

**ANNUAL REPORT OF BOARD OF MANAGERS OF THE
MENDOCINO STATE HOSPITAL.**

TALMAGE, CALIFORNIA, August 1, 1916.

*To the State Commission in Lunacy,
Sacramento, California.*

The Board of Managers of the Mendocino State Hospital herewith submits its annual report for the year ending June 30, 1916.

VISITS AND INSPECTIONS.

A majority of the Board of Managers has visited the hospital monthly during the fiscal year commencing July 1, 1915, and ending June 30, 1916. We have found the inmates well housed, clothed and cared for, and due attention given to their physical and mental welfare. We have found, with few exceptions, that the officers and employees of the institution have been attentive to their duties and have exerted every endeavor to carry out the purposes of the hospital.

We have supervised the repair and alterations of old buildings, the installation of new plumbing and electrical system and the construction of new buildings, all of which more fully appears in detail in the report of the Medical Superintendent herewith transmitted to you. Notably, we call your attention to the completion of the large storage dam and reservoir. We have carefully examined the monthly reports and the suggestions therein contained which we have found to be satisfactory.

APPROPRIATIONS.

We recommend an appropriation for the support of hospital for the fiscal years 1917-1918 and 1918 and 1919 in the sum of \$289,220; for salaries for the above period, \$209,000.

SPECIAL APPROPRIATIONS.

Water softening plant -----	\$7,500 00
Converting second floor of Administration Building into a ward for patients -----	7,500 00
Reconstruction of Ward 5 and converting present laundry and bakery into a ward -----	20,000 00
Constructing new laundry and bakery and installation of new machinery -----	28,000 00
Nurses' home -----	25,000 00
Construction new steam heating distribution system for administration and ward buildings -----	5,000 00
Installation two 150-horsepower boilers to replace three condemned 75-horsepower boilers -----	18,000 00

Remodeling mechanics-farm hands' lodgings	2,000 00
Reconstruction of Ward 7	10,000 00
Plumbing repairs	5,000 00
Renewal of old floors in wards	2,500 00
Repairs and improvements at dairy	2,500 00
Installation heating plant to heat two physicians' cottages, business manager's cottage and residence of medical superintendent and the Manor House	10,000 00
Construction of cloister in back yard for the female patients	5,000 00
New Manor House for board of managers.....	6,500 00
Furnishings for Manor House	1,750 00
Additions to Ward D for female patients	20,000 00
Remodeling Ward 8 for male patients	5,000 00
Enlargements of operating room, etc.	3,000 00
Purchase of land for pasturage, piggery, etc.....	20,000 00

WATER SOFTENING PLANT.

We recommend the appropriation by the legislature of the sum of \$7,500 for the purpose of meeting the cost of installing a water softening plant at the Mendocino State Hospital. This is absolutely necessary, and should be considered an emergency appropriation because of the rapid destruction of pipes caused by the alkaline condition of the water.

CONVERTING SECOND FLOOR OF ADMINISTRATION BUILDING.

We believe that the second floor of the Administration Building, which has been occupied by the board of managers and the officers of the institution who have been given living quarters elsewhere, can be converted by the expenditure of the sum of \$7,500 into accommodations for at least 80 patients and possibly 90 patients. The hospital is at present greatly overcrowded and the work of securing this extra space should be prosecuted with the greatest expedition to relieve the congestion.

RECONSTRUCTION OF WARD 5.

The arrangement of Ward 5, accommodating at present 107 patients, is very poor and is very much in need of reconstruction. Below this floor is the laundry and bakery which makes the quarters above very uncomfortable. We recommend the removal of the laundry and bakery and the converting of the space thus obtained into sleeping quarters for patients now overcrowding the second floor. We estimate the cost of rearranging the two floors will be \$20,000 and ask that immediate attention be given to this as we regard it as a matter of great emergency. The foregoing will necessitate the construction of a building for the laundry and bakery which we estimate will cost \$2,000. We further recommend an appropriation to cover the cost of removing the laundry and bakery and the installation of new laundry and bakery machinery in the sum of \$8,000.

NURSES HOME.

An appropriation of \$25,000 is recommended for the purpose of constructing a home to accommodate female attendants, married couples employed as attendants, female stenographer, etc., said home to have a capacity of 34 rooms, two living rooms and necessary bath rooms, toilets, lavatories and other required conveniences. The necessity for this new construction is fully set forth in the Medical Superintendent's report.

