

# Zeehan Hospital, Zeehan, Tasmania. The First Forty Years, During The Mining Boom 1894-1934 The Curious Case of the Missing Lead Poisoning

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Received: 08 Sep 2021

Accepted: 29 Sep 2021

Published: 03 Oct 2021

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## Citation:

Stride P. Zeehan Hospital, Zeehan, Tasmania. The First Forty Years, During The Mining Boom 1894-1934 The Curious Case of the Missing Lead Poisoning. *Ame J Surg Clin Case Rep.* 2021; 3(13): 1-83

## Keywords:

Zeehan, compensation; environmental pollution; mining; lead

History is not there for you to like or dislike. It is there for you to learn from it. And if it offends you even better. Because then you are less likely to repeat it. It is not yours to erase, it belongs to all of us. Anon

## 1. Abstract

The clinical details of the patients admitted to the Zeehan Hospital in Tasmania, Australia from the opening date of the hospital in 1894 for the subsequent forty years during the peak of the mining period in Zeehan are presented. Major features are the frequent but uncompensated industrial fatalities and accidents, outbreaks of infectious diseases in the pre-antibiotic era and the damage to individuals and the environment from severe metal pollution, yet an apparent silence about the issue of clinical lead poisoning.

## 2. Introduction

The visitor to the area around Queenstown and Zeehan in Tasma-

nia will be appalled by the environmental destruction of the surrounding countryside on the western edge of the Wilderness World Heritage Area. The loss of topsoil from logging with removal of tree roots allied to the severe metal pollution of the ground from mining activities has left a 'moonscape' which may never fully recover. It is a monument to the much better land management skills of the First Australians compared with the 'gold-digging' of the profit-driven European migrants.

The medical observer noting the effect on the botany of the area may wonder how this will impact on the health of a co-located biological specimen, homo sapiens, perhaps not so sapiens! This treatise searches predominantly for evidence of metal toxicity amongst the patients attending Zeehan Hospital during the peak mining decades. (Figure 1, 2)

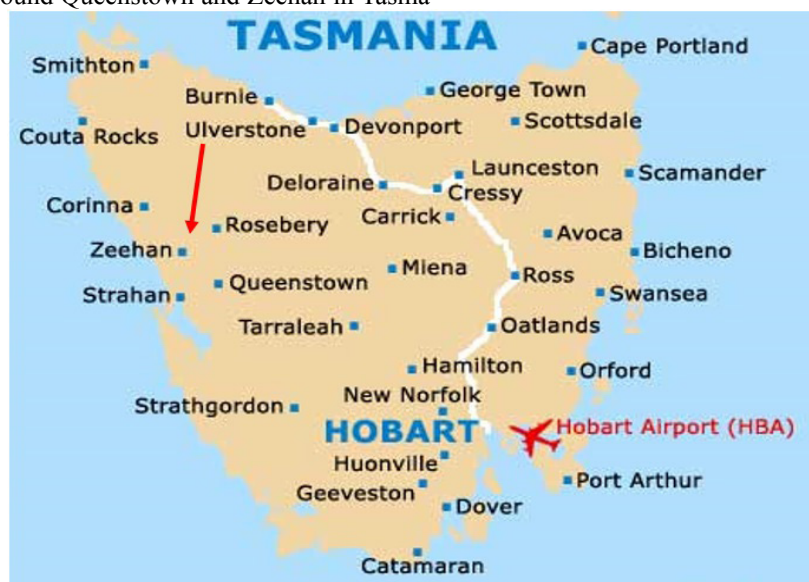


Figure 1 - Map of Tasmania demonstrating location of Zeehan, Rosebery and Strahan



**Figure 2:** Map of Australia showing location of Tasmania

### 3. Methodology

Most details relating to the Zeehan Hospital are obtained from the archives of the Zeehan and Dundas Herald and other Tasmanian newspapers digitised on the National Libraries of Australia Trove website. Articles were sought between 1/1/1891 and 5/9/1934 using the search term 'Zeehan Hospital'. Other articles of relevant medical history are cited.

Clearly these are not peer-reviewed publications, but they are probably the best available source of information. This treatise is essentially related to the medical and clinical details. Similar articles could be written about the devoted care provided by the nursing staff, long hours for little pay similar to 2021 when only applause is the standard recognition of nurses leading the fight against Covid-19. Another article could be written about the hospital buildings and infrastructure, while administrative, financial and political events are largely omitted.

### 4. Current health status of Tasmanians

Tasmania has the lowest life expectancy of any Australian State at 79.5 years. All the other states have a life expectancy over 80 years, with pre-covid Victoria highest at 81.8 years. The second lowest life expectancy by area within Tasmania is the West/Waratah area just north of Queenstown, the area discussed in this article, with a life expectancy of 70.5 years. [1] Many co-factors and confounding factors will impact on life expectancy but such figures merit closer analysis and consideration of the impact of environmental pollution on health.

Epilepsy is a chronic disorder of the brain that is characterised by abnormal electrical activity causing seizures or unusual behaviour, sensations and sometimes loss of awareness.

Tasmania has a higher prevalence of epilepsy than any other state or territory in Australia, with about twenty-thousand cases on the Island. There are many causes of epilepsy, one of which is neuro-

toxicity from lead poisoning. Again an investigation into the underlying aetiology is indicated.

### 5. History of Zeehan

The Zeehan area was originally inhabited by the Peerapper and Tommeginne Indigenous people. In 1642, Abel Tasman sighted and named Mount Zeehan after the brig Zeahan in which he was sailing. Bass and Flinders in their circumnavigation of Tasmania in 1802, confirmed the name of Mount Zeehan and named the nearby Mount Heemskirk after Tasman's second ship.

Tin was discovered nearby at Mount Bishoff in 1871 and at Mount Heemskirk in 1879. Deposits of silver and lead were discovered in the area by Frank Long in 1882 and the town of Zeehan soon developed around mines. A Post Office opened in 1888 as the population grew progressively to a peak of about ten thousand in 1910, about ten times the current population in 2021. The main street was over three kilometres long with twenty hotels plus banks and elegant theatres. One hundred and fifty-nine companies operated at the town's peak and the town stock exchange had sixty members. The mines earned some two hundred thousand dollars per year for two decades, before progressively declining till 1960 when the last mine was closed. In more recent years there were small revivals of mining at the Renison Bell tin mine in the 1970s and 1990s and the progressive population decline has been marginally reversed.

