
RESIDENT OFFICERS

EIGHTEENTH ANNUAL REPORT
OF THE
RESIDENT OFFICERS
OF THE
NEW JERSEY STATE HOSPITAL
AT MORRIS PLAINS, N. J.
For the Year ending October 31st,
1893.

TREASURY REPORT

RESIDENT OFFICERS.

MOSES K. EVERITT,
Warden.

B. D. EVANS, M.D.,
Medical Director.

ELIOT GORTON, M.D.,
Assistant Physician.

THOMAS P. PROUT, M.D.,
Second Assistant Physician and Pathologist.

PETER S. MALLON, M.D.,
Third Assistant Physician.

M. L. PERRY, M.D.,
Fourth Assistant Physician.

TREASURER,

GUIDO C. HINCHMAN.

APOTHECARY,

STEPHEN T. QUINN.

TREASURER'S REPORT.

To the Managers of the New Jersey State Hospital at Morris Plains :

GENTLEMEN—The Treasurer of the New Jersey State Hospital at Morris Plains respectfully submits the following abstract of receipts and disbursements from November 1st, 1892, to October 31st, 1893, inclusive :

RECEIPTS.	
Balance on hand November 1st, 1892	\$19,303 60
From State Treasurer for convict patients	\$16,424 90
From State Treasurer for county patients.....	41,288 70
From sundry counties for maintenance of county patients,	117,283 40
From private patients.....	47,817 24
From hides, tallow, &c.....	11,498 65
From First National Bank, Morristown, for interest.....	17 38
From unpaid acceptance of Treasurer, No. 618, dated June 15th, 1892, payment of which has been stopped	4 70
	234,334 97
From loan received from the New Jersey State Hospital at Trenton.....	10,000 00
	\$263,638 57
DISBURSEMENTS.	
On orders of the Warden.....	\$250,098 81
Balance in Treasurer's hands.....	13,539 76
	\$263,638 57

G. C. HINCHMAN,
Treasurer.

Dated at the New Jersey State Hospital
at Morris Plains, N. J., Nov. 9th, 1893.

The New Jersey State Hospital at Morris Plains, November 9th, 1893.

We hereby certify that we have examined the Treasurer's accounts and compared the same with his books and vouchers, and find them in accordance with the above statement, and correctly stated and balanced.

GEORGE RICHARDS,
JEREMIAH O'ROURKE,
JAMES W. SMITH,
Auditing Committee.

WARDEN'S REPORT.

To the Board of Managers of the State Hospitals :

GENTLEMEN—As required by "An act relative to the government and management of the Insane Asylums or Hospitals owned by the State of New Jersey," approved March 11th, 1893, the Warden of the New Jersey State Hospital at Morris Plains presents his report for the year ending October 31st, 1893, accompanied by an abstract of accounts, showing all receipts and the items of expenditures for the year preceding, and an appendix, showing the various products of the farm and garden and the products of the different workshops connected with this institution, to which reference is hereby made for detailed information concerning the results in each.

Your Treasurer's report shows—

Total receipts from November 1st, 1892, to November 1st, 1893.....	\$263,638 57
Total disbursements.....	250,098 81
	\$13,539 76
Cash balance.....	\$13,539 76
Including with this balance the amounts due for maintenance and already earned, there is an available cash resource of.....	\$59,886 13
There is also in store, according to the inventory and estimation of the appraisers, based on the actual cost price at wholesale to the house, fuel and subsistence valued at.....	18,852 52
	\$78,738 65

The liabilities, including bills on file, amounts due on pay-roll for October and maintenance accounts paid in advance, but not yet earned, are thirty-six thousand nine hundred and ninety-three dollars and seventy-five cents (\$36,993.75).

Included in the liabilities is a loan of ten thousand dollars (\$10,000), which was necessarily contracted, because Passaic county has failed to meet any of her obligations to this Hospital during the past year, and is now indebted for the maintenance of her patients here to the amount of twenty-three thousand five hundred and eighty-nine dollars and thirty-nine cents (\$23,589.39).

FARM AND GARDEN.

The acreage of arable land has been increased by seeding with rye fourteen (14) acres, which had lain untilled and unproductive for fifteen years. By reference to the appendix it will be seen that three thousand and sixty (3,060) bushels of potatoes have been raised on the farm and twelve hundred (1,200) in the garden. The appendix also shows that five thousand seven hundred dollars and seventy-eight cents (\$5,700.78) worth of hogs have been sold during the past year. The cost of this stock was one thousand five hundred and three dollars (\$1,503), which leaves a net return, free of all expense, of four thousand one hundred and ninety-seven dollars and seventy-eight cents (\$4,197.78) for hogs raised during the year. The value of the products from the farm in excess of the same last year is five thousand eight hundred and eleven dollars and thirty-two cents (\$5,811.32), while the increase in the garden is three thousand four hundred and twenty-six dollars and seventeen cents (\$3,426.17). This favorable showing is made on valuations fixed by the appraisers appointed by your Board, and the prices of all products are practically the same as those fixed last year, as can be seen by comparison with that report. This result, in spite of a season not so favorable as the last, is the best justification possible of the continued attempt of the last two years to get greater returns from the farm and garden by a more liberal use of fertilizers and improved methods of cultivation.

The returns from the green-houses, as shown by the appendix, have fully realized the expectation of last year's report. It is gratifying to know that in one of the few ways we have of alleviating, in a measure, the monotony of Hospital life, the results have so entirely compensated for the outlay. The success attending this labor is to be attributed to the painstaking and well-directed efforts of our florist, as well as to a well-equipped green-house.

We continue to furnish all the milk used in the institution from our own dairy. The average daily supply for the past year has been five hundred and seventy-three and one-third ($573\frac{1}{3}$) quarts, which has been supplied for consumption without a single complaint of lack of freshness or lowered quality.

IMPROVEMENTS.

The current repairs to the house and all equipments have been attended to as need arose. The roofs and rain-gutters, which were beginning to leak badly in many places, have been put in good order. Eight wards and all the water-closets and a number of dining-rooms have been painted since last year in the manner then reported. Numerous additions have been made to the furniture of the house and the number of the carpeted wards increased. The apartments of the resident officers have also been repaired and otherwise repaired.

The gas plant has been thoroughly overhauled and eleven old retorts replaced by new ones. The building of proper roads on the property has been continued and the terraces at the south of the building completed. Tile drains have been laid from the hog-pens and cow-stables to take the wash from each by gravity and allow it to run over tillable fields. This utilizes a valuable fertilizer, which, unless thus provided for, would become a prolific source of pollution to the water courses in the vicinity, and, in draining to them, make quagmires of filth, exceedingly offensive and dangerous to the health of all persons living in the neighborhood.

The most extensive improvement of the year to the outlying buildings is the erection of sheds and a new barn, which are now nearing completion. These are to replace the old shed used for storing the farm machinery and wagons and the farm stables, which, exceedingly faulty in their original design and construction, had become so dilapidated as to furnish insufficient protection to the horses.

The barn proper is seventy-five (75) feet by forty-eight (48) feet and is twenty-eight (28) feet high to the eaves. The first story is stone, and to be used for horse-stables, and the upper part is framed throughout with the best quality of Georgia pine. It is inclosed, and the material on hand to complete the building. The cost to date, including material not yet used in construction and labor, is seven thousand and forty dollars and sixty-four cents (\$7,040.64). The sheds are finished with the exception of doors, and have cost, in labor and material, four thousand eight hundred and thirty-four dollars and sixty-nine cents (\$4,834.69). They aggregate two hundred and fifty-two (252) feet in length and are twenty-five (25) feet in width. Under one of them is a cellar space of fifteen thousand seven hundred

and fifty (15,750) cubic feet, to be used for storing vegetables, roots, &c., which has cement floors and walls of stone masonry. In building the above sheds and barn, one thousand four hundred (1,400) perches of foundation wall have been laid.

ANNUAL APPRAISEMENT.

The annual appraisal of the personal property of this institution, taken as usual, amounts to one hundred and thirty-two thousand eight hundred and thirty-one dollars and eighty-five cents (\$132,831.85). Thanks are due Mr. Robert Killgore, of Dover, and Mr. Jas. P. Sullivan, of Morristown, appraisers appointed by your Honorable Board, for the efficient assistance rendered in taking the same.

ACKNOWLEDGMENTS.

For gratuitous copies of the following-named papers, we are indebted to their publishers:

Evening Journal.....	Newark.
Elizabeth Daily Journal.....	Elizabeth.
The Iron Era.....	Dover.
The Index.....	Dover.
The True Democratic Banner.....	Morristown.
The Express.....	Morristown.
The Chronicle.....	Morristown.
The Clinton Democrat.....	Clinton.
Star of the Cope.....	Cape May City.
Middlesex County Democrat.....	Perth Amboy.
The Advance.....	Jamesburg.
The Democrat-Advertiser.....	Flemington.
Southwestern Presbyterian.....	New Orleans, La.
Hunterdon Independent.....	Frenchtown.
Orange Sonntagsblatt.....	Orange.
Hunterdon County Democrat.....	Flemington.
Bergen County Democrat.....	Hackensack.
Union County Standard.....	Westfield.

I am pleased to note the continuance of the same pleasant relations between the departments which has existed since my connection with this institution began, and the willingness of all employed in the department committed to my charge to perform the various services

assigned them. The careful attention given to the interest of this Hospital by your Honorable Board has been an important factor in the successful operations of the past year, and I would record my thanks for the consideration displayed.

Respectfully submitted,

M. K. EVERITT,
Warden.

The New Jersey State Hospital
at Morris Plains, Nov. 9th, 1893.

ABSTRACT OF ACCOUNTS

For the Fiscal Year Ending October 31st, 1893.

G. C. HINCHMAN, TREASURER.

DE.

To balance October 31st, 1892.....	\$19,303 60
To amount received for board, clothing and incidental expenses of private patients.....	47,817 24
To amount received for board, clothing and incidental expenses of county patients.....	117,283 40
To amount received from State Treasurer for county patients... ..	41,288 70
To amount received from State Treasurer for convict patients.....	16,424 90
To amount received for hides, tallow, &c.....	4,373 37
To amount received for sundries, rags, &c.	1,274 17
To amount received for hogs and pigs.....	5,700 78
To amount received for rents.....	112 00
To amount received for postage.....	38 33
To amount received for interest.....	17 38
To amount received from canceled voucher No. 618.....	4 70
To amount received from loan.....	10,000 00

\$263,638 57

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Amusements.....	\$806 63
Books and stationery.....	1,130 88
Bedding, linen, &c.....	4,374 01
Clothing.....	6,285 99
Crockery and cutlery.....	832 08
Counsel fees.....	250 00
Farm and garden.....	12,324 46
Fixtures.....	362 77
Flour.....	6,130 10
Feed.....	4,463 80
Fencing.....	517 31
Fruit.....	1,584 55
Freight.....	3,775 23
Furniture.....	4,383 22
Fuel.....	12,008 47
Funeral expenses.....	580 00

NEW JERSEY STATE HOSPITALS.

Gas and steam pipe and fittings.....	\$1,326 10
Grounds and grading.....	3,196 58
Hay and straw.....	34 65
Harness, wagons, &c.....	1,106 56
Household goods.....	1,702 96
Improvement of buildings.....	15,696 90
Insurance.....	37 50
Incidental, including soap, waste, combs, brushes, &c.....	1,925 75
Laundry.....	4,733 64
Light, including gas used in laundry and for cooking.....	7,036 03
Medical supplies.....	2,431 97
Medical library.....	364 58
Newspapers.....	16 00
Provisions and groceries.....	79,684 41
Postage.....	521 83
Petty current expenses.....	500 00
Pathological department.....	561 34
Refunding.....	1,506 48
Repairs.....	9,380 96
Smith and wheelwright.....	1,006 10
Stock.....	5,832 99
Tinware and fixtures.....	800 08
Tools and supplies, boiler-house and machine.....	1,425 90
Telegrams, telephone rental, &c.....	453 30
Vegetables.....	2,065 42
Wages.....	47,131 28
Balance October 31st, 1893.....	\$250,098 81
	13,539 76
	\$263,638 57

APPENDIX TO WARDEN'S REPORT.

FARM AND GARDEN PRODUCTS.

DAIRY AND FARM, 1893.

209,250 Quarts milk..... @ \$0 04½	\$9,416 25
492 Dozen eggs.....	24 118 08
150 Tons hay.....	20 00 3,000 00
30 Tons rye straw.....	15 00 450 00
3,060 Bushels potatoes.....	80 2,448 00
528 Bushels rye.....	60 316 80
600 Bushels turnips.....	35 210 00
322 Bushels apples, cider.....	15 48 30
50 Bushels apples, selected.....	1 00 50 00
25 Bushels apples, baking.....	1 00 25 00
5 Bushels apples, crab.....	1 00 5 00
1,700 Quinces.....	03 51 00
26 Weeks' pasture for 68 head of stock.....	50 884 00
	<u>\$17,022 43</u>

STOCK.

3,893 Pounds veal, 28 calves..... @ \$0 10	\$389 30
61 Cattle slaughtered, 34,413 pounds.....	07 2,408 91
50 Fowls.....	50 25 00
Hogs sold.....	5,700 78
	<u>8,523 99</u>

GARDEN, 1893.

1,300 Bushels tomatoes..... @ \$0 50	\$650 00
550 Bushels carrots.....	50 275 00
350 Bushels parsnips.....	50 175 00
750 Bushels beets.....	50 375 00
900 Bushels mangel-wurzel.....	40 360 00
400 Bushels ruta бага turnips.....	40 160 00
300 Bushels flat turnips.....	35 105 00
450 Bushels Yellow Stone turnips.....	35 157 50
1,200 Bushels potatoes.....	80 960 00
225 Bushels onions.....	1 00 225 00
155 Bushels apples, selected.....	1 00 155 00
400 Bushels spinach.....	50 200 00
600 Bushels kale.....	35 210 00
450 Bushels bush beans.....	70 315 00
155 Bushels Lima beans.....	75 116 25

NEW JERSEY STATE HOSPITALS.

400 Bushels peas	@ \$1 00	\$400 00
165 Bushels cucumbers	80	132 00
85 Bushels cucumber pickles.....	1 50	127 50
5 Bushels onion sets.....	5 00	25 00
40 Bushels horseradish	1 25	50 00
30 Bushels okra	1 00	30 00
50 Bushels oyster plant.....	1 25.	62 50
175 Bushels grapes.....	2 00	350 00
180 Bushels squash	45	81 00
25,000 Heads celery	03	750 00
16,000 Heads cabbage.....	05	800 00
17,500 Heads lettuce.....	02	350 00
1,500 Heads cauliflower	10	150 00
18,500 Bunches onions.....	02	370 00
30,000 Bunches radishes	03	900 00
2,500 Bunches carrots	02	50 00
4,500 Bunches asparagus	12	540 00
7,500 Bunches rhubarb	05	375 00
2,000 Bunches parsley.....	03	60 00
2,000 Bunches leeks.....	03	60 00
1,000 Bunches celery, for soup.....	05	50 00
100 Bunches sage.....	05	5 00
100 Bunches thyme.....	05	5 00
1,500 Baskets peaches.....	40	600 00
30 Baskets pears, Early Tyson.....	1 00	30 00
15 Baskets pears, Osborn.....	50	7 50
25 Baskets pears, Sheldon.....	75	18 75
80 Baskets pears, Bartlett.....	75	60 00
15 Baskets pears, stewing	40	6 00
35 Baskets pears, David's Seedling	75	26 25
15 Baskets pears, Burrie Bose	1 00	15 00
100 Baskets pears, Seckel.....	60	60 00
25 Baskets pears, Burrie Diel	1 00	25 00
5,000 Muskmelons.....	05	250 00
30,000 Ears sweet corn.....	01	300 00
100 Ears sweet corn, for seed	03	3 00
1,100 Bundles cornstalks	03	33 00
300 Pumpkins	05	15 00
2,500 Peppers	01	25 00
1,800 Quinces.....	03	54 00
1,600 Eggplants.....	05	80 00
1,000 Quarts blackberries.....	10	100 00
1,500 Quarts raspberries.....	10	150 00
350 Quarts currants	10	35 00
5,000 Quarts strawberries	10	500 00
300 Quarts gooseberries.....	10	30 00
350 Quarts cherries.....	12	42 00

 \$12,617 25

 \$38,173 67

NEW JERSEY STATE HOSPITALS.

