11, 1888. He continues about as recorded a month since.

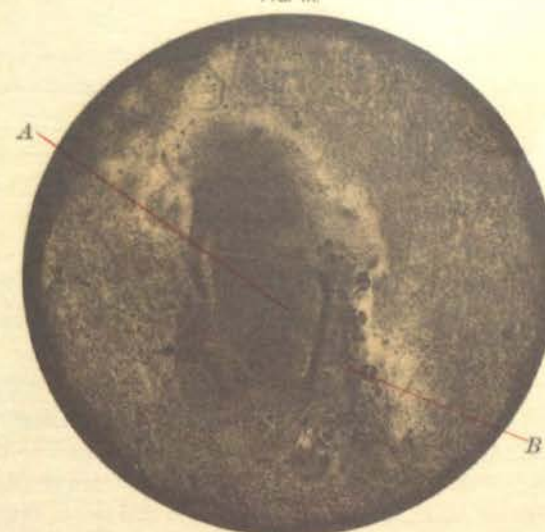
March 27, 1889. No change in his condition. He is very dull and inactive mentally and indifferent. He does very little work and rarely converses with any one. He is careless and slovenly about his clothing and person. Bodily health is good.

April 24, 1889. He continued in much the same condition as described above. He is dull and stupid; answers ordinary questions but does not volunteer any information. A few days ago he was seen to have an apoplectic attack, from which he recovered in half an hour. Yesterday he had another which was followed by coma, and he died to-day without previously regaining consciousness.

AUTOPSY.

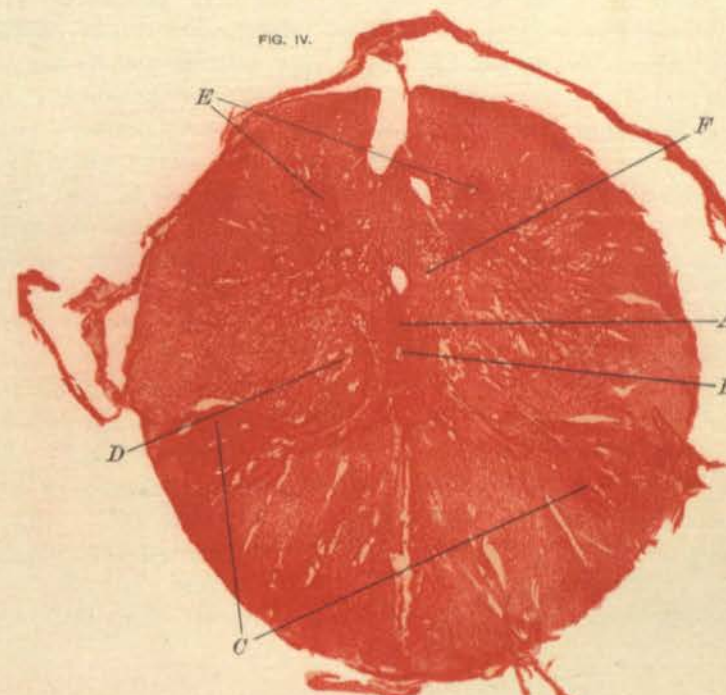
Autopsy held thirty-six hours after death. Much congestion of pia, considerable extravasation of vessels of pia over left temporal

FIG. III.



Section of temporal region of brain, showing engorgement of blood vessel (A) and exudation of corpuscles (B) into the adjacent tissue. (1.5 objective.)

FIG. IV.



Cross section of cervical region of cord showing A. Dilated central canal. B. Small blood vessel surrounded by perivascular space. C. Posterior horns of gray matter, increase of connective tissue. D. Myelitis of lateral tract. E. Atrophy of the anterior horns of gray matter. F. Con-

lobe. Meningo-encephalitis very noticeable. The pia was very adherent over entire surface. Lateral ventricles filled with fluid. Brain tissue seems to be softer than normal. Heart walls very friable, suspect fatty degeneration. Other organs normal. Lower portion of mesentery hypertrophied and congested (chronic). Pulmonary vein contains an ante-mortem clot. Portions of all regions of brain wall of left ventricle of heart and lower portion of mesentery retained for microscopical examination.

MICROSCOPICAL EXAMINATION.

Parietal lobe. In the examination of these sections we find compound granular corpuscles (corpuscles of gluge), indicating softening of the brain. These granular corpuscles are the same as those seen in Fig. V. In this case but few are found in any one field, five being the greatest number seen. Lymph space dilation is found to be very common. The lymph spaces are universally dilated, and to such an extent their calibre is from four to five times that of the contained blood vessel. Near the middle of one of the convolutions (ascending) and on a level with the bottom of sulcus separating the ascending frontal and ascending parietal convolutions we find a microscopical hemorrhage as seen in Fig. III. The vessel is surrounded by a few compound granular corpuscles, and there is a space (not shown in the cut) twice the calibre of vessel that had been occupied by the clot. The adjacent tissue presents evidences of *pressure* from the hemorrhage. There is universal proliferation of the nuclei of the neuroglia.

Examination of the sections from the other lobes shows proliferation of nuclei and dilation of the perivascular spaces.

Medulla. Examination of these sections show that there is no proliferation as found in the sections of the cerebrum, but we find here about the same degree of perivascular dilation.

Cervical cord. Microscopical examination of the transverse sections of the cord reveals, what appears to be a separation of one of the anterior horns of gray matter by a tract of white matter, see Fig. IV. The microscope, however, shows that the gray matter is replaced by connective tissue, establishing a malformation of the gray matter. We have here the third stage of myelitis. The compound granular corpuscles have disappeared as well as any oil globules that may have been present during the preceding stages, and the connective tissue trabeculae are thickened.* This area contains

*Bramwell.

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no blood vessels, and the nerve elements are replaced by the connective tissue growth. The anterior and posterior horns of gray matter are markedly atrophied, and the central canal is obliterated. The connective tissue fibres (replacing the gray matter) are found to be obliquely arranged, between the remaining filaments of gray matter, connecting the anterior horns with the gray commissure. This arrangement presents a beautiful wavy appearance as viewed through a one-fifth objective. The area of connective tissue extends anteriorly and involves the greater portion of the column of Turck on same side. The cross pyramidal tracts are also found to be involved, but the myelitis is less advanced here; we find the blood vessels to be engorged and a few compound granular corpuscles are seen. The anterior and posterior horns of gray matter are markedly atrophied, and the central canal is obliterated. The vascular supply is very meagre, but few vessels are found and these are contracted and tortuous.

The anterior median fissure is deflected from the connective tissue area, so that instead of extending vertically toward the gray commissure from the surface of the cord, it extends obliquely toward the cornua of the opposite side. The perivascular spaces are greatly dilated.

The connective tissue area takes the same degree of stain as the white columns of the cord.

Heart. Microscopical examination of the walls of the heart present the usual evidences of fatty degeneration.

MELANCHOLIA.

CASE NO. 7138.

Admitted December 12, 1888. Age forty-one. Single. Laborer. German. First attack began June 16, 1885; would not work at the quarry any longer; said he owned the world; got a gun and made the men stand aside; talks about what little money he has saved in the bank. Attempted to injure others. Masturbation assigned as cause.

HISTORY AFTER ADMISSION.

December 30, 1881. He has been in an entirely stationary condition since his admission; he is very quiet and retiring and does not speak of his own accord, and will only answer questions in monosyllables; he has been orderly and well behaved; he is probably under the influence of delusions as he avoids the other patients

and much of the time is in a room by himself; his bodily condition is good and he eats and sleeps well.

February 21, 1889. There has been no change of any kind in his condition; he seems comfortable and contented and makes no complaints; he has been orderly and well behaved and occasionally can be induced to engage in some useful occupation.

April 20, 1889. Nothing new can be recorded in his case and he remains in a stationary condition.

June 11, 1889. He now goes out to work quite often; his bodily health is good and he is comfortable in every way; his mind is much impaired and weakened.

September 10, 1890. This patient has not changed greatly; he is perhaps paler and is somewhat jaundiced but not markedly so; mentally he is very sluggish and stupid, taking no apparent notice of anything going on about him; he sits quietly on a settee on No. 5, without speaking, and does not reply to inquiries, though he understands apparently what is said to him.

October 10, 1890. This patient has failed very markedly in flesh and strength the past few days and is seriously ill; on physical exploration we find complete dullness over right thorax up to within a few inches of the clavicular border; some embarrassment of breathing is observed but there is no prexia; his appetite and nutrition is very poor, and he is rapidly losing in flesh; he has been confined to bed; he is neat and clean about his person, but mentally he is as sluggish as before; he is taking tonic and supporting treatment.

October 15, 1890. The patient has been slowly but steadily failing, and lately his stomach has been very irritable so as to be unable to retain nourishment. He has become extremely weak and helpless, and it is very evident that his death is very near at hand.

October 18, 1890. Patient has become extremely weak and exhausted, and in spite of close attention, supporting treatment and careful nursing, he died at 3:20 P. M.

AUTOPSY.

The autopsy was held twenty hours after death. Body somewhat emaciated, well developed, no deformities or abnormalities save marked atrophy of the left temporal muscle.

Head. On opening skull bone was found of normal thickness and density; meninges presented nothing pathological. Some cerebral atrophy was recognized by hypernormal quantity of

arachnoidal fluid, occupying ventricles as well as the sub-arachnoidal spaces. Veins were moderately distended, but arteries empty. Pia mater was pale and anaemic. On examination the cortical surface of the cerebrum was found to contain a large patch of degeneration, involving the region of the left Sylvian fissure. This degeneration extended throughout the floor of the fissure of Sylvius, included Broca's convolution, partly involved the ascending frontal convolution, and the first and second temporal convolution entirely.

The degeneration implicated the entire thickness of the cortex and extended to some depth into the medullary substance. It was yellowish in color and contrasted sharply with the adjacent cortex. It was much softer and more friable than normal brain tissue. Exploration of the left middle cerebral artery revealed an embolism, completely filling and obstructing the lumen of the vessel, and located at the division of the artery, into the middle and posterior branches, which had degenerated into mere fibrinous threads. No other pathological conditions were macroscopically observed in other parts of the brain.

Thorax. Some old fibrinous adhesions were found in pleurae, mostly on right side. Lungs somewhat congested on right side.

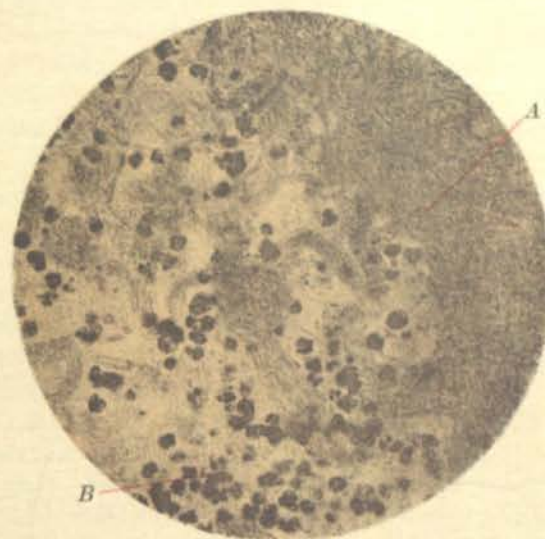
Heart appeared normal.