Review of the obituary columns of the Zeehan and Dundas Herald between 1910 and 1920 reveals the death of five male staff members of the Zeehan mining industry. Four were relatively young, aged 42, 48, 48 and 49, and one aged 85. Soft supportive evidence for a health hazard associated with mining.

#### 5.1. Current Environmental Pollution in 2021

A study of the levels of pollution in the lakes of northwest Tasmania found a level of contamination with lead copper, cadmium and arsenic equal to the most severely polluted lakes in the world.

Owen Tarn and Basin Lake near Queenstown were the worst, but Lake Dobson, Lake Cygnus, Dove Lake and Perched Lake were also affected. These lakes are in the mountainous areas up to a hundred and thirty kilometres downwind from Zeehan and Queenstown and have been adulterated by atmospheric pollution mainly caused by open cut mining proceeding uninhibited till finally controlled by the Environment Protection Act of 1973 [2, 3].

Comparative metal levels in Owen Tarn utilizing isotope dating technology or deep sediment analysis have demonstrated enrichment factors, i.e. the pollution level above normal levels, of up to a hundred-fold for copper and lead and less marked increases for cadmium and arsenic dating back over a century. This contamination has therefore been present continually for over one hundred years dating back to the peak mining period.

Tasmania Huon Pine, famous in the historic ship building industry, is a long lived timber and known as one of the most effective bio accumulators of mercury in the world. The mercury levels found in the century-old yearly rings of the Huon Pine correlate closely with the mining activity in the Zeehan area between 1890 and 1920, particularly with the amount of pyritic copper smelting.

Recent Tasmanian bush fires have caused an increase in atmospheric

ic mercury levels to three or four times the pre-industrial level due to the release of mercury previously locked in trees. Some two hundred thousand hectares have burnt recently in Tasmania, and it is estimated that two-hundred thousand kilograms of mercury are released globally into the atmosphere each year. This mercury is toxic to humans, particularly to the nervous system in foetuses and young children. (Figure 2)

Insect life in the area and fish species in the rivers are reduced, again raising the probability of serious toxicity to humans.

Since 1880, the Queen River was used by the Mt Lyell copper mine as a drain, dumping an estimated hundred million tons of sulphidic tailings into the river becoming Australia's worst acid mine drainage. In 2017 after heavy rain the residents of Queenstown noted the river had turned an even deeper shade of orange than usual, deeper than any time in the previous decade, strongly suggesting increased pollution though the mine was inactive since three miners died in an accident in 2014. The residents called the river 'pumpkin soup creek'. Newspapers sought comments from the mine and the Department of Primary Industries. The premier discussed responsible parties rather than solutions and Queenstown locals spoke anonymously for fear of reprisals from the mines. (Figure 3)

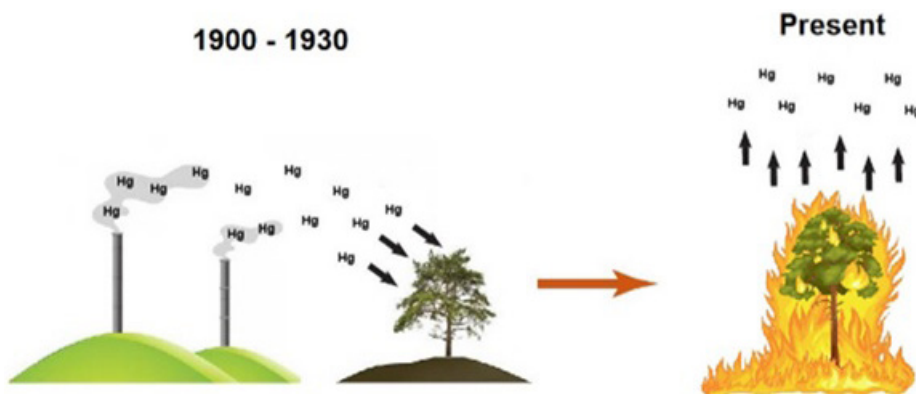


Figure 2 - The mercury cycle



Figure 3 - The discoloured Queen River 2017

## 5.2. Lead Poisoning in The Mines, Miners and Families, A Nineteenth Century Perspective

This paper was initiated with the intent of investigating the frequency of lead poisoning in the miners and their families in the Zeehan district between 1890 and 1920. Yet there were no diagnosed and published cases of lead poisoning admitted to the Zeehan Hospital between 1894 when the hospital opened until 1934 when mining was in recession. Considering the current situation of elevated blood levels in citizens of Rosebery and the levels of pollution in the surrounding lakes there would appear to be three possible reasons why lead poisoning was not frequently recorded in the past amongst the miners and families of Zeehan.

- Lead poisoning was not recognised at that time.
- Lead poisoning did not occur.
- Lead poisoning was common but deliberately or unintentionally concealed.

## 5.3. These Three Concepts Will Be Explored Individually

### 5.3.1. Medical Knowledge of Toxicity of Lead and Other Metals in 1890-1934.

Physicians have known of lead toxicity for two millennia since the Greek botanist Nikander in the 2nd century BC first described the paralysis and colic caused by lead.

Ramazzini's text 'Disease of Workers' first published in 1713, over three centuries ago, noted that Italian miners had an increased mortality, that their wives would marry miners again and again as husbands died, that mining was often a punishment and that exposure to metals caused diseases of the brain and lungs. He considered mercury to be the worst poison liable to cause neurological problems in months and death within three years [4].

Osler in his seminal text of 1892, 'The Principles and Practice of Medicine' notes that lead poisoning is widespread, particularly amongst workers in lead-ore smelters. Osler notes the main clinical features are anaemia, a blue line on the gums, abdominal colic, peripheral neuropathies, epilepsy, renal disease and arteriosclerosis [5].

Thus the signs and symptoms of lead poisoning, and preventative measures were well known not only to doctors in the nineteenth century as shown in a summarised Herald editorial.

