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TRUBY KING AND SEACLIFF ASYLUM

1869 - 1907

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CONTENTS

Acknowledgements ii
List of Illustrations iv
List of Abbreviations v

CHAPTER

1 Introduction 1
2 Bodily Environment 11
3 Treatment 38
4 Conclusion 61

Appendices 68 - 69
Bibliography 70 - 72

- / -
<table>
<thead>
<tr>
<th>Illustration</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truby King About 1913</td>
<td>2</td>
</tr>
<tr>
<td>Seacliff Asylum</td>
<td>13</td>
</tr>
<tr>
<td>Suicidal Melancholy</td>
<td>41</td>
</tr>
<tr>
<td>A Mental Patient</td>
<td>50</td>
</tr>
</tbody>
</table>
LIST OF ABBREVIATIONS


F.M.O.L.  Farm Manager's Outward Letters.

M.S.O.L.  Medical Superintendent's Outward Letters.

S.I.B.    Seacliff Inspector's Book.
CHAPTER I.

INTRODUCTION

In New Zealand the name of Frederic Truby King is so closely associated with infant welfare and the Plunket Society (The Royal New Zealand Society for the Health of Women and Children), that his numerous other activities tend to be forgotten. This thesis explores an important period in his life which historians have neglected. King was Medical Superintendent of the Seacliff Lunatic Asylum from April 1889 until December 1920. During those thirty one years at Seacliff his energy, ability and compassion earned him a solid professional reputation. King's professional experience in mental health during those years included, in addition to running such a large and difficult asylum as Seacliff, the lectureship in Mental Diseases at the Otago University and examinerships in Public Health and Medical Jurisprudence. The responsibility for the overall management of the Waitati auxiliary, and The Camp, an outpost on the Peninsula, also fell on King. Considering his long and varied involvement in the field of mental health I decided to investigate his work as Superintendent. Confining dates were taken as 1889, when King began his superintendency, and 1907 when the Royal New Zealand Society for the Health of Women and Children was formed. From this time onwards King became increasingly involved in the promotion of his infant welfare programme and spent a lot of
time away from the asylum. His official involvement with infant welfare escalated after 1912. In that year he was transferred temporarily to the Public Health Department for six months.²

In 1914 King spent some months in London as the government's delegate at the Infant Mortality Congress.³ Between 1917 and 1920 King was fully occupied in England organising the Infant Life Protection Association for which purpose he was granted leave of absence.⁴ His involvement with infant welfare from 1907 onwards occupied a higher profile than his work with the insane.

In C. Hubbard’s study on Lunatic Asylums in Otago between 1882-1911, she concluded that despite the change in legislation in 1911 which seemed to indicate a more interested and concerned public, social attitudes towards lunatics did not change to any great extent.⁵ Instead, pity, ignorance and fear remained dominant elements in the public feeling towards the mentally ill throughout the period. Based on the evidence she collected, Hubbard decided that any changes that had occurred in asylums during that time; for example, the greater emphasis on cure, of which classification, staff training and voluntary admission were apart, were largely due to the efforts of a few "experts" rather than the desires of "society".⁶ Included within this small group of experts was Doctor Truby King. This study hopes to put the role of King in context, to consider what King achieved while superintendent and how innovative these changes were. More importantly, some attempt will be made to present the philosophy and ideas which guided King in his activities.

No matter what the personal ideology of King, however, he was subject to certain constraints in his activities. King, like administrators in other government institutions, was restrained and directed by a legislative framework. Legislation provided guidelines
on certain aspects of the asylum related to its operation. The Act
most relevant during the period under study, was The Lunatics Act
1882.7 Basically a consolidating Act, it was in most respects a
repetition of The Lunatics Act 1866. It differed in two areas.
First the position of alcoholics within the lunatic asylum was
further defined. These people ideally, were to be kept in a ward
apart from the mental patients and made to work as directed. The
second change concerned the patients' estates. The administration
of these was to be placed in the hands of the Public Trustee, where
previously this had been the preserve of the courts.9 Like The
Lunatic Act 1866, the 1882 Act covered a range of issues affecting
asylum administration and matters relating to patients' rights. For
example, committal procedures as laid down in 1868 were restated.
These did not change in any considerable way until the 1911
legislation. Justices of the Peace could commit dangerous lunatics, and
lunatics wandering at large or being cruelly treated. Prisoners who
became insane could be removed to an asylum, as could drunkards, for
detention and treatment. The committal order had to be supported by
two medical certificates. There was no procedure of admittance other
than committal. The label "lunatic" was applied uniformly to all
those judged "unable to manage their own affairs".10 The
administrative framework provided in The Lunatics Act 1868 was
retained. Each asylum was to have a Medical Officer, and a clerk who
was to keep a Register of Patients, a Medical Journal and a Casebook.11
An Inspector and Deputy-Inspector were appointed to ensure the
efficient and humane operation of the asylums throughout New Zealand.

The law, therefore, determined who and how a person was
committed to an asylum. Neither King nor his peers had the power to
refuse admission to any person who had the necessary committal order
and medical certificates. There was no legal provision for voluntary admission nor were patients classified according to the nature or severity of their illness. How the patient was treated once inside the asylum was, however, mainly determined by the attitudes of those who ran the institution. Although ultimately accountable to his superiors, King had a lot of autonomy in the administration of Seacliff and held strong opinions on how he thought the asylum should be run.

Another consideration which had an influence on how King ran the asylum, was the concern for efficiency and economy. This aspect can be seen most clearly in the operation of the Seacliff Farm. Although by the turn of the century the farm was praised most often for its therapeutic role, it was still important that it be run in an efficient way.

The Seacliff Lunatic Asylum had 900 acres of farmland within its boundaries. The task of managing this estate was part of King's duties as superintendent. Seacliff had been designed as a "Farm Asylum". The idea was that patients would help run the farm, benefiting themselves and saving the taxpayer money. The farm was also expected to contribute to the diet of the patients and staff. In return the asylum provided, in effect, a ready market and labour supply. The farm supplied a wide variety of foodstuffs. This had repercussions for the management of the whole asylum. If, for example, savings could be made by using the produce grown on the farm, then more funds became available in other areas. Doctor Duncan MacGregor the Inspector-General stressed the importance of the farm's contribution to the reduction of maintenance costs. These same sentiments were still evident in 1907 when the farm manager wrote that he would "endeavour to make the most of the farm so as to make the
Asylum cost as little as possible. The range of farming activities undertaken at Seacliff was diverse. Patients were encouraged to become involved, for example, in vegetable growing, work in the orchard, dairying, and tending pigs, cattle and other grazing stock. As an extension of food production ventures, a fishing station was established by King at Karitane at which selected patients could work. Although this venture cannot be strictly included within the farm, it similarly demonstrates the dual role that the farm played. That is as a curative; by providing fresh food and healthful occupation outdoors, and as an economic device.

King's personal interest and involvement in the farm is well known. He gained a reputation as a "scientific farmer", and farming developed the appeal of an absorbing hobby. From the beginning King participated actively in the running of the farm. He was interested in investigating the practical aspects and scientific study of rearing plants and animals. King had no previous knowledge on the subject of farming but in the interests of improved farm management began to apply scientific experiment to the industry. The results of this experimentation had wider implications, as King's interest in animal husbandry was transferred to a concern for human nutrition. The first beneficiaries of King's new dietary ideas were the patients under his care at Seacliff. This shift in emphasis from economic motives to treatment motives in King's own personal involvement, is similarly reflected in the overall direction of the asylum. The major emphasis of treatment is discussed in Chapter three.

The dominant philosophy shared between those in charge of Otago asylums was encapsulated in the phrase humanitarianism. In Dunedin during the late 1870s Doctor Edward Halme had introduced...
the "considerate approach to the mentally ill". This approach ideally encompassed what Esquirol termed "moral treatment", "moral" meaning "the application of . . . intelligence and of emotions", in the treatment of mental illness. King was an advocate of this type of response to the treatment of the mentally ill. Bloomfield demonstrated for the Dunedin Lunatic Asylum in the period 1863 - 1876, and Hubbard for Ashburn Hall and Seacliff between 1882 - 1911, that often this ideal was complicated by the adverse circumstances in Otago asylums.

By the late 1880s when King began his career at Seacliff "opinion . . . was in a painfully divided state on this question - as to how sufferers from mental disease should be dealt with". King himself clearly felt that the role of the asylum was to provide treatment for patients who were curable and to care for those who could not be managed outside the asylum. He also realised the limitations of this aim when he acknowledged that disease of the brain was particularly hard to recover from. Often he admitted that "the best that the institution could do was to render life as free, full, useful and enjoyable as possible".

In 1888 in his annual report MacGregor summarised the dilemma if a visitor to one of our asylums believes that society does its duty by the mentally diseased when it provides them with, on the average, better accommodation and better food than they were accustomed to in their homes and sees that they are treated with as little harshness as possible, then he will come away impressed with the idea that extravagance and not parsimony has characterised our treatment of the insane, at any rate, in recent years. If, on the other hand, our visitor considers that a Lunatic Asylum should not be a mere refuge for the safe keeping and kindly treatment of acute and curable cases - an institution where the most skilful medical officers, armed with every appliance for combating mental disease, should be able to devote their whole
attention to curative work, - then he will be filled with indignation at our apathy. 25

The question we need to consider is how much this had changed by 1907, and how much was due to King.
CHAPTER 1

FOOTNOTES


3. Ibid., p. 13.


6. Ibid., p.78.


10. S. Fennel, "Psychiatry and Seaclliff", p.3.


12. This situation contributed to an already acute problem of overcrowding. In 1891, in response to agitation by Doctor Duncan MacGregor, the Inspector-General of Asylums, and others, the law was amended to provide for a minimum space quota of 600 cubic feet per patient in the dormitories. Unfortunately this requirement could not often be fulfilled as asylums could not refuse to admit persons with the necessary committal order.


16. Farm Manager's Outward Letters 19/8/07 (Hereafter F.M.O.L.).

17. R.M. Bardon, New Zealand Notables, series two, Christchurch, 1945 p.16.

18. Ibid., p.16.


24. Rules and Regulations for the guidance of attendants and nurses, Seacliff Hospital, Wellington, 1900, p.2.

CHAPTER 2.