Abdomen. On opening the abdominal cavity a large distention of the liver was found, occupying the outer and upper region of the greater convexity, pushing the diaphragm high up into the right pleural cavity, and also displacing the liver downwards. An incision revealed a large abscess, with very thin external walls and containing four or five pints of pus and detritus of broken down hepatic tissue. A second smaller abscess was found in the concavity of the greater lobe, alongside and external to the gall bladder. This contained some twelve ounces of fluid pus and detritus. No other abnormalities were noted.

MICROSCOPICAL EXAMINATION.

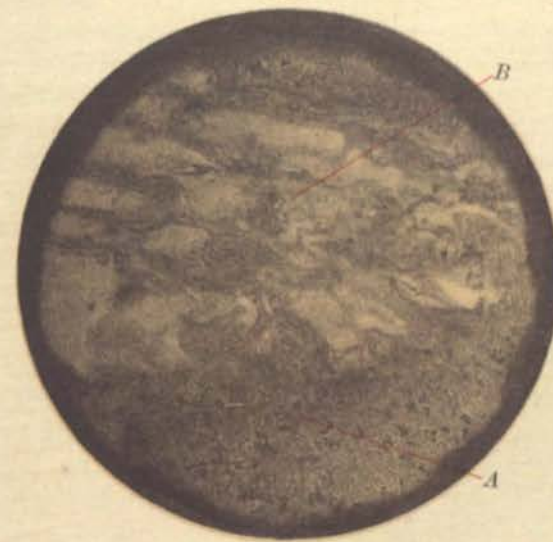
Brain. Examination of the sections from the temporal lobe reveals an area of advanced breaking down-softening of the brain structure, (see Figs. V and VI) leaving a reticulation of connective tissue, to the substance of which may be seen clinging granular matter, some fields showing the compound granular corpuscles (corpuscles of Gluge) by the hundred. It is very rare to find the great number of typical granular corpuscles that are presented in

FIG. V.



Section of the temporal region of brain showing A. Comparatively normal tissue. B. Advanced stage of softening; the protoplasm of the neuroglia elements being transformed into granular corpuscles. Corpuscles of Gluge.

FIG. VI.



Section from the same region (temporal) showing hemorrhagic deposits (A) and area of softening (B).

these sections. In the vicinity of this area of degeneration there are a number of miliary hemorrhagic deposits. (See Fig. VI.) Near the surface of the convolution we find many blood corpuscles quite evenly distributed throughout the tissue. In addition to the corpuscles of Gluge above mentioned, we find in the same area detritus; some fat globules, and find that the brain cells have entirely disappeared, leaving an irregular network of connective tissue.

Optic Commissure. We find here an engorgement of the vessels and in some instances dilation of the perivascular spaces, not marked however.

Pons Varolii. In the examination of these sections we find a large area of degeneration, centrally located, there being more complete loss of tissue than in the cerebrum but less detritus present, owing to its absorption probably. There is marked hypertrophy of the axis cylinders. Hemorrhagic foci are also seen.

Medulla. As far as we are able to observe the medulla seems to be in a normal condition.

Cervical cord. In the examination of the cervical region of the spinal cord, we find the central canal to be very much contracted and the anterior fissure abnormally long, and, at about the junction of its posterior and middle thirds, it is turned upon itself. The posterior fissure is divided and short. The perivascular spaces are found to be dilated and contain white blood corpuscles. Through the direct tracts the horizontally cut axis cylinders are undoubtedly hypertrophied.

Liver. The macroscopical pathology of the liver being described in connection with the autopsy report, there is nothing of much interest to be added, more than to mention the thick wall of the connective tissue displacing the hepatic cells and forming the wall of the abscess. This suppuration of the liver is probably secondary to that of the brain, the channel of infection being that of the hepatic artery; the virulent material having passed through the lungs without developing pulmonary abscesses.

MELANCHOLIA.

CASE 4772.

Admitted May 5, 1882. Age twenty-three years. Single. Has been in this country only two months; born in Pomerania, Prussia; was a shepherd in Germany; a soldier three months; there is no history of any previous attack; the military record of this man is about his person, in which it appears that he served ten weeks in

the Prussian army, and was under arrest for neglect of duty; it is added that his conduct was bad, he being "lazy and careless," from which record it is the opinion of the commission that his present condition had its inception about that time. He is now suffering apparently from acute melancholia, in which he seems entirely apathetic and devoid of ambition to support himself. Aside from the above military record, the condition at present suffered from would be regarded by the commissioners as nostalgia; the testimony seems to be that he was in good health and strength up to a very short time ago. He has had no treatment of any kind, and he has wandered about in a listless aimless manner.

HISTORY AFTER ADMISSION.

May 23, 1882. This young man was admitted when in a state of moderate depression, but not more perhaps than might be attributed to natural backwardness, augmented by the circumstances of being placed among strangers, with whom he is unable to speak; his demeanor and conduct are quiet and he is well behaved giving no trouble to anyone; he sits around reading or walks the hall most of the time; to questions addressed to him he gives an intelligent answer; says he eats and sleeps well and feels quite comfortable here; his attendant says that he at times breaks out into a laugh and seems quite amused at something, though at what is not evident; at first he said he had a longing for his native country, but latterly he said nothing concerning this.

June 30, 1883. Shortly after the date of the last record a greater degree of mental confusion and mental disorder developed. He became reticent, morose and obstinate, and quite careless of his dress and appearance, would stand about in one attitude, perhaps for hours, with his head bowed down; he paid no attention to what was going on; by fall he had become careless and filthy, so that it was impossible for him to remain on his first ward No. 4; he was taken to No. 7, where during last fall and the past winter he sat around in a state of utter confusion and mental lethargy; he was just able to answer with a labored "yes" or "no" to the very simplest of questions, and for a time was not able to do that, but seemed quite incapable of comprehending any thing; last January he ran down very much in physical health; he vomited everything he ate, also had diarrhoea; he is extremely emaciated and enfeebled, being barely able to walk; under treatment his health improved and with it his mental condition, so much so that by April he was able to go

out to his old ward No. 4, where he did fairly well though still quite obscured and dull in mind. He manifested a great desire to see his relatives, and by urging him he has been a little more careful in his habits. These, however, leave very much to be desired.

July 3, 1883. He was discharged by order of the commissioners.

October 4, 1883. This young man was returned to the hospital to-day. His condition is one of dementia, and the confusion and inactivity of mind is much more pronounced than when he left. His bodily health is the same.

July 1, 1884. This young man has changed in no particular since. His mind is very dull and sluggish, and he can be seen sitting or standing about for hours without moving. He does not speak only in answer to direct questions. He is careless. His bodily health is good.

December 28, 1885. There has been no change or variation whatever in this patient's mental state during the past eighteen months. He is uniformly and very extensively demented. He can usually be seen sitting quietly on some seat, indifferent and inattentive to what is going on about him. He was so obscured that he could answer simple questions only with great difficulty and much hesitation. He was careless and filthy and required attention and care at the hands of his attendants, to be kept in a presentable condition. At times he shows some moodiness and irritability. Physically he has grown thin and weak lately, and the greater part of the current month he has been confined to bed with a fever of a malarial character. Had a number of chills and sweating and high temperature following, with a remission in all the symptoms. At present he is better and able to sit up, but he is weak and cachectic. Physical exploration gives indications of tubercular infiltration of the lungs. Does not cough yet or only rarely. Is on No. 6.

June 21, 1886. Phthisis has steadily progressed, and the last three months he has been confined to bed. Both lungs were deeply involved in the tubercular process, but the right lung is the more extensively diseased. Strength and flesh has become greatly reduced under sweats and hectic fever, which could only partially be controlled. For some time he has been on No. 12 and has had every care. He died to-day.

AUTOPSY.

There are but few notes that can be made on this autopsy. No macroscopical lesions were found in brain. Portions of the several

regions were retained for microscopical examination. Lungs were found to be markedly tubercular, and portions of both pieces were retained.

Spleen larger than normal; congested and pigmented.

Liver far from being normal in appearance; small abscesses were observed. Retained for microscopical examination. There was found to be more than the normal quantity of fat about the heart and kidneys. Apex of heart retained for microscopical examination.

MICROSCOPICAL EXAMINATION.

Parietal lobe. Microscopical examinations of the sections of the parietal lobe of the brain reveals a very marked diminution from the usual number of nerve cells, and many of the axis cylinders are atrophied. There is also dilatation of the perivascular spaces and occasionally the contained vessel is found to be tortuous. A few white corpuscles are found in the perivascular spaces, most of the vessels are contracted and many of them contain but few corpuscles. In one region we find some granular corpuscles and fat globules, but the most marked lesions being absence of nerve cells, and the general anæmic condition of the cerebrum.

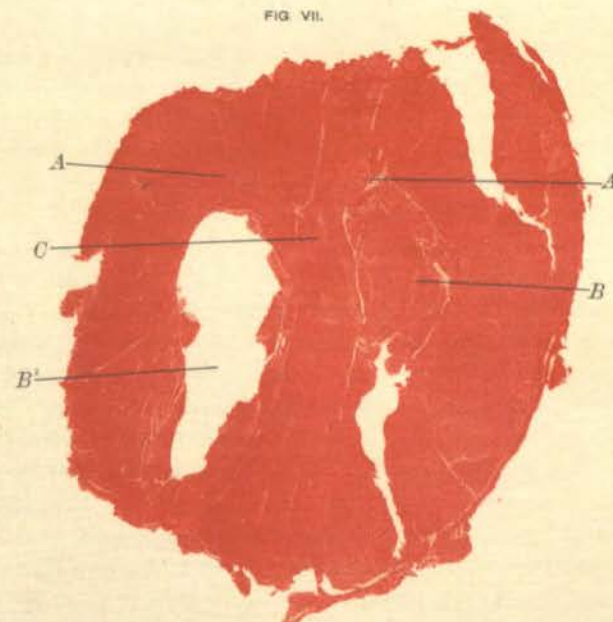
Pons varolii. The sections of the pons varolii present many dilated perivascular spaces, from which the blood vessels have fallen out. This condition is well marked throughout the entire series of sections made from this specimen. We find hypertrophy of the axis cylinders, especially near the floor of the fourth ventricle inside of the curve (*genu facialis*) made by fibres forming deep origin of the facial nerve.

Medulla. We find here dilated perivascular spaces, and an atrophy of most of the axis cylinders found in the tracts of the arciform fibers of both sides.

Cervical cord. Cross-sections of the cervical enlargement of the cord presents a malformation of the gray matter, both anterior and posterior horns. The white substance extends from the posterior columns forward, dividing the gray matter latterly. There are few normal nerve cells within the anterior and right posterior horns. The left posterior horn is devoid of all ganglion cells. The central canal is occluded, nearly obliterated by connective tissue elements. The blood vessels are much diminished in calibre, and surrounded by an extravasation of corpuscles.