REMODELING MECHANICS AND FARM HANDS LODGING HOUSE.

We recommend an appropriation in the sum of \$2,000 to be used for the purpose of remodeling the present workingmen's lodging house which in its present condition is badly in need of remodeling.

RECONSTRUCTION OF WARD 7.

We deem it of great necessity and therefore recommend an appropriation in the sum of \$10,000 to cover the cost of reconstructing Ward No. 7. This ward at present consists of temporary shacks of wood and in use to house 105 patients. This ward is on the cottage plan and it is contemplated that the reconstruction should follow the same plan.

PLUMBING REPAIRS.

We earnestly request an appropriation in the sum of \$5,000, for plumbing repairs, water pipes, upkeep of sewers, etc.

RENEWAL OF OLD FLOORS IN WARDS AND REPAIRS AND IMPROVEMENTS AT DAIRY.

An appropriation of \$2,500 is requested to cover the cost of renewal of old floors in wards and \$2,500 for the repairs and improvements at the dairy, all of which work is very essential.

INSTALLATION OF PLANT TO HEAT OFFICERS' RESIDENCES.

We recommend the appropriation in the sum of \$10,000 to cover the cost of installing a plant for heating the cottages of the two physicians, business manager, and medical superintendent residence.

CONSTRUCTION OF CLOISTER IN YARD FOR FEMALE PATIENTS.

An appropriation of \$5,000 is recommended for the purpose of constructing a cloister in the yard for the female patients. There is at present such a cloister in the yard for male patients and has proven a great benefit to patients by enabling them to go out of doors during the winter months and is also a protection against the heat of the summer.

STEAM HEATING DISTRIBUTION SYSTEM.

The board recommends an appropriation in the sum of \$5,000 for the installation of a new steam heating distributing system in the Administration and Ward Buildings.

NEW BOILERS.

We recommend that the three old 75-horsepower boilers which have been condemned by the boiler inspector of the Industrial Accident Board, as per correspondence on file in this office, be replaced by two 150-horsepower boilers at a cost of \$18,000.

NEW MANOR HOUSE FOR THE BOARD OF MANAGERS.

We recommend that the Manor House now built, but not yet occupied by the board of managers, be utilized for the accommodation of the secretary to the medical superintendent and guests at the Hospital and that a new Manor House be constructed at a cost of \$6,500; said Manor House to be built according to plans to be submitted to the board for its approval.

ADDITION TO WARD D—FEMALE PATIENTS.

We further recommend that an appropriation of \$20,000 be made for the purpose of adding accommodations for female patients to the number of at least 75 in that one floor be added to Ward D.

REMODELING WARD 8—MALE PATIENTS.

An appropriation of \$5,000 is recommended to cover the cost of remodeling Ward 8.

ENLARGEMENT OF OPERATING ROOM, ETC.

We recommend that an appropriation of \$3,000 to cover the cost of enlarging the operating room and necessary adjuncts such as anaesthetic room, dressing room, etc.

PURCHASE OF LAND FOR PIGGERY, PASTURAGE, ETC.

We earnestly recommend the appropriation of \$20,000 with which to purchase additional land for pasturage and the piggery, and also for the watershed tributary to the hospital.

RECEIVING HOSPITAL.

We recommend that the question of a receiving hospital be held in abeyance.

ENDORSE HOSPITAL ADMINISTRATION.

In conclusion this board of managers earnestly endorses the excellent work of the medical superintendent in handling the affairs of the hospital during the fiscal year and we are pleased to note the spirit of harmony that prevails throughout the institution.

Respectfully submitted.

BOARD OF MANAGERS,
ALFRED GREENEBAUM, *Chairman.*
THOMAS P. BOYD.
A. J. MAYFIELD.
BEN J. PATOCCHI.
ADOLPH UHL.

Attest · JOHN F. GALVIN

REPORT OF THE MEDICAL SUPERINTENDENT, MENDOCINO STATE HOSPITAL.

TALMAGE, CALIFORNIA, July 1, 1915.

The Honorable Board of Managers, Mendocino State Hospital.

GENTLEMEN: I herewith present to you my annual report for the sixty-sixth fiscal year ending June 30, 1915.