BODILY ENVIRONMENT

Doctor T. King was appointed Medical Superintendent of the Seacliff Asylum in April 1889. He quickly saw the need for drastic reform in the running of the hospital - both within its walls and in the management of the farm! He insisted on radical changes to bring the asylum up to standard. This chapter considers the changes undertaken by King during the period 1889 - 1907, to provide a good physical environment at the hospital. The discussion is divided into two parts. First, such things as improvements in sanitation, ventilation and other health measures will be discussed, and secondly, activities designed to beautify the asylum and grounds will be considered. It appears that most of the radical re-adjustments in the asylum were made in the first seven or so years of King's Superintendency as from the mid-nineties onwards references to work on improvements related to health became less frequent. The assumption is that while the job of maintaining existing facilities never ceased, most of King's reforms had been achieved by 1896.

The lessons of preventative public health medicine had been well learnt by King. While a student in Edinburgh he had undertaken studies in public health as part of a Bachelor of Science. He was one of the first graduates in this comparatively new subject.
King was adamant about the rules for the adequate protection of the physical health of the mental patients under his care. He shared, along with his predecessors like Hulme, and his contemporaries, like MacGregor, a belief that certain conditions were essential to the preservation of life and health in man. The mentally ill were no less deserving of these fundamental rights to fresh air and sunshine, plain and wholesome food, regular and graduated exercise and cleanliness. Those afflicted with mental diseases were not to be treated like animals without feelings, or like criminals.

King believed that the well-being of the mind depended on the well-being of the body. This philosophy, by no means novel, formed the basis of King's attitude towards mental illness, the treatment of the mentally ill and guided him in determining how an asylum should function. More important still was his conviction that insanity could be eradicated by providing for the needs of the body. Social sanity he believed lay in prevention, "not in allowing people to drift without rudder or anchor, then trying to drag them off the rocks and refit them, at ruinous cost and trouble". King believed that insanity was caused by ill-health. While at Seacliff King developed his belief that many mental diseases were the result of maltreatment in infancy, especially in regard to diet. Knowledge obtained in his experiments with plants and animals at Seacliff influenced these ideas and eventually led him to establish and promote his system of rearing infants. The encouragement of good nutritional practices from birth would, he believed, go some long way towards preventing mental disease. At a Conference of the Mothercraft Society in 1932, King said,

I have always realised that there is no way of dealing with insanity except by commencing with the baby ... Bring up a child healthy and normal, make him vigorous, give him a good body, and the
probability is that he will never enter an asylum.\textsuperscript{11} These ideas, at the heart of King's later ideology of child rearing, were applied with equal vigour to curing those who had fallen victim to diseases of the brain. In 1907 King argued for a more widespread recognition "of the universal need for fresh air, regular daily exercise and avoidance of excesses and carelessness in regard to food and drink."\textsuperscript{12} Just as these considerations were vital in avoiding the onset of acquired insanity, so too was the possibility of regaining mental balance dependent on providing a healthy environment which included these desirable factors.\textsuperscript{13}

Working from the assumption that a healthy environment was not only the right of every insane person but also the key to recovery, King began work to secure such an environment. He attacked the inadequacies of the asylum buildings and the site with vigour. To a large extent many of these deficiencies were inherited. The principal problem areas related to inadequacies in the original construction of the asylum and the preparation of the site. These problems had rapidly been compounded by the continuing and worsening overcrowding which had plagued Otago asylums since the beginning. The most pressing problems related to land movement, drainage, ventilation and sanitation. King believed that the stark and prisonlike appearance of the asylum was equally unacceptable.\textsuperscript{14}

When the Seacliff site was chosen as the location for the new mental hospital, the director of the geological survey, Sir James Hector, had not been fully convinced of its suitability. He believed that the ground was unstable and that this instability resulted from its inherent nature.\textsuperscript{15} The beautiful site and the presence of an apparently firm clay foundation for buildings led the authorities to ignore Hector's warning. It was not long, however, before the truth
of Hector's prediction became apparent. The geological features of the Seacliff area meant that earth movement was (and is) a common feature. The line of shear between the moving and stable mudstone had a marked effect on the buildings.\textsuperscript{16} This line passed under the eastern end of the main building of the hospital.\textsuperscript{17} Over the course of time the movement of the clay foundations of the buildings caused cracks and other structural damage to the asylum.\textsuperscript{16} A Royal Commission investigated the state of the buildings in 1888, after a slip in 1887 which had led to structural damage.\textsuperscript{19} The Commission, although it confirmed that the faults in the asylum were unacceptable, did not conclude that the asylum was unsafe for use.\textsuperscript{20}

Many "rescue" attempts were initiated before King took up his superintendency but the problem of coping with the damage caused by unstable ground remained throughout his tenure. The two important repercussions were the interference with drainage and sewerage pipes and the contribution which structural damage made to overcrowding. In 1894 the north wing was on the move again and extensive cracks appeared in the corridor connecting the wing to the main building.\textsuperscript{21} By 1907, despite the introduction of isolating drains and a comprehensive surface drainage system, as suggested by the 1888 Royal Commission, problems with land subsidence continued.\textsuperscript{22} Ironically land movement disrupted the very drainage system that was designed to prevent the problem, leading in 1907 to problems with leaking pipe joints.\textsuperscript{23}

Overcrowding had long been a problem in New Zealand asylums and Seacliff fared no differently. The structural damage which periodically threatened the safety of the North wing contributed to the problem. In 1889 female patients accommodated in the north wing had to be given alternative accommodation in the auxiliary building.
and in two large halls in the asylum. With the transfer to the new asylum at Seacliff, it had been hoped that the problem of overcrowding would be solved. Unfortunately it continued to rank high among the problems at Seacliff. King laid great emphasis on the role of environmental conditions in aiding the patients' recovery. The problem of overcrowding was, therefore, very distressing to him and others in charge of mental hospitals. The main cause of the problem was believed to be the dumping of "incurables" into asylums by local bodies. Among professional men, the continuing cry was that the number of old, senile and chronic patients was a worrying proportion of the total asylum population. Overcrowding the asylums with incurables, they feared, would make it impossible to give the recent and presumably curable cases the care and attention or the accommodation required for their proper treatment.

The distress of Doctor Duncan MacGregor, the Inspector-General of Asylums, at the overcrowded conditions was long-standing. He openly condemned the practice in his report for 1894 when he complained that:

There is a strong tendency to throw every case that can be brought within the definition of insanity off the local rates on to the general taxation of the colony. The officers of the Charitable Aid Boards and Hospital Trustees, especially in larger centres, are constantly getting medical certificates, which enable them to commit to our Asylums persons who are suffering from senile decay, being troublesome and often dirty in their habits and difficult to manage, those in charge make every effort to get them removed.

The law also contributed to overcrowding. Up until 1891 the law made no provision for establishing a legal minimum requirement of space per patient in the dormitories. Unlike the situation in many overseas countries where a standard was fixed, and where admissions were not taken unless accommodation was available, New Zealand law
had no such provisions. This situation was not acceptable to MacGregor who lamented the lack of minimum space provisions in his report of 1890. He strongly recommended an amendment to the existing lunatic law of 1882 to establish a minimum day-room and dormitory space quota per patient. Such a provision was incorporated into the law in 1891. A clause was inserted in the Act to the effect that the dormitories should be such a size as would admit of not less than 600 cubic feet of space per patient. From then on critics could be more specific about the nature of overcrowding because they had a legal requirement against which a comparison could be made.

Despite this change in the law and an obvious desire to improve accommodation, progress was slow. On taking up his new position King promptly added his voice to the clamour against overcrowding. His first letter to the Inspector-General dealt with this very issue. Once the immediate problems caused by the inability to use parts of the North wing had been solved, albeit temporarily, the accommodation situation at Seacliff showed some improvement. During 1889 and the early part of the following year a large day room, which replaced the damaged portion of the North wing, was completed. It was confidently expected that the new day-room and a new attic dormitory, also newly completed, would give sufficient accommodation for some time to come. This faith was short lived. In 1891 Mr F. Chapman, the deputy inspector commented with dissatisfaction on the extent of the problem at the time of his visit. Comparing the legal space requirement allowed for each patient with the actual space available in this asylum, there was an excess of 142 patients. A few years later the problem, again acute, was complicated by the fact that the North wing was once more on the move. At this time the only recourse was to put beds in the corridor to accommodate the
extra numbers. In 1894 Chapman remarked that "if the problem continues we will not have enough beds".\textsuperscript{38} A more precise examination of the problem can be made for 1898. The annual report for that year included a summary of the accommodation situation for the whole of New Zealand. Only three asylums, Porirua, Wellington and Auckland were not seriously overcrowded. The situation at Seacliff was particularly critical. Pressure for sleeping space meant that the entertainment halls had to be used as dormitories.\textsuperscript{39} At Seacliff, of the 569 patients resident in April 1898, 139 slept in single rooms. The remaining 427 patients were provided for in the dormitories. The area available here amounted to 169,617 cubic feet, which was designed to comfortably accommodate 316 patients. Instead the asylum had an excess of 141 patients.\textsuperscript{40} By 1901 King was able to acknowledge that accommodation had improved over the last few years. The problem had eased until there were only 70 patients over the legal allowance! The existing accommodation was still insufficient to overtake the pre-existing state of overcrowding or to provide for newcomers. On a more positive note MacGregor commented in 1906 that for once the accommodation situation was favourable. In 1905, for the first time, the 600 cubic feet requirement had been complied with.\textsuperscript{42} Unfortunately this condition proved to be temporary. The government was not insensitive to the demands for increased accommodation that came from King via the Inspector-General. While government attempted to keep pace with the increased demands for extra accommodation the building programmes were often behind, and no sooner completed than fresh demands were being made for more.\textsuperscript{43}

An obvious consequence of overcrowding was the negative contribution it made to the physical environment and health of the patients. Being forced, by necessity, to sleep in a draughty corridor
could not have contributed much to the physical or mental well-being of the patients. In 1895, when the death rate increased to 5.8% compared with 4.3% for the previous four years, King did not hesitate to attribute this to overcrowding. Similarly, an epidemic of septic pneumonia in 1897, which led to ten deaths, was also attributed to the overcrowded state of the asylum. The health implications of inadequate physical surroundings were not solely a consequence of overcrowding. Other factors played a role. Bolstered by an unflagging faith in the benefits of clean air, good food, fresh water, cleanliness and the mentally soothing effects of beautiful surroundings, King vigorously attacked inadequacies in these areas. He displayed the same determined attitude and enthusiasm with which he had tackled the problem of overcrowding. Fortunately the reforms he implemented in these areas were more successful.