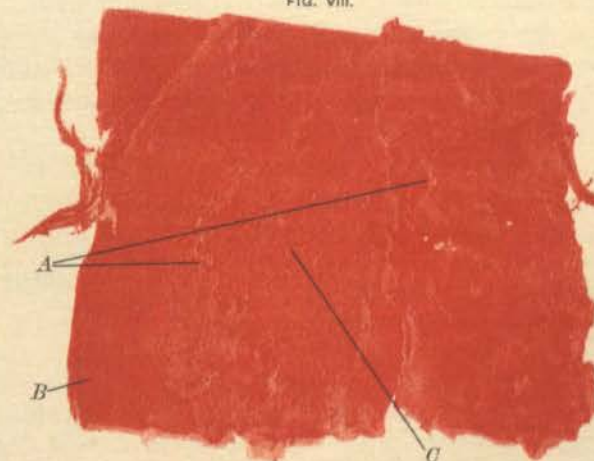
Longitudinal sections of the same cord show the division of the gray by the white matter. This section was taken from tissue

FIG. VII.



Cross section of cervical region of cord showing at (A). Anterior horn of gray matter. (B) White matter dividing the gray. (C). Central canal occluded. B' Same as B before sectioning.

FIG. VIII.



Longitudinal section of the same. A. Divided gray matter. B. White matter. C. White matter dividing the gray (A).

adjacent to and just below the horizontal sections described above. The cross-section showing the malformation of the gray matter is shown in Fig. VII. and the longitudinal section in Fig. VIII. As we approach the dorsal region of the cord we observe an anatomical change. The cornua to the unaided eye appear nearly normal in contour, but the gray commissure is very narrow, and is found to be composed of wavy connective tissue fibers, and is free from axis cylinders (sclerosed). The left posterior cornua is devoid of multipolar cells, and the few found in the right posterior cornua are atrophied and vacuolated; but few are found in the anterior horns, and these are atrophied with the exception of three or four that appear normal. The central canal in this region is filled with small round cells. The malformation of the cord described above is congenital. It is known that these malformations may occur without producing symptoms during life, and are only discovered by microscopical examination.

Heart. Microscopical examination of the walls of the heart reveals no lesions.

Spleen. On microscopical examination of the pulp of the spleen we find a large number of lymph cells, containing pigment granules. The granules vary in size; the smaller being the size of red corpuscles of the blood, the larger of the corpuscles of Gluge. They present a dark brown appearance. The arteries and veins have thickened walls and are peripherally infiltrated with pigment. Pigment is also found in the connective tissue forming the trabeculae.

Liver. We find multiple abscesses of the liver, all small, and on microscopical examination there is seen marked atrophy of the hepatic cells, and a new formation of connective tissues around the intralobular veins.

STATISTICS.

Dr. Witte has continued to have charge of the statistics of the hospital, and by a good deal of labor presents the tables appended to this report.

ACKNOWLEDGMENTS.

To my medical staff and other subordinate officers, I desire to return my sincere thanks for much exacting service.

Dr. M. E. Witte remains as first assistant physician, and Dr. Peck as second assistant physician; Mr. E. N. Nelson as steward, and Mrs. F. V. Cole as matron; Dr. P. F. Straub, after a continuous

service of over five years as third assistant physician, tendered his resignation in September last to pursue his studies abroad, and is now at the university at Berlin; Dr. W. H. Ludewig filled the vacancy thus occasioned until May, when he engaged in private practice in a neighboring State and Dr. E. F. Strohbehn has since filled the position; Miss Flora Chalfant and Miss Cornelia Miller respectively continue to fill the positions of clerk and stenographer satisfactorily, and Dr. Edward House has competently filled the position of apothecary made vacant by the resignation of Dr. L. W. Harding, who left to continue his studies at the State University, and after graduation engaged in private practice.

At the date of our last report Miss Meno Trope, supervisoress of the female wards, had been absent for several months, having taken a vacation, hoping a protracted rest would improve her failing health, but she has been unable to return to duty. For more than twenty years she labored most faithfully in the care of the insane, and it can be said of her, that no one could more conscientiously discharge their duty, and she is deserving of the most cordial commendation for her protracted and faithful service. Miss B. Whelan most industriously fills the position thus made vacant. Capt. W. K. Dillion, the competent supervisor of the male wards, resigned to pursue the study of law, and his place is filled by Mr. S. H. Anderson, who is watchful and energetic. To many other faithful employes and attendants I desire to extend my heartfelt thanks for much valuable, though trying service. It is a work demanding consecration, such as is required in few places, and while not much of the plaudits of the public will accrue to the individual, accepting such service, yet it is better than the honor of kings to be permitted to thus, each in our place, serve humanity, where the suffering and mental torture is often most intense. A bright reward awaits the conscientious service thus performed.

The following newspapers have been sent to the hospital by the publishers gratuitously, and have been much appreciated by all. I desire to thank the gentlemen who have been so generous in the past, and trust the favors may be continued:

Daily Register, Des Moines, Iowa; Daily Capitol, Des Moines, Iowa; Daily Leader, Des Moines, Iowa; Daily Evening Gazette, Burlington, Iowa; Semi-weekly Eagle, Vinton, Iowa; Republican, Montezuma, Iowa; The Journal, Mt. Pleasant, Iowa; Free Press, Mt. Pleasant, Iowa; Independent, Mt. Pleasant, Iowa; Advertiser, Creston, Iowa; Observer, DeWitt, Iowa; The Homestead, Des Moines, Iowa; The Weekly Gazette, Cedar Rapids, Iowa; The

Weekly Times, St. Cloud, Minnesota; The Deaf Mute Hawkeye, Council Bluffs, Iowa; Sunday Democrat Gazette, Davenport, Iowa; Times, Cedar Rapids, Iowa; Journal, Muscatine, Iowa; Wapsie Index, West Liberty, Iowa; The Post (German), Keokuk, Iowa; Gate City (Weekly), Keokuk, Iowa; Index and Review, Kalamazoo, Michigan; Iowa State Press, Iowa City, Iowa; German-American, Waterloo, Iowa; Sentinel, Sauk Rapids, Minnesota; Standard, Chicago, Illinois; The Democrat (German), Davenport, Iowa; Herald, Oskaloosa, Iowa; Electric Light, Marshalltown, Iowa; National Democrat (German), Dubuque, Iowa; The McGregor News, McGregor, Iowa; The Independent, Marysville, Iowa.

H. N. Crane, of Mt. Pleasant, has continued to contribute much valuable reading matter in the form of papers and magazines for distribution in the wards.

To the Young Men's Christian Association of Muscatine we are indebted for a generous supply of papers.

Mr. J. T. Woods is also entitled to our thanks for magazines.

To the following individuals and firms we are indebted for liberal contributions to aid us in our annual christmas celebration, and donations to our organ fund: Charles Wedertz, Leonard & Ellis, D. E. Wood & Co., D. A. Stuart & Co., Fuller & Fuller, Marshall Field & Co., Bernard Bros. & Mercer, C. T. Reynolds & Co., F. Worcester, Mrs. J. A. Green, Willett & Pashley, Western Electric Co., Fieldhouse & Dutcher, Wm. Blom, Thayer & Jackson, H. R. Worthington, Geo. H. Spahr, Jenkins Bros., H. T. Bird, Charles Snider, Sheuerman Bros., B. T. Ross & Bro., Haussmann, McComb & Dunn, J. A. Fay & Co., J. L. Mott Iron Works; Bramhall, Dean & Co., Wirts & Scholle, a friend from Ohio, C. W. Webster, E. R. Squibb, M. D.; J. R. Ritter Conserve Co., Leedham & Baugh, Thos. Kane & Co., J. M. Parker, Sr.; Orr & Lockett, James Frame, Des Moines Soap Works, W. R. Green, Dearborn Foundry Co., Milwaukee Cement Co., John Blaul & Sons, Bicklin, Winzer & Co., Fleischman & Co., Mrs. H. G. Sedgewick, C. M. Clark, Burley & Co., H. N. Crane, O. F. Griffith, H. O. Whitney, John Wallbank; Acres, Blackmar & Co., C. J. Smith, L. F. Willard, Bert Crane, A. Booth, J. C. Bowman & Co., C. Mathes, John M. Day, C. D. Frank, John Whitten, H. M. Cornwell, Mrs. M. A. Hatch, Mrs. J. M. Day, Henry Ruwe, Sarah J. Reel, W. L. Brown, Charles Miller, Wm. Tearney, H. L. Bousquet, Crane Co., Wyckoff, Seamans & Benedict, Wm. Baragwanath & Son, Clement Bane & Co., John Mohr & Son, Quincy White Lime Co., L.

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Ketcham & Bros., A. J. Fish & Co., P. T. Twinting, G. W. S. Allen & Co., W. F. McClary, Curwen Stoddard & Bros., Pilger Grocer Co.

We have been greatly aided in our musical entertainments by, and are under obligations to, Mrs. Alice M. Warhurst, Mrs. Anna Gimble Throop, Mrs. Minnie Cole Conway, and the Misses Belle Chalfant, Clara McFarland, Nellie Higley, Ida Powell, Ina Woodworth, Maud Risser, Belle Hodgdon and Messrs. Louis and Maurice Klein. By the contributions and assistance of these kind friends we have been enabled to extend the limit of our holiday observances, and increase the number of our entertainments, and add greatly to their interest. Could each one witness the pleasure afforded by their generosity they would feel amply repaid.

I would be ungrateful did I not express my sincere thanks to you, gentlemen, for the cordial support you have ever given me, in the administration of the affairs of the institution. With the protecting hand and infinite love of Him who has blest us in the past and who knows the sufferings of every one with nerves unstrung and mind distorted by disease, who finds a resting place here, guiding the future of this great trust, may its usefulness be constantly increased.

Respectfully submitted,

H. A. GILMAN, *Superintendent.*

July 1, 1891.

TABLE I.

MOVEMENT OF THE POPULATION.

	Males.	Females.	Total.
Number at the beginning of the period.....	326	433	759
Admitted in the period.....	312	331	643
Total present in the period.....	638	764	1,402
Discharged—Recovered.....	110	118	228
Improved.....	58	49	107
Not improved.....	47	50	97
Died.....	60	94	154
Discharged in the period.....	275	311	586
Remaining at the end of the period.....	363	453	816
Average present during the period.....	344.97	448.02	792.99

TABLE II.

ADMISSIONS AND DISCHARGES FROM THE BEGINNING OF THE HOSPITAL.

	Males.	Females.	Total.
Admitted.....	4,551	3,450	8,001
Discharged—Recovered.....	1,374	1,047	2,421
Improved.....	839	578	1,417
Not improved.....	1,008	736	1,834
Died.....	866	635	1,501
Not insane.....	11	1	12
Total number discharged.....	4,188	2,997	7,185

TABLE III.

NUMBER AT EACH AGE WHEN ADMITTED IN THE PERIOD.