Our net increase in population for the past year is 62, as compared with a net increase of 12 the previous year, and 23 the year before that. Since the hospital had already exceeded its reasonable accommodations this makes imperative that increased accommodations for patients be provided. The proposed plan of utilizing the second floor of the Administration Building as an additional ward will, therefore, not more than meet our present necessities. It will be noted that the inebriety admissions constitute 42 per cent and the mental admissions 58 per cent of our total admissions the past year. Since this condition will remain until the state makes some other provision for inebriety cases, it would be wise to have this in view in making the plans for increasing the capacity of the hospital.

In general, the admissions were 80 per cent males and 20 per cent females, and 75.6 per cent came from the San Francisco Bay section. The foreign born admissions were 18.2 per cent, while the proportion of foreign born population in the United States is 14.5 per cent. In other words, there is among those admitted, one female to every four males, and one foreign born to every native born, and three times as many admissions from the San Francisco Bay section as from other portions of the state. We have to do, therefore, in the work of this hospital, chiefly with men from San Francisco and the foreign born population is more largely represented among our admissions than in the general population. It is interesting to note that the foreign countries are represented as follows:

Ireland -----	31 per cent
England -----	14 per cent
Scotland -----	10 per cent
Belgium -----	10 per cent
Sweden -----	10 per cent
Other countries -----	25 per cent

INEBRIETY.

We have separated our inebriety cases from the mental cases in our 381 admissions and note some interesting differences; 79.6 per cent of the mental cases and 87 per cent of the inebriety cases are first admissions; 27 per cent of the mental and only 18 per cent of the inebriety cases were less than 30 years old; while 24.3 per cent of the mental cases and 35.8 per cent of the inebriety cases were between 30 and 40 years of age; 40 per cent of the mental cases were noted as married and 49 per cent of the inebriety cases were married. In other words, readmissions were 8 per cent less common among the inebriety cases, and the inebriety cases were predominantly between 30 and 40 years of age and 9 per cent more of them were married. Drug addiction was represented by 27.5 per cent and alcoholism by 72.5 per cent, but when the two sexes are separated we find among those with drug addiction 45 per cent of the women and only 23 per cent of the men, and among the alcoholics 55 per cent of the women and 77 per cent of the men. This is probably explained by the two facts that alcoholism is less common among the women and that drug addiction is not only more easily hidden, but is found more among the lower social classes of women.

The experience of this hospital with 591 inebriety cases has led to certain rather clearly defined conclusions, viz:

First. A state institution with complete control of the patient for at least six months is essential. I know of nothing else that will take its place. Our patients frequently tell us that wherever else they may have been they have, in some manner, secured some amount of drugs or drink. The knowledge of the impossibility of securing any drug or drink reduces markedly the discomfort associated with withdrawal. In this connection it is interesting that gradual withdrawal is usually associated with distress at the end of the withdrawal period nearly, if not quite, as great as the distress of abrupt withdrawal. The knowledge that the withdrawal at the beginning is complete and that the distress is at its height seems to introduce a hopeful element into the case. There is also a complete change of environment.

Second. A thorough physical and mental study of the case is essential in order that the treatment of that individual case may be intelligently carried out. The previous history as given by the patient naturally presents everything in the most favorable light, but the main facts can generally be relied upon. The type of person and his mental equipment give you a good basis on which to estimate the possibilities of the patient.

Third. There is a distinct separation in the physical and mental

treatment of any case. The physical condition can, as a rule, be adjusted to as nearly the normal as possible within three months. The mental adjustment is a matter of re-educating as far as possible. Since these cases are generally between 35 and 40 years of age, the possible re-education can not, even in a favorable case, be accomplished in a shorter period than six months. With the adjustment of the physical condition there is usually a period of unrest and impatience which is particularly dangerous and frequently leads to relapse if restraint is removed. This three-months period has been noted by all who have had to do with chronic alcoholics. When this period is passed the mental treatment progresses as satisfactorily as the type of person will permit. Many of these patients do not know that they can be comfortable without drugs or drink. The realization of this fact is usually the beginning of the cooperation of the patient with the mental treatment.

Suggestion with occupational therapeutic efforts, a hopeful atmosphere and a realization of the principles involved in recovery comprise, in brief, the outline of treatment that we have found most successful. The alcoholic is fortunately unusually suggestible, but herein unfortunately lies the great difficulty as to permanent recovery and the great difficulty in treatment therefor. The massive suggestion of hypodermatic medication producing a distaste for alcoholic drinks fails ordinarily in this regard and hence is less often used. The limit of two years for institutional treatment seems wise and cases not relieved in that time will require permanent supervision in some industrial colony. The mental defective offers a special problem, and having determined his mental age he can not be expected to do more than that age would indicate.