CUT FLOWERS AND PLANTS FURNISHED, 1893.

CUT FLOWERS.

Roses.....	30,000
Carnations.....	18,000
Bouvardia.....	300
Violets	4,000
Calla Lilies.....	200
Easter Lilies.....	75
Tulips	200
Hyacinths	200
Narcissus	100
Sprigs of Mignonette.....	400
Sprigs of Heliotrope.....	350
Tube Roses.....	50
Gladiolus	50
Asters (China).....	1,500
Sprigs of Smilax.....	50
Sweet William	100
Bunches of Cosmos.....	100
Chrysanthemum Flowers.....	300

BEDDING AND DECORATIVE PLANTS, GROWN FOR SEASON, 1893.

Geraniums.....	1,500
Coleus	4,000
Canna Indica.....	450
Ageratum	300
Begonia Alba.....	300
Scarlet Sage.....	200
Petunia	350
Caladium	150
Castor Oil Plants.....	15
Lantana.....	40
Alternanthera	150
Tulips.....	1,500
Hyacinths.....	500
Primula Sinensis.....	150
Cineraria.....	100
Mignonette.....	200
Easter Lilies.....	75
Calla Lilies.....	75
Chrysanthemums	300
Pansies.....	800
English Daisies.....	300
Forget me-not.....	200
Croton.....	125
Acalypha	100
Fancy-leaved Begonia	250

Marguerite.....	50
Roses.....	1,800
Carnations.....	900
Stevia.....	150
Bouvardia.....	100
Hydrangea.....	50

ACCOUNT OF FRUITS, &c., CANNED AND PRESERVED.

Pine Apple.....	6 quarts.
Cherries.....	40 quarts.
Pears.....	140 quarts.
Quinces.....	44 quarts.
Peaches.....	126 quarts.
Strawberry Jelly.....	8 pounds.
Quince Jelly.....	20 pounds.
Crab Apple Jelly.....	10 pounds.
Quinces.....	56 quarts.
Tomatoes.....	775 gallons.
Quinces.....	80 gallons.
Pears.....	14 gallons.
Peaches.....	390 gallons.

ARTICLES MADE IN SEWING-ROOM, 1893.

Sheets.....	1,785
Sheets (double).....	48
Pillow-cases.....	1,439
Hand towels.....	1,506
Roller towels.....	222
Dish towels.....	813
Table-cloths.....	80
Napkins.....	324
Kitchen aprons.....	205
Chef's aprons.....	6
Barber's aprons.....	1
Curtains.....	77
Curtain bands.....	60
Bed spreads.....	295
Blankets.....	360
Clothes bags.....	101
Camisoles.....	4
Chemise.....	482
Ladies' drawers.....	290
Underwaists.....	245
Petticoats.....	276
Night dresses.....	17
Burial robes.....	42

Burial skirts.....	42
Burial chemise.....	42
Burial sheets.....	42
Dresses.....	763
Dress waists.....	9
Wrappers.....	20
Dress skirts.....	2
Dresses repaired.....	6
Pairs sleeves made.....	4
Total number of pieces.....	9,618

RETURN OF WORK DONE IN MATTRESS-ROOM AND SHOE-SHOP.

Single hair mattresses made, new.....	644
Double hair mattresses made, new.....	6
Single hair mattresses made over.....	863
Double hair mattresses made over.....	27
Hair pillows made, new.....	674
Hair pillows made over.....	1,873
Single mattress ticks made, new.....	662
Double mattress ticks made, new.....	17
Pillow ticks made, new.....	807
Feather pillows made, new.....	93
Sofa pillows made, new.....	12
Pieces of furniture upholstered.....	118
Large hall carpets made, new.....	6
Large hall carpets made over.....	3
Connecting hall carpets made, new.....	8
Alcove carpets made, new.....	6
Parlor carpets made, new.....	3
Room carpets made, new.....	309
Room carpets made over.....	56
Carpets taken up.....	302
Carpets laid.....	468
Carpets repaired.....	87
Rooms laid with linoleum.....	6
Chairs caned.....	208
Settees caned.....	4
Bed protectors made, new.....	396
Holland window shades made, new.....	372
Long window curtains made, new.....	2
Long window curtains hung (pairs).....	30
Ottomans made, new.....	23
Carpet door mats made, new.....	27
Pairs of holders for bakery and boiler-room.....	176
Pieces of harness repaired.....	20
Pieces of harness made, new.....	32
Horse blankets repaired.....	14
Bed protectors repaired.....	226

Yards of carpet hemmed.....	1,526
Yards of carpet bound.....	212
Sets of mangle aprons made, new.....	4
Sets of mangle aprons repaired.....	6
Chair cushions made, new.....	25
Awnings put up.....	25
Awnings taken down.....	25
Mattress ticks repaired.....	59
Window shades repaired.....	108
Pairs of boots, shoes and slippers repaired.....	1,487
Total number of pieces.....	12,037

ARTICLES MADE IN TIN-SHOP, 1893.

Sprinkling pots.....	2
Large hood and funnel for pig-pens.....	1
Russia-iron stove for green-house.....	1
Water pails for store-room.....	78
Joints, Russia-iron pipe (cottage).....	3
Russia-iron fender.....	1
Tin boilers for kitchen.....	6
Large funnel (cottage).....	1
Tea pots (dining-room).....	2
Large coffee boiler (kitchen).....	1
Strainers for tea boilers.....	3
Large kettles for kitchen.....	13
Russia-iron covering for two ironing-room tables.	
Diet cups, with lids.....	144
Feet of tin gutter (office).....	26
Pie plates (bakery).....	12
Small tea pots.....	2
Pudding pans (store-room).....	60
Drinking cups (store-room).....	204
Large coffee pots.....	4
One-gallon oil can.....	1
Large square plates.....	4
Large strainers for sewer.....	2
Copper pans for ironing-room.....	6
Dust pans (store-room).....	24
Galvanized-iron coal hods (store-room).....	4
Lining steam closet.....	1
Repairs to old steam closet.....	1
Feet of leader for carriage-house.....	7
Joints Russia-iron pipe, with one elbow, for blacksmith.....	4
Repairs to kitchen diet boxes.....	42
Drinking pail and cup for farm hands.....	1
Small skimmers (kitchen).....	6
Colanders for kitchen.....	2

Pail for kitchen.....	1
Twenty-four feet gutter and 24 feet of leader for garden-house.	
Repairs to tin roof, garden-house.	
Diet flats (store-room).....	172
Large baking pans (kitchen).....	24
Square boxes (store-room).....	8
Large watering-pot (gas-house).....	1
Dust-pan (center kitchen).....	1
Repairs to roof and leader (cottage).	
Bread-boxes (store-room).....	6
Tea-kettle, saucepan, bread-boxes, &c., center kitchen.	
Large frying-pans (center kitchen).....	2
Leader for cottage (feet).....	15
Lining ice-box (center kitchen).	
Copper funnel (store-room).....	1
Paris green sprinklers for farmer.....	2
Round pudding-pans (store-room).....	6
Repairs to ice-box at slaughter-house.	
Tin flats, kitchen.....	16
Dash-boards, covered.....	2
Large strainer (pig-pens).....	1
Joints Russia-iron pipe, with one elbow, for cottage.....	6
Copper gutter (gas-house), feet.....	66
Flashing strips for wagon-sheds (feet).....	600
Small dippers (store-room).....	6
Milk pail.....	1
New fruit cans.....	400
Repairs to fruit cans.....	300
Galvanized skimmers, sewer.....	5
Molasses cans (store-room).....	30
Large dish-pans (kitchen).....	2
Square flats (kitchen).....	6
Thermometer guards (halls).....	8

FOR NEW WAGON SHEDS.

Feet of gutter.....	481
Feet of flashing strips, 20 inches wide.....	50
Feet of 4-inch tin leader.....	116
Four-inch galvanized leader strainers.....	6

FOR NEW STABLE.

Feet of galvanized iron gutter.....	270
Feet of 4-inch galvanized iron leader.....	251
Sheets of No. 24 galvanized iron, for cresting.....	9
Boxes 14 x 20 tin, for flashing.....	2
Extensive repairs to roofs, leaders, gutters, &c., on main building.	

MEDICAL DIRECTOR'S REPORT

MEDICAL DIRECTOR'S REPORT,

WITH

PATHOLOGICAL SUPPLEMENT.

MEDICAL DIRECTOR'S REPORT.

To the Board of Managers :

GENTLEMEN—I have the honor to present the eighteenth annual report of the Medical Department of this institution, formerly known as the State Asylum for the Insane, Morristown, N. J., changed by act of Legislature, 1893, to The New Jersey State Hospital, Morris Plains, and it becomes my duty to make the first annual report of the Medical Department under this new title and address.

Since the change in nowise affects the character of the work, the form of management, or the object for which the institution was built, there is no indication for any radical deviation from the usual form of report.

An additional table has been added this year, showing the change of the insane population from year to year, since the opening of the institution in 1876.

TABLE I.

SHOWING THE ADMISSIONS, RE-ADMISSIONS, DISCHARGES AND DEATHS DURING THE YEAR ENDING OCTOBER 31st, 1893.

	ADMISSIONS.			DISCHARGES AND DEATHS.		
	Men.	Women.	Total.	Men.	Women.	Total.
In the Hospital October 31st, 1892.....				471	478	949
Patients admitted—						
First admission.....	117	95	212			
Not first admission.....	15	24	39			
Total admitted during the year.....				132	119	251
Total patients under treatment during the year.....				603	597	1,200
Patients discharged—						
Recovered.....	37	33	70			
Improved.....	10	11	21			
Unimproved.....	7	4	11			
Died.....	40	49	89			
Total discharged and died.....				94	97	191
Remaining in the Hospital.....				509	500	1,009
Of this number there are, Public.....	439	444	883			
Private.....	70	56	126			
Total.....				509	500	1,009
Whole number admitted from August 17th, 1876, to October 31st, 1893.....	2,027	1,832	3,859	2,027	1,832	3,859
Discharged, recovered.....	411	377	788			
Discharged, improved.....	394	400	794			
Discharged, unimproved.....	128	134	262			
Died.....	580	421	1,001			
By elopement.....	5		5			
Total discharged and died.....				1,518	1,332	2,850
Remaining October 31st, 1893.....				509	500	1,009

TABLE II.

MONTHLY ADMISSIONS, DISCHARGES AND AVERAGES.

MONTHS.	ADMISSIONS.			DISCHARGES AND DEATHS.			DAILY AVERAGES.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
1892.									
November.....	15	10	25	7	4	11	474.94	479.81	954.75
December.....	7	5	12	8	4	12	478.90	484.03	962.93
1893.									
January.....	7	2	9	4	7	11	479.29	481.54	960.83
February.....	8	4	12	7	6	13	483.80	480.92	964.72
March.....	11	9	20	5	9	14	487.83	478.85	966.68
April.....	8	11	19	14	22	36	485.80	473.34	959.14
May.....	11	10	21	4	4	8	487.49	469.90	957.39
June.....	12	8	20	8	7	15	493.97	470.77	964.74
July.....	9	17	26	11	7	18	492.32	478.42	970.74
August.....	12	9	21	3	8	11	495.40	483.78	979.16
September.....	23	27	50	8	6	14	509.38	497.40	1,006.78
October.....	9	7	16	15	13	28	513.95	503.25	1,017.20
Total.....	132	119	251	94	97	191			
Since April 1st, 1893.....							496.90	482.40	979.30

TABLE III.

NUMBER OF ATTACK OF THOSE ADMITTED.

ATTACK.	Men.	Women.	Total.
First.....	110	88	198
Second.....	18	17	35
Third.....	2	10	12
Fourth.....	1	3	4
Fifth.....		1	1
Sixth.....	1		1
Total.....	132	119	251

TABLE IV.

AGE WHEN ADMITTED.

AGE.	Men.	Women.	Total.
Under fifteen years.....	2	.....	2
From fifteen to twenty years.....	6	6	12
From twenty to twenty-five years.....	10	16	26
From twenty-five to thirty years.....	17	14	31
From thirty to thirty-five years.....	8	16	24
From thirty-five to forty years.....	19	17	36
From forty to forty-five years.....	10	6	16
From forty-five to fifty years.....	9	14	23
From fifty to sixty years.....	23	14	37
From sixty to seventy years.....	16	13	29
From seventy to eighty years.....	11	1	12
Eighty years and over.....	1	2	3
Total.....	132	119	251

TABLE V.

NATIVITY OF PATIENTS ADMITTED.

PLACE OF NATIVITY.	Men.	Women.	Total.
Connecticut.....	3	.....	3
Georgia.....	1	.....	1
Maine.....	1	.....	1
Massachusetts.....	1	1	2
New Jersey.....	50	54	104
New York.....	14	5	19
Ohio.....	1	.....	1
Pennsylvania.....	3	8	11
Virginia.....	1	1	2
United States.....	4	5	9
Austria.....	.....	1	1
Belgium.....	.....	1	1
Bohemia.....	1	.....	1
England.....	9	6	15
France.....	2	1	3
Germany.....	5	8	13
Holland.....	1	.....	1
Hungary.....	1	1	2
Ireland.....	20	23	43
Nova Scotia.....	1	.....	1
Poland.....	1	.....	1
Russia.....	4	.....	4
Switzerland.....	1	1	2
Scotland.....	2	3	5
Unknown.....	5	.....	5
Total.....	132	119	251

TABLE VI.

PLACE OF RESIDENCE OF THOSE ADMITTED.

COUNTIES.	Men.	Women.	Total.
Camden.....	1	.....	1
Bergen.....	10	7	17
Essex.....	7	5	12
Hudson.....	25	21	46
Hunterdon.....	8	13	21
Morris.....	17	13	30
Middlesex.....	1	1	2
Passaic.....	19	32	51
Sussex.....	5	1	6
Union.....	21	19	40
Warren.....	7	7	14
New York, N. Y.....	11	.....	11
Total.....	132	119	251

TABLE VII.

CIVIL CONDITION OF THOSE ADMITTED.

CIVIL CONDITION.	Men.	Women.	Total.
Single.....	52	49	101
Married.....	68	50	118
Widowed.....	12	20	32
Total.....	132	119	251

TABLE VIII.

OCCUPATION OF THOSE ADMITTED.

Males.

Barber.....	1
Basketmaker.....	1
Bricklayer.....	1
Blacksmiths.....	5
Bookkeepers.....	3
Brokers.....	2
Clerks.....	7
Carpenters.....	3
Coachman.....	1
Collector.....	1
Contractor.....	1
Dairyman.....	1
Dyer.....	1
Farmers.....	17
Factory hands.....	4
File cutter.....	1
Flagman.....	1
Gardeners.....	6
Hackman.....	1
Hotel keeper.....	1
Inspector.....	1
Liquor dealer.....	1
Laborers.....	13
Merchants.....	7
Machinists.....	4
Minister.....	1
Moulder.....	1
Manufacturer.....	1
Miller.....	1
Miner.....	1
Mariners.....	8
Painter.....	1
Plumber.....	1
Printer.....	1
Railroad employes.....	2
Student.....	1
Salesmen.....	3
Sawmaker.....	1
Shoemakers.....	3
Soldier.....	1
Telegraph operators.....	2
Truckman.....	1
Upholsterers.....	2
No occupation.....	10
Occupation unknown.....	5
Total.....	129

TABLE IX.

OCCUPATION OF THOSE ADMITTED.

Females.