AGE.	WHEN ADMITTED.			WHEN ATTACKED.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 15.....	1	1	2	9	7	16
15 to 20.....	13	19	32	15	19	34
20 to 25.....	40	36	76	43	45	91
25 to 30.....	46	46	92	48	44	92
30 to 35.....	44	54	98	43	58	101
35 to 40.....	35	47	82	22	45	65
40 to 45.....	26	30	56	23	26	49
45 to 50.....	28	18	46	20	21	41
50 to 60.....	31	50	81	24	33	57
60 to 70.....	28	23	51	20	17	37
70 to 80.....	15	7	22	12	5	17
80 and over.....	4	4	8	2	2	4
Unknown.....	1	1	2	31	10	41
Total.....	312	331	643	312	331	643

TABLE IV.

NUMBER AT EACH AGE FROM THE BEGINNING OF THE HOSPITAL.

AGE.	WHEN ADMITTED.			WHEN ATTACKED.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 15.....	41	23	64	174	97	271
15 to 20.....	279	228	507	353	306	659
20 to 25.....	702	477	1,179	651	521	1,172
25 to 30.....	683	556	1,239	614	572	1,186
30 to 35.....	589	553	1,142	503	514	1,017
35 to 40.....	565	416	981	422	332	754
40 to 45.....	417	340	757	294	251	545
45 to 50.....	358	264	622	248	215	463
50 to 60.....	471	372	843	328	229	557
60 to 70.....	260	131	391	183	79	262
70 to 80.....	96	46	142	68	26	94
80 and over.....	18	3	21	7	7	14
Unknown.....	72	41	113	695	307	1,002
Not insane.....	.....	.....	.....	11	1	12
Total.....	4,551	3,450	8,001	4,551	3,450	8,001

TABLE V.

NATIVITY OF PATIENTS ADMITTED.

NATIVITY.	WITHIN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Maine.....	1	1	2	35	22	57
New Hampshire.....	1	1	2	17	11	28
Vermont.....	4	4	8	39	36	75
Massachusetts.....	1	4	5	46	28	74
Rhode Island.....	1	1	2	7	9	16
Connecticut.....	1	1	2	22	14	36
New York.....	11	10	21	263	191	454
New Jersey.....	1	1	2	27	14	41
Pennsylvania.....	20	20	40	341	240	580
Delaware.....	2	2	4	4	6	10
Maryland.....	3	3	6	36	16	52
Virginia.....	3	6	9	107	70	183
West Virginia.....	2	2	4	8	6	14
North Carolina.....	1	1	2	28	14	42
South Carolina.....	1	1	2	5	5	10
Georgia.....	3	3	6	3	1	4
Alabama.....	1	1	2	6	3	9
Mississippi.....	1	1	2	4	4	8
Louisiana.....	1	1	2	4	1	5
Arkansas.....	2	2	4	2	2	4
Ohio.....	34	35	69	649	538	1,187
Indiana.....	12	27	39	301	254	555
Illinois.....	12	21	33	201	213	414
Kentucky.....	8	4	12	96	54	150
Tennessee.....	1	1	2	44	31	75
Missouri.....	8	9	17	85	58	143
Michigan.....	1	1	2	23	16	39
Wisconsin.....	6	2	8	35	25	60
Iowa.....	93	111	204	798	615	1,413
Minnesota.....	1	1	2	3	4	7
Nebraska.....	1	1	2	3	5	8
Kansas.....	1	1	2	5	4	9
Texas.....	1	1	2	1	1	2
California.....	1	1	2	6	3	9
Washington.....	1	1	2	1	1	2
New Mexico.....	1	1	2	1	1	2
Utah.....	1	1	2	1	1	2
District of Columbia.....	1	1	2	1	1	2
Canada.....	2	2	4	55	25	80
Nova Scotia.....	2	2	4	2	5	7
New Brunswick.....	1	1	2	1	1	2
Great Britain.....	30	21	51	455	301	756
Germany.....	31	21	52	406	340	746
Austria.....	2	1	3	17	6	23
Netherlands.....	1	1	2	25	13	38
Denmark.....	1	4	5	24	20	44
Norway.....	2	4	6	33	26	59
Sweden.....	10	12	22	122	78	200
France.....	1	1	2	24	11	35
Portugal.....	1	1	2	1	1	2
Switzerland.....	2	2	4	31	20	51
Italy.....	1	1	2	2	2	4
Bohemia.....	2	2	4	17	24	41
New South Wales.....	1	1	2	1	1	2
Russia.....	6	6	12	5	1	6
Unknown.....	6	6	12	82	56	138
Total.....	312	331	643	4,551	3,450	8,001

TABLE VI.

RESIDENCE OF PATIENTS ADMITTED.

RESIDENCE.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
State at large.....	42	12	54	519	170	689
Adair county.....	0	0	0	31	24	55
Adams county.....	0	5	5	27	20	47
Allamakee county.....	0	0	0	13	20	33
Appanoose county.....	11	4	15	92	57	149
Audubon county.....	0	4	4	14	18	32
Benton county.....	0	0	0	17	19	36
Black Hawk county.....	0	0	0	14	13	27
Boone county.....	3	5	8	22	28	50
Buchanan county.....	0	0	0	7	5	12
Buena Vista county.....	0	0	0	1	0	1
Butler county.....	10	11	21	4	0	4
Bremner county.....	0	0	0	1	1	2
Calhoun county.....	0	0	0	7	2	9
Carroll county.....	0	0	0	24	35	59
Cass county.....	5	3	8	67	74	141
Cedar county.....	0	0	0	5	1	6
Cerro Gordo county.....	0	0	0	2	1	3
Cherokee county.....	0	0	0	8	7	15
Chickasaw county.....	0	0	0	40	22	62
Clarke county.....	0	0	0	3	1	4
Clay county.....	0	0	0	27	17	44
Clayton county.....	0	0	0	49	14	63
Clinton county.....	0	0	0	10	5	15
Crawford county.....	0	0	0	47	34	81
Dallas county.....	0	0	0	85	58	143
Davis county.....	9	10	19	57	47	104
Decatur county.....	0	0	0	14	7	21
Delaware county.....	17	14	31	180	147	327
Des Moines county.....	0	0	0	2	1	3
Dickinson county.....	0	0	0	47	53	100
Dubuque county.....	0	0	0	2	1	3
Emmet county.....	0	0	0	16	14	30
Fayette county.....	0	0	0	6	5	11
Floyd county.....	0	0	0	2	4	6
Franklin county.....	0	0	0	26	38	64
Fremont county.....	4	4	8	13	21	34
Greene county.....	0	0	0	8	2	10
Grundy county.....	0	0	0	33	26	59
Guthrie county.....	0	0	0	1	6	7
Hamilton county.....	0	0	0	7	9	16
Hardin county.....	0	0	0	43	49	92
Harrison county.....	10	8	18	128	106	234
Henry county.....	0	0	0	1	6	7
Howard county.....	0	0	0	2	2	4
Humboldt county.....	0	0	0	60	60	120
Iowa county.....	3	9	12	21	19	40
Jackson county.....	0	0	0	115	70	185
Jasper county.....	14	7	21	114	101	215
Jefferson county.....	10	11	21	137	77	214
Johnson county.....	14	9	23	13	25	38
Jones county.....	0	0	0	104	94	198
Keokuk county.....	9	7	16	1	1	2
Kossuth county.....	0	0	0	215	171	386
Lee county.....	21	8	29	20	29	49
Linn county.....	0	0	0	68	53	121
Louisa county.....	9	3	12	49	89	138
Lucas county.....	0	0	0	1	1	2
Lyon county.....	0	0	0	0	0	0

TABLE VI—CONTINUED.

RESIDENCE.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Madison county.....	0	5	5	62	38	100
Mahaska county.....	0	10	10	109	79	188
Marion county.....	0	8	8	120	65	185
Marshall county.....	17	6	23	66	36	102
Mills county.....	0	1	1	57	28	85
Mitchell county.....	0	0	0	2	1	3
Monona county.....	0	0	0	7	1	8
Monroe county.....	0	8	8	66	41	107
Montgomery county.....	0	5	5	42	31	73
Muscatine county.....	0	5	5	85	74	159
O'Brien county.....	0	0	0	1	1	2
Pago county.....	0	5	5	74	55	129
Palo Alto county.....	0	0	0	2	2	4
Pocahontas county.....	0	0	0	2	2	4
Polk county.....	8	25	33	174	172	346
Pottawattamie county.....	0	13	13	92	120	212
Poweshiek county.....	10	4	14	70	49	119
Ringgold county.....	0	2	2	17	24	41
Scott county.....	26	14	40	168	161	329
Shelby county.....	0	4	4	20	21	41
Story county.....	0	4	4	11	16	27
Tama county.....	0	0	0	12	6	18
Taylor county.....	0	5	5	35	30	65
Tiara county.....	0	4	4	42	31	73
Van Buren county.....	0	6	6	66	88	154
Wapello county.....	11	7	18	126	101	227
Warren county.....	6	3	9	70	36	106
Washington county.....	9	8	17	105	68	173
Wayne county.....	0	8	8	37	46	83
Webster county.....	0	0	0	5	8	13
Winnebago county.....	0	0	0	20	12	32
Winneblesh county.....	0	0	0	6	3	9
Woodbury county.....	0	0	0	5	5	10
Worth county.....	0	0	0	2	2	4
Wright county.....	0	0	0	73	62	135
From elsewhere.....	0	0	0	0	0	0
Total.....	312	331	643	4,551	3,450	8,001

TABLE VII.

OCCUPATION OF THOSE ADMITTED.

OCCUPATION.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Agents.....	2	1	3	29	2	31
Apothecaries.....	1		1	8		8
Architects.....				1		1
Artists.....	1		1	3		3
Bakers.....				9		9
Bankers.....	1		1	23		23
Barbers.....				2		2
Basket-makers.....	1		1	45		45
Blacksmiths.....				3		3
Boiler-makers.....				1		1
Book-binders.....	2		2	6		6
Book-keepers.....	1		1	1		1
Brakemen.....				5		5
Brewers.....	1		1	5		5
Brick-makers.....				2		2
Bridge-builders.....				2		2
Broom-makers.....				10		10
Butchers.....	1		1	13		13
Cabinet-makers.....	3		3	104		104
Carpenters.....				1		1
Cashiers.....				2		2
Chair-makers.....				5		5
Cigar-makers.....				71		71
Clerks.....	3		3	9		9
Collars.....	5		5	3		3
Confectioners.....	1		1	1		1
Conductors.....				2		2
Contractors.....				9		9
Cooks.....	3		3	8		8
Coopers.....				1		1
Dairymen.....				1		1
Dentists.....				4		4
Domestic duties.....		317	317		3,111	3,111
Draymen.....				1		1
Editors.....				3		3
Engineers.....	3		3	18		18
Engravers.....				1		1
Express messengers.....				1		1
Farmers.....	116		116	2,020		2,020
Florists.....				1		1
Gardeners.....				14		14
Grain dealers.....				1		1
Grocers.....				7		7
Gunsmiths.....				2		2
Harness-makers.....				17		17
Hat-braiders.....				2		2
Hat-braiders.....	2		2	14		14
Hotel-keepers.....				2		2
Hunters.....				4		4
Iron-moulders.....	1		1	3		3
Jewelers.....				3		3
Laborers.....	98		98	1,045		1,045
Laundresses.....		1	1	2		2
Lawyers.....	2		2	21		21
Machinists.....				22		22
Marble-cutters.....				2		2
Masons.....	1		1	30		30
Mechanics.....				3		3
Merchants.....	9		9	70		70

TABLE VII—CONTINUED.