Institutional treatment must be followed by after-care work and the parole system, so that the patient may be not only helped in the new environment but also returned for additional treatment if necessary. The number of cures is really in direct proportion to the amount and removability of the psychopathic abnormalities in each individual. It is variously estimated at from 30 to 70 per cent. As soon as we recognize the mental factor in the question of alcoholism, the whole problem assumes a different aspect. We do not ineffectually punish the defective individual or expect that the removal of alcohol will remove his inherent defect. We sympathetically and wisely treat the individual and secure the best result that is humanely possible.

PERSONNEL.

Dr. L. O. W. Moore resigned as interne on account of sickness September 13, 1914.

Dr. Isabel C. Boerke was appointed interne September 23, 1915.

Mr. F. C. Handy resigned as steward December 31, 1914, and accepted a business opening in San Francisco. Mr. Handy had been connected with this hospital nearly all the time since its establishment in 1893.

Mr. N. S. Burge was appointed steward to succeed Mr. Handy on January 15, 1915. He has had unusual experience in large construction work and the handling of men. He is a graduate of Stanford University 1907.

Dr. F. E. Allen resigned his position as first assistant physician January 26, 1915. He had been connected with the hospital medical staff since 1904.

Dr. M. J. Rowe, of the civil service eligible list, was appointed first assistant physician February 26, 1915. Dr. Rowe has had an unusually wide psychiatric experience in Worcester, Mass., Ann Arbor, Mich., and Kalamazoo, Mich. He had been living in Monrovia, California.

RELIGIOUS SERVICES.

The patients maintain a continued interest in the Catholic and Protestant religious services. Attendance is entirely optional with the patients and averages about 75 at each service. They also seem to manifest an especial interest in remarks that have to do with every day living.

OCCUPATIONAL AND RE-EDUCATIONAL WORK.

The class of work done by the patients is better than in any institution I know and has received a great deal of praise. Some of their work was on display in the California Building at the Panama-Pacific International Exposition and the beautiful character of the work has attracted especial attention. It is proving more and more true that the high value of the work is an especial incentive to the patients and develops especial care and effort. Thus the character of the work advances as the patient proves more competent and we are securing better results. As before we find that individualizing with patients develops more skill and often arouses a chronic case into a state of efficiency. The balance on hand in the fund is \$94.71. We have purchased during the year a good second-hand Steinway piano at \$100, and now have a piano on each of the female wards except the violent ward.

TUBERCULOSIS.

We have had 15 deaths from tuberculosis, 15 deaths from general paralysis of the insane and 10 deaths from nephritis. Sixty per cent of our mortality is due to these three diseases therefore. We have had uniform success in the discovered tubercular cases, but still find that our only aid to this diagnosis in mental cases is physical signs. Any loss in weight leads to physical examination and our weight records

are carefully and punctually made therefor. All tubercular garbage is immediately removed and cremated in an especially constructed crematory.

The new female tubercular cottage attracts favorable comment from every one, and patients placed there uniformly improve.

CLINICS AND RECORDS.

Five hundred fifty-five cases have been considered in conference. The especial value to the patient is seen in the clarifying of diagnosis and in the different viewpoints and reasons for the same in discharging and paroling patients. A study of old cases has also shown possibilities in increasing efficiency. Patients are not now as excited by a conference as some of them were formerly and we have frequent requests for conference consideration. We have established also the past year an index of diagnoses with cross references. Consequently the study of any mental disease is greatly facilitated. The main difficulty in dealing with mental cases is the lack of available data and commitments are usually inadequate and obscure.

Three hundred eighty-one Wassermann examinations have been made in the admission cases. This includes all the current admissions. A few older cases have also been examined. The percentage of positive reactions was 10.4 per cent (males 8.9 per cent; females 1.5 per cent).

Our percentage of recoveries to admissions is lower than last year (27.65 vs. 32.52). I can, however, see no value in this percentage at any time because the prospect of recovery depends upon the form of mental disease involved. The relatively larger number of women with manic depressive insanity (whole population 20 per cent women, manic depressive insanity, 43 per cent women), and the relatively insignificant number of women among the paresis cases (10 per cent versus 20 per cent), are interesting facts.

BUILDINGS.

The ranch cottage was occupied in October, 1914, and has proven very successful. It has a very homelike atmosphere and the men have free parole. Any cases becoming disturbed are returned to the main building. There have been no escapes.