'Personal hygiene was highly important. Washing of hands and face, and teeth cleaning prior to eating was strongly recommended. A bath and change of clothes at the end of each shift was equally recommended. Broken Hill had baths with hot and cold water and regulations to enforce these proposals. The Herald considered many healthy young men were jeopardising their future health by insufficient care.'

Sufferers from lead poisoning were noted to become lethargic and constipated. They were said to have a sallow complexion with harsh dry skin and a sweet metallic taste in the mouth. A lead line

on the gums may be observed. Lead is neuropathic with a particular predilection for the radial nerve causing weakness and wasting of the wrist extensor muscles and wrist drop. Kidney failure and gout may follow, gout being more common in lead nephropathy than other forms of renal disease [6, 7].

J. Taylor, the Hobart City librarian suggested Zeehan miners would be less prone to lead poisoning than their fellow workers in Broken Hill, as the lead ore in Broken Hill was in the form of powdery dry ore, while most of the deeper ore at Zeehan was in the form of Galena. Galena is a crystallised form of lead sulphide, often in octahedral forms and often containing up to two percent silver but producing much less powder than dry ore. Galena had been mined for millennia, the ancient Egyptians applied it around their eyes to reduce desert glare and to repel flies [8].

Information from Leadville, Colorado on the volatility of metals published in the Journal of Science was reproduced in the Hobart Mercury. The loss of some ten percent of gold and silver as fumes in smelters with significant financial loss was noted, perhaps as much as five million dollars annually in USA in the 1880s, equivalent to a hundred and twenty-five million dollars in 2021.

Lead and silver were noted to be volatile at normal furnace heat and that lead poisoning was becoming a problem in Leadville area. A distillation process was suggested to recoup financial losses, a more important concept than reducing pollution!

Over a century since the mining boom, and even after twenty-five years of environmental cleaning, children in Rosebery still have mild elevation of blood lead levels, higher than safe for pregnancy. Local sources suggest the government is reluctant to release its results and reluctant to test those children at most risk [9, 10].

A case of lead poisoning was admitted to the temporary hospital in Zeehan in 1892 and said to be also progressing satisfactorily [11].

A dog was noted to drink water from a hole above a lead deposit and heavily contaminated with galena dust, whereupon it rolled around in agony, then appeared to go mad racing off into the bush never to be seen again. Lead poisoning was suspected [12].

Clearly the concept of lead poisoning was not only well known to the doctors of Zeehan Tasmania and the rest of the world, but also to the lay press of Australia by the late nineteenth century. Premiss one is excluded.

### 5.3.2. Lead Poisoning Did Not Occur

Between 1894 and 1934, the first forty years of the Zeehan Hospital, the newspapers of Tasmania, often quoting the Medical Superintendent, did not document one admission with a diagnosis of lead poisoning. Many admissions were diagnosed with miner's phthisis, either silicosis or tuberculosis or both, yet none with lead poisoning.

In 1899, the Medical Superintendent of Zeehan Hospital stated that 'no well-marked case of lead poisoning came under his notice, though lead mining in other parts of the world generally claims a



number of victims who die through getting lead poison into the system, and though many must have occurred [13].

However, firstly the aforementioned ring study of Huon pines showed there were excess levels of atmospheric mercury between 1895 and 1915, and wherever mercury is found, lead would also be polluting the environment.

Secondly the new and most comprehensive epilepsy research ever undertaken in Tasmania reveals that Tasmania has the highest prevalence of epilepsy in Australia. Assuming that the genetic diversity is similar in every Australian state and territory, it implies a causal environmental factor and lead poisoning is well known as a risk factor for epilepsy [14].

Thirdly the levels of lead in the residents and environment of Rosebery, less than thirty kilometres from Zeehan remain elevated today. This issue is sub judice currently pending litigation against the government and the owner of Rosebery Mine, MMG Ltd and their owner China Minmetals who according to local citizens feel no financial responsibility for the welfare of Tasmanians. Accusations of suppression of critical data, deletion of adverse results, investigation by inappropriate specialists lacking expertise in toxicology and evasion of responsibility by mining companies abound. Many mines of yesteryear are closed down with no entity responsible for cleaning the environmental destruction they caused.

However extremely high levels of lead have been found in local river water and local tap water tap water up to 182µg/L at the Stitt River, and within Rosebery, 53.1µg/L at Howard Street, 49.9µg/L at Sassafras Street when the Australian Drinking Water Guideline recommended maximum for lead is 10µg/L.

Blood lead serves well as a bio-marker of lead exposure over a longer period of time for humans, and of the various tests for exposure to heavy metals it is one of the most reliable indicators available, though twenty-four-hour urinary lead for four days after a chelating agent may be more accurate as a measure of stored lead [7].

Elevated blood levels of lead have been found in many citizens of Rosebery. Between 2008 and 2010 one hundred and sixteen out of five hundred and four adults had serum levels of 10µg/dL or over, above the very maximum safe level.

The atmosphere in the Rosebery area is heavily polluted with metals. The average amount of lead in the air has been measured at 1.5µg/per cubic meter, three times the maximum safe level. The National Pollutant Inventory has previously shown that MMG Rosebery Mine is the highest toxic hazard polluter in Tasmania. The NPI data shows that MMG Rosebery Mine emitted into a closed airshed over the town on average, 500 kg per day of combined zinc, arsenic and lead, the highest zinc emitter in the nation. On a yearly basis the MMG Rosebery Mine emits over 220,000kg of 10µm particulate matter every year.

In 2017 the World Health Organisation's Agency for Research on Cancer declared air pollution to be carcinogenic similar to tobacco

smoke, asbestos dust and arsenic.

West Coast residents have been found in a West Coast Health assessment in 2000 to require admissions to public acute hospitals for treatment for bronchitis, emphysema and asthma at a rate 35% above the national average.

Thus increased levels of lead and other metals have been found in the soil, lead being the most prevalent metal in the Rosebery environment. In situations involving multiple soil contaminants lead has been described as a good proxy indicator for exposure to the other metals. Following complaints by residents of Rosebery, the DHHS and Environment Protection Authority investigated the homes of five Rosebery residents' finding the lead level in the soil of 4,590 mg/kg was sixteen times the Health Investigation safe level and the level of arsenic at 646 mg/kg was six times the safe level. The manganese level in surface water was 15,100 µg/L, over three times the safe level.