OCCUPATION.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Millers.....	2		2	13		13
Millwrights.....				5		5
Milliners.....				12		12
Miners.....	2		2	52		52
Musicians.....				5	1	6
No occupation.....	18		18	262	192	554
Not ascertained.....				47	19	66
Nurserymen.....				1		1
Painters.....	6		6	19		19
Peddlers.....				10		10
Photographers.....	1		1	5		5
Physicians.....	6		6	28	1	29
Plasterers.....	2		2	20		20
Policemen.....				1		1
Pork packers.....				1		1
Potters.....				3		3
Preachers.....	1		1	24		24
Printers.....	2	1	3	21	1	22
Real estate dealers.....				3		3
River pilots.....				1		1
Sailors.....				7		7
Saloon keepers.....	2		2	13		13
Seamstresses.....		2	2		18	18
Salesmen.....	1		1	14		14
Servants.....				30		30
Shoemakers.....				35		35
Showmen.....				2		2
Silversmiths.....				1		1
Soldiers.....	1		1	5		5
Spinners.....				1		1
Speculators.....				4		4
Stage drivers.....				2		2
Steam and gas fitters.....				1		1
Stock dealers.....				5		5
Students.....	2		2	33	3	36
Surveyors.....				2		2
Tailors.....	2		2	26		26
Teachers.....	2	9	11	30	55	85
Teamsters.....				12		12
Telegraphers.....	1		1	6		6
Tinners.....	1		1	11		11
Traders.....				13		13
Wagon makers.....	2		2	8		8
Watch makers.....				1		1
Weavers.....				5	1	6
Wheelwrights.....				1		1
Total.....	312	331	643	4,551	3,450	8,001

TABLE VIII.

CIVIL CONDITION OF THOSE ADMITTED.

	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Single.....	176	93	269	2,350	1,085	3,435
Married.....	105	192	297	1,949	2,010	3,959
Widowed.....	21	37	58	164	298	462
Divorced.....	3	8	11	38	45	83
Unknown.....	7	1	8	41	12	53
Total.....	312	331	643	4,551	3,450	8,001

TABLE IX.

HOW COMMITTED.

	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
By commissioners of insanity.....	307	331	638	3,640	2,705	6,345
By judges of district court.....	2	2	4	23	23	46
By judges of circuit court.....				68	46	114
By clerk of circuit court.....				30	26	56
By judges of county court.....				490	462	952
By friends.....				174	169	343
By governor's order.....	3	3	6	64	64	128
From elsewhere.....				59	42	101
Total.....	312	331	643	4,551	3,450	8,001

TABLE X.

HOW SUPPORTED, OF THOSE ADMITTED.

	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
By State alone.....	33	11	44	500	128	628
By counties.....	279	320	599	3,814	3,101	6,915
By friends.....				179	169	348
By other States.....				58	42	100
Total.....	312	331	643	4,551	3,450	8,001

TABLE XI.

SUPPOSED OR ASSUMED CAUSES OF INSANITY.

CAUSE.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Abortion.....		3	3		9	9
Anxiety, worry.....	5	10	15	5	10	15
Apoplexy.....	1	2	3	6	5	11
Blindness.....				3	1	4
Bodily injuries.....	5	5	10	39	7	46
Business anxiety.....	2	1	3	92	8	100
Change of life.....		15	15		105	105
Christian Science.....		1	1		1	1
Concussion.....				4		4
Constitutional.....				70	50	120
Disappointed affection.....	1	6	7	80	51	131
Disappointments.....	1		1	22	21	43
Disease of brain.....	6	1	7	19	3	22
Disordered menstruation.....		15	15		154	154
Domestic trouble.....	4	15	19	92	171	263
Epilepsy.....	12	11	23	303	134	437
Excessive study.....				14	3	17
Exposure to cold.....				6	3	9
Fright.....	4		4	18	33	51
General ill health.....	10	20	30	267	374	641
Grief, loss of friends, etc.....	4	10	14	36	128	164
Hemiplegia.....				3	6	9
Heredity.....	5	16	21	158	180	338
Hysteria.....				5	5	10
Ill treatment.....		3	3	4	25	29
Injuries to head.....	8	4	12	166	15	181
Intemperance.....	29		29	424	34	458
Jealousy.....				3	3	6
Lactation protracted.....		2	2		12	12
La Grippe.....	3	15	18	3	15	18
Military service.....				30		30
Loss of property.....				39	9	48
Loss of sleep.....				3	1	4
Masturbation.....	28	1	29	417	10	427
Measles.....		1	1	2	4	6
Meningeal disease.....		1	1	2		2
No satisfactory cause assigned.....	132	102	234	1,627	1,090	2,717
Nostalgia.....				3	6	9
Not insane.....	1		1	10	1	11
Novel reading.....				1		1
Opium habit.....	2	1	3	6	2	8
Original defect.....	1		1	46	25	71
Over exertion.....	5	6	11	119	54	173
Paralysis.....		2	2	9	6	15
Pecuniary anxiety.....	4		4	44	7	51
Political excitement.....				4		4
Poverty, hardships.....		4	4	20	45	65
Puerperal condition.....		21	21	359	359	718
Religious excitement.....	9	9	18	120	87	207
Scarlet fever.....				2	2	4
Scrofula.....				1		1
Senility.....	2	1	3	33	13	46
Spermatorrhoea.....				1		1
Spiritualism.....				7	7	14
Stroke.....	12	6	18	117	16	133
Surgical operation.....				1		1
Syphilis.....	5		5	48	8	56
Typhoid fever.....	2	3	5	32	20	52
Use of tobacco.....				1		1
Uterine disease.....		22	22		105	105
Vaccination.....		1	1	2		2
Venereal excesses.....	2		2	16	1	17
War excitement.....				3		3
Total.....	312	331	643	4,551	3,450	8,001

TABLE XII.

FORM OF DISEASE OF THOSE ADMITTED.

FORM OF DISEASE.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Mania acute.....	80	84	164	1,659	1,337	2,996
Mania chronic.....	73	80	153	1,348	978	2,326
Melancholia acute.....	75	87	162	804	690	1,494
Melancholia chronic.....	42	60	102	346	310	656
Dementia acute.....	1	1	2	41	8	49
Dementia chronic.....	25	19	44	277	121	398
General paresis.....	15	1	16	66	5	71
Not insane.....	1	1	2	10	1	11
Total.....	312	331	643	4,551	3,450	8,001

TABLE XIII.

COMPLICATIONS OF THOSE ADMITTED.

COMPLICATIONS.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Epileptic.....	16	13	29	373	162	535
Apoplectic.....	2	1	3	14	7	21
Paralytic.....	1	4	5	59	19	78
Suicidal.....	32	54	86	303	346	649
Homicidal.....	39	16	55	161	52	213
Hereditary.....	46	85	131	509	589	1,098
Chorea.....	1	1	2	2	4	6
None.....	174	168	342	3,120	2,270	5,390
Not insane.....	1	1	2	10	1	11
Total.....	312	331	643	4,551	3,450	8,001

TABLE XIV.

NUMBER OF THE ATTACK IN THOSE ADMITTED.

NUMBER.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
First.....	238	244	482	3,280	2,467	5,747
Second.....	32	56	88	468	466	934
Third.....	7	8	15	105	105	210
Fourth.....	1	1	2	80	22	102
Fifth.....	1	1	2	7	11	18
Sixth.....	1	1	2	3	3	6
Seventh.....	1	1	2	4	1	5
Several.....	15	18	33	226	202	428
Unknown.....	17	3	20	418	172	590
Not insane.....	1	1	2	10	1	11
Total.....	312	331	643	4,551	3,450	8,001

TABLE XV.

DURATION OF INSANITY BEFORE ENTRANCE OF THOSE ADMITTED.

DURATION.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Less than one month.....	73	58	131	802	518	1,320
One to three months.....	44	52	96	716	606	1,322
Three to six months.....	22	30	52	422	400	822
Six to nine months.....	18	24	42	289	279	568
Nine to twelve months.....	6	9	15	94	97	191
Twelve to eighteen months.....	18	30	48	288	237	525
Eighteen months to two years.....	3	5	8	85	79	164
Two to three years.....	17	35	52	253	228	481
Three to four years.....	17	13	30	178	133	311
Four to five years.....	8	7	15	130	100	230
Five to ten years.....	18	29	47	289	246	535
Ten to fifteen years.....	19	13	32	137	87	224
Fifteen to twenty years.....	6	9	15	68	45	113
Twenty to twenty-five years.....	3	5	8	29	22	51
Twenty-five to thirty years.....	5	2	7	16	9	25
Over thirty years.....	1	1	2	16	10	26
Unknown.....	33	10	43	749	353	1,102
Not insane.....	1	1	2	10	1	11
Total.....	312	331	643	4,551	3,450	8,001

TABLE XVI.

RECOVERED OF THOSE ATTACKED AT THE SEVERAL AGES FROM THE BEGINNING.

AGE WHEN ATTACKED.	NUMBER.			PER CENT RECOVERED OF THOSE ATTACKED AT EACH AGE.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under fifteen.....	16	12	28	9.19	12.37	10.33
Fifteen to twenty.....	165	133	298	46.74	43.46	45.23
Twenty to twenty-five.....	255	213	468	39.25	40.88	39.93
Twenty-five to thirty.....	216	195	411	35.18	34.09	34.65
Thirty to thirty-five.....	162	146	308	32.02	28.40	30.29
Thirty-five to forty.....	124	100	224	28.39	20.12	24.71
Forty to forty-five.....	95	71	166	32.32	28.29	30.46
Forty-five to fifty.....	75	49	124	30.24	23.79	28.79
Fifty to sixty.....	104	53	157	31.71	23.14	28.19
Sixty to seventy.....	30	18	57	21.51	22.70	21.76
Seventy to eighty.....	9	4	13	15.23	15.38	15.33
Unknown.....	114	52	166	16.53	17.26	16.67
Total.....	1,374	1,047	2,421			

TABLE XVII.

RECOVERED AFTER VARIOUS DURATIONS OF THE DISEASE BEFORE TREATMENT FROM THE BEGINNING.

DURATION.	NUMBER.			PER CENT RECOVERED AFTER EACH PERIOD OF DURATION.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under one month.....	443	255	698	55.23	49.22	52.88
One to three months.....	332	299	631	46.37	49.34	47.73
Three to six months.....	189	165	354	44.79	41.25	43.09
Six to nine months.....	104	92	196	36.00	32.97	34.51
Nine to twelve months.....	28	34	62	29.79	35.05	32.46
Twelve to eighteen months.....	59	54	113	20.49	22.79	21.52
Eighteen to twenty-four months.....	8	12	20	9.41	15.19	12.19
Two to three years.....	18	30	48	7.16	13.16	9.90
Three to four years.....	15	9	24	8.42	6.76	7.71
Four to five years.....	8	6	14	6.15	6.10	6.08
Five to ten years.....	12	14	26	4.45	5.28	5.05
Over ten years.....	6	3	9	2.25	1.73	2.05
Unknown.....	152	74	226	20.29	20.97	20.51
Total.....	1,374	1,047	2,421			

TABLE XVIII.