The female tubercular cottage is proving most satisfactory and comfortable, all of which is reflected in the conduct of the patients. It was opened March 5, 1915. This was built from the contingent fund.

The "Mission Corridor" enabled the men to be out of doors during the rainy part of the winter and also has made the parole ground comfortable in summer. This was also built from the contingent fund.

A new cottage on Ward 7 with steam heat and separate bath was built out of the contingent fund and occupied June 15, 1915. It

increased our capacity by 20 beds and was very much needed for those patients sick in bed.

The earth reinforcement on Dam No. 2 was washed away by the winter floods. Out of the contingent fund we have placed a new concrete toe wall, a rock fill and a concrete apron to carry away the storm water overflow. We have also very much enlarged the spillway. This will, we hope, make this overtaxed dam entirely safe. The finishing of Dam No. 3 and the cleaning of the storage basin will be completed by next winter.

The survey for the new main pipe line has been completed and bids asked for the 10-inch main wooden pipe line decided upon by the state engineering department.

We have in contemplation, with the contingent fund available, the building of a new guest or manor house, a new steward's cottage, the reconstruction of the second floor of the Administration Building into an additional ward, the changing of the steward's department accommodations so as to give adequate storage facilities and to concentrate the ice plant and cold storage plant, the enlargement of the laundry and a better housing of the electric transformers and switch board.

The hospital has been exceedingly fortunate in not only the hearty cooperation of the officers and employees in the work of the past year, but also in the untiring efforts and enthusiasm of the new board of managers as well as the long faithful service of the retiring board of managers. The outlook is therefore unusually promising.

On June 30, 1916, our population reached 1,200, which is the largest in the history of the hospital and 10 per cent in excess of our capacity. At present our most important problem is to secure adequate accommodations for not only our present excess, but the probable increase of the next two years. Fortunately this offers an opportunity to remedy the structural defect of our present type of hospital and balance the large wards of the main hospital with a receiving hospital and a number of cottages, thus making more segregation possible.

The character of our population remains practically the same as outlined in the last report and means still that we have a larger foreign population (total 38.3 per cent; mental 53.7 per cent; alcoholic 16 per cent), and that 66 per cent of our admissions are from the San Francisco Bay section. It means that we are vitally interested in the proposed San Francisco psychopathic hospital because of the early and therefore preventative treatment of mental disease possible in such a hospital, as well as a more complete study of cases so that commitments may be restricted to well defined mental diseases instead of including, as now, dream states, temporary upsets in defective makeups,

and a certain number of delirium tremens cases that could as well be treated in a psychopathic hospital.

This means that we are also vitally interested in the proper mental examination of incoming immigrants since we, in common with other northern state hospitals, have a foreign population 14 per cent greater than the state foreign population and 24 per cent greater than the general United States foreign born population.

The fallacy of publishing any tables showing percentages of recoveries to admissions (whatever this term might be supposed to mean), is evident for the following reasons:

First. "Insanity" includes many mental diseases with the additional fact that mental diseases have a general bodily relation as well as social and legal relations.

Second. The cases admitted bear slight relationship to the cases discharged and first attacks are not prognostically comparable with subsequent attacks. Any notation of recovery is also to a large degree contingent upon the after-care or treatment that can be given for a period.

Third. Our 1916 record shows 80 alcoholic cases discharged as term expired, and only time can tell where they ought to be classed, although the fulfillment of the term of commitment might presume recovery, *i. e.*, if alcoholic cases were included.

Fourth. We have four cases transferred for the convenience of families, of which I feel sure three are now recovered, but we can not claim recovery in these cases. Besides two others are social recoveries of paranoid states, but could not be called medical recoveries.

Fifth. We also transfer to Washington, D. C., each fall, 15 to 20 naval cases, and a good percentage of these would reach a recoverable status if retained the usual length of time.

Manifestly then any percentage of recoveries to admissions, means nothing of value; has at least in Pennsylvania been used against state service, and is capable of varied treatment by different hospitals. The 1914 report of this hospital showed the recovery rate probably recoverable cases of mental disease and this ranged from 17 per cent to 100 per cent depending upon the mental disease considered.