A good deal of money and skill was expended in improving ventilation at the asylum. By 1893 radical improvements had been made. By the end of that year, MacGregor was able to note that the ventilation and warming of the building had been placed in a satisfactory position. Credit for this achievement was acknowledged to belong to Truby King. New buildings erected on the site in later years included adequate and improved ventilation facilities. In the main building, despite some success and MacGregor’s optimism, King was never really satisfied that a proper standard of light, air and dryness had been achieved.

Dampness, a problem in itself, also contributed to a bad odour in the asylum. Frequent washing of wooden floors, soiled by patients, meant that they were kept constantly damp, creating a bad smell. As a solution to this problem, as King explained in 1891, the floors had been polished with beeswax and turpentine which made them resistant
to water. Another positive result of polishing the floors in this way was the brightening effect it had in the asylum corridor and dormitories. Nearly a mile of sewer-pipe, with only two ventilation apertures ran through the main building. Bad workmanship meant that this lead pipe leaked at the joints allowing foul smelling gas to permeate the building. The only remedy for the defects in the sewerage pipe was to cut the pipe off from the building. This was done in 1890 ensuring a circulation of fresh air in its place.

Providing the asylum with clean air was one aspect of King's attempts to improve the standard of the physical environment. Upgrading the system of sewage disposal was similarly judged essential. King was well aware of the health problems that could result from bad sanitation. While Medical Superintendent at the Wellington General Hospital there had been an outbreak of typhoid fever. King's report that he considered the fault lay with the sewerage system was rejected by the Board. On his own initiative and at his own expense he carried out an investigation and discovered that the drains had not been connected up, but discharged into a foul cesspit in the foundations. The changes that King initiated at Seacliff incorporated a new development. He designed and implemented a gravitation system of sewage irrigation. This was used first for the upper Asylum and garden in 1891, and then for the disposal of sewage from the main building.

There is no doubt that the motive behind improvements in sanitary conditions (including ventilation), had a preventative health motive. In 1895 King was convinced that improvements in ventilation, drainage and other hygienic measures were largely responsible for the almost entire eradication of erysipelas and ulcerated throats. Considering his background in preventative
medicine - King was the first New Zealand medical man to hold a diploma in Public Health - it follows that he should take an interest in such things and value them so highly. Certain of King's improvements in this area did not meet with whole-hearted support. The charges laid against King in 1891 in a series of articles in The Globe provide an excellent example. The complaints made referred to King's management of the asylum and treatment of staff, patients and relations of patients. King was also specifically accused of wasting public funds, providing poor quality and often inadequate quantities of food, allowing lax supervision, behaving rudely and harshly with relatives, staff and patients and in general running the asylum in a manner injurious to the local community. The Superintendent was able to answer the charges to the satisfaction of his superiors; furthermore King turned the whole situation to his advantage. He took the opportunity to summarise and explain the changes he had made in the administration of Seacliff in the two years which he had been there. The incident allowed King to discuss the principles of management which guided his administration of the asylum. The major theme of his reply was that patients had the right to a good physical environment, and that the improvements he had made were completely necessary and justified. Chapter three will deal more fully with King's opinions on the therapeutic value of work, amusements and liberty which he also discussed. Although these features were incorporated as a part of the overall environment they were oriented more directly towards the cure of the patient and fit more easily into a discussion of treatment. The most important point of King's reply is what it reveals about his attitude towards the mentally ill. His sympathy and compassion were evident. The insane were not to be treated like children or animals or criminals, rather,
they were adult human beings suffering from a disease of the brain and as such, King believed, they should be given the same care and respect that a person suffering from any other physical disease would receive. 57

The connection in King's mind between engineering a good physical environment at Seacliff and regaining mental vigour has been explained. For King one of the most important components of the physical environment and the key to physical, and thus mental health, was nutrition. By 1906, King had concluded that "insanity was essentially a disease of imperfect nutrition". As long as the brain was well and properly nourished, he believed, then insanity did not occur. 58 Good nutrition had to begin at birth. If, King argued

women were rendered more fit for maternity, if instrumental deliveries were obviated as far as possible, if infants were nourished by their mothers, and boys and girls were given rational education the main supplies of population for our asylums, hospitals, benevolent institutions, jails and slums would be cut off at the sources. 59

Statements such as this lent an authority to the child care crusade which could not easily be ignored. 60 Kings was not the only voice arguing the connection between bad dietary practices and insanity. MacGregor had long since been of the opinion that inadequate nutrition was a major factor in causing insanity. Doctor F. Hay, his successor as Inspector-General of Mental Hospitals, shared this view, that the "potent underlying cause of insanity must be sought in early malnutrition." He felt that proper nourishment of the infant both before and after birth must tell when moral and physical stress was encountered later in life. 61 King had learnt this lesson from his experiments with plants and animals. He saw it proved over and over again, that both plants and animals suffered life-long harm
from being neglected or wrongly treated in their early stages of growth. The weakest and least resistant were attacked by disease later in life, not the strong. By 1910 King was even more specific about the link between nutrition and mental health.

The infections which arise in the first years of life, and especially the inflammations of the gastro-intestinal tract ... are the most important factors in determining the majority of cerebropathies, and in this way a crowd of idiots, imbeciles and epileptics is produced ... Similarly he believed that

most cases of epilepsy in adults are found to have been preceded by convulsions in infancy, or by incontinence of urine - in other words, by nervous explosions and irritabilities induced mainly by wrong feeding and otherwise careless or ignorant rearing! ... early indigestion ... is a prime factor in the vices of puberty and adolescence, besides rendering the individual an easy prey to vice and insanity throughout life.

If inadequate diet and rearing led to insanity then it was equally obvious to King that a good, balanced, wholesome diet could cure insanity. He believed that with proper care, the patient (like the plant or animal) would be better able to cope with disease. Soon after his arrival in 1889, King made various alterations in the food arrangements at the Seacliff asylum. The first change was basically an economic measure. In September 1889 cooking at the asylum was centralised in one kitchen. This led to both a simplification in the meal arrangements for patients and staff and a saving of two salaries amounting to more than £120 per annum. This change was followed up by alterations in the diet of the patients aimed at improving their general nutrition. For instance, King reduced the amount of meat allowed for each patient and bolstered the quantity and variety of vegetables served daily. King was not without supporters for this change. MacGregor had considered implementing
similar improvements to the asylum diet but had refrained owing to the possible outcry. King's "zeal and enthusiasm" had instead achieved the reform.69 Not everyone responded to the changes in the same positive way. A complaint about the food arrangements at Seacliff was specified in the charges which appeared in The Globe in 1891.70 King's explanation for the change in diet is contained in his annual report for 1891. Before King took over the administration of the asylum meat had been served three times a day in unlimited quantities. In comparing the Seacliff diet with those of asylums in other countries, especially with England, King found that the Seacliff patients received an "undue proportion of meat".71 King believed that this diet was not suitable for the proper physiological treatment of the insane. "The consumption of flesh by the insane should be limited... because it is desirable to lessen rather than to foster the animal propensities."72 King believed that the greatest onset against insanity and a very important factor in inducing tranquility of mind in those actually insane, was to maintain a high standard of bodily nutrition. He maintained that the new diet was both more satisfying and more nutritious than the one it replaced.73 Indeed, if anything, King could be called on to defend the excess rather than the insufficiency of his diet. Table 1 shows a comparison between three weekly diets - Seacliff before King introduced his new dietary scheme, an estimate from an English asylum and the modified Seacliff diet. King specified not only the changes in amount (given in ounces), but also the relevant equivalent values of nitrogen and carbon contained in each foodstuff. He considered these two elements essential to a healthy body. King in this 1891 justification for his dietary changes saw the benefits of the improved diet in terms of the "energy" developed by the daily diet when it was
### Table 1

**Comparison Between Weekly Diets of Asylums**

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<th></th>
<th>Peat</th>
<th>Sugar</th>
<th>Gelatine</th>
<th>Bread</th>
<th>Potatoes</th>
<th>Vegetables</th>
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**Source:** J.H.R., 1891, II-29, p.12.
### TABLE 2

Estimated Energy Developed by Daily Ration when Oxidized in the Body

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<tr>
<th></th>
<th>Seaciff Original</th>
<th>Seaciff Modified</th>
<th>English Asylum</th>
<th>English Soldier</th>
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<td>Ounces per day</td>
<td>Total Foot-tons</td>
<td>Ounces per day</td>
<td>Total Foot-tons</td>
</tr>
<tr>
<td>Meat (boned)</td>
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<td>6.07</td>
<td>321.7</td>
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<td>Gelatine</td>
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<td>5.36</td>
<td>176.8</td>
<td>15.8</td>
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<td>Vegetables</td>
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<td>51.45</td>
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<td>Sugar</td>
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<td>15</td>
<td>1.6</td>
<td>203.5</td>
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<tr>
<td>New Milk</td>
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<td></td>
<td>5</td>
<td>134.5</td>
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<td>Skimmed Milk</td>
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<td>163</td>
<td>8.5</td>
<td>174.8</td>
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<tr>
<td>Flour</td>
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<td>176.74</td>
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<td>Foot-tons</td>
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<td>3,796</td>
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<td>2,973</td>
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</table>

"oxidised in the body". He concluded from Table 2 that, compared to the previous Seaciff diet, the English asylum diet, and the diet of an English soldier, the new Seaciff diet had a higher "energy" potential. The evidence given here fails to substantiate charges made against King that he was starving his charges. For King, the most conclusive evidence that his modified diet was successful, and did improve the health of the patients, was the increase in weight that occurred in the male patients. In his reply to the Globe's charges, King mentions that the newly admitted male patients who were being fed on the modified diet, were weighed monthly. Table 3 shows that in the five months between January 1890 and June 1890, all of the new admissions gained weight. Patients had long since been weighed on arrival, but as a check on health and on the new diet King instituted regular weighings after this. During the remainder of the period official reports typically compliment the food. In 1894 Chapman recorded that "the diet is ample and wholesome". Two years later Morrison, his colleague, noted that "the food is both wholesome and nutritious and sufficient in quantity". Whatever the initial resistance to King's new diet, other superintendents were quick to follow suit. By 1906 King's dietary pattern was the norm throughout New Zealand asylums.