Actress.....	1
Bookbinder.....	1
Dressmaker.....	1
Housewives.....	45
Housekeepers.....	12
Laundress.....	1
Servants.....	22
Silk weavers.....	6
Silk winders.....	3
School girl.....	1
School teacher.....	1
Seamstresses.....	2
Waitress.....	1
No occupation.....	18
Occupation unknown.....	4
Total.....	119

TABLE X.

FORM OF MENTAL DISEASE OF THOSE ADMITTED.

MENTAL DISEASE.	Men.	Women.	Total.
Mania, acute.....	12	6	18
Mania, acute delirious.....	2	5	7
Mania, alcoholic.....	13	1	14
Mania, chronic.....	9	11	20
Mania, delusional.....	11	4	15
Mania, epileptic.....	3	.....	3
Mania, puerperal.....	.....	5	5
Mania, recurrent.....	4	9	13
Mania, recurrent.....	2	.....	2
Dipsomania.....	23	31	54
Melancholia, acute.....	3	10	13
Melancholia, chronic.....	5	3	8
Dementia, epileptic.....	1	2	3
Dementia, organic.....	.....	3	3
Dementia, primary.....	17	10	27
Dementia, senile.....	2	7	9
Dementia, terminal.....	.....	1	1
Circular insanity.....	1	.....	1
Choreic insanity.....	3	1	4
Epileptic imbecility.....	1	3	4
Imbecility.....	3	1	4
Insanity of pubescence.....	2	5	7
Insanity of adolescence.....	4	1	5
Paranoia.....	11	.....	11
Paresis.....	.....	.....	.....
Total.....	132	119	251

TABLE XI.

HOW SUPPORTED.

HOW SUPPORTED.	PATIENTS ADMITTED.		
	Men.	Women.	Total.
State.....	4		4
County.....	84	98	182
Private.....	44	21	65
Total.....	132	119	251

TABLE XII.

ALLEGED CAUSES OF INSANITY OF THOSE ADMITTED.

CAUSES.	Men.	Women.	Total.
<i>Physical.</i>			
Bisulphide of carbon poisoning.....	1		1
Congenital.....	1		1
Cerebro-spinal meningitis.....		3	3
Cerebral hemorrhage.....	1		1
Childbirth.....		12	12
Epilepsy.....	11	4	15
General ill-health.....		8	8
Heat stroke.....	6		6
Intemperance and other excesses.....	22	1	23
Heredity.....	20	21	41
Injury to head.....	1	1	2
La grippe.....		3	3
Lactation.....		1	1
Masturbation.....	8		8
Menopause.....		5	5
Opium.....		1	1
Old age.....	13	7	20
Overwork.....	6	7	13
Puberty.....	5	6	11
Syphilis.....	4		4
Total physical.....	99	80	179
<i>Moral.</i>			
Domestic and family troubles.....	3	1	4
Financial reverses.....	4	1	5
Disappointed affections.....		4	4
Grief.....		2	2
Religious excitement.....	3		3
Shock.....		1	1
Worry.....	4	7	11
Total moral.....	14	16	30
Total physical.....	99	80	179
Total moral.....	14	16	30
Unassigned.....	19	23	42
Total.....	132	119	251

TABLE XIII.

COMPLICATIONS OF THOSE ADMITTED.

COMPLICATIONS.	Men.	Women.	Total.
Aphasia.....		1	1
Blindness.....	1	1	2
Bright's disease.....		1	1
Chorea.....	1		1
Epilepsy.....	11	4	15
Hernia.....	6		6
Homicidal.....	10	2	12
Lacerated cervix.....		3	3
Multiple neuritis.....	2	1	3
Paralysis.....	1		1
Phthisis.....		1	1
Procidencia.....		3	3
Syphilis.....	4		4
Suicidal.....	15	21	36
Without complications.....	81	81	162
Total.....	132	119	251

TABLE XIV.

HEREDITY OF THOSE ADMITTED.

HEREDITY.	Men.	Women.	Total.
Insanity in family.....	29	30	59
Insanity not in family.....	55	68	123
Hereditary taint denied.....	48	21	69
Total.....	132	119	251

TABLE XV.

DURATION OF DISEASE BEFORE ADMISSION.

PERIOD.	Men.	Women.	Total.
Under one month.....	30	28	58
One to three months.....	22	17	39
Three to six months.....	18	14	30
Six to twelve months.....	15	17	32
One to two years.....	10	10	20
Two to three years.....	10	10	20
Three to four years.....	8	6	14
Four to five years.....		2	2
Five to ten years.....	6	5	11
Ten to twenty years.....	2	4	6
Over twenty years.....	3	6	9
Unknown.....	10		10
Total.....	132	119	251

TABLE XVI.

AGE WHEN ATTACKED OF THOSE RESTORED.

AGE.	Men.	Women.	Total.
Under fifteen years.....			
From fifteen to twenty years.....	1	1	2
From twenty to twenty-five years.....	5	6	11
From twenty-five to thirty years.....	7	4	11
From thirty to thirty-five years.....	2	5	7
From thirty-five to forty years.....	3	7	10
From forty to forty-five years.....	1	3	4
From forty-five to fifty years.....	5	3	8
From fifty to sixty years.....	6	3	9
From sixty to seventy years.....	7	1	8
Total.....	37	33	70

TABLE XVII.

DURATION BEFORE ADMISSION OF THOSE RESTORED.

DURATION.	Men.	Women.	Total.
Under one month.....	14	13	27
From one to three months.....	10	8	18
From three to six months.....	6	4	10
From six to twelve months.....	2	3	5
From one to two years.....	1	1	2
From two to three years.....	1	2	3
Over three years.....	3	2	5
Total.....	37	33	70

TABLE XVIII.

DURATION OF TREATMENT OF THOSE RESTORED.

DURATION OF TREATMENT.	Men.	Women.	Total.
Under one month.....	2	1	3
From one to two months.....	7	4	11
From two to three months.....	9	4	13
From three to four months.....	2	2	4
From four to five months.....	4	4	8
From five to six months.....	4	4	8
From six to nine months.....	2	3	5
From nine to twelve months.....	.....	5	5
From twelve to eighteen months.....	3	2	5
From eighteen to twenty-four months.....	1	1	2
Two years and over.....	3	3	6
Total.....	37	33	70

TABLE XIX.

MENTAL DISEASE OF THOSE RESTORED.

MENTAL DISEASE.	Men.	Women.	Total.
Mania, acute.....	8	7	15
Mania, acute delirious.....	2	.....	2
Mania, alcoholic.....	6	.....	6
Mania, chronic.....	3	2	5
Mania, puerperal.....	.....	1	1
Mania, recurrent.....	3	6	9
Dipsomania.....	5	1	6
Melancholia, acute.....	8	13	21
Melancholia, chronic.....	1	2	3
Insanity pubescence.....	1	.....	1
Primary dementia.....	.....	1	1
Total.....	37	33	70

TABLE XX.

AGE AT DEATH.

AGE.	Men.	Women.	Total.
Under fifteen years.....	1	.....	1
From fifteen to twenty years.....	.....	.....	.....
From twenty to twenty-five years.....	.....	.....	.....
From twenty-five to thirty years.....	.....	5	5
From thirty to thirty-five years.....	.....	2	2
From thirty-five to forty years.....	3	4	7
From forty to forty-five years.....	7	2	9
From forty-five to fifty years.....	7	4	11
From fifty to sixty years.....	8	9	17
From sixty to seventy years.....	4	14	18
From seventy to eighty years.....	9	8	17
Eighty years and over.....	1	1	2
Total.....	40	49	89
Average age at death.....	55	54	54½

TABLE XXI.

FORM OF MENTAL DISEASE OF THOSE WHO DIED.

MENTAL DISEASE.	Men.	Women.	Total.
Mania, acute.....	1	2	3
Mania, acute delirious.....		3	3
Mania, alcoholic.....	1		1
Mania, chronic.....	5	3	8
Melancholia, acute.....		3	3
Melancholia, chronic.....	3	1	4
Dementia, epileptic.....	3	6	9
Dementia, organic.....	2	2	4
Dementia, senile.....	6	8	14
Dementia, terminal.....	10	20	30
Choreic insanity.....		1	1
Epileptic imbecility.....	1		1
Imbecility.....	1		1
Paresis.....	7		7
Total.....	40	49	89

TABLE XXII.

CAUSES OF DEATH.

CAUSES.	MANIA.		MELANCHOLIA.		DEMENTIA.		Total.
	Men.	Women.	Men.	Women.	Men.	Women.	
Mania—							
Acute, with cerebral hemorrhage.....	1						1
Acute, with phthisis.....		1					1
Acute, with pneumonia.....		1					1
Acute delirious, with exhaustion.....		2					2
Acute delirious, with pyæmia.....		1					1
Alcoholic, with multiple neuritis.....	1						1
Chronic, with enteritis.....		1					1
Chronic, with exhaustion.....		1					1
Chronic, with general tuberculosis.....		1					1
Chronic, with esophageal stricture.....		1					1
Chronic, with organic heart disease.....		1					1
Chronic, with phthisis.....		1					2
Chronic, with pulmonary hemorrhage.....		1					1
Melancholia—							
Acute, with exhaustion.....				1			1
Acute, with phthisis.....				2			2
Chronic, with hepatitis.....			1				1
Chronic, with organic heart disease.....			1				1
Chronic, with phthisis.....				1			1
Chronic, with cerebral congestion.....			1				1
Dementia—							
Epileptic, with enteritis.....						1	1
Epileptic, with exhaustion.....					3	2	5
Epileptic, with pneumonia.....						3	3
Organic, with exhaustion.....						2	2
Organic, with organic heart disease.....						1	1
Organic, with strangulated hernia.....						1	1
Senile, with cerebral hemorrhage.....						1	1
Senile, with enteritis.....						1	1
Senile, with exhaustion.....					4	4	8
Senile, with hepatic and renal disease.....					1	1	2
Senile, with pneumonia.....						2	2
Terminal, with cerebral embolism.....						1	1
Terminal, with cerebral effusion.....						1	1
Terminal, with cholera morbus.....						1	1
Terminal, with enteritis.....						1	1
Terminal, with exhaustion.....					2	2	4
Terminal, with gastric ulcer.....						1	1
Terminal, with heat stroke.....						1	1
Terminal, with organic heart disease.....					1	1	2
Terminal, with phthisis.....					2	2	4
Terminal, with pneumonia.....					3	11	14
Choreic insanity, with enteritis.....						1	1
Epileptic imbecility, with exhaustion.....						1	1
Imbecility, drowned.....						1	1
Paresis, with cerebral hemorrhage.....						2	2
Paresis, with exhaustion.....						4	4
Paresis, with organic heart disease.....						1	1
Total.....	7	8	2	4	31	37	68

TABLE XXIII.

SHOWING YEARLY INCREASE IN POPULATION SINCE OPENING OF INSTITUTION.

YEARS.	Men.	Women.	Total.
October 31st, 1876.....	159	183	342
October 31st, 1877.....	216	229	445
October 31st, 1878.....	227	253	480
October 31st, 1879.....	248	279	527
October 31st, 1880.....	277	309	586
October 31st, 1881.....	310	331	641
October 31st, 1882.....	321	346	667
October 31st, 1883.....	330	377	707
October 31st, 1884.....	371	374	745
October 31st, 1885.....	415	414	829
October 31st, 1886.....	415	441	856
October 31st, 1887.....	434	439	873
October 31st, 1888.....	463	441	904
October 31st, 1889.....	427	430	857*
October 31st, 1890.....	450	436	886
October 31st, 1891.....	455	443	898
October 31st, 1892.....	471	478	949
October 31st, 1893.....	509	500	1,009

* One hundred patients transferred to Essex County Asylum.

On October 31st, 1892, the end of the previous fiscal year, there remained in the Hospital 949 patients—471 men and 478 women—of which number 115 were private patients.

The admissions for the fiscal year ending October 31st, 1893, number 251—132 men and 119 women. These are classified as follows: Indigent, 182; private, 65; State, 4.

Those patients who are committed by order of the Court of Common Pleas, and whose expenses are borne jointly by the county and the State, are termed "Indigent," while those patients who are committed upon the certificates of two physicians, and whose expenses are paid by their guardians, relatives or friends, are termed "Private." Those patients committed under Rev. Sup., p. 967, §§ 6, 7, who are maintained entirely by the State, are so designated.

The residence of those admitted is as follows: Camden county, 1; Bergen county, 17; Essex county, 12; Hudson county, 46; Hunterdon county, 21; Morris county, 30; Middlesex county, 2; Passaic county, 51; Sussex county, 6; Union county, 40; Warren county, 14; New York, N. Y., 11.

Consulting Table V., we find that of the admissions 93 were of foreign birth and 5 whose nativity was unknown, while 153 patients were born in the United States, of which number 104 were natives of New Jersey.

The whole number of patients under treatment was 1,200—603 men and 597 women. Of this number 28 were colored—10 men and 18 women. The daily average for the year was 972.09, and the daily average since April 1st was 979.30.

By reference to Table X., a detailed statement of the forms of mental diseases of those admitted will be found, and it will be noted that they may be grouped as follows: Manias, 95; melancholias, 67; dementias, 52, and other special forms 25, making a total of 251. A point of much interest to the student of statistics is that these may be subdivided as follows:

Cure highly improbable.....	Chronic mania.....	20	}
	Chronic melancholia.....	13	
	Serious complications.....	6	
	Total	39	
Hopelessly insane	Epileptic mania.....	3	}
	Organic dementia.....	3	
	Epileptic dementia.....	8	
	Senile dementia.....	27	
	Terminal dementia.....	9	
	Circular insanity.....	1	
	Choreic insanity.....	1	
	Imbecility.....	8	
	Paranoia.....	5	
	Paresis.....	11	
	Total	76	
	Grand total.....	115	

Therefore, of the 251 patients admitted, 115, by reason of their mental disease or incurable complications, were manifestly beyond reach of curative treatment, leaving only 136 apparently susceptible to curative methods. The number discharged "recovered," 70, is 51 per cent. of the 136 patients admitted in which any probability of being restored existed. Adding the 21 discharged as "much improved," we have 91, making 67 per cent. who were cured or much improved when discharged.

The complications of those admitted were as follows: Aphasia, 1;

blindness, 2; Bright's disease, 1; chorea, 1; epilepsy, 15; hernia, 6; homicidal, 12; lacerated cervix, 3; multiple neuritis, 3; paralysis, 1; phthisis, 1; procidentia uteri, 3; syphilis, 4; suicidal, 36; without complications, 162.

Civil condition of the admissions was: Single, 101; married, 118; widowed, 32.

The discharges during the year number 102, and the deaths 89, making a total of 191—94 men and 97 women. Of the 102 discharges—54 men and 48 women—70 were restored; 21 improved, and 11 unimproved. Of the 89 deaths, 40 were men and 49 were women.

The percentage of deaths, based on the whole number under treatment, was 7.4, which is low when we take into consideration the epidemic of pneumonia through which we passed last spring. By reference to Table XX. it will be seen that the majority were over 60 years of age.

The percentage of recoveries, based as usual on the number of patients admitted during the year, was 27.9.

Of the duration of treatment of those restored, the shortest period of time in the Hospital was thirteen days and the longest period twelve years.

By reference to Table XXI it will be seen that the mental diseases of those who died are as follows: Acute mania, 3; acute delirious mania, 3; alcoholic mania, 1; chronic mania, 8; acute melancholia, 3; chronic melancholia, 4; epileptic dementia, 9; organic dementia, 4; senile dementia, 14; terminal dementia, 30; choreic insanity, 1; epileptic imbecility, 1; imbecility, 1; paresis, 7. The average age of those who died was: Men, 55; women, 54; average of total, 54½.

About March 1st, an epidemic of croupous pneumonia and la grippe broke out in the female department, and was mostly confined to that part of the house. It proved fatal in a number of old persons and epileptics.*

About one-fourth of the population of the entire house were attacked by one or the other of these two diseases. The cause of the epidemic and why it should confine itself to one wing of the Hospital almost entirely, we have been unable to satisfactorily ascertain.