The question of inebriates and drug users is becoming more and more urgent. We are receiving mainly those classed as police cases and the treatment of which previously has frequently been unsuccessfully attempted by the various agencies combating inebriety in San Francisco. In other words, our cases are, as a rule, last resort cases and often received from the police. However, they are no criterion as to what could be done with the general class of inebriates. Starting

with such a class of material it is surprising that we have as many permanent recoveries as we have. We should expect that the return to the average environment would be associated with great danger of relapsing and that several courses of treatment would be necessary. Hence, we have placed more than 50 per cent under parole so that we might have some control of them outside of the hospital during the period of treatment allowed by law. This has proven more successful, although from lack of personal checking of the family reports we would not class them as recovered. It does indicate, however, that besides a special industrial state institution for these cases, we should have an after-care organization and an indeterminate sentence.

The chief point developed in our study of these cases, however, is that they are largely mental deviation problems and in need of mental treatment. These mental deviations are both qualitative and quantitative, *i. e.*, we have to do with mental disease and mental defect.

Goddard says, in concluding the subject of alcoholism and feeble-mindedness, "Everything seems to indicate that alcoholism is only a symptom; that it for the most part occurs in families where there is some form of neurotic taint, especially feeble-mindedness. The percentage of our alcoholics that are feeble-minded is very great. Indeed, one may say without fear of dispute, that more people are alcoholic because they are feeble-minded than vice versa." To gain any idea, therefore, of the importance of alcoholism, we must study the origin of the man, his general adaptability to life, and the effect of alcoholism on the individual whose conduct has claimed our attention so much.

In our experience at the Mendocino State Hospital, with 745 cases received since the passage of the inebriety law in California in 1911, we have come to certain conclusions as to alcoholic types of patients from what might more properly be called the psychobiological point of view. These types might be summarized as follows:

First. An unstable emotional or manic depressive type, with or without mental defect. They give a previous history of unusually hopeful periods, and unusually hopeless periods; of moderate elation, but more marked depression. Their drinking is more often associated with the depressed period; and, having once found relief in alcohol, they flee to that refuge whenever slightly depressed. The temporary relief from alcohol is followed by the usual reaction following drinking, and they become continuous excessive drinkers with rare periods of abstinence or normal emotional poise. They are periodic drinkers only in the sense that they have periods of abstinence which are interrupted without adequate external cause. If they can be taught the untrustworthiness and changeable character of their emotional life, they may pass through these periods of depression without recourse to alcohol.

Second. There is a group that seems to suffer periods of nervous explosion, with a craving for liquor that suggests very strongly epileptic equivalents. For no reason, after a period of relatively exemplary behavior, a tense restlessness seizes them, accompanied by an intense craving for alcohol. These prodromal symptoms resemble the aura in epilepsy. The higher type individual will have to recognize this stage, and place himself in some condition where he can fight the attack, or remain in the control of others. The defective lower-grade type has no such conception, and drinks to the point of intolerance. A young woman ran away from this hospital when her outlook was much improved, drank to excess for three days, and was then found and returned because she was physically unable to go farther and drink more. No other conduct disorder was discovered. She complained of a great craving, and was restless before she ran away.

Third. The mentally defective type is the largest with which we have to deal, and constitutes about 75 per cent of our cases. This may be partly due to the fact that at least two-thirds of our cases come from larger centers of population where the stress is greater, and have usually been out of employment. Their previous histories show a low grade of effectiveness. Their frequent changes of occupation might be due to alcoholism, but their grade of employment does not show any marked efficiency. There was nearly always a complete failure from a financial standpoint and from a marital standpoint. To develop this question a study was made of 100 practically consecutive cases without any choice of individuals, and after several weeks or months had elapsed to avoid the immediate effects of alcoholism noted in our earlier experiences with various intelligence tests. This work was done under as nearly the same conditions as possible, and largely by one member of the staff. The Binet-Simon tests revealed that the mental ages ranged as low as seven years, and that only 25 per cent were graded as of 15 years or more of mental age. One was seven years mentally; two were eight years; six were nine years; 14 were ten years; 23 eleven years, and 29 twelve years; while only 16 were 15 years, and nine other cases came between 12 and 15 years, hence were counted as adult mentality. If the generally accepted estimate that 50 per cent or more of the inhabitants of our almshouses, prisons and houses of prostitution are mental defectives is correct, then from our experience it would appear that the alcoholics and the drug cases, show a possibly higher percentage of mental defectives, and our problem becomes 75 per cent that of the mental defectives. Industrial segregation or sterilization, with supervision, would seem imperative in these cases. It is also evident that one could not expect greater efficiency than their mental age would indicate.