DURATION OF TREATMENT OF THOSE RECOVERED.

DURATION.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under one month.....	4	.....	4	40	5	45
One to two months.....	8	1	9	80	38	118
Two to three months.....	9	11	20	139	79	218
Three to six months.....	31	34	65	438	316	754
Six to nine months.....	19	32	41	274	235	509
Nine to twelve months.....	12	20	32	161	125	286
Twelve to eighteen months.....	15	12	27	138	141	279
Eighteen to twenty-four months.....	6	5	11	49	38	87
Two to three years.....	4	8	12	40	60	90
Three to four years.....	1	1	2	9	9	17
Four to five years.....	1	2	3	7	7	14
Over five years.....	1	1	2	4	4	8
Total.....	109	118	227	1,374	1,047	2,421

TABLE XIX.

WHOLE DURATION OF DISEASE OF THOSE RECOVERED.

DURATION.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under one month.....	1	.....	1	7	2	9
One to three months.....	5	.....	5	45	4	49
Two to three months.....	5	2	7	90	35	125
Three to six months.....	17	15	32	297	176	473
Six to nine months.....	19	20	39	251	229	480
Nine to twelve months.....	9	19	28	177	146	323
Twelve to eighteen months.....	20	18	38	184	75	259
Eighteen to twenty-four months.....	7	5	12	83	68	151
Two to three years.....	5	13	18	60	35	95
Three to four years.....	1	9	10	23	10	33
Four to five years.....	3	2	5	7	7	14
Over five years.....	6	12	18	27	26	53
Unknown.....	10	3	13	147	67	214
Total.....	109	118	227	1,374	1,047	2,421

TABLE XX.

FORM OF DISEASE OF THOSE RECOVERED FROM THE BEGINNING.

FORM OF DISEASE.	NUMBER RECOVERED.			PER CENT RECOVERED OF EACH FORM ADMITTED.		
	Males.	Females.	Total.	Males.	Females.	Total.
Mania, acute.....	899	640	1,539	54.19	47.86	51.33
Mania, chronic.....	90	63	153	6.07	6.44	6.57
Melancholia, acute.....	335	288	623	41.66	41.74	41.70
Melancholia, chronic.....	42	53	95	12.14	17.00	14.48
Dementia, acute.....	8	3	11	19.51	37.50	22.40
Total.....	1,374	1,047	2,421			

TABLE XXI.

CAUSES OF DISEASE OF THOSE RECOVERED FROM THE BEGINNING.

CAUSES.	NUMBER RECOVERED.			PER CENT RECOVERED OF EACH CLASS ADMITTED.		
	Males.	Females.	Total.	Males.	Females.	Total.
La Grippe.....	1	6	7	33.33	40.00	38.88
Abortion.....	2	2	4	22.22	22.22	22.22
General ill health.....	89	150	239	33.33	40.11	35.72
Hereditary.....	67	68	135	42.41	37.77	39.98
Disordered menstruation.....	58	58	116	37.66	37.66	37.66
Religious excitement.....	60	39	99	50.00	44.82	47.82
Business anxiety.....	34	4	38	36.98	50.00	38.00
Grief, etc.....	11	38	49	30.55	29.69	30.00
Masturbation.....	101	2	103	24.22	20.00	24.12
Novel reading.....	45	1	46	100.00	100.00	100.00
Domestic trouble.....	33	45	78	35.87	26.31	29.65
Puerperal condition.....	17	155	172	56.67	43.18	43.18
Military service.....	17	4	21	38.64	57.14	41.18
Pecuniary anxiety.....	12	13	25	40.00	25.49	30.86
Disappointed affection.....	1	1	2	100.00	100.00	100.00
Spermatorrhoea.....	51	16	67	51.26	29.63	44.51
Over exertion.....	4	1	5	100.00	100.00	100.00
War excitement.....	1	1	2	33.33	33.33	33.33
Loss of sleep.....	5	1	6	35.71	33.33	35.30
Excessive study.....	171	15	186	40.35	44.12	40.69
Intemperance.....	11	2	13	28.20	22.22	27.69
Loss of property.....	12	6	18	37.50	30.00	34.61
Typhoid fever.....	2	1	3	33.33	50.00	37.50
Opium habit.....	1	1	2	50.00	50.00	50.00
Meningitis.....	2	1	3	6.06	7.69	6.47
Senility.....	7	4	11	26.51	20.00	25.98
Hysteria.....	44	3	47	50.00	33.33	33.33
Epilepsy.....	1	1	2	100.00	100.00	100.00
Injury to head.....	43	24	67	61.43	48.00	55.83
Vaccination.....	1	1	2	33.33	33.33	33.33
Excessive use of tobacco.....	3	1	4	42.86	14.18	28.57
Constitutional.....	11	19	30	44.44	33.33	37.25
Spiritualism.....	8	11	19	31.81	52.39	41.89
Fright.....	7	11	18	26.66	26.66	26.66
Disappointment.....	1	28	29	25.00	32.00	31.03
Change of life.....	5	1	6	10.87	4.00	8.45
Ill treatment.....	2	1	3	50.00	50.00	50.00
Original defect.....	3	1	4	50.00	33.33	44.44
Political excitement.....	40	3	43	34.19	18.75	32.33
Exposure to cold.....	9	2	11	18.75	25.00	19.64
Sunstroke.....	11	5	16	28.20	71.43	34.79
Syphilis.....	1	1	2	8.33	8.33	8.33
Bodily injuries.....	1	1	2	16.66	16.66	16.66
Lactation protracted.....	1	1	2	50.00	25.00	33.33
Paralysis.....	7	8	15	35.00	17.77	23.08
Measles.....	1	1	2	33.33	33.33	33.33
Poverty, hardships.....	1	4	5	33.33	66.66	55.55
Blindness.....	1	1	2	25.00	25.00	25.00
Nostalgia.....	1	1	2	31.57	100.00	62.94
Jealousy.....	6	1	7	50.00	25.00	27.27
Concussion.....	8	1	9	27.72	24.04	26.29
Disease of brain.....	451	263	714			
Veneral excesses.....						
No satisfactory cause assigned.....						
Total.....	1,374	1,047	2,421			

TABLE XXII.

NATIVITY OF THOSE RECOVERED FROM THE BEGINNING.

COUNTRY.	NUMBER RECOVERED.			PER CENT RECOVERED OF EACH CLASS ADMITTED.		
	Males.	Females.	Total.	Males.	Females.	Total.
Maine.....	8	6	14	22.86	27.27	24.56
New Hampshire.....	6	2	8	35.29	18.18	28.57
Vermont.....	6	8	14	15.38	22.22	18.66
Massachusetts.....	13	2	15	28.26	28.57	28.39
Rhode Island.....	1	3	4	50.00	28.57	33.33
Connecticut.....	5	2	7	22.77	14.28	19.44
New York.....	67	49	116	23.47	25.65	25.55
New Jersey.....	8	3	11	29.69	21.43	26.83
Delaware.....	1	2	3	50.00	33.33	33.33
Pennsylvania.....	106	78	184	31.05	31.32	31.19
Maryland.....	9	4	13	25.00	25.00	25.00
Virginia.....	26	27	53	25.00	35.52	28.96
West Virginia.....	3	2	5	37.50	35.52	35.71
North Carolina.....	11	3	14	30.29	21.57	33.33
South Carolina.....	2	2	4	40.00	33.33	33.33
Alabama.....	2	1	3	50.00	33.33	40.00
Louisiana.....	2	2	4	50.00	33.33	40.00
Arkansas.....	2	2	4	100.00	33.33	40.00
Ohio.....	206	192	398	31.74	35.49	33.51
Indiana.....	92	77	169	35.40	30.51	30.45
Illinois.....	68	72	140	33.83	35.83	33.83
Kentucky.....	29	17	46	30.20	30.79	30.66
Tennessee.....	8	9	17	18.18	29.03	22.66
Missouri.....	24	14	38	28.30	24.14	26.57
Michigan.....	11	5	16	47.09	31.25	41.03
Wisconsin.....	7	14	21	20.00	56.00	35.00
California.....	1	1	2	16.66	33.33	11.11
Iowa.....	206	225	515	36.34	36.54	36.34
Minnesota.....	2	2	4	66.66	50.00	57.14
Nebraska.....	1	2	3	50.00	66.00	60.00
Kansas.....	1	3	4	20.00	75.00	44.44
District of Columbia.....	1	2	3	100.00	66.66	66.66
New Mexico.....	1	1	2	100.00	100.00	100.00
Canada.....	25	7	32	45.45	25.00	40.00
Nova Scotia.....	1	1	2	20.00	14.28	14.28
Norway.....	9	4	13	27.27	15.38	22.03
Sweden.....	34	20	54	27.87	25.64	27.00
Netherlands.....	12	7	19	48.00	53.85	50.00
Bohemia.....	4	5	9	23.53	20.83	21.92
France.....	7	2	9	29.16	18.18	25.71
Switzerland.....	9	6	15	29.03	30.00	29.41
Portugal.....	1	1	2	100.00	100.00	100.00
Germany.....	92	80	172	22.68	23.53	23.50
Austria.....	2	1	3	11.77	16.66	13.04
Denmark.....	4	1	5	16.66	5.00	11.35
Russia.....	1	1	2	20.00	100.00	16.66
Great Britain.....	132	65	197	29.01	21.59	25.06
Italy.....	2	2	4	100.00	100.00	100.00
Unknown.....	21	17	38	24.42	30.34	27.94
Total.....	1,374	1,047	2,421			

TABLE XXIII.

DEATHS AND THE CAUSES.