* Dr. Gorton's paper on "Pneumonia among the Insane" is a thorough and carefully-written account of the epidemic.—*Medical News*, August 5th, 1893.

There were no suicides during the year. One male patient while working in the Warden's department was drowned by accident. He was an imbecile and had been in the Hospital for years, and had been accustomed to carrying drinking-water from the springs for more than two years. He had no suicidal tendencies, and a careful investigation of the case seems to leave no doubt as to the drowning being accidental. On his way to the spring he stopped along the reservoir and evidently tried to catch his bucket full of water from an iron pipe through which water empties into the reservoir. The bank being abrupt at this point, he lost his equilibrium and fell in.

LIMITED ACCOMMODATIONS.

On August 17th, 1876, this institution was formally opened for the reception of patients, with a normal capacity of 800, this meaning the occupation of the fourth floor of the wings. It was thought at that time the buildings would afford ample accommodation, with the Trenton Asylum (now State Hospital), for the insane of the State for at least the remainder of the century; but such has not proven to be the case. By reference to Table XXIII. it will be seen that the insane population of the institution has been steadily increasing year by year at the rate of 40 per year, until on October 10th, 1893, the census was 1,025, or 225 in excess of the normal capacity of the house, and there is no valid reason for concluding there will in the future be any abatement in this steady increase. Statistics satisfactorily demonstrate that insanity is increasing in a much more rapid ratio than is the State's general population.

The crowded condition of our wards often amounts to an inconvenience bordering upon a calamity. It renders classification next to impossible; it often makes the injudicious placing of two patients in one room unavoidable, and renders the proper placing of the acutely insane a problem difficult and perplexing.

When we have patients sick from what are commonly termed "physical ailments," we are at a loss how to provide for them the necessary room. The tables in our dining-rooms are crowded to a condition of inconvenience that robs the eating hour of any home-like appearance. Without further elaborating the distressing features of this problem, it can be summed up in this: Our overcrowded condition in many ways strongly tends to defeat the paramount object of

the institution—that of giving to every patient a fair opportunity to be restored to good health and mental stability, and when this, by nature of his disease, is impossible, to make him comfortable by good hygienic conditions and give him reasonably compatible associates and surroundings. Daily, patients are brought to us with the papers of commitment, and we know of no authority to refuse them. This state of affairs calls for prompt attention, and demands of the commonwealth that she make further provision for the proper care of the insane.

At the annual meeting of your Board in November, 1892, Dr. Eliot Gorton was promoted to the position of First Assistant Physician, left vacant by the resignation of Dr. W. P. Spratling, which took effect October 1st, 1892.

Dr. L. J. Blake was promoted to the position of Second Assistant Physician, and Dr. Thos. P. Prout, to the position of Third Assistant Physician and Pathologist, leaving the position he occupied vacant.

I am of the opinion it would be promoting the best interests of the Hospital to increase the medical staff. At no time since 1884 has the number of physicians been so small as during the Hospital year just closed, and never was there so much work or so many patients in the institution. From 1885 to 1888, the staff consisted of five physicians with an average of 850 patients. In 1889 and 1890, it is consisted of six physicians for the same number of patients. To-day, with over 1,000 patients, the medical staff consists of four physicians, including the Medical Director and Pathologist.

AMUSEMENTS AND ENTERTAINMENTS.

The advancement made during the year in supplying outdoor amusements has been highly gratifying. A large number of patients have been entertained and benefited by them.

The tennis courts and ball field, which have been nicely laid out, have been greatly appreciated.

The multiform advantages to be derived from the systematic employment of the minds and energies of the insane are well known and universally admitted by alienists and all persons familiar with the care of this unfortunate class, but while the earnest physician may be ever cognizant of this, he is not always able to judiciously apply it. Like in the outside world, patients differ in their tastes and

inclinations. What entertains one will disgust another, that which will stimulate a few to exercise their sluggish minds and muscles may have no fascination for others, but by a reasonable variety of sports, amusements and light systematic work, the majority will be entertained and benefited. This subject, though familiar to many, is none the less interesting and important.

A brief mention of why so much stress is laid upon the methodical employment and entertainment of the patients, and some of the helpful factors in it, will not be out of place, and to many may prove interesting.

Physical exercise, properly regulated, tends to induce healthful sleep. In sleep we get brain-rest, which is essential to normal mental activity as well as to the repair of any impairment of bodily function. When to judiciously-selected exercise we can add pure air and sunshine with pleasant recreation and diversion, we have gone far toward placing about our patients the conditions most favorable to recovery.

When sleep can be brought about by outdoor exercise it is always more satisfactory than that induced by drugs, and more invigorating and beneficial to the patient.

The patient who sleeps quietly is not the only gainer by his peaceful slumbers. His associates upon the ward in adjoining rooms who would be disturbed by his restlessness and noise are permitted to sleep. So the advantages from the sleep-giving qualities of exercise at once become evident. Again, from the same influences, the appetite is improved, digestion is made easier, the sluggish circulation so peculiar to a large part of the patients of every insane hospital is stimulated, the patient is quietly led away from his vagaries, his delusions, his imaginary sorrows, his air castles, and is introduced to something entertaining, interesting and calculated to direct his thoughts in healthful and agreeable channels, and, whether an interested spectator or an active participant, the results will be favorable.

In many cases repair, mental and physical, follows promptly after a course of this form of treatment.

The fancy-dress ball, which came off February 22d, 1893, was a most pleasurable affair. The manner in which it always absorbs the attention of our patients for weeks before it takes place is more beneficial than the ball itself.

The brass band and orchestra have done good work and added much to the pleasure of our patients.

The weekly card parties have been well attended and very much enjoyed.

PATHOLOGICAL DEPARTMENT.

It is hardly necessary for me to devote any time to the consideration of the pathological laboratory and Dr. Prout's work, as his report of thirty-eight autopsies speaks for itself. The diligent manner in which he has prosecuted the work has been highly gratifying to me, but owing to our limited medical staff he has had to do the work of Third Assistant in addition to doing all the autopsies and his laboratory work.

The Bevan-Lewis freezing microtome has found favor with us because, by its use in conjunction with liquid carbon dioxide, we are enabled to promptly prepare the specimens and give them studious attention while all the interesting features of our cases are fresh in our memory. In five minutes after the autopsy is performed we are able, by the Bevan-Lewis method, to have a specimen fixed; and ready for microscopical examination in two hours. The freezing by the use of the carbon dioxide requires about twelve seconds.

By Weigert's method, where the chrome salts are used, it requires in the neighborhood of four weeks to prepare a specimen, while by the Golgi silver method it requires from twenty-four hours to four days.

By many advocates of the Weigert and Golgi methods and their various modifications objections are made to the Bevan-Lewis method, and among them the assertion that many of the phenomena found in specimens so prepared are almost solely due to the sudden freezing, &c. These objections have not to me seemed well founded. That there is a marked difference at times in specimens of the same tissue from the same autopsy when prepared, one by the Bevan-Lewis and the other by the Weigert or Golgi method, is more than probable, but the fact that there is a difference is far from conclusive evidence as to where the fault lies.

By the protracted methods of hardening and preparing, there are two important points not to be lost sight of, viz. :

1st. It is possible and in fact true that the central portions of specimens treated with solutions of chrome salts or other like fluids, undergo putrefactive changes before they are permeated and acted upon by the fluid.

2d. A decrease in volume of the specimens is generally, if not always noticeable, which must mean to some degree a disturbance of the delicate relation of their structures.

These two adverse conditions might alone account for the absence of phenomena found often by the Lewis method of prompt freezing, such as a more frequent and numerous existence of vacuolation of the nerve cell and its nucleus.

By the Lewis method there may be a slight change in structure of the specimen by freezing, but not such as would not re-adjust itself a few seconds later when it is thawed.

While we have been pleased with the Lewis method, our interest has not flagged in the various other means of preparing our specimens, feeling that by giving all methods a fair and continuous trial, and making careful comparisons, the best attainable results will be reached.

PURCHASES AND IMPROVEMENTS, ETC.

The purchase of about sixty-five volumes of medical works and the binding of seventy-five volumes of medical periodicals, form, with the few old volumes already in the hospital, a respectable nucleus for a library, something long needed here. By adding a few books well selected, each year, the library can be built up, a matter of importance that should not be forgotten or neglected.

The Carl Zeiss microscope, purchased in the early part of the year, is a superior instrument, and is giving entire satisfaction.

During the entire year the Warden has kept the painters looking after the painting of the wards; in this way neatly-painted walls and decorated alcoves have taken the place of blank halls, adding greatly to the appearance of our house, and at the same time pleasing the sick by making more cheerful their surroundings, the place of their abode.

New carpets have supplanted old ones, and some found place where carpet had not lain before.

SUBJECTS OF SPECIAL INTEREST.

A matter extremely annoying and attended with unpleasant results, is the frequent reception of patients unaccompanied by any one capable of giving definite information as to the family history, age, civil condition, occupation, habits or the development of the disease of the person committed to us for treatment. It is far from infrequent to have a patient brought to the Hospital by a person who knows nothing but the fact that he has been deputized to deliver the person over to the authorities of the Hospital. To one deputy who was unable to give any history of the person he had brought to us, I asked why he had come without first learning something of his case. He answered "Here, Doctor, are my credentials," pointing to the court order, or commitment papers.

This manner of dealing with matters of such vital importance to the sick, depriving the physician of information necessary to an intelligent treatment of the patient, and the institution of desirable records and statistics, is as plainly unjust as it is in the great majority of the cases unwarranted. The only remedy that suggests itself is an act of the Legislature requiring the physicians upon whose testimony or certificates the patient is committed to an institution for treatment, to make out a full and complete account of the patient, giving his name, address, age, civil condition, family history, habits, occupation, supposed cause of the attack, with a concise statement of the symptoms upon which his diagnosis of *insanity* is based, this written statement to accompany each patient, and be held as one of the papers requisite to the admission of the patient.

It is almost a daily occurrence that female indigent patients are sent to us in the care of a male attendant. In fact it rarely happens, if at all, that a female attendant is ever sent by the county authorities, while it is not difficult to understand that there are numerous conditions liable to arise that could be consistently met and given attention only by a woman. When it is considered that from many of the counties the route is more or less circuitous, and often requiring the better part of a day to make the trip, it would be at least humane that statutory provision be made looking after this matter.

ACKNOWLEDGMENTS.

On December 9th, 1892, Mr. Pearsall, editor of the Union County Standard, gave a most enjoyable entertainment in the amusement hall. A large number of patients were present, and were greatly pleased with Mr. Pearsall's humorous songs and recitations.

We acknowledge with pleasure the receipt of a box of oranges for the patients, sent by Mr. Rexford, of Montclair, N. J.

For a large number of periodicals—Harper's, Century, North American Review, Forum, Scribner's, London Graphic, &c., which have been a source of much gratification to a large number of patients.—our thanks and acknowledgments are due to the Morristown Club, Dr. H. A. Buttolph, Short Hills, N. J.; Mr. Albert H. Vernam, Morristown, N. J., and Mr. George H. Richards, Dover, N. J.

The chapel services have been kept up regularly, the following gentlemen officiating in turn: Rev. Drs. Buckley and Erdman, and the Rev. Messrs. Adams, Thompson and Halloway, of Morristown.

Rev. Father Egan, of Morris Plains, celebrated high mass in October, and has consented to hold service every month.

To all these gentlemen I wish to express my appreciation of their visits and services.

The affairs of the medical and business departments have been conducted without friction. It gives me pleasure to make record of the Warden's business-like methods and always courteous manner in the treatment of matters of mutual interest affecting our respective departments.

My assistants have exhibited a devotion to their work, the interests of the institution, and comfort of the patients, that has been highly gratifying to me. Their work, often onerous and unpleasant, has been prosecuted cheerfully and skillfully, and it gives me pleasure to record my appreciation of their earnest efforts.

Our pharmacist has maintained his excellent reputation for carefully and promptly dispensing the medicine, and in the discharge of the many duties of his position.

The Supervisors have performed their duties to my entire satisfaction. They have been watchful of the details of ward work and discipline, and have done their part faithfully in making a success of the administration of the affairs of the Medical Department.

I am pleased to record that the organization of the work of the

Medical Department is exceptionally good, and the duties of every officer and subordinate have been kept clearly defined, so that their faithful execution insures at all times such an administration of the affairs of the department as can only result in the promotion of the best and purest interests of the hospital.

I have endeavored, as outlined in the close of my last report, to keep an eye constantly upon, and bend my best energies to the furtherance of the noblest object of the institution as a hospital for the treatment and custody of those bereft of their reason, and not to be swerved from the line of my duty by outside or extraneous influences.

It is extremely gratifying to me that in you, gentlemen, I have ever found willing counsel and support in the discharge of my duties; for this mark of appreciation and confidence I am deeply grateful.

Again acknowledging the merciful hand of Divine Providence, I respectfully submit this report.

October 31st, 1893.

B. D. EVANS,
Medical Director.

PATHOLOGICAL SUPPLEMENT.

REPORT IN PATHOLOGY.

To the Medical Director :

During the past year thirty-eight autopsies have been done. These comprised a fair representation of the more common forms of mental disease, the great majority of which were of chronic insanity.

The tables of the report are prepared in order to present in concise form, some of the more interesting facts in regard to the work done. Two of the autopsies included in these tables properly belong to last year's report, as they were done before the beginning of the present year ; but inasmuch as no report was made of work done last year they are incorporated here.

TABLE I.

No.	Age.	Sex.	Autopsy number of hours after death.	Mental Disease.	Cause of Death.	Duration of Mental Disease.
98	88	Male	16 hours...	General paralysis.....	Exhaustion.....	6 years.
99	26	Male .....	.....	Epileptic dementia. ...	Epilepsy (status epilepticus).....	22 years.
100	45	Male	16 hours...	General paralysis.....	Organic heart disease.....	2 years.
101	54	Male	18 hours...	Terminal dementia. ...	Chronic diffuse nephritis.....	18 years.
102	44	Male	18 hours...	Terminal dementia. ...	Acute enteritis. Fatty infiltration of heart.....	16 years.
103	80	Female ...	24 hours...	Terminal dementia. ...	Exhaustion.....	16 years.
104	58	Female ...	2½ hours...	Terminal dementia. ...	Exhaustion.....	16 years.
105	45	Male .....	.....	Epileptic dementia.....	Epilepsy (status epilepticus).....	15 years.
106	76	Female ...	9 hours...	Chronic mania.....	Pneumonia.....	27 years.
107	67	Female ...	24 hours...	Melancholia (recurrent).	Exhaustion.....	11 weeks (third admission).
108	36	Male	20 hours...	General paralysis.....	Exhaustion.....	16 months.
109	58	Female ...	5 hours...	Terminal dementia.....	Pneumonia.....	8 years.
110	49	Female ...	18 hours...	Acute delirious mania ..	Exhaustion.....	5 weeks (second admission).
111	56	Male	17 hours...	General paralysis.....	Strangulated inguinal hernia	3 years.
112	45	Male	18 hours...	General paralysis.....	Exhaustion.....	1 year.
113	75	Female ...	24 hours...	Senile dementia.....	Pneumonia.....	6 years.
114	50	Female ...	4 hours...	Chronic mania.....	Pneumonia. Gastric ulcer.....	14 years.
115	49	Female ...	5 hours...	Terminal dementia.....	Pneumonia. Organic heart disease.....	9 years.
116	30	Female ...	7 hours...	Epileptic dementia.....	Exhaustion.....	9 years.
117	37	Male	12 hours...	Acute delirious mania ..	Exhaustion.....	3 weeks.
118	48	Female ...	2 hours...	Chronic mania.....	Organic heart disease.....	23 years.
119	56	Male	36 hours...	General paralysis.....	Exhaustion.....	3 years.
120	67	Female ...	2 hours...	Terminal dementia.....	Pneumonia.....	12 years.
121	55	Male	9 hours...	Terminal dementia.....	Exhaustion.....	3 years.
122	54	Male	3 hours...	Chronic melancholia.....	Exhaustion.....	2 years.