Providing for the immediate physical needs of the patients was only the first step in engineering a good total environment. In King's opinion the emphasis he placed on beautifying the grounds and the interior of the asylum buildings was equally important. He considered such improvements were in the nature of "moral, elevating, refining and soothing influences". Beautification programmes were just as important to a patient's well-being as a good diet. Inside the asylum much was achieved to make the building look more like a
<table>
<thead>
<tr>
<th>Number of Patients</th>
<th>Length of Time In Asylum</th>
<th>Average increase in weight per man in pounds</th>
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<tr>
<td>24</td>
<td>5 months</td>
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</tr>
<tr>
<td>3</td>
<td>4 months</td>
<td>241 lb</td>
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<td>7</td>
<td>3 months</td>
<td>141 lb</td>
</tr>
<tr>
<td>15</td>
<td>2 months</td>
<td>111 lb</td>
</tr>
<tr>
<td>16</td>
<td>1 month</td>
<td>91 lb</td>
</tr>
</tbody>
</table>

home and less like a prison. The desirability of this aim was well appreciated by some. A large percentage of the work of enlivening the appearance of the asylum was carried out by patients under the supervision of an attendant. The Staff book reveals that many attendants were hired as tradesmen/attendants, so these specialist skills could be used to the advantage of the asylum. The main beautification programme undertaken at the asylum was painting. As early as May 1889 the Inspector-General noted how much the appearance of the asylum had improved because of the recent painting of the wards. As much as possible each corridor and room was painted a colour different from another. This practice contrasted with the sombre green and strong blue that prevailed throughout the building when King first took up his position. Ornamentation of the wards was achieved by adding plants, ferns, flowers and paintings. Many of the latter were donated by King and his wife Isabella. The beautification programme also had benefits while it was in progress; it provided patients with opportunities to work. The success of the superintendent in these endeavours is demonstrated by the favourable comments by an ex-patient who wrote a letter, later published in Ensign, about his stay at Seacliff. He praised among other things the spacious cheery-looking corridor and the handsome pictures.

The beautification of the grounds was another task undertaken by King. MacGregor had commented, in 1886, on the forbidding appearance of the asylum and grounds. "The drawbacks", he acknowledged, "arise from two sets of circumstances, first, the whole external aspect of the place is dreary and depressing because it is dense bushland just in the process of being cleared and the laying out of the grounds about the building is, at present, in a state of chaos". He optimistically predicted that
in a very few years, when this asylum is surrounded with beautiful grounds and fertile fields the present feeling will give place to one of satisfaction.\textsuperscript{85}

The benefits of a plan of beautification were two; first, it was important that the patients have congenial surroundings. Pleasant grounds and gardens were considered an adjunct to recovery as they provided ample opportunity to stimulate a renewed interest in life. Patients obviously took a keen enjoyment in the gardens. A letter written by a female patient while recovering in Seacliff remarks enthusiastically about the great abundance of flowers.\textsuperscript{86} Second, the actual work involved in laying out the gardens and on the farm, was considered a vital component in the patient's chances of recovery. Patients, especially males, were employed with pick, shovel, handcart and wheelbarrow, extending and improving the grounds and gardening.\textsuperscript{87} King attached great importance to the beautification of the grounds. Soon after he took up his position at Seacliff he replaced the existing gardener/attendant, Thomas Mason, with a landscape gardener.\textsuperscript{88} Some critics considered this unnecessary. A letter to the editor of the \textit{Globe} asked, "What does an asylum want with a landscape gardener?".\textsuperscript{89}

For King another important consequence of beautifying the surroundings was that it removed the sense of being imprisoned. This aspect was particularly relevant in regard to the natural scenery. The natural beauty of the Seacliff site found in its native bush and ocean view was initially lost to the patients. In most cases patients were unable to take advantage of the beauty of the surrounding countryside because of high fences surrounding the outdoor enclosures and airing courts. King saw to it that these corrugated iron fences were replaced by picket fencing where fencing was necessary.\textsuperscript{90} The airing courts and enclosures were constantly
upgraded and planted with trees, flowers and shrubs. In 1896, for example, an extensive park for the female patients was laid out north of the main building. This park was similar to the male enclosures in that it commanded beautiful views of the sea and surrounding countryside. The contrast between the old walled airing courts, situated at the back of the building, and the new enclosures was remarked on favourably by King in 1896.91

There can be no doubt that by 1907, under King's direction, considerable changes designed to enhance the physical environment of the patients had occurred at Seacliff Asylum. It is tempting when discussing these reforms to over-emphasise the personal role of King. This study tends, for the most part, to consider developments at Seacliff in isolation; because of this the figure of King looms large. King's enthusiastic support for "modernisation" can not be denied. He personally believed that certain standards of hygiene, care and environment were not met at the asylum and made every effort to eradicate these problems. The extent to which King was innovative is perhaps less obvious. In most respects he was not. Men like MacGregor certainly were in favour of the steps he took, as were the visitors Chapman, Caradus and Morrison. King was tapping a tradition of humanitarian treatment of the insane that had begun with the pioneers like Phillippe Pinel, William Tuke and John Conolly. In practical terms this philosophy may have lapsed at Seacliff, due in part to the inadequacies in the construction of the hospital and overcrowding. King was remarkable, however, for the whole-hearted way in which he tackled the problems.

His dominant philosophy was always that everybody, including the insane person, had a right to certain basic necessities. The improvements he encouraged in
drainage, ventilation, sanitation and diet were all justified by this ideology. The health of the mind depended on the health of the body. The physical environment of the asylum was, therefore, considered by King to be a major determinant in the recovery of a patient. This philosophy also explains the emphasis King placed on the beautification of the asylum surroundings. The environment for King included enhancing these visual aspects. The mentally ill were, he believed, entitled to the best possible conditions. If their basic requirements were met, if they were placed in a congenial environment, if they were given adequate occupation and not treated like criminals or animals, then and only then could some chance for a recovery be sustained. It is upon these environmental factors that King hoped to build the possibility of a cure.
CHAPTER 2

FOOTNOTES

4. Hulme had studied mental diseases at La Salpetriere in Paris where Esquirol's influence and humanitarian teachings were still strong, and he introduced a "considerate approach" to the problems of mental illness in Otago. C. Blake-Palmer, p. 459. MacGregor's support for the humane treatment of the insane is widely accepted, see N. Murray "The Life and Work of Duncan MacGregor", M.A. thesis, Otago, 1944. For the wider perspective on the work of men like Finkel and Tikau who stressed the importance of the "moral treatment" of the insane, see R.A. Clark, Mental Illness in Perspective and D.J. Rothman, The Discovery of the Asylum: Social Order and Disorder in the New Republic, Boston, 1971.
5. T.G. Gray, The Very Error of the Moon, p. 103.
6. The belief that the insane were no more than animals has a biblical precedent. For example, the fate of Nebuchadnezzar in the Old Testament story. "And they shall drive thee from man and the dwelling shall be with beasts of the field." David 4; 30-36.
7. M. King, Truby King, p. 95.
8. From the 1932 Mothercraft Society Conference quoted in M. King, Truby King, p. 93.
11. Ibid., p. 93.
13. Ibid.
M. King, Truby King, p. 86.
15. W.N. Benson, "Landslides and their relation to Engineering in the Dunedin district, N.Z. Economic Geology, 41, 4, 339. He expressed the opinion that "the clay would move - like any other plastic substance - with an almost
molecular motion".

16. Ibid., p. 336
17. See Appendix A.
20. Ibid., p. 7.
23. F.M.C.L., 1/11/07.
25. See "Annual Reports on the Lunatic Asylums of the Colony"
   A.I.H.R., 1893, 1897, 1901, H-7.

    H.S. Primrose, p. 28, notes that in New Zealand while
    local bodies were prepared to accept responsibility for
    those who were physically ill, they were not as willing
    to take responsibility for those who were insane. As a
    consequence the latter came under central control. It
    was felt that this provided a powerful incentive for
    local bodies to remove patients, especially the aged,
    to asylums.

27. "Annual Report on the Lunatic Asylums of the Colony", A.I.H.R.,
    1887, H-9, p. 1.
    1888, H-8, p. 1.
    "Annual Report on the Mental Hospitals of the Colony",
    1890, H-12, p. 1.
32. "Annual Report on the Mental Hospitals of the Colony", A.I.H.R.,
    1900, H-7, p. 1.
    (Hereafter MSOL).
34. A.I.H.R., 1890, H-12, p. 3.
35. Ibid., p.6.
36. S.I.B., 13/7/91.
43. M.S. Primrose, "Society and the Insane", p.26. Established that this situation was not peculiar to Seacliff, but widespread throughout the colony.
46. S.I.B. 6/11/93. Typical of such reports, little is noted by the writers of the details of any changes made, beyond the compliment that advances had been made and that much praise was due to King. This pattern is repeated when other improvements are discussed. Although the source material is useful it is also frustrating because of this lack of detail which would enable a more thorough analysis.
47. A.J.H.R., 1894, H-7, p.4. "After much thought Doctor King has remedied the defective provision for these things as far as structural peculiarities allow."
49. Ibid., p.4.
51. Ibid, p.2.
52. T.G. Gray, The Very Error of the Moon, p. 96.
56. Ibid.
57. Ibid.
63. Ibid., p.6.
65. Ibid., p.18.
66. F.T. King, Plants and Animals, p.6.
68. Ibid., p.3.
72. Ibid.
73. Ibid.
74. M. King, Truby King, p.65.
75. An incident in 1893 stemmed from staff grumblings about the food.
76. S.I. B. 30/12/94, 30/6/96.
77. See Appendix B.
79. S.I.B., 8/7/92.
84. Medical Casebooks, 29/7/90.
85. S.I.B., 29/5/86.
86. Medical Casebooks, September 1890.
87. Ibid., 29/7/90.
89. Ibid.
90. S.I. B., 24/9/94.
CHAPTER 3

TREATMENT

A discussion of the way in which the Seacliff Asylum operated between 1889 - 1907 is not complete without a review of the methods of treatment used at the asylum. The therapeutic qualities of comfortable surroundings, a hygienic environment, and good nutrition have been discussed. This chapter aims to evaluate the major forms of treatment and to assess King's role in this aspect of the asylum. C. Hubbard concluded in her study of Otago asylums between 1882 - 1911 that both change and continuity existed in the treatment of the mentally ill. For the most part the conclusions reached here substantiate that finding.