Hence there is evidence of toxic elevated levels of lead in humans, the soil, the water supply including distant lakes and the atmosphere in the Zeehan area both a hundred years ago in the peak mining period and today. There is evidence of increased levels of mercury in the atmosphere peaking a century ago. In spite of the lesser toxicity of galena and the hygiene recommendations, it is hard to believe that lead poisoning did not occur amongst the miners, particularly the smelter workers, and their families in Zeehan a century ago.

#### **5.4. Were The Cases of Lead Poisoning in Zeehan Concealed?**

The table below details the numbers of named admissions to Zeehan Hospital over four decades, those who died and those who were discharged. In the last decade there was a reduction in the papers documenting a diagnosis in named citizens by over twenty percent. Why should that occur? Was it increased confidentiality? Probably not. The names and conditions of state and federal politicians are given. Even the names and diagnoses of the hospital dearest and most eminent medical and nursing staff are stated. (Table 1)

Was there collusion between the owners of the newspaper and mining industries to suppress publication of toxicity in miners to evade culpability and compensation? It was an era when profit for the owners and businessmen took total precedence over the health of the work force, when accidents, fatal or otherwise were proclaimed just an accident with no one to blame, and without any form of compensation. The Elkington report of 1906 suggested that public health physicians were reluctant to antagonise the wealthy less scrupulous businessmen in town perhaps with data of diseases such as lead poisoning. There are grounds for suspecting a coverup a century ago, evasion and blocking release of data similar to the current investigation into pollution and disease in Rosebery, similar to the current Covid-19 situation and the suspicion arousing reluctance of China to permit an independent transparent external investigation into the microbiology laboratory in Wuhan.

Decade	Diagnosed admission	Undiagnosed admission	% Diagnosed	Diagnosed death	Undiagnosed death	% Diagnosed
	survived	survived			death	
1894-1904	7	3	43%	11	5	71%
1904-1914	20	4	83%	18	6	75%
1914-1924	21	6	77%	21	17	53%
1924-1934	19	50	28%	33	29	53%

## 6. Tasmanian Hospitals - Background

Although Hobart and Launceston had hospitals by 1804 and 1808 respectively, many staff were untrained and supplies of equipment and medications were limited. Convict settlements sometimes had an attached 'medical room' where convicts could be treated while still in custody. The hospital on Sarah Island for example treated flogged convicts backs to enable them to return to work the following day! [15] Contagious diseases hospitals were designed in the Cascades to protect sailors of the Royal Navy from venereal disease, and in Launceston to treat prostitutes. Hospitals opened in north-west Tasmania in Zeehan in 1891, Strahan in 1893 and Queenstown in 1895.

Impure water supplies and insanitary human waste disposal lead to frequent outbreaks of infections such as typhoid. Improving standards, training of nursing staff and the 1918 Registration of Hospitals Act saw slow improvement.

A new hospital requires government approval, funding, design and construction. The Tasmanian Government initially thought Strahan was the optimal site for a new hospital in north-west Tasmania, however the Zeehan Hospital Committee and the local newspaper campaigned for the establishment to be placed in Zeehan.

### 6.1. 1891

Alfred Pillinger, Minister for Works, replied to Mr. R. S. Evans, secretary of the Zeehan Hospital Committee, in February 1891, agreeing that it was a suitable place for a new hospital, but that government funding would depend on an active local committee being able to raise half the money required, namely £500 for construction and £150 for maintenance. Evans and the committee issued a 'call to arms' in the town to raise funds from individuals and businesses [16].

In May, Pillinger wrote to Evans, requesting details of the number and size of the hospital rooms and thoughts on architectural style, so the government architects could develop a design for which tenders could be sought. Pillinger again emphasised that progress depended on the town producing half the funding. The following

week a fund-raising concert and ball arranged by Dr. Kennedy and Mr. T Dunn raised £83.7s [17].

A meeting was held in July of interested men in Zeehan to form a committee to raise funds and support the development stage of the hospital. The number and affiliations of those members was subject to the usual small town heated debate. Opinions were expressed that the membership should include representatives from the miners' union and the medical association. The membership was set at eleven and members chosen by ballot included Dr. Kennedy and Mr. F. Bignold as secretary [18].

Prior to the opening of Zeehan Hospital many unwell citizens were treated in local hotels. The Hobart Mercury of October 28 published allegations that they received little food and poor care from the hotel staff, an opinion strongly repudiated by Drs. Gibbons and Kennedy of Zeehan. Both commended the owners and staff for the time given and no cost to the patients, for the hours of care through the night and the requested individualized menus [19].

In November, it was announced that the proposed hospital construction had been put out to tender, though architectural details had not been published since the request from Pillinger about rooms. The paper also reported that Dr Kennedy had recovered from an illness and had returned to his profession [20].

The following month it was announced there were insufficient funds to pay for the cheapest tender. The Herald noted that patients were being treated in a temporary hospital where they received the best care the limited space allowed, though two men died in spite of this. It emphasised the importance of the hospital for the people of Zeehan and the irritation experienced by the suffering citizens of the town and suggested that the government should make up the short fall of some £500 at least on a temporary basis [21].

### 6.2. 1892

Dr Kennedy informed the hospital committee at the monthly meeting that there was a severe case of dilated bronchi in the temporary hospital and sought their approval to arrange transfer to the Royal Hobart Hospital. On the same day the Launceston paper wrote

that the NSW Government announced that there would be a Royal Commission into the origin, prevention and cure of lead poisoning at Broken Hill, an enquiry most relevant to Zeehan [22, 23]. The three doctors of Zeehan, John Kennedy M.D., C. S. Gibbons M.A. M.R.C.S.E. and J. Borthwick L.R.C.P.S.E. also wrote to Pillinger seeking financial support, citing the growing population, the risk of mining accidents, the inability of those off work to find accommodation, the approaching cold winter and the undesirability to caring for patients with contagious diseases in public hotels [24].