TABLE I.—Continued.

No.	Age.	Sex.	Autopsy number of hours after death.	Mental Disease.	Cause of Death.	Duration of Mental Disease.
123	37	Female ...	1 hour.....	Chronic melancholia.....	Exhaustion.....	3 years.
124	46	Male	16 hours...	Terminal dementia.....	Exhaustion.....	4 years.
125	51	Female ...	10 hours...	Acute delirious mania ..	Septicæmia.....	1 year.
126	50	Male	10 hours..	Epileptic dementia.....	{ Cerebral hemorrhage. Epilepsy (status epi- } lepticus).....	5 years.
127	44	Male	15 hours...	Alcoholic dementia.....	Acute phthisis.....	6 weeks.
128	50	Male	10 hours...	Chronic melancholia.....	Acute hepatitis.....	3 years.
129	25	Female ...	10 hours...	Acute melancholia.....	Chronic phthisis.....	2 months.
130	35	Male	5 hours...	Terminal dementia.....	Chronic phthisis.....	5 years.
131	55	Female ...	6 hours...	Chronic mania.....	Acute enteritis.....	12 years.
132	69	Female ...	7 hours...	Choreic insanity.....	Acute enteritis.....	9 years.
133	48	Male	12 hours...	General paralysis.....	Exhaustion.....	4 years.
134	69	Male	30 hours...	Senile dementia.....	Hepatic cirrhosis. Chronic nephritis.....	1 year.
135	65	Male ...	12 hours...	Senile dementia.....	Chronic diffuse nephritis. Exhaustion.....	2 years.

There is very little in Table I. that I need comment on. It is to be deprecated that so much time necessarily elapsed after death before the greater number of the autopsies were performed, but that cannot be remedied under existing laws and the present state of public opinion. The following table of the number of each of the mental diseases mentioned above may be of interest, as follows:

Acute delirious mania.....	3 cases.
Choreic insanity.....	1 case.
Chronic mania.....	4 cases.
Epileptic dementia.....	4 cases.
General paralysis.....	7 cases.
Melancholia (acute and chronic).....	5 cases.
Acute alcoholic dementia.....	1 case.
Terminal dementia.....	13 cases.

It will be noted that very few of the above were cases of acute insanity, all except three being of the chronic insane. The duration of mental disease varied accordingly, from three weeks (the shortest period) to twenty-seven years (the longest period). In fifteen of the autopsies the lesions found in the organs of the body, aside from the brain, were deemed insufficient to have caused death. This is not surprising when the duration of mental disease is taken into consideration. In all of the cases of epilepsy, and most of the cases of general paralysis, no lesion of importance was apparent in any of the organs aside from the brain, most of the cases of epilepsy dying during a period of status epilepticus.

The following compilation from the records of the gross lesions found in other organs in each of the autopsies performed will be of interest.

ACUTE DELIRIOUS MANIA.

No. 110. Not examined (by request).

No. 117. No lesion worthy of note.

No. 125. Heart, mitral and tricuspid valves thickened. Lungs congested. Kidneys friable, capsules adherent. Small cyst of parovarium.

CHOREIC INSANITY.

No. 132. Lungs, tubercular inflammation of upper portion of both. Heart, all the valves thickened except the pulmonary. Kidneys,

capsules very adherent, cortex thin and anæmic, kidney substance friable. Small intestine greatly congested, mucous lining hemorrhagic. Mesenteric and agminated glands swollen.

CHRONIC MANIA.

No. 106. Kidneys, capsules adherent, number of small cysts and amyloid degeneration in cortex. Ovary (left) cystic. Left lung consolidated (pneumonia). Heart, fatty infiltration, all the valves thickened.

No. 114. Lungs, right lower lobe consolidated (pneumonia). Stomach, ulcer one and one-half inches in diameter at pyloric extremity. Heart, aortic valves atheromatous, other valves thickened.

No. 118. Liver, nodular and hard. Kidneys, capsules adherent, cortex pale and thin, small cyst in right. Lungs, cheesy nodules scattered throughout both. Heart, dilated, valves thickened and incompetent.

No. 131. Lungs, number of hard bodies scattered throughout both, varying in size from a hickory nut to a hen's egg (sarcomata). Heart, mitral and aortic valves thickened (latter calcareous). Uterus, multiple fibroid growths. Kidneys, capsules adherent, cortex thin and pale. Stomach and intestines congested.

EPILEPTIC DEMENTIA.

No. 105. No lesion worthy of note.

No. 116. Lungs, few cheesy nodules scattered throughout both.

No. 126. Heart, mitral and aortic valves thickened. Kidneys, capsules slightly adherent. Brain, hemorrhage in right occipital region involving about four cubic centimeters of brain substance.

No. 99. No lesion worthy of note.

GENERAL PARALYSIS.

No. 98. No lesion worthy of note.

No. 100. Heart, much dilated, valves thickened. Lungs, both apices tubercular.

No. 108. Heart, fatty infiltration. Kidney, small cyst in left.

No. 112. No lesion worthy of note.

- No. 111. Strangulated inguinal hernia.
 No. 119. Kidneys, capsules slightly adherent, small cyst in left.
 No. 133. No lesion worthy of note.

MELANCHOLIA.

- No. 107. Heart, valves thickened. Lungs, both apices partly consolidated.
 No. 122. Heart, valves thickened. Atheromatous patches in aorta.
 No. 128. Heart, mitral valves thickened. Stomach, dilated, mucous lining inflamed. Liver, small abscesses scattered throughout great lobe. Small stone in ductus communis, larger one in common bile duct.
 No. 129. Lungs, tubercular inflammation on both sides. Kidneys, capsules adherent, cortex thin and pale.
 No. 123. Uterus, three fibroids. Heart, tricuspid valve thickened, wall of ventricle thin.

ACUTE ALCOHOLIC DEMENTIA.

- No. 127. Lungs, cavities in both apices, remaining portion consolidated. Kidneys, capsules slightly adherent, cortex thin. Stomach, dilated. Liver, fatty infiltration.

TERMINAL DEMENTIA

- No. 101. Right kidney cystic, capsule adherent.
 No. 102. Heart, fatty. Small intestine congested.
 No. 103. Not examined.
 No. 104. Not examined (by request).
 No. 109. Liver, fatty and friable, two stones in gall bladder. Right lung consolidated (pneumonia).
 No. 113. Lungs, lower lobes consolidated (pneumonia). Heart, mitral and tricuspid valves thickened, wall of ventricle thin and covered with thick layer of fat.
 No. 115. Lung, left lower lobe consolidated (pneumonia).
 No. 120. Liver, large and fatty. Right lung consolidated (pneumonia). Right heart dilated.

- No. 121. Left lung, cavity in upper portion, cheesy nodules scattered throughout.
 No. 124. Lungs, pleuræ very adherent. Heart, mitral and tricuspid valves slightly thickened.
 No. 130. Heart, mitral and aortic valves thickened, one segment of aortic valve perforated. Right lung tubercular.
 No. 134. Liver, hardened and nodular, edges thin and sharp. Kidneys, small and lobulated, surface roughened, cortex thin and anæmic.
 No. 135. Heart, very small. Kidneys very small and pale, capsules adherent. Cortex, very thin, large areas showing extreme atrophy.

The above compilation is very much condensed, perhaps too much so to be of any service outside of the purpose for which I intended it, namely, to show the character and relative frequency with which lesions in the organs aside from the brain are met with, in the various forms of mental disease. Reference is made in the above to gross lesions only, as it has not been possible to make systematic microscopical examinations of all the organs of the body, in any except those of the last half of the year. The autopsies in the early portion of the year were, therefore, for this and other reasons, incomplete.

In looking over the above, one is impressed with the greater relative frequency of gross lesions, in the cases of chronic mania and melancholia, than in any other forms of mental disease.

The following table was prepared in order to show the relative frequency of some of the more prominent gross appearances of the brain and membranes:

TABLE II.

Number.	SKULL.	DURA MATER.	PIA MATER.	BRAIN SUBSTANCE.		
				Consistence.	Blood-Supply.	Other Conditions.
98	Thick, dense and heavy.	Adherent to skull.	Edematous and opaque	Diminished	Anæmic	Cortex thin. Convulsions atrophied.
99	Thick, dense and heavy.	Adherent to skull.	Opaque	Diminished	Anæmic	
100	Slight asymmetry.	Adherent to skull and pia	Opaque	Diminished	Anæmic	Ependyma thickened.
101	Normal.	Normal	Edematous and opaque	Diminished	Anæmic	Echymotic spots in membranes.
102	Thickened.	Normal	Edematous and opaque	Diminished	Congested	Meningeal vessels engorged. Cortex thin.
103	Normal.	Adherent to skull.	Edematous and opaque	Normal	Anæmic (slight)	Convulsions atrophied. Cortex thin.
104	Thick and heavy.	Adherent to skull.	Edematous and opaque	Increased	Normal	Convulsions atrophied. Cortex thin. Localized softening, left side.
105	Thickened.	Normal	Edematous and opaque	Normal	Congested	Convulsions atrophied (parietal)
106	Thick, dense and heavy.	Adherent to skull.	Edematous and opaque	Normal	Normal	Convulsions atrophied. Vessels atheromatous.
107	Thin.	Normal	Edematous and opaque	Normal	Congested	Echymotic spots throughout membranes. Choroid plexuses edematous.
108	Normal.	Thickened and congested	Edematous and opaque	Normal	Congested	Meningeal vessels engorged. Excess of fluid in ventricles.
109	Thin and light.	Normal	Edematous and opaque	Diminished	Anæmic	Cortex thin. Convulsions atrophied.
110	Normal.	Normal	Edematous	Diminished	Congested	Choroids edematous and congested. Excess of fluid in ventricles.
111	Normal.	Normal	Edematous and opaque	Normal	Congested	Convulsions atrophied. Meningeal vessels engorged.
112	Normal.	Congested	Very opaque	Normal	Anæmic	Meningeal vessels engorged. Excess of fluid in ventricles.
113	Thick, dense and heavy.	Adherent to skull.	Congested	Normal	Anæmic	Convulsions atrophied. Meningeal vessels engorged. Excess of fluid in ventricles.
114	Dense and heavy.	Normal	Opaque	Diminished	Anæmic	Cortex thin. Depression of external table over left parietal eminence.
115	Thick, dense and heavy.	Normal	Congested	Diminished	Congested	Convulsions atrophied.
116	Thick, light and porous.	Thickened (slight)	Edematous and opaque	Increased	Anæmic	Cortex thin.
117	Thick, dense and heavy.	Congested	Congested and edematous	Normal	Congested	Meningeal vessels engorged.
118	Very thick, dense and heavy.	Normal	Normal	Normal	Normal	
119	Thick, dense and heavy.	Normal	Edematous and opaque	Diminished	Anæmic	Cortex thin.

TABLE II.—Continued.

Number.	SKULL.	DURA MATER.	PIA MATER.	BRAIN SUBSTANCE.		
				Consistence.	Blood-Supply.	Other Conditions.
120	Thickened.	Thick and adherent	Edematous and opaque	Diminished	Anæmic	Cortex thin.
121	Very dense.	Thick and adherent	Edematous	Diminished	Normal	Convulsions atrophied. Cortex thin.
122		Normal	Adherent and opaque	Increased	Normal	Vessels atheromatous.
123	Normal.	Normal	Edematous and adherent	Diminished	Anæmic	
124	Very dense.	Adherent	Edematous and opaque	Diminished	Normal	Convulsions atrophied. Excess of fluid in ventricles.
125	Thick and heavy.	Normal	Edematous	Normal	Congested	Meningeal vessels engorged.
126	Thick and light.	Congested	Normal	Normal	Congested	Hemorrhage in right occipital region.
127	Thickened.	Normal	Edematous	Diminished	Normal	Excess of fluid in ventricles.
128	Thin and light.	Adherent to pia and brain	Edematous	Diminished	Anæmic	Choroid plexuses edematous.
129	Thick, dense and heavy.	Thickened	Edematous	Diminished	Normal	Cortex thin. Convulsions atrophied.
130	Greatly thickened, dense and heavy.	Slightly thickened	Slightly adherent	Normal	Anæmic	
131	Dense and heavy.	Thickened	Edematous	Normal	Anæmic	Cortex thin. Convulsions atrophied.
132	Thin and light.	Adherent to skull	Edematous	Diminished	Anæmic	
133	Thickened.	Congested	Edematous and opaque	Diminished	Congested	Convulsions atrophied. Cortex thin.
134	Not examined, by request					
135	Normal.	Thickened and congested	Normal	Diminished	Anæmic	Cortex thin. Convulsions atrophied. Vessels atheromatous.

The frequency with which lesions of more or less import are met with in the skull is worthy of note, over seventy per cent of the cases showing changes in this regard.

Dura mater was recorded as excessively adherent only in those cases where an extra effort was necessary in removing the skull cap, and adherent to the brain only in those cases where it could not be separated from the pia without tearing the brain substance.

The frequency with which opacity of the pia was found is worthy of note, over eighty per cent. presenting this lesion to a greater or less degree. The pia mater was also œdematous in about seventy per cent. of the cases.

Softening.—In eighteen of the cases recorded above (about fifty per cent.), the consistence of the brain substance was diminished; in the other nineteen it was normal or increased. The frequency with which this lesion occurs is accounted for in a great measure by the fact that the great majority of these fatal cases were of the chronic insane, very many of them having been of years' duration. The degree of softening varied greatly from very slight diminution of consistence to the opposite extreme, where great care was necessary in handling the brain to prevent damaging it. Softening may result from post mortem change. As a fact, however, I am convinced that it was a result of cerebral disease in the great majority of these cases. This opinion is materially strengthened by referring to Table I., where the time elapsing between death and the time of the autopsy is found to bear no relation to the consistence of the cerebral mass.

It would seem, therefore, that we may consider general cerebral softening, aside from any putrefactive process, as a lesion of great importance in insanity. This would seem a natural conclusion, when one considers the hygroscopic properties of the gray matter (favoring œdema), the frequency of fatty changes in the cells of the cortex, and the frequency of vascular disease interfering seriously with the nutrient supply; besides, the brain is liable, as are the other tissues of the body, to inflammatory states which seriously impair it.

Of the other items of the table I need mention only one or two.

Atrophy of the convolutions was a lesion of prominence and great frequency. It was most often associated with the frontal and parietal segments of the cortex, and quite frequently confined to the frontal alone. General atrophy of the convolutions was quite common, the cerebral mass not filling out the cranial cavity, as it properly should.

PLATE I.