It will be remembered that Seacliff was designed as a farm asylum. The inclusion of the farm was expected to provide the patients with ample opportunity for occupation outside. Work as a curative ranked highest on the list of approved treatments. This emphasis was not new. King's biographer claims that occupational therapy in the open air was introduced by King at Seacliff long before it became usual practice throughout mental hospitals in New Zealand. The accuracy of this statement is doubtful. At the Dunedin Lunatic Asylum attempts were made to provide work for the patients, preferably manual occupation outdoors. One of the major faults of the Dunedin Lunatic Asylum and a reason for the shift to
Seacliff had been the limited scope for this type of therapeutic activity. King followed up and improved upon the examples set by his predecessors by encouraging work as the basic form of curative treatment. After 1869 Seacliff became an asylum where the theory of the therapeutic value of outdoor labour was put into practice enthusiastically. King's support of the role of work in treatment stemmed from his personal belief in "natural treatments". For the same reason, in later years he rejected the wide use of drugs and psycho-analysis or psychotherapy in the treatment of the mentally ill. King believed that the use of these techniques was limited and that any benefits achieved by these methods could be better provided for naturally by outdoor conditions. King considered that work kept the body and mind healthy and occupied. He believed that this stimulated an interest in life, alleviated boredom, and could ultimately, for these reasons, have beneficial effects. MacGregor shared this opinion. In 1890 he wrote that he was impressed with the success that had resulted from the constant effort to interest the patients in some kind of occupation and in the corresponding improvement in the health and appearance of the male patients in particular. As King explained in 1891, work improved the health and physical appearance of the patients and helped them to sleep. This former point was remarked upon in 1895 when, on an annual visit, MacGregor observed the number of patients engaged in outside work. "I can usually tell these", he said, "by their bright and healthy appearance".

King was in no doubt that fresh air, sunshine, water, sleep, a good diet and regulated work provided the essentials to a full and healthy life. This philosophy was applied vigorously to the operation of the asylum. The laws of preventative medicine were applied
to ensure that the patients lived in a healthy environment. Their "healthy occupation" was ensured by the insistence on work as essential to physical health and, therefore, as a curative. "Nothing", King felt, "tends to aggravate mental troubles more than idleness". MacGregor also believed that outdoor work was the only means of combating mental disease. The importance of the farm in King's asylum derived from this belief that a cure could only be achieved through work. By this method a return to reason might, it was hoped, be achieved.

Although King thought any kind of occupation was beneficial he preferred outdoor work. A problem did exist in providing women with opportunities to work outside. As a group the women patients were more noisy and excitable than the men. This was evidence enough for King of the obvious benefits of providing work. Unfortunately the largest handicap in providing work for the female patients seems to have been from the disfavour in which farm work for women was held. Kings own prejudices reflect this opinion. As he explained in 1891 "it was impractical to supply insane women with much outdoor employment especially on an estate where both sexes are maintained." This suggests that men were considered more suitable for outdoor labour and had priority over women, who could be provided with work in the more traditional areas of laundry and kitchen or with such activities as sewing and knitting. Another consideration may have been the increased possibility for fraternisation between the sexes and the supervisory problems this would have entailed for the staff. The majority of the male patients able to work were occupied outdoors. Activities available included bush clearing, woodchopping and carrying, digging, planting, moving farms, pruning trees and dairy work. King was careful to point out that work although encouraged was voluntary. Normally it consisted of no more than five or six
hours per day including two spells for "smoking". Efforts were constantly being made to extend the scope of out-door employment. The extension of the workshops, for example, provided an immense service in giving employment to patients.

Determining the actual numbers of patients engaged in work either indoors or outdoors proves to be a difficult task. While commentators at the time commonly praised the practice they rarely mentioned the actual numbers. In general it seems that the numbers employed in and around the asylum increased over the period. In 1894 MacGregor remarked favourably that only 50 of the 314 male patients were unable to work. Of those working almost 50% were engaged in work on the farm. Four years later MacGregor again referred to the numbers employed daily in and around the asylum. Of the 586 patients about 450 were occupied daily with work. This represents an increase to over 70% in only four years. Figures extracted from the 1907 annual report support the assumption that this level was maintained.

As an extension of the belief that work aided recovery, recreation and amusements were considered to have a place in treatment. These activities provided the only alternative to work. King's opinions on the matter were made clear in 1891 when he defended his administration of the asylum against the Globe's criticisms. In his reply to the charges he included a list of the amusements provided for the patients. This list included Saturday afternoon sports, croquet for women on all fine mornings, tennis for special patients (for this two courts were available), a general picnic in summer, fortnightly dances during winter, optical lantern shows and entertainment provided by companies from Dunedin or given by the staff members. A popular favourite was music supplied by a band made up of
staff members. King vigorously defended the expense involved in setting up this band. 30 Inside the asylum recreation facilities included a billiard room, a games room reading room as well as sitting rooms. One of these was used as a library for the enjoyment of both patients and staff and proved very popular. Of special note is the access that patients had to Doctor and Mrs King's summer cottage at Karitane. This was often made available to patients, "recoverables", who spent two or three weeks there with nurses. 32 The provision of a wider range of amusements for the patients was an activity which King supported and encouraged. Although this aspect of asylum life was part of a trend that had begun in Otago with humanitarians like Hulme, King does seem to advance these ideas quite considerably. 33

The use of drugs warrants only a brief mention. In comparison with modern psychiatric medicine, drugs were used infrequently as a method of treatment. Few references are made to the use of drugs in the relevant source material. An examination of the Medical Casebooks suggests that drugs, when used, were used mainly to calm patients. 34 In later years King remarked on his personal dislike of drugs. 35 It is likely that this viewpoint contributed to their minor role at Seacliff.

The use of restraints as an aid in treatment was an accepted part of asylum care. The usual method was locked gloves and canvas dresses with or without the sides attached. The reasons for which restraints or seclusion were used did not vary much throughout the period. The primary reasons were for self injury and violence towards others. 37 The authorisation for the use of restraints or seclusion were strictly controlled and documented. Every care was taken by the superintendent (later verified by the Inspectors and
official visitors), to ensure that the use of these devices was warranted. The aim shared by King and MacGregor was to keep the use of mechanical restraints and seclusion at the lowest possible level.\textsuperscript{38}

King, like many of his contemporaries, also believed that effective cures required trained staff. An examination of the role of the staff, and its quality in terms of training, provides further evidence that King looked increasingly towards curing his patients. There were two distinct groups within the staff at Seacliff — the medical professionals and the general nursing staff. Among the medical staff the standard of training was high. This pattern was not repeated among the nursing staff. This group had the most contact with the patients but played a minor role in the medical treatment of their charges. Their first priority was to the cleanliness of the wards and patients, followed by the maintenance of the patients' interest and occupation. They were to "watch them, amuse them, keep them and the asylum clean and tidy".\textsuperscript{39} King’s attitude to the role of the nursing staff is reflected in a booklet he wrote in 1900, outlining the rules and regulations for the guidance of attendants and nurses.\textsuperscript{40} The staff were expected to join in with the patients in work and recreation, in order to bring about a "spirit of hearty comradeship and friendliness".\textsuperscript{41} King made it clear that the staff were employed to carry out the work of the institution and the patients were expected only to render assistance. The staff were advised to take a participatory role and set a good example for the patients by working themselves.\textsuperscript{42} This all implies something more than the custodial role suggested by Fennel.\textsuperscript{43} At least in terms of ideals, King hoped that the staff would fulfil an "inspirational" role. That is, he demanded that the staff treat the patients in a kind way and encourage them to participate in the
activities of the asylum. King's attitude to and opinions on the role of the staff reflect the whole tone of the institution. King believed that by providing the best possible physical environment and trying to "direct their (the patients) diseased thoughts into healthy channels and rouse them out of brooding to take an interest in life and their surroundings" was the best path to recovery. It was the role of the nursing staff to stimulate that interest. The role of the staff was, therefore, prescribed by the overall nature of the asylum.

King placed great emphasis on the humane treatment of the insane, and the complete obedience of the nursing staff. The dismissal of three attendants, Arundel, Impey and Clarke, in 1893 for insubordination demonstrates the importance King placed on maintaining discipline. This well-publicised incident arose out of staff dissatisfaction with the meat. Although the quality was good it was often underdone, according to the taste of the majority of the attendants. The incident got out of hand and led to charges against King that he had not only refused to remedy the situation, but had in fact denied that any problem existed. On closer examination it appears that what lay behind the incident was not a complaint about the meat or the food in general, but rather a matter of the relationship between King and his nursing staff. King was not "liberal" when it came to the relationship between the medical staff and the attendants. There was no doubt that the latter were subordinates and owed absolute obedience to King in all matters.

MacGregor, after holding an inquiry into the whole affair, came to the conclusion that he had "never known a more deliberate and skillful attempt to make mischief in a public institution on the basis of such a frivolous grievance". He fully supported King's
dismissal of Arundel, Impey and Clarke. "The dismissal of all three was justifiable and necessary, and the evidence is conclusive that the doctor treats the attendants with every consideration."° A reading of the minutes of the evidence supports this finding. A

King was equally adamant that no violence be used towards the patients. The use of physical violence against any patient was grounds for instant dismissal, and when it occurred this rule was unconditionally enforced. Dismissal for violence was not a great problem, however. Hubbard actually observed a steady decline in the percentage of dismissals for violence or drunkenness. Most staff members continued to leave voluntarily. This is not to suggest, however, that the discipline and obedience King insisted upon did not aggravate some staff members. A Globe editorial in 1891 alleged "that the attendants are in such a state of discontent that it borders very closely on mutiny", and that "Doctor King . . . is a very irritable disposition, easily roused to anger, and remarkably autocratic in his bearing towards officials under him". In this particular incident King was able to successfully answer this and other charges against him to the satisfaction of his superiors.