CAUSES.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Chronic insanity.....	11	20	31	144	141	285
Acute mania.....	2	1	3	55	47	102
Typho mania.....	1	1	2	7	7	14
Acute delirious mania.....	3	3	6	17	21	38
Acute melancholia.....	2	2	4	23	19	42
Cerebral softening.....	1	1	2	4	4	8
Cerebral congestion.....	1	1	2	12	7	19
Organic disease of brain.....	1	1	2	8	4	12
General paralysis.....	7	3	10	64	13	77
Apoplexy.....	5	11	16	56	41	97
Hemiplegia.....	1	1	2	3	1	4
Epilepsy.....	2	3	5	131	56	187
Suicide.....	2	1	3	17	13	30
Consumption.....	9	14	23	146	139	285
Pulmonary congestion.....	1	1	2	2	2	4
Pulmonary gangrene.....	2	1	3	4	3	7
Pulmonary abscess.....	1	1	2	7	4	11
Bronchitis.....	1	1	2	1	1	2
Typhoid fever.....	1	1	2	1	1	2
Intermittent fever.....	1	1	2	1	1	2
Congestive fever.....	1	1	2	1	1	2
Dysentery and Diarrhoea.....	1	1	2	28	26	54
Cholera morbus.....	1	1	2	1	1	2
Chronic gastritis.....	1	1	2	1	1	2
Chronic hepatic disease.....	1	1	2	3	2	5
Bronchectasis.....	1	1	2	2	2	4
Strangulated hernia.....	1	1	2	2	2	4
Peritonitis.....	1	1	2	4	2	6
Diabetes.....	1	1	2	1	1	2
Dropsy.....	1	1	2	2	2	4
Heart disease.....	2	7	9	12	15	27
Endo-pericarditis.....	1	1	2	1	1	2
Uterine hemorrhage.....	1	1	2	1	1	2
Uterine disease.....	1	1	2	1	1	2
Erysipelas.....	1	1	2	8	3	11
Syphilis.....	1	1	2	14	14	28
Old age.....	5	3	8	31	12	43
Accident.....	1	1	2	1	1	2
Enteritis.....	1	1	2	5	5	10
Serofula.....	1	1	2	1	1	2
Pneumonia.....	3	8	11	9	15	24
Paraplegia.....	1	1	2	1	1	2
Cancer.....	1	1	2	1	2	3
Paralysis.....	1	1	2	6	4	10
Meningitis.....	2	2	4	3	3	6
Pleuritis.....	1	1	2	1	1	2
Anæmatosis.....	1	1	2	1	1	2
Embolism.....	1	1	2	1	1	2
Injury received before admission.....	1	1	2	1	1	2
Atheroma of arteries.....	1	1	2	1	1	2
Rubeola.....	1	1	2	1	1	2
Empyema.....	1	1	2	1	1	2
General decay.....	1	1	2	1	1	2
Chronic meningitis.....	1	1	2	1	1	2
Pericerephalitis.....	3	3	6	1	3	4

TABLE XXIII.—CONTINUED.

DEATHS AND THE CAUSES.

CAUSE.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Acute laryngitis.....				1		1
General ill health.....				1	1	2
Scarletina.....				1		1
Typhomalarial fever.....				1		1
Pulmonary hemorrhage.....		1	1	4	5	9
Cystic hemorrhage.....				1	1	2
Bright's disease.....		1	1		4	4
Killed by cars.....	1		1	1		2
Unknown.....				1		1
Injury to head.....				1		1
Anæmia (Pernicious).....	1		1	1		2
La Grippe.....	1	1	2		1	1
Septicæmia.....	1		1		1	1
Senile gangrene.....	1		1			1
Foreign body in throat.....	1		1	1		2
Cerebromyelitis.....		3	3		3	3
Total.....	60	94	154	866	635	1,501

TABLE XXIV.

AGES AT DEATH.

AGES.	IN THE PERIOD.			FROM THE BEGINNING.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 15.....	1		1	6	4	10
15 to 20.....		1	1	28	26	54
20 to 25.....		6	6	60	59	119
25 to 30.....	4	10	14	107	74	181
30 to 35.....	3	13	16	88	97	185
35 to 40.....	4	13	17	110	76	186
40 to 45.....	9	9	18	82	66	148
45 to 50.....	5	5	10	86	48	134
50 to 60.....	11	20	31	124	100	224
60 to 70.....	12	12	24	85	46	131
70 to 80.....	10	3	13	51	22	73
80 to 90.....	1	1	2	4	1	5
Unknown.....		1	1	20	13	33
Total.....	60	94	154	866	635	1,501

TABLE XXV.

RATIO OF DEATH.

PER CENT.	Males.	Females.	Total.
Of all deaths on all admitted.....	19.03	18.41	18.76
Of deaths within the period of those under treatment.....	9.40	12.30	10.98

TABLE XXVI.

DURATION OF DISEASE OF THOSE WHO DIED FROM BEGINNING.

DURATION.	FROM ADMISSION INTO THE HOSPITAL.			FROM THE ATTACK.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under one month.....	138	101	239	34	32	66
One to two months.....	64	48	112	24	30	54
Two to three months.....	55	36	91	27	16	43
Three to six months.....	110	65	175	51	45	96
Six to nine months.....	76	38	114	36	42	78
Nine to twelve months.....	61	38	99	33	25	58
Twelve to eighteen months.....	81	54	135	81	47	128
Eighteen to twenty-four months.....	64	43	107	43	26	69
Two to three years.....	76	83	159	76	64	140
Three to four years.....	47	39	86	60	36	96
Four to five years.....	29	27	56	38	29	67
Five to ten years.....	52	46	98	111	100	211
Ten to twenty years.....	12	17	29	95	56	151
Over twenty years.....	1		1	28	10	38
Unknown.....				129	77	206
Total.....	866	635	1,501	866	635	1,501

TABLE XXVII.

REMAINING IN THE HOSPITAL AT THE END OF THE PERIOD.

AGE.	Males.	Females.	Total.
Under 15.....	5	1	6
15 to 20.....	24	3	27
20 to 25.....	45	52	97
25 to 30.....	69	83	152
30 to 35.....	56	70	126
35 to 40.....	38	66	104
40 to 45.....	31	41	72
45 to 50.....	46	63	109
50 to 60.....	27	30	57
60 to 70.....	10	12	22
70 to 80.....	5	1	6
80 to 90.....	3	1	4
Unknown.....	3	1	4
Total.....	363	453	816

TABLE XXVIII.

REMAINING AT THE END OF THE PERIOD—DURATION OF DISEASE.

DURATION.	SINCE ENTERING THE HOSPITAL.			SINCE THE ATTACK.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under one month.....	14	21	35	4	4	8
One to two months.....	14	8	22	4	3	7
Two to three months.....	7	13	20	3	6	9
Three to six months.....	18	13	31	8	7	15
Six to nine months.....	20	15	35	9	11	20
Nine to twelve months.....	17	24	41	8	7	15
Twelve to eighteen months.....	35	41	76	13	17	30
Eighteen to twenty-four months.....	41	31	72	22	20	42
Two to three years.....	62	78	140	31	42	73
Three to five years.....	52	91	143	54	81	135
Five to ten years.....	65	86	151	68	103	171
Ten to fifteen years.....	14	18	32	42	62	104
Fifteen to twenty years.....	3	11	14	18	19	37
Twenty to twenty-five years.....	1	2	3	5	17	22
Twenty-five to thirty years.....	1	1	2	4	13	17
Thirty to forty years.....				5	5	10
Over forty years.....				68	36	104
Unknown.....						
Total.....	363	453	816	363	453	816

TABLE XXIX.

NUMBER OF PERSONS AND TIMES EACH HAS BEEN ADMITTED.

NUMBER.	PERSONS.	ADMISSION.
Number admitted once.....	6,128	making 6,128
Number admitted twice.....	685	making 1,370
Number admitted three times.....	96	making 288
Number admitted four times.....	30	making 120
Number admitted five times.....	9	making 45
Number admitted six times.....	1	making 6
Number admitted seven times.....	1	making 7
Number admitted eight times.....	2	making 16
Number admitted nine times.....	1	making 9
Number admitted twelve times.....	1	making 12
Total.....	6,954	8,001

TABLE XXX.

DAILY AVERAGE OF PATIENTS.

1889 AND 1890.	1890 AND 1891.
July, 1889.....	754.26
August, 1889.....	779.70
September, 1889.....	790.20
October, 1889.....	793.84
November, 1889.....	797.34
December, 1889.....	800.25
January, 1890.....	803.40
February, 1890.....	793.21
March, 1890.....	774.35
April, 1890.....	783.07
May, 1890.....	776.74
June, 1890.....	783.27
July, 1890.....	787.10
August, 1890.....	797.68
September, 1890.....	796.20
October, 1890.....	796.77
November, 1890.....	807.27
December, 1890.....	808.50
January, 1891.....	810.65
February, 1891.....	806.75
March, 1891.....	798.84
April, 1891.....	790.00
May, 1891.....	806.50
June, 1891.....	817.00

Daily average for the period 792.99.

REPORT OF THE STEWARD.

Steward's Exhibit of Current Expense Fund, from July 1, 1889, to July 1, 1890.

RECEIPTS.

July 1.	Balance.....	\$ 86.92
July 10.	From Auditor of State.....	31,654.00
Sept. 30.	Collections.....	1,028.07
Oct. 15.	From Auditor of State.....	32,844.00
Dec. 31.	Collections.....	865.31
1890.		
Jan. 15.	From Auditor of State.....	33,530.00
March 31.	Collections.....	941.37
April 15.	From Auditor of State.....	32,928.00
June 30.	Collections.....	1,396.65
Total.....		\$ 135,274.32

EXPENDITURES.

Meats and fish.....	\$ 19,597.31
Breadstuffs.....	4,297.13
Fruits and vegetables.....	3,150.72
Coffee and tea.....	2,447.85
Sugar and syrup.....	2,908.42
Sundry groceries.....	4,251.49
Butter.....	8,191.39
Cheese and eggs.....	1,032.55
Soap.....	835.65
Mortuary expenses.....	138.00
Medicinal supplies.....	4,156.92
Dry goods and clothing.....	8,569.38
Postage and stationery.....	1,049.74
Library and diversions.....	881.19
Furniture and furnishing..	1,603.01
Hardware and queensware.....	5,177.45
Repairs.....	2,395.70
Contingencies.....	3,270.73
Visiting committee.....	421.69
Farm.....	4,800.30
Fuel.....	11,010.23
Lights.....	1,785.97
Salaries and wages.....	41,486.32
	<hr/>
	\$ 133,569.14
Balance.....	1,765.18
	<hr/>
Total.....	\$ 135,274.32

Steward's Exhibit Current Expense fund from July 1st, 1890, to July 1st, 1891.

RECEIPTS.

1890.		
July 1.	Balance.....	\$ 1,765.18
July 15.	Amount from auditor of State.....	32,844.00
Sept. 30.	Collections.....	1,020.63
Oct. 15.	Amount from auditor of State.....	32,376.00
Dec. 30.	Collections.....	890.02
1891.		
Jan. 15.	Amount from auditor of State.....	33,866.00
March 31.	Collections.....	823.36
April 15.	Amount from auditor of State.....	33,894.00
June 30.	Collections.....	1,523.33
Total.....		\$ 140,002.52

EXPENDITURES.

Meat and fish	\$ 13,229.66
Breadstuffs	6,231.28
Fruits and vegetables	4,614.44
Coffee and tea	2,010.53
Sugar and syrup	2,765.08
Sundry groceries	5,756.88
Butter	6,597.13
Cheese and eggs	1,182.01
Soap	826.43
Mortuary expenses	340.90
Medicinal supplies	2,821.95
Dry goods and clothing	11,076.34
Postage and stationery	1,508.31
Library and diversions	1,123.66
Furniture and furnishing	1,559.07
Hardware and queensware	5,490.10
Repairs	3,955.54
Contingencies	3,417.29
Visiting committee	504.64
Farm	4,635.21
Fuel	8,879.25
Lights	3,228.54
Salaries and wages	47,407.36
	<hr/>
Balance	\$ 139,161.60
	<hr/>
Total	6 140,002.52

STEWARD'S EXHIBIT.