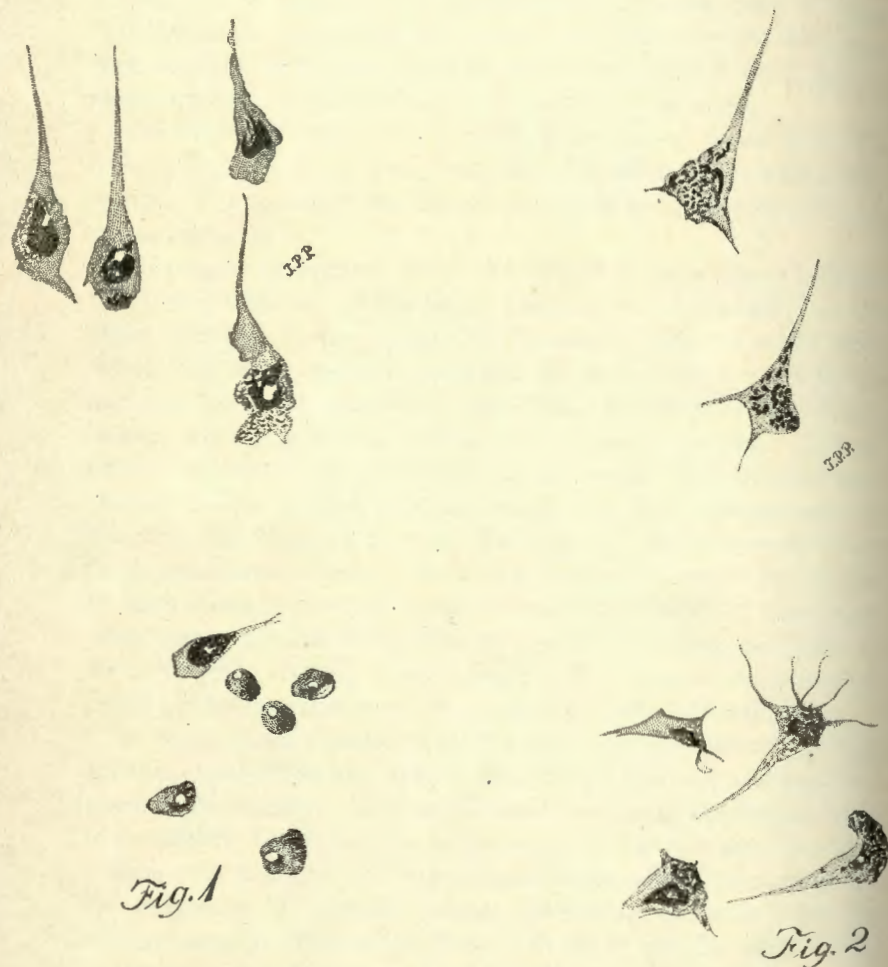


Fig. 1—Some phases of nuclear vacuolation with granular degeneration of portions of cell body; nucleus also showing tendency toward fragmentation.

Fig. 2—Pigmentary degeneration (case of acute delirious mania).

The association of this lesion with cases of chronic insanity is a matter of interest; in this connection, also, the relation that diseased arterial tunics (also a frequent lesion in chronic insanity and associated with atrophy) bears to this lesion, is an interesting question. Whether the atrophy depends for its existence upon the diseased condition of the vessels, or whether the condition of the vessels is secondary to the cortical lesion, is a problem that we must leave to the future. That the two occur together is a matter of common observation; but the interdependence of the parts (the one for nutritional supply, the other for nervous energy) is such that the seat of the primary lesion is a problem for serious study. My very limited observation will permit me to say this only, when atrophy of the convolutions is at all appreciable, there is degeneration of the nervous elements and vessels, the latter varying within certain limits; I have not, however, yet observed disassociation of these two conditions, where atrophy of the convolutions was at all marked.

MICROSCOPICAL APPEARANCES.

Terminal and Senile Dementia.—All of the cases presented granular degeneration of the cells of the cortex, as a very prominent feature. This lesion involved a greater or less area of the cell body, and in the more advanced cases the nucleus was swollen, irregular and faintly stained, and the cell processes poorly defined or entirely obliterated. Fatty degeneration was very frequently observed in connection with this lesion, small rounded bodies of yellowish color replacing a goodly portion of the cell. (See Plate I., Figure 1.)

In very many of the cases the nucleus was vacuolated also, that is, it was occupied by one or several bright, shining spots varying in dimensions, but large enough to replace from one-eighth to three-fourths of the area of the nucleus. (See Plate I., Figure 1, and Plate II., Figure 1.)

Marked colloid degeneration was found in the first layer in two of the cases. All of this class of cases presented a goodly number of bodies in the cortex, faintly stained and irregular in outline, with the shadow of what was once the nucleus, or an attempt at a cell process, which taken singly would have been entirely undefinable as nerve cells.

Epileptic Dementia.—The lesion of greatest prominence in these cases

was the vacuolation of the nucleus. This was especially marked in the second layer, where the nucleus of every one of the cells presented a larger or smaller vacuole. In the cells of the other layers vacuolation was present in lesser degree. Throughout the cortex the cell processes were poorly defined and cells unevenly stained. Granular and fatty degeneration, with pigmentary changes scattered throughout the cortex were frequently observed, and in some instances were lesions of equal prominence with the vacuolation.

Melancholia.—The microscopical appearances varied greatly, depending apparently upon the degree of advancement of the disease. In all, the cells gave evidence of serious degeneration. No especial form of degeneration was markedly prominent. Granular, fatty and pigmentary changes, with vacuolation of the nucleus and cell body, obliteration of the cell processes, &c., were all present in greater or less degree in all of the cases. The same may be said of the cases of chronic mania.

Choreic Insanity.—One case of this interesting disease came under my observation. In this as in the other forms of mental disease above mentioned, there was serious impairment of the cells of the cortex. Granular degeneration with vacuolation of the nucleus, were features of some prominence. In the second layer the majority of the cells were completely degenerated, resembling the condition found existing in the case of acute alcoholic dementia, mentioned further on. (See Plate II., Figure 3.) Many of the cells were very irregular in outline, cell processes entirely obliterated, and nothing definable as a nucleus except an irregularly-darkened area. In addition to this lesion, fragmentation of the nucleus was observed in the fourth and fifth layers.

The cases of acute delirious mania, general paralysis, and the single case of acute alcoholic dementia receive special mention later, and therefore need no comment here. In the great majority of the cases, the vessels gave some evidence of disease. Spider cells were present in great numbers in all of the cases of general paralysis, and in fewer numbers in some of the other forms of mental disease.

In concluding this portion of my report, I would say that all the cases examined microscopically showed some definite anatomical change in the cells of the cortex, not focal, but more or less diffuse in distribution, involving to a greater or less degree all the cortical layers. The changes in the cells in all of these cases were, it seems

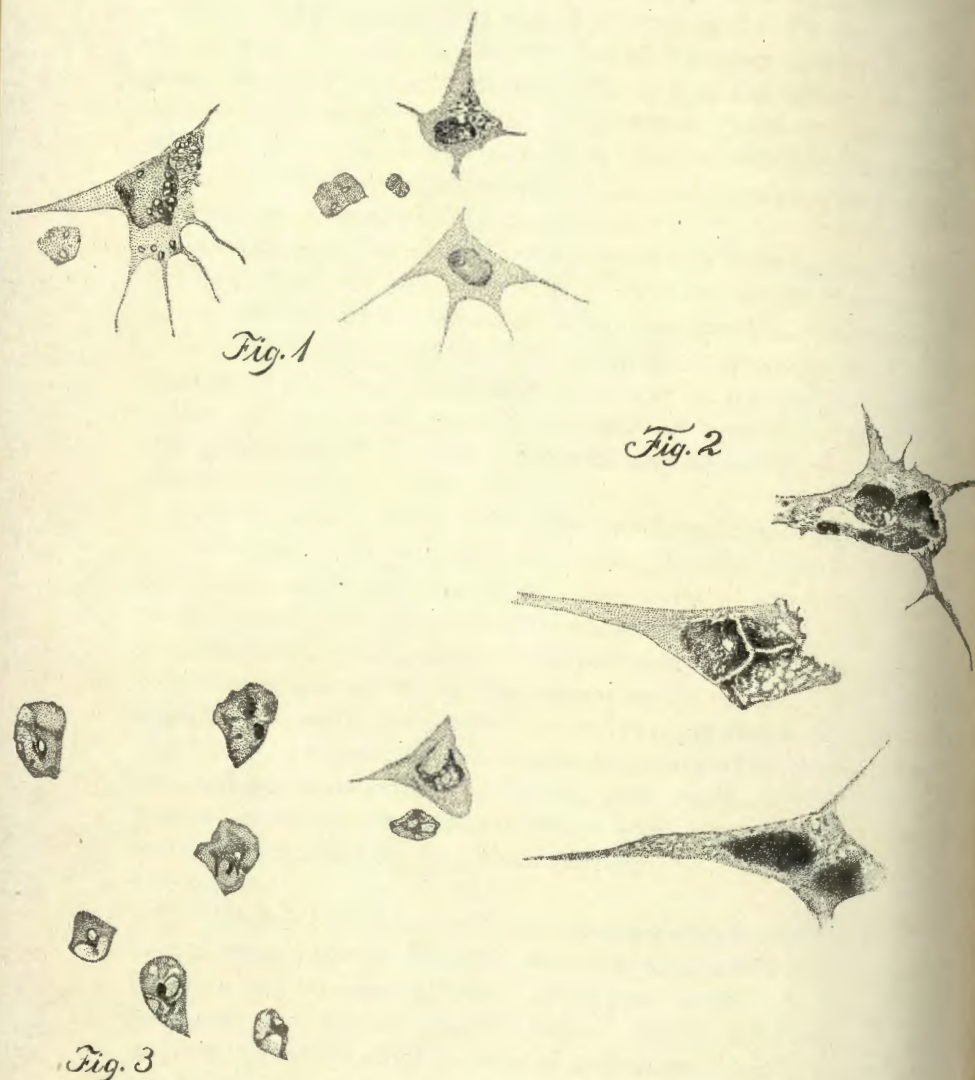


Fig. 1—Nuclear vacuolation (multiple) with granular and fatty degeneration of cell body.

Fig. 2—Some phases of nuclear fragmentation.

Fig. 3—Condition of cells in upper portion of third layer in a case of acute alcoholic dementia.

to me, ample to account for the mental disturbance manifested, provided we may consider the cortical cell the seat of mental activity, a point quite generally conceded.

In dealing with the cerebral cortex it is well to remember that we have a tissue intensely delicate as compared with the other tissues of the body—so widely differing from the kidney or liver, for instance, in point of construction and mechanism, that comparison is entirely irrelevant. The delicate adjustment of cortical areas to each other and to distant parts, the grouping of cells for the performance of special functions, and the establishment of centripetal and centrifugal relationships by means of delicately-constructed fibers, make a mechanism truly tremendous in its proportions and dazzling in its intricacy, but nevertheless perfect in its working and beautiful in its results. The brain is constructed with reference to its far-reaching importance as a vital organ, and is as far above the other tissues and organs of the body in point of construction and mechanism as can be conceived.

When we take into consideration and thoroughly appreciate this fact, we are prepared for a better understanding of how changes in the tissues of the brain, although perhaps slight when compared to lesions in other parts, may be far-reaching in their results, as far as the equilibrium of this delicately-adjusted mechanism is concerned.

Some points regarding the microscopical appearances deserve special comment.

FRAGMENTATION OF THE NUCLEUS.

In certain of the autopsies the nucleus presented peculiar divisions and subdivisions, some cells showing two or more well-formed nuclei, others presenting a nucleus divided into a number of irregular, ill-defined fragments, varying greatly in size and shape, while in not a few the nucleus was enlarged beyond all proportion to the size of the cell body and very irregular in outline. (See Plate II., Figure 2.)

In these cases a considerable number of nuclei were present, which, while not showing distinct divisions, presented marked tendencies in that direction. Such nuclei were invariably greatly enlarged and presented along the outer edge indentations of considerable extent. Irregularities in the outline of the cell body, and more or less complete obliteration of the processes were features of prominence. At the same time the cell body often showed divisions.

The ability of the nuclei to take the aniline stain seemed considerably impaired, as they were invariably unevenly stained, showing lighter and darker areas in varying proportion. Other evidence of degeneration, such as the granular fatty and pigmentary forms with cellular vacuolation, was quite frequently observed in connection with nuclear fragmentation.

The question of the significance of this phenomenon is an interesting one. Authorities differ widely as to the possibility of reproduction of the ganglion cell after destruction, the weight of opinion tending at the present time, however, toward the view that reproduction after removal, experimentally or otherwise, of a portion of the cortex does not occur. If this be true of experimental and operative removal of the cortex, it would seem that the same theory might be applied in certain forms of acute and chronic mental disease. That more or less complete destruction of many of the cortical cells occurs in these diseased conditions there is little doubt. What happens, then, in the cortex during recovery? Do ganglion cells so degenerated as to present a mere shadow of their former existence—cells in which the nucleus (the reproductive organ of the cell) is apparently entirely absent, or presents itself as a very slight discoloration in the body of the cell—by some inherent quality of their own become regenerated and re-assume their functions, or do entirely new structures take their place? Is not this question more satisfactorily solved by the theory of nuclear division, and may we not consider the phenomenon of nuclear fragmentation an effort on the part of nature to replace the degenerated elements of the cerebral cortex?

CELLULAR VACUOLATION.

The vacuolation of nerve cells seen in insanity is usually of a more or less general character; that is, a few isolated cells in a single layer do not suffer alone, but the lesion is quite evenly distributed throughout the layer or throughout the cortex. Nuclear vacuolation presents itself under two forms:

1st. The single large vacuole replacing more or less of the nucleus. (See Plate I., Figure 1.)

2d. Multiple vacuoles scattered throughout the nucleus, giving it a honeycombed appearance. (See Plate II., Figure 1.)

The two forms are found together, in some cases the first variety predominating, in others the second. However, where single vacuoles are found in brains presenting a predominance of the multi-vacuolated nuclei, the cell body is apt to present vacuoles showing a certain tendency to invade the nucleus. The nerve cells, as a whole, where this lesion is at all prominent, show great deterioration, other degenerative changes being common.

Considerable doubt has recently been thrown upon the pathological significance of vacuoles occurring in the cellular elements of the cerebral cortex. Hodge, in his recent admirable article entitled "A Microscopical Study of Changes in Nerve Cells Due to Functional Activity,"* demonstrates vacuolation of considerable extent as occurring in the cell body after normal fatigue. Very little is said and less demonstrated in regard to vacuolation of the nucleus; in fact, this phenomenon is not observed by Hodge as occurring after functional activity. However, the pathological significance of vacuolation of nerve cells is very seriously questioned.

In the brains of those dying insane, and presenting vacuolation of the cellular elements as a prominent feature of the cortex, the nucleus has in a great majority of instances shown vacuolation. When this is extreme in degree, the cell body is either seriously vacuolated or shows other evidence of degeneration; when slight, the cell body may or may not present vacuoles, but is very apt to show some evidence of impaired nutrition. If, therefore, we may consider the nucleus "the reproductive organ of the cell," or if "from the nucleus comes everything of structural significance in the protoplasm" (as Hodge observes in a résumé on the work of several authors), it would seem that for any morbid changes in the nucleus we should expect a corresponding deterioration in the structure of the nerve cell and impairment of its functional activity.

As a matter of fact, we have seen that the structure of such nerve cells was very seriously impaired, many being in a state of complete degeneration. As regards functional activity, no one questions its impairment in insanity. It would seem, therefore, that while the lesser degree of vacuolation of the cell body may be a physiological process, vacuolation of the nucleus is a matter of far more serious consideration, and is of pathological import.

*Journal of Morphology, Volume VII., Number 2.

It has been suggested that at least the lesser degrees of vacuolation of the nucleus and cell body were due to faulty microtechnical methods; no proof having yet been adduced, however, to show that such has been the case, the idea is scarce worthy of consideration. The course of reasoning employed to arrive at such a conclusion is difficult to conceive of. Just how a fixing agent, or an aniline stain or a freezing apparatus, either singly or combined, are to produce rounded vacuoles in nerve cells, is difficult of comprehension.

PIGMENTARY DEGENERATION.

Pigmentary degeneration is of especial interest on account of its presence and extreme development in all of the cases of acute delirious mania that were examined microscopically. Plate I., Figure 2, represents the degree of pigmentary degeneration found in autopsy number 117 in the right frontal region, cells of the third layer. Here the pigmentary changes were extreme, invading the nucleus, cell body, and in many instances the processes of the cell, without discrimination. In some of the cells the nucleus, together with more or less of the cell body, were replaced by a mass of yellowish-red pigment granules; in other instances only a portion of the nucleus with a part of the cell body were involved in the degenerative process, while very many other cells presented the pigment granules scattered irregularly through them. While this condition of things prevailed, and indeed reached the extreme degree on the right side, its presence on the left side, although a very prominent feature, was far less. An interesting point in connection with this lesion was the involvement of the vessels. The arterioles throughout the cortex were covered to a greater or less degree with pigment granules which were either scattered over the vessels or gathered together in masses here and there. A notable feature was the apparent inability of the cellular elements of the vessels to take the aniline stain, notwithstanding the fact that the cortical cells were fairly well defined.