Although no asylum had formal training requirements for nursing staff, King believed that improving the quality of the staff was desirable. During the 1890s moves were made to improve the training of staff as part of an effort to raise the standard of New Zealand asylums. Systematic courses of instruction were introduced for attendants at the larger asylums, Seacliff, Wellington and Auckland. At Seacliff, King organised lectures in anatomy, physiology and general nursing at which attendance was compulsory. Examinations for nursing staff, male and female, began in 1907. The first examination was held for staff who had worked with the insane for
three years or more and who had undertaken a course of training. From then on the examinations were held annually. The examination, which was based on the model of the British Medico-Psychological Association, had been held in Britain since 1891. The New Zealand course of training was based on this Association's handbook, and involved becoming familiar with its contents. As MacGregor explained, the training was oriented towards improving practical skills.

What is really required is not to memorise this book but to make a test of the practical application of knowledge to be mainly gained by an intelligent interest in the daily round of work.

The examination for the Registration of Mental Nurses had a practical orientation. It was divided into three parts: a written paper, a viva voce, largely practical, and a practical examination in nursing. Despite the increasing emphasis on training and the acquisition of skills "on the job", the role of attendants did not change markedly during the period. The chief attributes of a good attendant remained consistent: honesty, hardwork, sobriety, kindness and obedience being preferred.

In comparison with the nursing staff, the medical staff displayed a high level of skill. King's medical officers, notably Doctor E.H. Alexander, who was on the staff between September 1903 and June 1904 and Doctor S.C. Allen, from February 1902 to March 1904, were both highly competent men. King was also well qualified for his position. He had a brilliant academic record. He graduated Bachelor of Medicine and Master of Surgery in 1886 with first class honours. His excellent scholarship earned him the Ettles scholarship as the most distinguished graduate of his year. On the completion of his formal medical studies King spent two years as resident physician at the Edinburgh and Glasgow Royal Infirmary where he gained
invaluable practical experience. During those two years he studied
for a Bachelor of Science in preventative medicine and undertook
post-graduate studies in lunacy. After distinguished service at
the Wellington Public hospital he was appointed to the position of
Medical Superintendent at Seaciff. During his tenure, in 1894,
King returned to Edinburgh to study brain pathology and nervous and
mental disorders. At the same time he became a member of the
Psychological Association of Great Britain. King began his career
in mental health at a time when many orthodox medical practitioners
regarded the choice of psychiatry as a career as evidence of
eccentricity more appropriate to a patient. King's faith that
mental illness could be cured was a powerful incentive for his
rejection of these. At Seaciff King was able to apply his obvious
knowledge to the task of improving conditions.

During the period under study three developments occurred
which contributed indirectly to the more successful treatment of
the patients. These were the emphasis on the medical classification
of patients, the increase in liberty afforded to patients, and
the agitation in favour of early and voluntary admission. All three
can be considered aids to treatment.

Classification of mental patients involved the principle of
separation according to types of illness and severity. Ideally,
classification was the first step towards the segregation of
patients according to the type of illness they had. Until 1911,
when the definition of six types of mental defective was detailed in
the Mental Defectives Act, the label "lunatic" was applied equally
to all those judged unable to manage their own affairs. It was,
therefore, up to the staff to segregate patients according to
type. Medical men had long since recognised that the mentally ill
were not a homogeneous group. The desire to classify disease types related to the widespread belief that the application of "scientific method" was the best way to approach and solve a problem. Classification enabled the identification of a problem and, therefore, treatment could be arranged accordingly. Classification was a diagnostic aid and an aid in the more successful application of treatment. This connection was commented on by MacGregor in 1898 when he remarked that "classification was the indispensable condition to the scientific treatment of mental disease." 69

Classification involved two processes. The first, identification of different types of mental illness, relied on a greater sophistication in the analysis of the causes of mental illness. 70 The second, involved physically separating the patients according to their classification. The constraint which most restricted the trend towards separate rooms and separate buildings for patients, was overcrowding. In 1896, for example, overcrowding led to problems in the classification of female patients making it "impossible ... to secure the conditions essential for the proper treatment of patients". 71 Despite this serious handicap King was reportedly unremitting in his attempt to devise new means of improving the patients classification. 72 The 1890s saw numerous improvements in this direction. In his annual report for 1891 King mentioned that among the services that Seacliff was able to provide was a special isolating system giving individual and constant attention for patients requiring it. The success of this system was justification enough, he felt, for the added expense. 73 Ten new single rooms were completed in 1893 for the accommodation of special cases. 74 By 1894 changes were made which allowed for an increased surveillance of both suicidal and epileptic cases. 75 As an extension of the idea that
A MENTAL PATIENT. (E.L. Gilman (ed.), The Face of Madness p.83)
classification was beneficial some attempts were made to separate convalescent patients to give them more liberty away from other patients. In 1899, for example, a female convalescent cottage was being successfully used for this purpose.76 The government allocated the funds for these building programmes according to need. It was King's habit to keep MacGregor informed of the situation at Seaciff and to appeal for funds through him.

The two major classification successes were with alcoholics and epileptics. Under the 1882 Act, inebriates had been officially classified as a special group for which separate accommodation must be provided.77 There was a wide range of opinions on the treatment of "habitual drunkards". In 1887 MacGregor suggested that the "four classes of drunkards" be treated in different ways. Those who were casually drunk as opposed to suffering from long periods of indulgence in alcohol should, he suggested, be imprisoned during the "drying-out" period and made to work for a month. Those suffering from "delirium tremens" would best be accommodated in the Remand Ward at General Hospitals and made to work for three months to cement recovery. The last two classes, those who had become lunatic and dipoamaniac (those who became drunk on very little), should, he felt, be removed to a separate ward in a lunatic asylum and made to work on the farm.78 The stress on the same amount of work for those suffering from alcoholism is worthy of note. Despite the sentiments expressed here it was not until 1901 that separate facilities for alcoholics at Seaciff were achieved. In that year a home for inebriates was opened at Waitati.79 Epileptics were accommodated separately, away from the main building, at the Orokonui extension in 1904.80

Related to the process of classification was the provision made
for the separate reception and observation of patients before their placement within the Seacliff Asylum. King preferred to prevent new patients from being brought within sight of the main asylum building or into contact with ordinary chronic patients until it was determined whether that patient was suitable for curative treatment in a special cottage or ward. ⑧¹

King strongly advocated that provision be made available for the early and voluntary admission of mental patients. He was convinced that the average prospects of a person certified insane in an advanced state of mental disease (as was usually the case), were very poor. ⑧² In 1910 he wrote that "... every year of experience impresses one ... with the conviction that, ... in the vast majority of cases early admission to a Mental hospital affords the only means of doing justice to the insane". ⑧³ He believed that the number of patients successfully treated in the asylum would be increased if "voluntary patients" were admitted. ⑧⁴ He recognised that this class should be specially catered for. ⑧⁵

King's opinion on the necessity for voluntary and early committal was not shared by everyone. It seemed to many, doctors included, that it was more important to keep people out of an asylum than to provide them with the help they may have needed and which could have been provided in a mental hospital. Many professional men considered home treatment preferable to institutional care. ⑧⁶ Voluntary and early admissions were also hampered by the fear of wrongful committal. ⑧⁷ The feeling against early admission was associated with the conviction that every effort should be made to be absolutely certain that a person was insane. ⑧⁸ Similarly the stigma attached to committal to a mental hospital prohibited the easy acceptance of
early and voluntary admission. The practice of committing patients through a court process, which was the norm, attached the additional disadvantage of associating insanity with crime.\textsuperscript{99} Despite these problems King remarked in 1900 that several patients suffering from mental disease had voluntarily made application for admission to the asylum. King thought it was "highly desirable that the law should admit of the reception of such cases".\textsuperscript{90} He felt that voluntary patients could be admitted in circumstances where privacy, comfort and freedom from contact with other insane patients could be avoided. Such a situation would provide favourable circumstances and a chance to recover their mental balance.\textsuperscript{91}

The question of how much liberty should be allowed to mental patients was a contentious issue. It was an area where King held very strong views. The emphasis he placed on outdoor occupation for the patients correspondingly allowed for a greater possibility of escape. The chance of escapes was, as it is now, a source of public agitation and worry. A series of letters to the editor of the Globe in 1891 discussed this issue. The writers expressed a fear that "escaped lunatics would do violence on the community".\textsuperscript{92} They criticised King's policy on liberty accusing that, "patients who are only mad at intervals are allowed to roam about unattended or with insufficient attendance".\textsuperscript{93} Opinions such as these, stemmed from a belief that

an asylum was maintained expressly to keep insane people from being dangerous to the community at large. If lunatics are allowed to wander from the asylum that asylum is failing in the purpose for which it was intended.\textsuperscript{94}

King believed that the possibility of escapes was an "occupational hazard" of asylums; a policy of risking the escape of a few in order that the majority might benefit from an open air life.\textsuperscript{95}
As King explained in 1891, as a response to public fears, the insane were not criminals who should be locked away from the rest of the population. He stressed the importance of providing a large share of liberty to the insane so as to remove the sense of being imprisoned. At Seacliff positive moves were made to give the patients a greater sense of freedom. In the implementation of these ideas at Seacliff, King followed the recommendations of a Scottish report on Asylums. The gradual abolition of walled Airing courts reduced the feeling of being locked in. This process was undertaken during the King years. Selected patients were allowed the freedom of the estate on parole. Toned "liberty on parole", these patients were permitted to walk or work on the grounds without supervision. In 1892 King made inquiries into introducing a Boarding Out scheme in New Zealand, similar to the one that operated successfully in Scotland. He envisaged that such a scheme would be highly beneficial especially to convalescent patients as it would enable them to readjust to the outside world, while in a more sheltered environment. King met with little success in this venture. He found that "there prevails among our people an unreasonable aversion to have anything to do with persons of unsound mind".