Physically the following improvements have been made during the past year:

1. Main water pipe line replaced by a new line.
2. The storage reservoir with a capacity of 30,000,000 gallons has been completed and filled.
3. The entire electric system, which was pronounced inefficient, wasteful and dangerous, is being made over.
4. The steam system has been surveyed and the necessary changes will be recommended in the budget.
5. New electric elevators for food service have been installed.
6. The commissary department has been completely changed, adequate storage facilities supplied and a new automatic refrigerating plant installed.
7. Two new cottages for the Board of Managers and the Business Manager have been built.
8. The gas service has been extended to the officers' houses.
9. All the lavatory sinks have been replaced and many necessary changes made in the plumbing.
10. The high pressure fire system has been completely replaced and rendered fully efficient.

PERSONNEL.

Dr. I. C. Boerke resigned September 16, 1915.

Dr. A. C. Eaton was appointed September 17, 1916, as interne and qualified in the examination for assistant physician. Dr. Eaton left the hospital, however, to take up special work at the University of California.

Dr. C. H. Spalding succeeded Dr. Eaton as interne, August 2, 1916.

Mr. C. E. Wilson resigned as secretary to the medical superintendent December 1, 1915, after many years service, to take up ranching in San Joaquin County.

Our needs for the coming biennial period are necessarily larger since the special appropriations for this hospital at the last session of the legislature were very small. Summarized they are as follows:

Receiving hospital	\$100,000 00
New boiler plant and steam distributing system	55,000 00
Water softening plant	5,000 00
Repairs and improvements—Ward 7 reconstruction, plumbing, laundry, ward floors, dairy, etc.	25,000 00
Nurses' home	40,000 00
Men's cottage	25,000 00
Purchase of additional land, watershed protection, dairy needs, etc.	15,000 00

RECEIVING HOSPITAL.

This hospital is the only California state hospital without a receiving hospital. Early effective treatment and segregation are essential. Because of the large wards and impossibility of adequate separation of cases as the hospital now stands this is doubly important. For the third time we are asking therefore, first of all, for this necessity.

STEAM PLANT.

Seventy-five per cent of our boiler plant is under suspicion and renewal recommended by the Industrial Accident Commission. The engineering department states that the present plant is improperly placed on high ground and should be on low ground for a gravity return of hot water, and more centrally located for supplying all buildings, including officers' residences, with central steam heating. Evidently, then, this is essential and now is the time when this change should be made.

Several varied, but essential, needs have been included under this head.

Water softening plant.

Our water tested at various points shows a uniform hardness index of 200. Since chemically this consists chiefly of sulphite of magnesium and carbonate of lime, it is evident that these salts are thrown out wherever the water is warm and seriously damage the entire hot water system causing many repairs and loss of servicableity. It is estimated that a water softening plant will obviate this.

REPAIRS AND IMPROVEMENTS.

Central heating. This has been found more economical and safer. Hence with the reorganization of our steam plant it is desirable to make the service complete.

Dairy, barn, laundry, ward floors, ward 7 and plumbing are also manifestly in need of additional expenditures to place them in good condition.

Nurses' home. There is no provision made for nurses except rooms on the wards, and many are renting rooms therefor outside the hospital grounds. This need was presented and recognized in the preparation of the last budget.

Men's cottage. Ward 5 (109 patients) is uncomfortable in the summer and inadequate at all times for the working patients. Besides the laundry is in need of this accommodation for proper work.

Ward 6 (87 patients) is on the third floor of the Administration Building, which fact promises potential danger in the event of earthquake, and besides has inadequate stairways for escape in case of fire.

This space could readily be used in housing employees. Thus it is seen that the need of a men's cottage, of the Patton type (128 patients), would not provide for patients already on hand who ought to be better cared for. Its advantage in the proper segregation of cases is also evident. The necessity for this has already been mentioned.

Our dairy needs call for additional land for pasturing and the piggery must be separately and adequately provided for. Hence the purchase of approximately 100 adjoining acres of land is urgently advised. The hospital, in providing for a water system and watershed, did not purchase 200 acres of land now held as camping sites. The recent contamination of our water supply indicates that the purchase of this additional land is essential.

In conclusion, I beg to express my appreciation of the hearty cooperation of our present hospital force of employees and the unusual amount of personal time given to the hospital by the Board of Managers at the expense of their own interests.

Respectfully submitted.

ROBERT LEWIS RICHARDS,
Medical Superintendent.