Dr. Kennedy informed the February meeting of the hospital board that currently the only inpatient was recovering from typhoid, and that the patient with bronchitis had been sent to Hobart. Surprisingly, his name, Mr. Wilson, is published. Mr. E. B. Goddard of Strahan, the provided of the lowest tender, visited to review the hospital plans which had a new proposal of omitting the infectious diseases ward to reduce costs [25].

Dr. Kennedy announced to the monthly meeting that a patient had been discharged, another was convalescent, and there had been two admissions, one with bronchopneumonia, one with a lacerated hand. All their names appeared in the paper [26].

Finally, after much correspondence proceeding back and forth between the Hospital Board and Pillinger bickering over the responsibility for the gap in funding, the minister announced that his department was prepared to accept the latest tender [27].

Dr. Kennedy as chairman presented his monthly report to the hospital board meeting at Finn's Hotel, stating that Mr Hodge had been discharged cured of typhoid, presumably to the relief of his family and neighbors, and that there were two men in the temporary hospital, one recovering from surgery and one with a dislocated knee-joint [28].

The Herald editorial added to the many voices complaining about the lack of progress in commencing construction of the hospital. It reported the death of a John Roach from a chest infection in a police cell, the only available accommodation as the three beds in the temporary hospital were occupied. It also noted that a Mr. Evershed of Zeehan had to undergo outpatient surgery when this should have been done with greater comfort as an inpatient. Criminal negligence on the part of the government was imputed [29].

The May monthly meeting of the Zeehan Hospital Committee decided that £100 should be spent on increasing the number of available beds on a temporary basis until the new hospital was constructed [30].

Dr. Kennedy reported to the June monthly meeting of the Zeehan Hospital committee that there were three inpatients, one with rheumatic fever, one with typhoid and one with lead poisoning. No further cases of lead poisoning were subsequently reported [31].

The thirtieth meeting of the Zeehan Hospital Board was held with Dr. Kennedy in the chair in Finn's hotel in June 1892, a commendable achievement for a building the did not yet exist! Funding and

the new plans were reviewed with the proposal of seeking a new tender immediately. It was noted that the three patients in the temporary hospital were progressing satisfactorily, the patient with typhoid was convalescent, and the patient with lead poisoning was improving [32].

### 6.3. 1893

A nine-year old boy, Ross, was admitted to the Zeehan temporary hospital under Dr. C.S. Gibbons having suffered a fractured jaw when a tree branch fell on his head as the tree was being felled. A week later he was noted to be improving though the severity of his injuries suggested it would be a long time before a full recovery [33, 34].

The news noted that there were four patients in the temporary Zeehan Hospital though no clinical details were given. [35]. A five-year-old boy, the son of Mr. J.L. Young, was admitted to the Zeehan Hospital having broken his right proximal femur while playing on a hillside. The courageous young man only complained a little only as Dr Kennedy was setting the fracture [36].

Dr. Kennedy reported to the December monthly meeting of the hospital board that five patients had been admitted to the temporary hospital in the previous month. Two had since been discharged and three remained in the wards. No clinical details were given. It was announced that the latest architectural hospital plan was nearly complete and tenders would be sought very shortly [37,38].

### 6.4. 1894

The local member of parliament Mr Urquhart urged the government to complete the construction of the Zeehan Hospital without calling on the townsfolk for further subsidy. Interestingly he noted there was no provision for a kitchen in the design and suggested that this should be included and the morgue omitted! [39]. The dream finally came to fruition with the take-over of the hospital by the board on the fifth of September 1894. The editorial congratulated Messrs Curtain, Sinclair, Black and Finn for their untiring energy and drive to reach this successful outcome. The editorial also recognized the untiring work of Dr J. Kennedy as the driving chairman of the hospital board and provider of medical services often around the clock for no charge to his needy patients. The paper was pleased to announce that the new hospital would be open for public inspection the following day [40].

(Table 2)

Decade	Deaths	Admissions
1894-1904	13	42
1904-1914	52	69
1914-1924	2	32
1924-1934	1	33

Table 2 Morbidity and mortality from industry in Zeehan (Mining and related railways and timber industry)

table 2 needs description below table

Morbidity and mortality from industry in Zeehan (Mining and related railways and timber industry)

Over the next four decades the deaths occurring within the mining industry peaked in the major mining decade of 1904-1914, and then decreased in the third and fourth decade of the Zeehan Hospital.

## 7. Zeehan Hospital

Detail of the hospital are finally released to the public. The construction has twelve-to-fourteen-foot ceilings and a veranda running all round the outside. There are four wards, the largest two being twenty-one feet by eighteen feet, two nurse's rooms, a central hall and passageways. A large bay window faces the main street. There are also two linen rooms, two bathrooms, two toilets and in the outhouse, a kitchen, pantry, washhouse and cook's room. The décor gains approval from the paper, the large wards are painted pink, the halls tertiary green and both small ward and nurses room are grey. Decorations adorn the rooms and the best timber is used throughout. Overall the building was deemed substantial, handsome and pleasing to the eye. The contractor, Mr. T.J. Fairmile and his assistants were complimented. [41]. The first admission the Zeehan Hospital was a man with mild typhoid fever. Sister Annie Fogarty expected a rapid recovery [42]. (Table 3)

Year	Admissions	Deaths
1900	211	10
1903	171	10
1904	205	15
1905	182	18
1906	278	5 typhoid, pneumonia only
1909	238	14
1910	154	12
1911	214	6
1912	253	13
1915	163	12
1916	173	13
1917	187	9
1918	206	11
1919	235	14
1920	193	8
1921	240	7
1923	209	N/A
1924	169	N/A
1925	292	21
1926	314	11
1927	302	25
1928	324	20
1929	357	6
1933	284	7

### 7.1. Zeehan Hospital Yearly Admissions and Deaths 1900-1933

Details of admissions and deaths were not published every year, but there was a slow trend upwards with a simultaneous decline in mine related casualties and increase in females and families. Explosives failing to ignite are not uncommon as a cause of mining accidents. Harry Hellman, a tributor, or miner who retains a percent of his diggings, on attempting to relight a fuse of an explosive that had not detonated in the King Mine, caused an explosion injuring his face severely and blinding him. However, Dr. Borthwick attending Hellman in the Zeehan Hospital expected him to recover his sight over the coming weeks.