During King's superintendency the emphasis on exercise, diet and fresh air continued to be the main elements of treatment. In part this reflects the limitations of psychiatric knowledge at the time and also the dominant ideology. It also reflects King's own personal convictions. King stretched the possibilities of these methods of cure to their fullest potential. He expanded the numbers of patients who worked daily in and around the asylum. He also, in connection, increased the number and variety of recreational activities available at the asylum and encouraged
patient participation. King's promotion of the asylum as a place of
cure, of which the emphasis on classification, early admission,
staff training and liberty were a part, is also clearly demonstrated.

Despite the claim that King achieved more cures at Seaciff
than any other mental hospital south of the equator, the facts
counteract this statement. The proportion of discharges to
admissions indicates to some extent success or failure in treatment.
The number of recoveries for the whole of New Zealand was generally
40-45% of the yearly admissions. For Seaciff this figure was
slightly lower, ranging between 35-40%. The methods favoured at
Seaciff, despite King's expectations, were only moderately
successful.
CHAPTER 3

FOOTNOTES

9. Ibid., p.3.
14. Refer to Chapter 2.
18. Ibid., p.5.
19. Ibid., p.5.
20. Ibid., p.6.
21. Ibid., p.5.
   N. King, *Truby King*, p.87.
26. Ibid.
   16/7/91, p.4. c.5.
   27/7/91, p.3. c.3.
31. Ibid., p.7.
33. See J.H. Bloomfield, "Dunedin Lunatic Asylum".
34. S.I.S. 16/17/5/04.
   C. Hubbard, "Lunatic Asylums", p.35. confirms this view.
37. Refer to Register of Mechanical Restraints.
38. C. Hubbard, "Lunatic Asylums" p.38.
40. Ibid., p.4.
41. Ibid., p.3.
42. Ibid., p.7.
43. S. Fennel, "Psychiatry and Seacliff", p.4.
44. Ibid., p.41.
46. Ibid.
48. Ibid.
50. Rules and Regulations, p.3.
51. M. King, Truby King, p.86.
52. C. Hubbard, "Lunatic Asylums", p. 49.
53. Refer to Staffbook.
58. M. King, Truby King, p.90.
60. Ibid.
61. Ibid.
62. Staff Book 1903 - 1904.
   S.I.B. 16/17/5/04.
64. Ibid.
65. M. King, Truby King, p.83.
67. S. Pannel, "Psychiatry and Seadliff", p.35.
72. S.I.B., 10/3/94.
79. S. Fennel, "Psychiatry and Seacull", p.158.
80. Ibid.
81. M. King, Truby King, p. 93.
82. C. Hubbard, "Lunatic Asylums", p.21. Also includes table of admissions.
85. M. King, Truby King, p.183.
92. Globe, 18/7/91, p.5, c.5.
93. Ibid., 1/7/91, p.1, c.1.
94. Ibid., 18/7/91, p.5, c.5.
97. Ibid., p.8.
98. Ibid.
99. Ibid., p.9.
   S.I.B., 26/11/94.
101. Ibid.
102. M. King, Truby King, p.90.
103. See Appendix D.

104. See Appendix C.
CHAPTER 4

CONCLUSION

Between 1889 and 1907 King made changes at Seacliff Asylum designed to assist in curing the insane. These changes occurred in two related areas. Chapter two demonstrated the importance King laid upon the role of environmental conditions in a patient's recovery. He enthusiastically initiated reforms oriented towards the solution of several long standing problems. These included inadequate drainage, poor ventilation, and deficient sanitary facilities. The importance that he placed on good nutrition, and the changes that he carried out because of this, similarly reflected the importance he attached to the physical needs of the patients.

The evidence presented in Chapter three confirms Hubbard's conclusion that both change and continuity existed in the treatment of the mentally ill. Work remained the main form of treatment, to which amusements and recreation continued to provide the only alternative. King actively encouraged the expansion of these forms of activity, building on principles established in earlier years. The stress he laid on outdoor pursuits contributed, he felt, to alleviating the sense of imprisonment which accompanied committal. The benefits of liberty, in King's opinion, far outweighed the increased possibility of escapes afforded by these practices.
Prompted by his belief that insanity could be cured, King encouraged voluntary and early admissions and the classification of patients. The adoption of these practices was expected to improve the standards of mental health care. Staff training, which King also favoured, stemmed from a similar motive.

The improvements that King made at Seacliff and the methods of treatment which he favoured were consistent with his "decidedly biological outlook". King believed that the health of the mind depended on the health of the body. In his opinion, physical causes, faulty rearing and bad nourishment, especially in early childhood, accounted for the steadily increasing asylum population. King argued that an imbalance between nature and nurture was the root cause of most functional nervous disorders. This organic explanation of insanity reflected the opinion of academic psychiatry in the nineteenth and early twentieth centuries. Although academic psychiatrists acknowledged that factors like grief or domestic stress might play a part in the immediate causation of insanity, physiological factors were more important. It was only a short step from the assumption that physical factors, such as bad diet and an unhealthy environment, caused insanity to the conclusion that the correction of these deficiencies could cure insanity. King's belief in this idea is demonstrated by his work at Seacliff.

It is obvious that King believed insanity could be cured, and that the asylum, if conditions were improved, was the place where recovery should take place. It is equally obvious that despite King's expectations, no radical improvement in the percentage of recoveries occurred. Improvements in environmental conditions did contribute to the physical comfort and well-being of the patients. Unfortunately the fundamental orientation of Seacliff towards the
physical could not compensate for patients whose problem lay in more deep-seated psychological concerns. Improvements in general health standards, towards which King’s reforms tended, did not improve the treatment of mental illnesses as such. Epilepsy, for example, could not be cured by changing the environment or the diet of a patient.

Whatever the limitations of King’s (and his contemporaries) views on the origins and treatment of insanity, they proved important in shaping ideas that were more successful in a totally different field. By 1907 King had become convinced that insanity and other social ills were directly attributable to faults in the physical environment, specifically to bad nutrition in infancy. His work at Seacliff had been prompted by this belief. Perhaps the growing realisation that most forms of insanity could not be cured by environmental engineering explains his shift in focus towards infant welfare. With the formation of the Plunket Society in 1907, Kings oft repeated praise of prevention became institutionalised in an organisation which aimed to ensure the health of the nation from birth. It was only by watching over infant life in its earliest stages that the rising tide of insanity could be stemmed.4
CHAPTER 4

FOOTNOTES

2. *Ibid*.
APPENDIX A.

THE RELATIONSHIP OF THE LINE OF SHEAR TO THE SEACLIFF ASYLUM BUILDING

## Appendix B.

### 1. Auckland Asylum Weekly Diet, 1907

<table>
<thead>
<tr>
<th>Daily</th>
<th>Breakfast</th>
<th>Dinner</th>
<th>Tea</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Porridge</td>
<td>Potatoes and Vegetables</td>
<td>Bread and Butter</td>
</tr>
<tr>
<td>Sunday</td>
<td>Chops or cold meat or ½ lb</td>
<td>Roast beef, plum pudding</td>
<td>Cheese and Jam</td>
</tr>
<tr>
<td>Monday</td>
<td>Chops or cold meat</td>
<td>Soup, roast beef</td>
<td>Scones or cake or pastry</td>
</tr>
<tr>
<td>Tuesday</td>
<td>Mince or Steak and Onions</td>
<td>Soup, stew or roast mutton,</td>
<td>Cold meat and pickles or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>pudding</td>
<td>stew or mince</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Chops</td>
<td>Soup, roast beef or steak pie</td>
<td>Jam</td>
</tr>
<tr>
<td>Thursday</td>
<td>Steak or cold meat</td>
<td>Soup, boiled mutton, pudding</td>
<td>Scones or cake or pastry</td>
</tr>
<tr>
<td>Friday</td>
<td>Chops or stew</td>
<td>Soup, corned beef, pudding</td>
<td>Fish and Jam</td>
</tr>
<tr>
<td>Saturday</td>
<td>Cold corned beef</td>
<td>Soup, roast mutton</td>
<td>Cold meat and pickles,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>stew or mince</td>
</tr>
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### 2. Seacliff Asylum Weekly Diet, 1907

<table>
<thead>
<tr>
<th>Daily</th>
<th>Breakfast</th>
<th>Dinner</th>
<th>Tea</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Porridge, tea and toast</td>
<td>Vegetables</td>
<td>Tea and Toast</td>
</tr>
<tr>
<td>Jan. 27</td>
<td>Fish</td>
<td>Roast, pudding</td>
<td>Cold meat and scones</td>
</tr>
<tr>
<td>28</td>
<td>Bacon</td>
<td>Soup, Roast, pudding</td>
<td>Cold meat and scones</td>
</tr>
<tr>
<td>29</td>
<td>Sausages</td>
<td>Stew, Milk Pudding</td>
<td>Hot Meat</td>
</tr>
<tr>
<td>30</td>
<td>Chops</td>
<td>Roast beef, stewed fruit</td>
<td>Cold meat, jam</td>
</tr>
<tr>
<td>31</td>
<td>Bacon</td>
<td>Soup, roast mutton</td>
<td>Cold meat</td>
</tr>
<tr>
<td>Feb. 1</td>
<td>Chops</td>
<td>Roast, pudding</td>
<td>Cold meat</td>
</tr>
<tr>
<td>2</td>
<td>Chops</td>
<td>Soup, roast and pudding</td>
<td>Hot meat</td>
</tr>
<tr>
<td>3</td>
<td>Bacon</td>
<td>Lamb and Apple Pie</td>
<td>Cold meat, scones</td>
</tr>
</tbody>
</table>

**Source:** A.J.H.R., 1907, II-7, p.19 and p.25.
# Appendix C

## 1. Percentage of Recoveries on Admissions for Seacrest Asylum Between 1889 - 1907

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
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<tbody>
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<td>1889</td>
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<tr>
<td>1890</td>
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</tr>
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<td>1891</td>
<td>33.67</td>
</tr>
<tr>
<td>1892</td>
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</tr>
<tr>
<td>1893</td>
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<td>1896</td>
<td>33.73</td>
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<tr>
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</tr>
<tr>
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</tr>
<tr>
<td>1899</td>
<td>44.74</td>
</tr>
<tr>
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<td>35.08</td>
</tr>
<tr>
<td>1901</td>
<td>35.46</td>
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<td>1902</td>
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<td>34.88</td>
</tr>
<tr>
<td>1904</td>
<td>30.48</td>
</tr>
<tr>
<td>1905</td>
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<tr>
<td>1906</td>
<td>30.88</td>
</tr>
<tr>
<td>1907</td>
<td>37.17</td>
</tr>
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</table>