Free pigment in the form of single granules and masses of granules was found indiscriminately throughout the cortex, it probably having had its origin in cells which had long since become extinct. It is a matter of interest that the pigmented cells gave evidence on every hand of all the degrees of degeneration, from the lesser up to the point where the cell seemed a mere ghost of its former self. In the

other cases presenting marked pigmentary degeneration, the lesion was far less in degree.

An interesting point in autopsy number 125 was the presence of fragmentation of the nucleus as a feature of some prominence in many of the cells, in addition to the pigmentary changes. The pigmentary changes in this case were furthest advanced in the pyramidal cells of the cornu ammonis, where they reached the extreme degree.

ACUTE ALCOHOLIC DEMENTIA.

The single case of this form of mental disease that came under my observation is of interest because of the condition found existing in the nerve cells of the second and third layers of the cortex.

A short history will be of interest.

E. H., aged forty-four, occupation blacksmith, admitted June 28th, 1893. Alcoholic history marked, patient having been a hard drinker for years. Up to about three weeks before admission, during which time he was exposed to considerable inclement weather, he drank to greater excess than usual. On admission patient was unable to walk without aid, and mental power was very seriously impaired, an appreciable effort being necessary in order to make him understand simple propositions. Examination revealed great tenderness over the great nerve trunks, anæsthesia of the skin over considerable areas, extreme atrophy of all the muscles, and total abolition of the reflexes. Patient gradually failed mentally and physically and died July 18th, 1893.

Microscopical examination of the cortex revealed the fact that there was a widespread and general affection of the nervous elements, especially marked in the second and third layers. In this portion of the cortex many of the cells seemed almost entirely obliterated, while others were changed to such an extent that it seemed hardly probable that they were capable of performing their functions. Cell processes were very few and ill defined. In a few of the lesser degenerated cells the processes were not entirely obliterated, but even here the cells invariably showed decided evidence of degeneration.

The appearance of the nucleus varied considerably; in some cases being distorted and irregular in outline, and in others extremely vacuolated, while in not a few of the cells nothing was definable as a nucleus except perhaps a darkened area that merged gradually into

the protoplasm of the degenerate cell. Very many irregular protoplasmic masses presented in the field of the microscope in the second and third layers, entirely devoid of nucleus and cell processes, that taken singly would have been impossible of identification as nerve cells. (See Plate II., Figure 3.) Vacuolation when present was not of the type found in many other forms of mental disease. Instead of the well-rounded vacuole or vacuoles, replacing a certain portion of the cell body or nucleus, there were irregular spaces, somewhat rounded or otherwise, occupying varying portions of the cell rather indiscriminately.

GENERAL PARALYSIS.

The cases of general paralysis were of especial interest because of the uniformity of the lesions presented. The masses of large branching spider cells, scattered through the cortex, together with the degenerated and degenerating nerve cells, constitute a very striking picture in this disease. Of more especial interest at this time, however, are the changes in the walls of the vessels.

The vessels throughout the cortex show many localized changes in their caliber, either tending toward an increase or decrease, sometimes the one condition prevailing and sometimes the other. At these points there are very apparent changes in the vessel walls, some showing marked proliferation of the cellular elements on one side only, while in others the abnormal process encircled the whole vessel, giving it a mulberry-like appearance. These changes were extensive and general, being about evenly distributed throughout the cortex. (See Plate III., Figure 2.) In a number of instances the attachment of the spider cell to the vessel wall by an enlarged process was very clearly defined. (See Plate III., Figure 1.)

The question at once suggests itself as to the probable origin of these changes. That their origin is specific seems probable when we consider the important role that specific disease plays as an etiological factor in this disease, and this idea is very materially strengthened by the general appearance presented by the lesion under consideration. But in the case from which the drawings were made no specific history was obtainable, as it was that of an Italian male who could speak very little of our language.

As regards other lesions I need mention only the presence of large numbers of spider cells and various forms of degeneration in the



Fig. 1—Spider cell, showing vascular connection.

Fig. 2—Some vascular changes in general paralysis.

nerve cells. The spider cells were invariably present and especially numerous in the first and fifth layers, presenting in these divisions of the cortex great quantities of spider-like prolongations, interlacing with each other and extending into the adjacent layers. More or less complete degeneration of the neighboring nerve cells was always present, and apparent degeneration of some of the spider cells themselves was not uncommon.

In conclusion it is but proper that I should say that I am aware of the unfinished and unsatisfactory character of this report, my time having been limited by other duties, and space not permitting exhaustive details, but we live in the hope that some day some of the dark corners of psychological medicine will be illumined and the veil lifted that enshrouds so many of its pathological problems.

I desire thus publicly to express my thanks to the Medical Director for the many kindnesses and the consideration shown me in my work during the past year. My sincere thanks are also due the members of the Board of Managers for their uniform kindness and co-operation.

Respectfully submitted,

THOMAS P. PROUT,
Resident Pathologist.

The spirit of the new hospital is to provide a place where the patient can be treated in the most modern and scientific manner. The hospital is to be a place where the patient can be treated in the most modern and scientific manner. The hospital is to be a place where the patient can be treated in the most modern and scientific manner.

In conclusion it is the hope of the Board of Managers that the hospital will be a place where the patient can be treated in the most modern and scientific manner. The hospital is to be a place where the patient can be treated in the most modern and scientific manner.

I hope this book will be a help to the medical profession. I hope this book will be a help to the medical profession. I hope this book will be a help to the medical profession.

Respectfully submitted,

THOMAS F. HAMMILL

Medical Director

GENERAL RULES AND REGULATIONS

RULES AND REGULATIONS

OF THE

MEDICAL DEPARTMENT

New Jersey State Hospital, Morris Plains, N. J.

BY ORDER OF THE MEDICAL DIRECTOR.

Approved and Adopted by the Board of Managers, 1890.

GENERAL RULES AND REGULATIONS.

GENERAL RULES.

No intoxicating drinks of any kind shall be used by any one in the Medical Department, except upon the prescription of the resident physicians; and no one shall be employed who is known to use them, either at home or abroad.

Nor shall there be any smoking of tobacco in or about the buildings by those in the employ of the Medical Department, except in places designated by the Medical Director. No non-resident shall remain in the Medical Department at night without the knowledge of the Medical Director. No one belonging to the male department, nor any male employes about the premises, shall enter the female department or go upon the ground appropriated to the females, except by express permission. No one employed about the Medical Department shall report abroad the conduct or conversation of any of the patients. All persons employed to attend upon the patients shall give the Medical Director at least one week's notice of their intention to leave. Those leaving without the required notice will forfeit their unpaid wages, but not exceeding those of two weeks.

VISITORS.

Strangers and others may be permitted to visit the wards of the institution, by permission of the Medical Director, on any day except Sunday (on which day visitors shall not be admitted) between the hours of 10 A. M. and 12 M., and between 2 and 4 P. M. Visitors are expressly forbidden to deliver to or receive from a patient any letter, parcel or package, without the knowledge or approbation of the physicians. Attendants are particularly enjoined to abstain from mentioning to visitors the names of patients, their peculiarities, or any other circumstances respecting them, a knowledge of which might be painful to any person connected with them.

DUTIES OF THE SUPERVISOR AND ASSISTANT SUPERVISORS.

There shall be two Supervisors, male and female, and two Assistant Supervisors in each wing of the Hospital.

SEC. 1. The Supervisor shall have the general charge of the wards, the Ward Supervisors who are his or her assistants, and the immediate supervision of the wards to which they are respectively assigned. They form a corps of sub-officers between the medical staff and the attendants, and they are responsible in a great measure for the order and discipline of the department. It shall be their duty to see that the rules of the Hospital are observed, and that the patients are kindly treated.

SEC. 2. The Supervisor shall make a general tour of the wards before breakfast and such other times during the day and night as will insure the faithful enforcement of the rules. The Supervisors shall visit their respective wards at the hour designated by the Medical Director. At this hour they shall ascertain the condition of the patients, noting any negligence or improper conduct on the part of the attendants; that the patients are neatly dressed, washed and prepared for breakfast. Any sickness, or any condition of patient or ward requiring the attention of the physicians, they shall report *at once* through the Supervisor.

SEC. 3. The Supervisor and assistants shall be responsible for the general order and cleanliness of the wards, including the passages and stairs leading to them. They shall see that the beds are aired and made; that the bedsteads and bedding are scrupulously clean; that the water-closets are in order; that no food shall be allowed to accumulate in the dining-rooms; that *there are no dirty corners* anywhere, and that everything about the wards and rooms is kept in perfect order and neatness.

SEC. 4. In regard to the attendants, they shall see that they are fully instructed in their duties; that they are kind, painstaking and discreet in their management of the patients; that their time is passed with their patients in caring for, occupying and directing them; that they are in their places on the ward and not in their rooms until after all the patients have retired for the night; that in wards where patients sleep at night in the halls or large dormitories, to see that the attendants in charge of the evening remain at their posts of duty until relieved by the night nurses at nine o'clock. They must report

at once all irregularities in the conduct of attendants or neglect in the performance of duty.

SEC. 5. They shall observe carefully the patients under their charge; that all their wants are attended to; that the clothing provided is equal to the needs of each individual patient, and that it is worn only by the patient to whom it belongs.

SEC. 6. They shall have a record kept of all articles of clothing sent from each ward to the laundry; also, a record of their return. Any deficiency is to be reported to the Assistant Supervisor by the attendants, who shall take charge of any stray articles sent to their wards by mistake and hand them over to the Supervisor. The Assistant Supervisor shall take charge of "accommodation" clothing, and issue the same where it may be needed.

SEC. 7. The Supervisor shall see that sufficient bedding, towels, clothing and other supplies are issued for each ward, and shall keep in a book, prepared for the purpose, a record of all articles supplied. They shall see that all clothing is marked before issued; shall keep a record of clothing received with and issued to each individual patient, under the name of the patient, and upon his or her discharge shall check off the articles sent with them. Whenever any articles of clothing are left for a patient by his or her friends, they shall also be marked and the list entered in the clothing-book.

SEC. 8. The Supervisor shall receive each patient on admission, introduce him or her on the ward, explaining, as far as the mental condition of the patient will permit, the regulations under which they come. They shall, in conjunction with the Assistant Supervisor of the ward to which the patient is assigned, direct the bathing of the patient on admission, taking care to observe the personal condition and report to the physicians any wound, bruise or cutaneous disease; also, presence of vermin or any extreme untidiness. All money or valuables found with the patient shall be noted in the clothing record, the articles made into a package, marked with the name of the patient, amount of money, or kind of valuables, and brought at once to the office for safe keeping. No articles of jewelry shall be left with the patient, except by special direction of the physicians.

SEC. 9. Where a patient is transferred from one ward to another, the Assistant Supervisor of the ward from which the patient is transferred shall furnish to the Assistant Supervisor receiving the patient, a complete list of all clothing belonging to the patient, taking a receipt

for the same. No patient shall be transferred until bathed, unless otherwise ordered. The soiled clothes shall be tied in separate bundle and given to the Receiving Supervisor, who shall send them to the laundry.

SEC. 10. The attendant in charge of a ward shall immediately report to the Assistant Supervisor any destruction of clothing or other property, and turn over the same to him or her, giving the name of the patient by whom the damage was done. A damage-book shall be kept by each Supervisor, and all such instances carefully noted. The Supervisor shall keep a record of all damages, for the use of the Warden, in making up his accounts.

SEC. 11. The Supervisor shall see that blankets and all articles of clothing not needed in the spring, are neatly put away with camphor, taking an inventory of them, and in the fall shall attend to the unpacking and distributing of the same.

SEC. 12. The Supervisor and Assistant Supervisor shall visit the patients at their meals, and shall see that their food is sufficient in quantity, well prepared and distributed, and that the patients are in a tidy condition at the table. They shall especially see that patients, who are from various causes unable to be at table, are waited upon by the attendant, and that their food is not only suitable, but that it is slowly and judiciously fed to them. In the case of those patients having special or sick diet, they shall see that it is received by those for whom it is ordered. If the food sent to the wards be found deficient in quantity, quality or in any other way defective, they shall immediately report it to the Medical Director.

SEC. 13. They shall carry out the directions of the physicians respecting the recreation and occupation of the patients, and cooperate in every way possible to make employment beneficial to them. They shall guard against patients being exposed to rain and unsuitable weather, and when out of doors, they shall see that they are properly clad for the occasion.

SEC. 14. It shall be the duty of the Assistant Supervisors to personally administer all medicines at the time designated by the physicians. They shall see that the patients who may be ordered medicine receive the same, but shall not force any patient to take medicine unless in the presence of the physicians. They shall be at the drug-room for the medicine-tray half an hour before each meal.

SEC. 15. They shall accompany the physicians when on their visits to the wards.

SEC. 16. They shall have charge of the issuing of tobacco to the male patients.

SEC. 17. The Supervisor and the Assistant Supervisors shall have charge of the reception-rooms during visiting hours, and may call on one or more attendants to assist, as the case may require. They shall show the friends of patients proper consideration and deference, and shall endeavor to make their visits agreeable, but shall leave medical opinions to the physicians, and confine themselves to such matters as come directly within their province. The friends of patients are not to be taken into the wards without special permission from the physicians.

SEC. 18. They shall thoroughly review the weekly requisition-books and erase any article not needed before bringing the same to the office.

SEC. 19. They must not permit attendants to leave their wards without permission of the Medical Director or Assistant Physicians.

SEC. 20. They shall see that not more than one attendant on each ward is granted leave of absence on any one day (Sunday excepted), and then only by special permission. When leave of absence is granted to an attendant, he or she shall, before leaving, deliver his or her keys to the Assistant Supervisor, or in the absence of the same, to the Supervisor. An attendant returning from leave of absence is not to be given his or her keys, or returned to duty, if there is any evidence that he or she has violated the rules of the institution. Any irregularities in this respect are to be reported at once through the Supervisor to the Medical Director.

SEC. 21. The Supervisors are to keep records of all bruises found on patients, and how they were received, and report weekly the same in writing to the Medical Director.

SEC. 22. With as little delay as possible, after the ringing of the retiring bell, they shall see that all the attendants are in their rooms. All the outer doors of the buildings shall be locked at 8 P. M., excepting those of the main entrances, which will be locked at 10 P. M., and all the lights throughout the wards must then be extinguished except those burning by special permission.

SEC. 23. Night locks are to be opened by them as directed by the Medical Director. They shall make a special round of the wards in the evening, observing as to bedding, special wants, &c. They shall see that after supper the work in the dining-rooms and wards is not

too hurriedly performed, and in assisting patients to retire. the attendants are, in all cases, kind, gentle and considerate.

SEC. 24. The Supervisor and Assistant Supervisors shall maintain a dignified bearing, devote their whole time to the faithful discharge of their duties, and by every means in their power inculcate gentleness of manner and kindness of heart. They shall in every possible way, endeavor to promote the general interest of the Hospital, and be at all times in readiness to perform any service required of them by the physicians.

DUTIES OF THE WATCHMEN AND NIGHT NURSES.

The watchmen will commence their evening duties at 9 o'clock, at which time they will visit the office to receive their instructions for the night.

The night nurses will be at their posts of duty at this hour, and comply with the directions of the physicians respecting medicine and the care of the patients. While on duty they will be constantly awake, faithful and vigilant.

The patrolmen will visit every part of their department at least every hour during the night, making as little noise as possible, never conversing in a loud tone with anyone, and opening and shutting all doors as quietly as they can.

The watchers must be kind, gentle and soothing in their manner to the patients, and take every means to nurse the sick, tranquilize the excited, allay the fears of the timid, guard from injury the suicidal and epileptic and keep clean the infirm and untidy.

They will supply the patients with water when asked for, and will attend to all of their little reasonable wants.

They will notice any particular or unusual noise in the patients' rooms, will endeavor to ascertain the cause, and if necessary, give them attention.