A Mr. Robertson was admitted to the Zeehan Hospital under Dr. Kennedy in a dangerous but unspecified condition. An enquiry was expected to be organised by the chief secretary as to the reason for delay in his admission [43].

The case of Mr. Robison was discussed at the next hospital board meeting. He had been admitted from Mount Lyell and was examined by a Dr. Mathieson. The committee agreed to pay his fee. They also proposed that mining companies should retain one shilling from each worker for medical care, and that this proposal should be sent to the chairman of the Mount Lyell directors. Five months later, Mr. Craze, mine manager of the Zeehan-Montana mine, replied that the mine had agreed to pay three pence per miner in the expectation that they would all become hospital members and have rights to free treatment [44,45].

Small town politics emerged amongst the board members in November. Firstly, four members resigned. Secondly Messrs Powell and Hall were appointed to look into alleged abuses at the Hospital [46,47].

Ross Rutherford was admitted to the Zeehan Hospital following an accident at the Silver Queen mine. Poppet legs were being hauled into position when a rope broke and a poppet leg fell on Rutherford fracturing his mid-femur and causing severe bruises over his back and loins. Management prior to X-rays and interventional surgery would have been a clinical diagnosis, manual realignment and six weeks' bedrest on traction. Poppet legs are an upright structure at the mouth of a mine shaft supporting the frame from which the cage is suspended. Rutherford, a married man had only just arrived from Victoria [48].

### 7.2. 1895

The Minister of Lands approved funds to pay for the clearing and fencing of the Zeehan Hospital Grounds [49]. Mr Richard Thorne died in the Zeehan Hospital of typhoid fever a week following admission after initially showing signs of improvement. He left a wife and five children living in very poor circumstances having found employment difficult to obtain lately until recently finding a job in Zeehan [50]. Mr. David Rose, a mine shaft contractor, was admitted to the Zeehan Hospital under Dr. Kennedy having fallen about twenty-five feet from a ladder in the Comet mine. Kennedy



cleaned and dressed his superficial lacerations and bruises at the mine and arranged his admission. He was considered most fortunate not to have sustained worse injuries [51].

The Christmas Eve Telegraph informed readers that the government approved a tender for repairs and renovations of the fever ward including a supply of bedsteads [52].

### 7.3. 1896

Mr. Bath, an ore classifier at the Curtin and Davis mine, was conveyed on a stretcher to the Zeehan Hospital by nine fellow-workers when a huge log being chopped, rolled and crushed his legs severely against a stump. Clinical details are not given. However, the paper two days later gave more details. It states, 'the fleshy part of one calf was torn away'. It took twelve hours to carry him to the hospital. He was carried from the mine to Dundas railway junction where it was expected to place Bath on a rail trolley for the last five miles. However, the railway refused this request necessitating a further five miles' portage. As the paper says this caused Bath more suffering, and his faithful comrades more toil, and' this is not as it should be'.

Nearly three weeks later Dr. Kennedy reported that Bath was still in a precarious position in the hospital and that he would probably be laid up and unable to work for eighteen months. Dr. Kennedy had commenced a subscription to help support his wife and family. Moran, the railway ganger who refused Bath the use of a trolley was removed from his employment by the Railways Department [53,54,55,56].

More bad news emerged from the mines the following day. Harry Killalea was killed in an accident at Lee and Broadhurst tributary mine. He had been oiling a pump when his clothes became entangled in the machinery and he was crushed sufficiently severely that his heart was visible through a deep wound. He was noted to be well at ten o'clock. The pump was noticed to have stopped working at eleven o'clock but disregarded. Shortly afterwards his body was found lying between the cogs, spur and pinion wheel. A verdict of accidental death was recorded at the inquest.

Prior to 1900 there was virtually no compensation in the cases of such fatal or serious injuries. The families and other workers bore the costs. The laws protected employers such that it was hard to prove negligence. Employers were not responsible for injuries caused by other workers, employees assumed responsibility for the hazards of their workplace. The development of increasingly dangerous machinery without compensation was one of the factors leading to the development of the Australian Labour Party in the 1890s. The paper also noted that Miss Gibson, who attempted suicide the night before was recovering in Zeehan Hospital [57]. Another accidental mining death followed two days later. Mr. Cashbolt was sinking a win, or shaft between different levels, was placing two charges and retired to a safe distance. Only one explosion occurred, so Cashbolt returned without waiting the regulation

safe time. Unfortunately, when he was close the second charge detonated blowing off an arm and leg and destroying one eye. He was conveyed to the Zeehan Hospital where he expired the following morning in spite of the care of Drs Borthwick and Kennedy.

In none of these cases is there any mention of compensation or financial support from the mine owners, nor is there any mention of examining and improving mine safety [58].

A well-known miner, Mr. J. Blow, died in Zeehan Hospital due to a brain tumour after a lengthy painful illness. A popular man of Cornish extraction with an original sense of humour, the cause of his mental aberrations was not initially clear. Diagnosis at the time would depend upon a history of increasing headache, particularly on waking, vomiting and the slow development of subtle focal neurological signs. Hand-held ophthalmoscopes to note bulging optic discs and raised intracranial pressure did not become available till 1915.

The paper also noted the rumours of death in Kalgoorlie and Coolgardie of Zeehanites working there in the gold fields. Typhoid was the commonest cause of fever, admission to hospital and death at that time [59, 60].

Medical disputes are currently hopefully resolved by 'weight of evidence' rather than 'evidence of weight'. A hospital board meeting was called to resolve a dispute between Drs. Borthwick and Kennedy. Each doctor has his own ward and own patients, and the others are only seen by mutual consent. However, Dr. Kennedy weighing in at ten stone, inadvertently saw a patient of Dr. Borthwick who weighs in at sixteen stone. The latter became aggressive and apparently lifted Kennedy out of his area into Kennedy's ward. The board were able to compliment both on their outstanding medical care and cooperation and heal their wounded feelings [61]. Mr. Kelley suffered a severe laceration to his foot at the Curtin-Davis mine and was admitted under the care of Dr. Godfrey to the Zeehan Hospital [62]. Mr. W. Elder, a miner died suddenly at the Zeehan Hospital. Age and cause of death were unspecified [63]. A man working on the Carbine track cut his foot seriously with an axe and required admission to the Zeehan Hospital [64].