## 2. Percentage of Recoveries on Admissions for All New Zealand Asylums Between 1889 - 1907

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
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<tr>
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</tr>
<tr>
<td>1890</td>
<td>47.69</td>
</tr>
<tr>
<td>1891</td>
<td>37.24</td>
</tr>
<tr>
<td>1892</td>
<td>42.42</td>
</tr>
<tr>
<td>1893</td>
<td>41.30</td>
</tr>
<tr>
<td>1894</td>
<td>41.03</td>
</tr>
<tr>
<td>1895</td>
<td>43.40</td>
</tr>
<tr>
<td>1896</td>
<td>39.82</td>
</tr>
<tr>
<td>1897</td>
<td>36.69</td>
</tr>
<tr>
<td>1898</td>
<td>48.07</td>
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<tr>
<td>1899</td>
<td>37.58</td>
</tr>
<tr>
<td>1900</td>
<td>33.27</td>
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<tr>
<td>1901</td>
<td>42.17</td>
</tr>
<tr>
<td>1902</td>
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<tr>
<td>1903</td>
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</tr>
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</tr>
<tr>
<td>1906</td>
<td>42.94</td>
</tr>
<tr>
<td>1907</td>
<td>49.67</td>
</tr>
</tbody>
</table>

**Source:** Extracted from A.J.H.R., for the relevant years.
## Appendix D.

- Showing the Admissions, Discharges, and Deaths, with the Mean Annual Mortality and Proportion of Recoveries per Cent. of the Admissions for each Year since 1st January, 1876.

<table>
<thead>
<tr>
<th>Year</th>
<th>Admitted</th>
<th>Discharged</th>
<th>Died</th>
<th>Surviving at 31st December</th>
<th>Average Numbers resident</th>
<th>Percentage of Recoveries on Admissions</th>
<th>Percentage of Deaths on Average Numbers resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>1876</td>
<td>1,147</td>
<td>538</td>
<td>516</td>
<td>541</td>
<td>590</td>
<td>65.0%</td>
<td>1.9%</td>
</tr>
<tr>
<td>1877</td>
<td>332</td>
<td>150</td>
<td>172</td>
<td>140</td>
<td>132</td>
<td>49.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>1878</td>
<td>320</td>
<td>130</td>
<td>200</td>
<td>130</td>
<td>130</td>
<td>49.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>1879</td>
<td>300</td>
<td>100</td>
<td>220</td>
<td>100</td>
<td>100</td>
<td>49.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>1880</td>
<td>250</td>
<td>100</td>
<td>175</td>
<td>100</td>
<td>100</td>
<td>49.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>1881</td>
<td>250</td>
<td>100</td>
<td>150</td>
<td>100</td>
<td>100</td>
<td>49.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>1882</td>
<td>250</td>
<td>100</td>
<td>150</td>
<td>100</td>
<td>100</td>
<td>49.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>1883</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
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<td>1.9%</td>
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<tr>
<td>1884</td>
<td>200</td>
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<td>100</td>
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<td>1.9%</td>
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<tr>
<td>1885</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
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<td>49.9%</td>
<td>1.9%</td>
</tr>
<tr>
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<td>200</td>
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<tr>
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</tr>
<tr>
<td>1888</td>
<td>200</td>
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<td>1.9%</td>
</tr>
<tr>
<td>1889</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
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<td>49.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>1890</td>
<td>200</td>
<td>100</td>
<td>100</td>
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<td>1.9%</td>
</tr>
<tr>
<td>1891</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>49.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>1892</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>49.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>1893</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>49.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>1894</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>49.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>1895</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>49.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>1896</td>
<td>200</td>
<td>100</td>
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<td>100</td>
<td>100</td>
<td>49.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>1897</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>49.9%</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

Note: In mental hospitals; 1st January, 1876...

[Table data continues with similar structure and format, showing admissions, discharges, deaths, and related statistics for each year.]
### APPENDIX B.

**ADMISSIONS, DISCHARGES AND DEATHS WITH THE MEAN ANNUAL MORTALITY AND PERCENTAGE OF RECOVERIES PERCENT OF THE INMATES TO QUALIFY ASYLUM BETWEEN 1892 - 1907.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Resident In Asylum</th>
<th>Admissions</th>
<th>Total Under Care</th>
<th>Discharged Recovered</th>
<th>Discharged not Recovered</th>
<th>Died</th>
<th>Total Discharged or Died</th>
<th>Remaining 1st December</th>
<th>Average Numbers Resident</th>
<th>Percentage of Recoveries on Admissions</th>
<th>Percentage of Deaths on Average Numbers Resident</th>
<th>Percentage of Deaths on Admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>490</td>
<td>82</td>
<td>572</td>
<td>30</td>
<td>19</td>
<td>27</td>
<td>76</td>
<td>496</td>
<td>490</td>
<td>36.58%</td>
<td>5.51%</td>
<td>32.93%</td>
</tr>
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<td>496</td>
<td>85</td>
<td>581</td>
<td>39</td>
<td>14</td>
<td>33</td>
<td>86</td>
<td>495</td>
<td>495</td>
<td>45.68%</td>
<td>6.67%</td>
<td>38.82%</td>
</tr>
<tr>
<td>1899</td>
<td>495</td>
<td>99</td>
<td>593</td>
<td>33</td>
<td>17</td>
<td>32</td>
<td>82</td>
<td>511</td>
<td>498</td>
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<td>3.99%</td>
<td>20.00%</td>
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<td>100</td>
<td>611</td>
<td>43</td>
<td>11</td>
<td>20</td>
<td>74</td>
<td>537</td>
<td>501</td>
<td>43.00%</td>
<td>3.99%</td>
<td>20.00%</td>
</tr>
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<td>44</td>
<td>17</td>
<td>18</td>
<td>79</td>
<td>559</td>
<td>526</td>
<td>43.56%</td>
<td>3.42%</td>
<td>17.82%</td>
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<td>96</td>
<td>655</td>
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<td>4.30%</td>
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<td>89</td>
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<td>22</td>
<td>75</td>
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<td>547</td>
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<td>5.85%</td>
<td>35.95%</td>
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<td>555</td>
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<td>34</td>
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<td>25</td>
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<td>749</td>
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<td>38</td>
<td>124</td>
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<td>613</td>
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<td>6.18%</td>
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<td>8.07%</td>
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<td>775</td>
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<td>5.85%</td>
<td>30.16%</td>
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<td>52</td>
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<td>677</td>
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<td>7.68%</td>
<td>40.31%</td>
</tr>
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<td>105</td>
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<td>32</td>
<td>22</td>
<td>39</td>
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<td>36.19%</td>
</tr>
<tr>
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<td>142</td>
<td>836</td>
<td>38</td>
<td>25</td>
<td>37</td>
<td>100</td>
<td>736</td>
<td>707</td>
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<td>5.23%</td>
<td>29.84%</td>
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<td>874</td>
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<td>28</td>
<td>50</td>
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<td>6.87%</td>
<td>36.76%</td>
</tr>
<tr>
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<td>754</td>
<td>121</td>
<td>875</td>
<td>42</td>
<td>47</td>
<td>51</td>
<td>140</td>
<td>735</td>
<td>725</td>
<td>37.17%</td>
<td>7.03%</td>
<td>45.13%</td>
</tr>
</tbody>
</table>

**Source:** Extracted from the Annual Report on Asylums A.J.H.E., for each year 1892 - 1907.
BIBLIOGRAPHY

PRIMARY:

A. Unpublished

Records of Seacliff Mental Hospital - Hocken Library, Dunedin.

Farm Managers' Outward Letters, 19 August 1907 - 5 March 1908

Fish Book 29 October - 31 March 1905

Inspectors Visiting Book - 2nd volume 27 March 1886 - 26 November 1949 (also containing reports of the Official Visitors)

Medical Casebooks, selected volumes 1890-1891 nos 2345-2441
1895-1896 nos 2843-2942
1900-1901 nos 3443-3542
1905-1906 nos 4041-4140

Medical Superintendents' Outward Letters, selected volumes
vol. 14 2 October 1888 - 8 January 1890
vol. 13 3 April 1901 - 26 February 1902
vol. 16 22 October 1903 - 8 November 1904
vol. 19 24 December 1906 - 22 January 1908

Register of Mechanical Restraints - for 1898, 1905

Staff Register, February 1864 - November 1945

B. Published

(i) Official

Appendices to the Journals of the House of Representatives, 1888 - 1913

Annual Report on the Lunatic Asylums of the Colony (becomes Mental Hospitals in 1904 and Dominion in 1907),

Inquiry into complaints made against Doctor T. King and Doctor D. MacGregor's reply, 1893, H-29.

Papers relating to the Seacliff Inquiry, 1891, H-29.


New Zealand Statutes 1868, 1882, 1891, 1911.

(ii) Newspapers, pamphlets and periodicals

Globe July - September, 1891, January - September, 1893


King, F.T., The Evils of Cram, Dunedin, 1906.
Otago Daily Times, October, 1897, June 1904.

Otago Witness, July - December 1893

Rules and Regulations for the Guidance of Attendants and Nurses, Seaciff Hospital, Wellington, 1900.

The End of an Era Seaciff Hospital Final Farewell, Dunedin, 1972 (?)

SECONDARY:

A. Unpublished


B. Published

(i) Books and Pamphlets

Bathgate, A. (ed.), Picturesque Dunedin, Dunedin, 1890.


Fulton, R.V., Medical Practice in Otago and Southland in the Early Days, Dunedin, 1922.


Gray, T.G., The Very Error of the Moon, Devon, 1924.

Hall, J.K. (ed.), One Hundred Years of American Psychiatry, New York, 1944.


Patients' and Prisoners' Aid Society, *A Short History at Jubilee Year*, Dunedin, 1927.


(ii) Articles