Special Appropriation of the 23d General Assembly.

REPAIR FUND.

1889.		
July 1.	Balance on hand.....	\$ 1,416.91
July 4.	Amount drawn from Auditor of State.....	750.00
1890.		
April 26.	Amount drawn from Auditor of State.....	3,000.00
July 11.	Amount drawn from Auditor of State.....	500.00
Oct. 13.	Amount drawn from Auditor of State.....	1,000.00
1891.		
May 19.	Amount drawn from Auditor of State.....	1,300.00
		<u>\$ 7,966.91</u>

EXPENDITURES.

Labor.....	\$ 5,371.10
Paints.....	834.17
Lumber.....	691.59
Cement and sand.....	297.28
Hardware.....	602.77
Plaster.....	150.00
	<u>\$ 7,966.91</u>
June 30. Amount appropriation undrawn from the State treasury made by the 23rd General Assembly.....	\$ 1,200.00

KITCHEN FUND.

1889.		
July 11.	Amount from auditor of State.....	\$ 5,000.00
		<u>\$ 5,000.00</u>

EXPENDITURES.

Labor.....	\$ 1,480.61
Sand.....	115.92
Tile and cement.....	987.25
Lime.....	101.00
Hardware.....	1,331.88
Freight.....	93.84
Tea and coffee boilers.....	900.50
	<u>\$ 5,000.00</u>

INDUSTRIAL BUILDING FOR FEMALES.

1889.		
July 11.	Amount from Auditor of State.....	\$ 8,000.00

EXPENDITURES.

Labor.....	\$ 2,922.61
Sand, brick and cement.....	2,133.16
Stone.....	735.98
Hardware.....	878.94
Sewer pipe.....	80.08
Lime and hair.....	60.08
Lumber.....	1,005.75
Glass and paints.....	122.40
Roofing.....	555.00
	<u>\$ 8,000.00</u>
	\$ 8,000.00

COLD STORAGE FUND.

1890.		
April 26.	Amount from Auditor of State.....	\$ 4,000.00
1891.		
May 19.	Amount from Auditor of State.....	1,000.00
		<u>\$ 5,000.00</u>

EXPENDITURES.

Labor.....	\$ 2,490.15
Stone and brick.....	511.36
Lumber.....	1,151.10
Lime, cement and sand.....	281.03
Hardware.....	240.65
Paint.....	92.35
Balance.....	224.36
	<u>\$ 5,000.00</u>

June 30.	Amount appropriation undrawn from the State Treasury made by the 23d General Assembly.....	\$ 1,000.00
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ICE HOUSE FUND.

1890.		
April 26.	Amount from Auditor of State.....	\$ 2,000.00
		<u>\$ 2,000.00</u>

EXPENDITURES.

Labor.....	\$ 1,092.85
Brick.....	405.00
Sand and Stone.....	303.25
Lumber.....	108.90
	<u>\$ 2,000.00</u>

CHAPEL AND AMUSEMENT HALL FUND.

1890.		
April 26.	From Auditor of State.....	\$ 5,000.00
Oct. 13.	From Auditor of State.....	3,000.00
May 19.	From Auditor of State.....	7,000.00

EXPENDITURES.

Labor.....	\$ 5,767.20
Sand.....	183.70
Hardware.....	389.72
Stone.....	568.23
Lime and cement.....	183.19
Lumber.....	2,253.27
Furniture.....	480.00
Brick.....	547.57
Gas fixtures.....	70.30
Iron beams.....	271.72
Paints and glass.....	338.89
Frescoing.....	83.60
Roofing.....	345.00
Reflectors.....	68.40
Scenery.....	538.34
Organ.....	1,000.00
Lathing and staples.....	288.67
Balance.....	1,622.20
	<hr/>
	\$ 15,000.00 \$ 15,000.00

The following appropriations made by the Twenty-third General Assembly remain in the State treasury, undrawn, viz:

Slaughter house.....	\$ 1,500.00
Steam engine.....	2,000.00
Improvement of grounds and fences.....	1,000.00
Greenhouse.....	2,000.00
Total.....	<hr/>
	\$ 7,100.00

TREASURER'S EXHIBIT.

C. V. ARNOLD, Treasurer, in account with the current expense fund for the biennial period ending June 30, 1891.

DEBTOR.

1889.	
July 1.	To balance on hand.....\$ 86.12
July 15.	To amount received from State.....31,654.00
Sept. 30.	To amount received from Steward.....1,028.07
Oct. 15.	To amount received from State.....32,844.00
Dec. 31.	To amount received from Steward.....865.31
1890.	
Jan. 16.	To amount received from State.....33,530.00
March 31.	To amount received from Steward.....941.37
April 11.	To amount received from State.....32,928.60
June 30.	To amount received from Steward.....1,396.65
July 11.	To amount received from State.....32,844.00
Sept. 30.	To amount received from Steward.....1,020.63
Oct. 13.	To amount received from State.....33,376.00
Dec. 31.	To amount received from Steward.....890.02
1891.	
Jan. 16.	To amount received from State.....33,866.00
March 31.	To amount received from Steward.....823.36
April 10.	To amount received from State.....33,894.00
June 30.	To amount received from Steward.....1,523.33
	<hr/>
	\$ 273,511.00

CREDIT.

1889.	
By vouchers paid for July, as per statement.....\$ 19,169.30	
By vouchers paid for August, as per statement.....7,028.48	
By vouchers paid for September, as per statement.....5,505.01	
By vouchers paid for October, as per statement.....21,030.07	
By vouchers paid for November, as per statement.....7,237.47	
By vouchers paid for December, as per statement.....6,312.99	
1890.	
By vouchers paid for January, as per statement.....24,538.64	
By vouchers paid for February, as per statement.....4,381.79	
By vouchers paid for March, as per statement.....5,243.54	
By vouchers paid for April, as per statement.....23,208.04	
By vouchers paid for May, as per statement.....4,877.76	
By vouchers paid for June, as per statement.....4,967.05	
By vouchers paid for July, as per statement.....17,885.38	
By vouchers paid for August, as per statement.....9,373.66	
By vouchers paid for September, as per statement.....7,355.10	
By vouchers paid for October, as per statement.....19,609.37	
By vouchers paid for November, as per statement.....7,803.43	
By vouchers paid for December, as per statement.....6,216.76	

1891.		
By vouchers paid for January, as per statement.....	\$	22,656.34
By vouchers paid for February, as per statement.....		8,648.47
By vouchers paid for March, as per statement.....		4,731.17
By vouchers paid for April, as per statement.....		23,347.08
By vouchers paid for May, as per statement.....		6,474.13
By vouchers paid for June, as per statement.....		5,060.81
By balance on hand.....		840.02
	\$	273,511.66

C. V. ARNOLD, *Treasurer, in account with the Special Appropriation Funds for the biennial period ending June 30, 1890.*

REPAIR AND IMPROVEMENT FUND.

Dr.

1889.		
July 1.	To balance on hand.....	\$ 1,416.91
July 4.	To amount received from State.....	750.00
1890.		
April 26.	To amount received from State.....	3,000.00
July 11.	To amount received from State.....	500.00
Oct. 13.	To amount received from State.....	1,000.00
1891.		
May 19.	To amount received from State.....	1,300.00
		\$ 7,966.91

CR.

1889.		
Oct. 1.	By vouchers paid for quarter ending Sept. 30.....	\$ 803.65
1890.		
Jan. 1.	By vouchers paid for quarter ending Dec. 31, 1889.....	1,279.54
April 1.	By vouchers paid for quarter ending March 31, 1890.....	83.72
July 1.	By vouchers paid for quarter ending June 30, 1890.....	2,239.72
Oct. 1.	By vouchers paid for quarter ending Sept. 30, 1890.....	1,483.87
1891.		
Jan. 1.	By vouchers paid for quarter ending Dec. 31, 1891.....	477.55
April 1.	By vouchers paid for quarter ending March 31, 1891.....	619.82
July 1.	By vouchers paid for quarter ending June 30, 1891.....	979.04
		\$ 7,966.91
June 30.	Amount remaining undrawn in State treasury.....	\$ 1,200.00

KITCHEN FUND.

Dr.

1889.		
July 1.	To amount received from State.....	\$ 5,000.00

CR.

1890.		
Jan. 1.	By vouchers paid for quarter ending Dec. 31, 1889.....	\$ 1,426.64
April 1.	By vouchers paid for quarter ending March 31, 1890.....	3,573.36
		\$ 5,000.00

INDUSTRIAL BUILDING FUND.

Dr.

1889.		
July 4.	To amount received from State.....	\$ 8,000.00

CR.

1889.		
Oct. 1.	By vouchers paid for quarter ending Sept. 30.....	\$ 6,271.06
1890.		
Jan. 1.	By vouchers paid for quarter ending Dec. 31, 1889.....	1,507.05
April 1.	By vouchers paid for quarter ending March 31, 1890.....	221.89
		\$ 8,000.00

C. V. ARNOLD, *Treasurer, in account with the special appropriation funds for the biennial period ending June 30, 1891.*

CHAPEL AND AMUSEMENT FUND.

Dr.

1890.		
April 26.	To amount received from State.....	\$ 5,000.00
Oct. 13.	To amount received from State.....	3,000.00
1891.		
May 19.	To amount received from State.....	7,000.00
		\$ 15,000.00

CR.

1890.		
Oct. 1.	By vouchers paid for quarter ending Sept. 30.....	\$ 2,864.40
1891.		
Jan. 1.	By vouchers paid for quarter ending Dec. 31.....	3,550.88
April 1.	By vouchers paid for quarter ending March 31.....	2,529.47
July 1.	By vouchers paid for quarter ending June 30.....	4,424.05
Balance on hand.....		1,622.20
		\$ 15,000.00

COLD STORAGE FUND.

Dr.

1890.		
April 26.	To amount received from State.....	\$ 4,000.00
1891.		
May 19.	To amount received from State.....	1,000.00
		\$ 5,000.00
June 30.	Amount remaining undrawn in State treasury.....	\$ 1,000.00

CR.

1890.		
July 1.	By vouchers paid for quarter ending June 30.....	74.31
Oct. 1.	By vouchers paid for quarter ending Sept. 30.....	3,895.66
1891.		
Jan. 1.	By vouchers paid for quarter ending Dec. 31.....	30.03
July 1.	By vouchers paid for quarter ending June 30.....	775.64
Balance on hand.....		224.36
		\$ 5,000.00

ICE HOUSE FUND.

Dr.

1890.
April ... To amount received from State.....\$ 2,000.00

Cr.

1890.
July 1. By vouchers paid for quarter ending June 30 892.50
Oct. 1. By vouchers paid for quarter ending Sept. 30 1,040.45
Oct. 31. By vouchers paid for month 67.05
\$ 2,000.00

Dr.

June 30. Amount remaining in State treasury funds as follows, of appropriations made by the Twenty-third General Assembly, viz:
Slaughter-house fund\$ 1,500.00
Steam engine fund..... 2,600.00
Improvements of grounds and fences..... 1,000.00
Greenhouse..... 2,000.00
Total\$ 7,100.00