A meeting of the central Board of Health noted that the fever wards of Hobart and Launceston Hospitals were empty and that there had been no deaths from typhoid in Tasmania for a month. Two cases of scarlatina or scarlet fever were noted in Hobart. The index case was their father who had been in Zeehan Hospital having surgery following an accident at work, who then returned to Hobart. Apparently, he was not isolated in hospital despite signs and symptoms. The new hospital secretary was unaware that scarlet fever was a communicable disease despite an outbreak in Zeehan.

The children were isolated till they recovered, the house was cleaned and there was no further transmission [65].

A Mr. Hodgetts who was reported to be a long-term patient in Zeehan Hospital with an unspecified complaint was the beneficiary of

community fund-raising [66].

#### 7.4. 1897

An inquest was held at the Zeehan Hospital following the death of two miners. They were working under an overhanging rock on the N. E. Dundas tramline when the rock fell killing the two men instantly according to the ganger, James Tennant. The jury delivered a verdict of accidental death to the extreme displeasure of the Clipper unsurprisingly! The editorial stated that a lot is said about the risk of capital and little about the risk of labour. It felt that if the ganger or his superior knew their business and were not hopelessly ignorant or grossly careless, they surely would not have allowed men to risk their lives excavating under an overhanging rock. The Clipper considered the abundance of unemployed men in the district compelled working men to accept risks for a job [67].

'Billie' wrote to the local paper complaining that the Zeehan hospital only employed one extremely busy fully trained nurse, leaving some patient care to staff without sufficient skills. 'Billie' suggested that men utilising the hospital could afford to support the institution financially in preference to spending money in the pub. This may have had some effect as only twelve days later the hospital was advertising for a head nurse! [ 68, 69]

The meeting of the hospital board in March introduced some surprising medical changes. First Dr. Kennedy reported for the month he had admitted three, discharged five, leaving two remaining for treatment; and Dr. Borthwick had admitted four, discharged one, leaving two remaining for treatment. It was then announced that the board had ceased the division of the hospital into two wards, one for each doctor, and that the hospital would be available for any doctor practising in the area and approved by the board. The board would also write to Drs. Borthwick and Kennedy thanking them for their services which the board hoped would continue. They announced the appointment of Dr. Guinend to the hospital [70].

At the April monthly meeting Dr. Kennedy reported having admitted ten patients, discharged six having recovered, one died of pneumonia as a complication of typhoid, leaving four under care. Dr. Borthwick reported having discharged three patients, and admitted two, one patient died from inflammation of the lungs, and two remained.

It was reported that Dr. Godfrey had decided to practice in Zeehan and his application to work in the hospital was accepted. Dr. Borthwick tendered his resignation which was accepted with regret and a letter of thanks from the secretary for his past services.

Twelve applications for the position of head nurse were received and Nurse Ada Thomas, late of Prince Alfred Hospital, Sydney was chosen by ballot at a salary of £76 per annum. It was agreed that a letter of thanks should be sent to Nurse Fogarty thanking her for past services and seeking her application for the position of assistant nurse on her current salary [71]. The board reconvened

a week later as Nurse Ada Thomas had accepted a position elsewhere and Nurse Broad was appointed at £66 annually [72]. A public meeting in Zeehan proposed the addition of a female ward to the hospital [73]. Mr. Humphries survived a fall of some two tons of earth on him at the West Comet mine and was admitted to the Zeehan Hospital under Dr. Kennedy with only bruising [74].

The hospital secretary corresponded with the government seeking shared funding for the construction of a women's ward but received an evasive and unhelpful political answer suggesting the loyalty of the town citizens should be adequate for the entire costs. Three days later it was noted that the hospital medical officer had to refuse admission to a sick female as there was no accommodation! [75, 76].

George Floyd, a well-known miner, died suddenly from congestion of the lungs and lead poisoning. The Mercury, gives no location, nor age nor clinical details. Zeehan Hospital is not mentioned, nor does there appear to have been an inquest [77]. The hospital was noted to be full in early July with every bed occupied. Five patients had broken limbs which usually required prolonged bed rest in traction. The doctors were reported to be having difficulty arranging accommodation for patients. The paper expressed the wish that local subscriptions would help the construction of a women's ward shortly [78]. Zeehan Hospital was complemented on its ability to eliminate scarlet fever by Dr. E.L. Crowther of Tasmania who had an eminent career as a surgeon and horticulturalist before becoming a politician [79]. Mr G. Grimes, previously manager of the South-West Curtin-Davis mine, suffered a severe injury to his heel while working in the mine, necessitating six weeks in the Zeehan Hospital and the need for crutches on discharge [80]. A Mr. McFarlane died in the Zeehan Hospital, having been admitted from the North-East Dundas mine, from inflammation of the lung. Age and aetiology are omitted. A Mr. James Carew became lost walking in the snow between Mt Read and Mt Lyell taking four days to complete the journey arriving exhausted at Mt Read Hotel. He was admitted to Zeehan Hospital in a critical condition with pneumonia. The board secretary reported that nine patients had been admitted during August, eight had been discharged, one had died and twelve remained in hospital [81].

The paper reported that the Zeehan Hospital was currently full, even though there were no patients with infectious disease. Further admissions would have to be placed on the floor. It considered that the rapidly expanding population urgently needed an extension to the hospital. The local member of parliament submitted a request to the minister for lands for financial assistance for this concept who approved a grant of £500 [82].