They will enter on the records provided for the purpose, every particular occurring during the night, the condition of the sick, the suicidal, the epileptic, the restless, the feeble, the untidy, the untrustworthy and *all new patients*, and will also report any irregularities, neglect of duty or violation of rules which may come under their notice.

The watchmen will be careful that all lights in the wards are put out at 10 o'clock, except those directed to be kept burning during the night in the wards.

They shall be particularly watchful against fire, and, in case of its occurrence, will report it immediately to the Supervisor and Assistant Supervisor without giving a general alarm.

The watchers will be relieved from duty at 6 A. M.

RULES FOR BATHING.

The Assistant Supervisors will supervise the bathing of patients. Every patient is to be bathed immediately after admission, and once a week afterward, unless excused by medical order.

Should there be the least doubt as to the advisability of bathing any patient, owing to sickness, feebleness or excitement, the matter should be immediately reported to the medical office.

The name of every patient not having the customary bath is to be reported to the physician.

No patient shall be transferred to one ward from another without being bathed, unless excused by the physician.

To provide against catching cold, the Supervisors will see that the bath and dressing-rooms are sufficiently warmed at bathing-times; otherwise to postpone bathing until the rooms are heated.

Any marks, bruises, wounds, sores, pain or evidence of disease complained of by the patients, or noticed during any of the bathing operations, must be immediately reported to the physicians.

During the use of bath, the room is never to be left by the attendant, except by special permission of the Medical Director. When the room is not in use the door must be kept locked.

Before putting the patient into the bath, observe that the water is of proper temperature. It should not be less than eighty-eight degrees nor above ninety-eight degrees Fahrenheit.

Never turn on hot water when a patient is in the tub.

In the bath, the body of the patient is to be well cleansed with soap, and in washing the hair be careful that no soap gets into the patient's eyes. After leaving the water, especial care must be taken to thoroughly dry the patients and clothe them as rapidly as possible. A separate towel must be provided for every one.

Patients' nails will be cleaned and trimmed at this time.

Under no pretense whatever shall a patient's head be put under water.

Not more than one patient to be bathed in the same water.

The bath brush is only used on the feet.

An attendant must not attempt, under any circumstances, to bathe a struggling patient alone.

Cold baths must never be given.

Neither before nor after the bath will patients be allowed to stand about unclothed.

Any lack of warm water, soap, towels, &c., to be reported to the Supervisors.

DUTIES OF THE ATTENDANTS.

Attendants are expected to devote their whole time to the Hospital in the performance of the duties enjoined by the By-Laws, or such as may be required of them by the officers.

No attendant shall be permitted to leave the Hospital without the consent of the Medical Director or other proper officer, and when leave of absence has been granted they shall be expected to return at the appointed hour.

All applications for leave of absence must be made through the Supervisor, who will keep a record of all absences.

They must expect a constant observation of the manner in which their respective duties are performed; they shall strive unceasingly to promote the welfare of the Hospital, and use their utmost exertion to render all those entrusted to their care contented and comfortable.

They shall be careful at all times to set a good example and shall take every proper opportunity to inspire the patients with respect for and confidence in the officers, and to convince them of the true character of the institution and its leading object, the promotion of the restoration and comfort of its patients.

In all their intercourse with the patients the attendants shall treat them with respect and civility; shall address them in a mild and gentle tone of voice, and shall avoid violence and rudeness of every kind. All civil questions are to be properly answered. All reasonable requests are to be promptly attended to. They are to keep cool under every provocation, and never to scold, threaten or dictate authoritatively, but whenever they desire anything done by a patient shall make a request in a respectful manner. The law of kindness

must at all times prevail. No attendant will be excused under any circumstances, for striking, choking, kicking or otherwise maltreating a patient, and *no one* will be excused for failing to report promptly any such case that comes to his or her knowledge. *All* cases of abuse and maltreatment are required to be reported to the Board of Managers, and attendants thus reported are liable to be prosecuted according to law. They shall carefully avoid talking to patients on the subject of their delusions, or in hearing of other patients, and they shall exert their influence to prevent others from talking to them or of them on this subject. They shall never allow patients to be laughed at, ridiculed or harshly spoken to, on account of their delusions or the peculiarities of their conduct.

Deception must always be avoided, and no promises must be made which cannot be performed; no attendant shall be permitted to buy from or sell anything to a patient or accept anything from a patient for money or for any other consideration. No excuse will be taken for wearing a patient's clothes.

Attendants shall never give up their keys or allow any person to enter the ward without the permission of the physician, and no male attendant shall at any time enter the female apartment without similar permission. Neatness and cleanliness shall be most scrupulously attended to by attendants, not only in regard to their own appearance but in the patients and wards under their charge, and failure in these will be considered a neglect of duty.

Visiting from one ward to another, except on business connected with the patients, is not permitted.

They shall see that the doors of the wards and of the rooms are locked at bed-time, and such lights only are to be kept burning as are directed by the physician.

Each attendant is responsible for every patient under his or her care, and is expected to be able, at any moment, to say where such patient may be found.

One attendant must always be in each ward with the patients and must never leave, under any circumstances, until relieved.

Attendants will never retire to their rooms while the patients are in the wards.

The attendants shall rise in the morning at the hour designated and shall see that the patients under their charge are washed, their hair

combed and that they are perfectly dressed for the day, before breakfast.

They shall also see that the patients are neat and tidy during the day, adjusting their clothes whenever they seem disordered, and changing them whenever, for purposes of cleanliness, it becomes necessary.

The beds and bedding are to be well aired in the morning, and the beds well made; if soiled, they are to be removed and clean ones substituted.

The rooms, halls and stairs to be carefully swept and the floors, walls and windows to be washed whenever required.

The wards are expected to be ready for inspection in every part at the hour specified.

Whenever it may be necessary to lock a patient in his or her room, the fact must be immediately reported to the Ward Supervisor.

At meals one or more attendants shall always be present to carve, to distribute food, and to see that all the patients have a sufficient supply, and that they eat in a proper manner. Care must also be taken that no patient carries away from the table a knife, fork or any other article.

The knives and forks must be counted after each meal, to ascertain if any are missing.

Attendants must never place in the hands of patients, or leave where they can obtain, any razor, knife, rope, cord, medicine or any dangerous weapon or article.

Neither shall they deliver any letter or writing, from or to a patient, without permission of the Medical Director.

No patient shall be taken out of the wards for any purpose by any person, unless on order or permission of the physicians, and, when taken out, he must be returned by the person who took him from the ward.

When a patient complains of being sick, or is supposed to be so, the fact must be reported without delay to the Ward Supervisor.

The shaving will be done by the barber, and no patient shall be allowed to shave himself, except by special permission from the Medical Director.

Attendants shall not be allowed to be in the kitchen, nor in the halls in the basement, nor in the center, without permission.

When a person manifests a disposition to suicide, the utmost watchfulness must be exercised.

The times most apt to be chosen for such attempts are on rising in the morning, at dusk, at meal-time or whenever the attention of the attendant is thought to be diverted. No plausible excuse in such case should be allowed to throw the attendant off his or her guard. A moment's neglect may lead to as serious consequences as a whole hour.

Whenever a patient escapes, immediate notice is to be given to the Supervisor, and by the Supervisor to the Medical Director, in order that prompt measures may be taken to overtake the individual.

When it is ascertained that a patient has escaped through the negligence or carelessness of the attendant, the expenses incurred in bringing back such patient will be charged to the attendant, but not exceeding one month's wages. When a patient manifests a strong disposition to escape, the vigilance of the attendant must never be relaxed for a moment. Before closing the door of a patient's room for the night, the attendant must be certain that the patient is actually in the room; this ascertained, he should wish the patient good-night, then lock the door, and be sure that the bolt of the lock has properly slipped.

In walking out with patients, the attendant shall avoid going to town without special permission.

Attendants shall, in no case, visit friends of patients, nor receive from them money or presents.

The conduct and conversation of patients must never be spoken of to visitors, nor reported by attendants when absent from the Hospital.

In addition to keeping their wards scrupulously neat and clean, the attendants shall be careful that every unpleasant effluvium is removed promptly whenever discovered, and the air of the ward is kept pure and free.

It is expected that every part of the ward will be at all times prepared for the closest scrutiny.

The clothing of new patients and those coming in from work is to be examined at the earliest opportunity after admission, to ascertain whether there are knives, weapons of any kind, money, tobacco or other forbidden articles upon the person.

When about to leave, attendants shall call at the Supervisor's office and put their keys in the place provided for the purpose, and report themselves to the Supervisor, and in like manner report themselves on their return.

In sending articles of clothing, bedding, &c., to the wash, the attendant shall make a record in the book provided for that purpose, which shall be sent with the articles to the laundry.

The articles to be washed to be placed in a place designated, so that they may be removed by the laundry car.

The first retiring bell at half-past nine o'clock, and the second at ten o'clock, at which time all lights in the ward will be extinguished, except those directed to be kept burning during the night, and attendants and others are expected to be in their rooms.

BY-LAWS, FORMS, ETC.

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EXTRACT FROM THE BY-LAWS.

ADMISSION OF PATIENTS.

ORDER OR WARRANT FILED.

1. Whenever a patient is sent to the Hospital by the order of any court, justice or judge, the order or warrant, or a copy thereof, by which such person is sent, shall be lodged with the Medical Director.

CLEANLINESS.

2. Each patient, before admission, shall be made perfectly clean, and be free from vermin or any contagious or infectious disease.

CLOTHING FOR MEN.

3. Each male patient shall be provided with at least two shirts, a new and substantial coat, vest and pantaloons, of strong woolen cloth, two pairs of socks, a black cravat, a good hat or cap, and a pair of new shoes or boots; together with a comfortable outside garment.

CLOTHING FOR WOMEN.

4. Each female patient, in addition to the same quantity of undergarments, shoes and stockings, shall have a flannel petticoat, two good dresses, also a cloak or other outside garment. In case the patient is so much excited as not to admit of being thus clothed, other clothing that can be kept on, that is comfortable and in sufficient quantity, with a change thereof, may be substituted.

It is very desirable that extra and better apparel should be sent

with those accustomed to it, that when they become better, and when they attend religious worship, walk or drive out, their self-respect may be preserved.

In all cases the patient's best clothing should be sent; it will be carefully preserved, and only used when deemed necessary for the purposes above mentioned.

JEWELRY, ETC.

5. Jewelry and all superfluous articles of dress, knives, &c., should be left at home, as they are liable to be lost.

HISTORY OF CASE.

6. A written history of the case should be sent with the patient, and, if possible, some one acquainted with him should accompany him to the Hospital, from whom minute, but often essential, particulars may be learned.

TERMS OF ADMISSION.

7. The price of board, including washing and attendance, for all who are supported at public charge, is three dollars (\$3) per week. For private patients, or those supported by themselves or friends, the price varies from five dollars (\$5) upward, according to the trouble and expense incurred, and according to their ability to pay. Higher prices are paid by a special agreement with the Warden for extra attention and accommodations. Payments required to be made quarterly, in advance, from date of admission.

BOND, ETC.

8. A bond, with satisfactory sureties, will be required for the payment of the board and expenses, and for the removal of the patient when discharged, of all persons, except those sent at the expense of the counties.

Those who bring friends should be prepared to give such a bond, and, if strangers, bring evidence of their responsibility.

FORMS AND DIRECTIONS

FOR THE ADMISSION, &c., OF INDIGENT AND PAUPER INSANE PATIENTS.

FORM OF ORDER, ETC., FOR JUDGE.

I, A. B., one of the Judges of the Court of Common Pleas of the county of.....and State of New Jersey, do hereby report that application has been made to me on behalf of C. D., a resident of the (township, ward or borough) of.....in said county, alleged to be insane (and in indigent circumstances or a pauper, as the case may be), and that pursuant to the act of the Legislature in such cases made and provided, I have called before me Dr.....a respectable physician, and other credible witnesses, to wit (state their names), and having examined them and fully investigated the case, and not deeming it necessary to call a jury, I do hereby decide and certify that satisfactory proof has been adduced before me showing the said C. D. to be an insane person, and that.....has not sufficient estate to support.....under said visitation of insanity.

Given under my hand at.....in the county and State aforesaid, this.....day of.....in the year of our Lord one thousand eight hundred and.....

A. B.

CERTIFICATE OF PHYSICIAN.

.....County, ss.—I, A. B., being duly sworn according to law, do certify and declare that I have examined into the state of health and mental condition of C. D., of the (township, ward or borough) of.....of said county of.....and that I am of the opinion that.....is insane.

A. B., Physician.

FORMS AND DIRECTIONS

FOR THE ADMISSION, &c., OF PRIVATE INSANE PATIENTS.

FORM OF REQUEST.

The undersigned, of the.....of.....in the county of.....is desirous of placing in the "New Jersey State Hospital at Morris Plains, N. J.," and hereby requests the admission therein of.....a resident of the.....of.....who is aged.....years, and has beenis a native of.....in the State of.....and is.....of the undersigned.

Dated.....18...

FORM OF CERTIFICATE OF INSANITY BY A PHYSICIAN.

.....18...
I.....physician, of the township of.....in the county of.....do certify under oath that I have examined into the state of health and mental condition of.....of the township of.....in the county of.....and that.....is, in my opinion, insane, and a fit subject to be sent to the New Jersey State Hospital.

.....

Sworn to and subscribed before me this.....day of.....A. D. 18...

FORM OF BOND.

Whereas.....of.....in the county of.....an insane person, has been admitted as a patient into the "New Jersey State Hospital at Morris Plains, N. J.;" now therefore,

We, the undersigned, in consideration thereof, jointly and severally bind ourselves to.....Treasurer of said Hospital, to pay to him and his successors in office, the sum of.....dollars and.....cents per week for the care and board of said insane person, as long as..... shall continue in said Hospital, with such extra charges as may be occasioned by.....requiring more than ordinary care and attention; and also to provide.....with suitable clothing, and pay for all such necessary articles of clothing as shall be procured for.....by the Warden of the Hospital; and to remove.....from the Hospital whenever the room occupied by.....shall be required for a class of patients having preference by law, or whenever.....shall be required to be removed by the Managers; and also to pay all expenses incurred by the Managers or Warden in sending said patient to.....friends, in case one or either of us shall fail to remove said patient when required to do so as aforesaid; and if.....shall be removed at the request of.....friends before the expiration of six calendar months after reception, then to pay board for twenty-six weeks unless..... shall be sooner cured; and also to pay, not exceeding fifty dollars, for all damages.....may do to the furniture or other property of said Hospital, and for reasonable charges in case of elopement, and funeral charges in case of death; such payments for board and clothing to be made quarterly, in advance, from date of admission, and at the time of removal, with interest on each bill from and after it becomes due.

In witness whereof, we have hereunto set our names this.....day of.....in the year 18...

Name,	Residence,	P. O. Address.
Name,	Residence,	P. O. Address.

Signed and sealed in the presence of.....

Sworn and subscribed before me this.....day of.....A. D. 18...

A. B., *Judge, &c.*

The Chosen Freeholder or Freeholders of the township, ward or borough must then indorse the above order and certificate as follows: "Approved," and sign his or their names as the Chosen Freeholder or Freeholders of the (township, ward or borough) of.....and county of.....

CERTIFICATE OF THE COUNTY CLERK.

State of New Jersey, }
 County, } ss.

I, A. B., Clerk of the county of.....do hereby certify that the foregoing is a true copy of the report and certificate of.....one of the Judges of the Court of Common Pleas of said county, in the case of.....and also the certificate of Dr.....thereunto appended, as filed in my office; that the foregoing is a true copy of the indorsement thereon, and that (A. B. and C. D.) whose name.....signed to the said indorsal of approval.....member of the Board of Chosen Freeholders of said (township, ward or borough) in said county, and that said signature.....is in.....proper handwriting.

In witness whereof, I have hereunto set my hand and seal of office, at.....this.....day of.....A. D. 18...

A. B., *Clerk.*