A coroner's inquest was held in the Zeehan Hospital into the death of Mr. Alf McGuinness. Evidence given by the braceman, Alf Daily, the tracker, Mr. W Crocket, and the shift boss, Mr. Deboo indicated that the shackle required by mining regulations for raising and lowering timber was absent. The verdict and any culpability of the

mine were not recorded [83]. Dr. Kennedy was asked to visit Mr James Miller, age 34 in Dundas with severe inflammation of the lungs and cardiac disease. Kennedy arranged his urgent transfer to Zeehan Hospital but he died two hours after admission [84]. Mrs. Smith of Trial Harbour was admitted to the Zeehan Hospital with a snake bite. She was bitten on the finger while washing in a creek. She dislodged the snake with a still, tied a piece of string around her finger, asked her father to chop off the terminal phalanx with an axe, then rode her horse twelve miles to hospital where she was considered to be a survivor although a little sleepy! [85]. A coronial inquest was held by Mr. E.L.Fowell into the death of James Atess who drowned at the Queen Mine. He had been timbering a shaft when he fell into a well about twenty-foot deep at the bottom of the shaft. His fellow worker, John Yelland jumped in but Atess remained below the surface. By the time Yelland obtained grappling irons and assistance to find the man, Atess had drowned. When he was brought to the surface, Dr Borthwick attempted resuscitation for half an hour to no avail. The coroner considered the death an unfortunate accident and the jury agreed. It appeared well before the safety of workplaces was considered [86].

#### 7.5. 1898

Mr. William Archer died in the Sylvester Mine and his body was subsequently recovered and conveyed to Zeehan Hospital presumably for an autopsy and then a coronial inquest. He was a Victorian aged about thirty and only recently commenced work in the mine. He had been working in the main shaft with four other men when there was a sudden profuse rush of sludge from a wall followed by a rapidly rising water level jamming Archer against a pump. Charles Spark, the chief witness, also trapped managed to free himself and escape with only severe bruising to his left leg, but they could not help Archer who called help once before his head was submerged. John Parmenter helped Sparks to the surface and several days passed before the mine could be pumped out and Archer's body recovered. The mine manager, Mr. James Hancock was distressed as he had a reputation for being a careful and thoughtful man, and this was the first death under his management He sought Dr. Kennedy's help immediately. Mr. Richards, the manager of Queen Mine and twenty volunteers also came to render assistance. Subsequent papers do not record the outcome of any inquest [87, 88]. William Dobie and George James Smith were admitted after an explosion in the Commonwealth Mine at Dundas. Smith suffered only a few scratches and painful eyes, but Dobie was severely injured. His face was smashed to pulp, his jaw broken and his palate blown away, but he remained conscious throughout. It was thought a hammer rebounded into his face with the force of the explosion. Drs. McCarthy and Kennedy administered analgesia, prepared a facial plaster cast and performed surgery [89]. Mr. Thomas Heaps, a well-known prospector and mining identity at Lefroy died in the Zeehan Hospital, though age and cause of death are not recorded [90]. The Lieutenant-Governor of Tasmania, Jenico Preston, Vis-

count Gormanston, and Lady Gormanston visited Zeehan in February. The visit to the mining area was curtailed by local bushfires. Gormanston also visited the Zeehan Hospital accompanied by the matron, Miss Broadbent, and committee VIPs. He complimented the matron and medical staff on the cleanliness and organisation and added his voice to the recommendations for more spaces for the nurses and another storeroom [91]. Lynch, a young jockey was admitted to the Zeehan Hospital with a leg injury sustained when his horse, Colebrook, fell with him, but was reported to be making good progress [92]. Mr. John Tregay wrote to the Herald to thank the matron and nurses of Zeehan Hospital and Dr Kennedy for the kind and unremitting treatment he had received recently which he described as the kindest he had received in eighty years of travels around England, America and Australia [93]. Dr. McCarthy was criticised and condemned at the April Hospital Board meeting for admitted two inappropriate and undesirable patients. The first had mental health problems, a lunatic in the then contemporary vernacular. He paraded around the hospital half naked and was extremely obnoxious to other patients and staff alike. The second endeavoured to make the hospital a temporary home. The hospital doctors were requested to attend the next meeting to discuss the problem [94]. The Surveyor-General visited the nearby Queenstown and noted twenty-two cases of typhoid fever housed in one small cottage, two huts and two tents. Clearly the disease was prevalent in the area [95]. Yet another miner died as a result of a mining explosion. Thomas Snooks who was injured in the West Coast mine died in the Zeehan Hospital overnight. He had placed gelignite in three holes, lit two fuses and retired. He returned to the mine to light the third when it exploded. Dr Kennedy addressed the subsequent inquest stating that he saw Snooks in a guard's van and found him in state of collapse. His left wrist was smashed to pulp; his left leg was severely damaged with the muscles severed down to the bone. He had superficial abrasions on the shin, above the left eye and over the left frontal bone. His heart was said to be weak and he had a pre-existing cardiac problem.

The jury returned a verdict of accidental death without needing to retire [96]. Predictably a case of typhoid arrived in the Zeehan Hospital having contracted the disease in Queenstown where the hospital was crowded and come to Zeehan. Unfortunately, Mr. Maxwell succumbed to the disease [97]. Charles Cressin was admitted to the Zeehan Hospital having been badly injured by a log slipping on the Pieman River [98]. James Hammersley was admitted to the Zeehan Hospital under Dr Kennedy following an accident at the Oceana Mine. He was partially buried under a fall of ore sustaining a severe injury to his left arm. The skin distal to his elbow was degloved exposing all the tendons. He also fractured his tibia and femur. Dr Kennedy was obliged to amputate his hand which with the loss of two fingers of his right hand in a previous accident left him maimed for life. The Clipper noted if he were the Prince of Wales, he would continue to be rewarded for doing

nothing while Hammersley being a working man would receive nothing! [99, 100]. Mr. A.E. McGuinness, a miner, was admitted to the Zeehan Hospital having sustained a compound fracture of his leg under a fall of earth at North Pieman [101]. Friction surfaced again between Dr Borthwick and the other medical staff. Dr Borthwick resigned his position as senior surgeon when the ward system was abolished. However ever since then intermittent patients have requested his services, an arrangement which required the approval of Dr. Kennedy, now the senior surgeon. This had not always functioned as intended leading to raised angry voices and threat of violence. Matters came to a head when Borthwick was found by the matron to have entered by the back door to visit one of Dr. Kennedy's patients. The other medical staff threatened to resign if this continued. The board proposed a solution that Dr. Borthwick could see patients in the hospital with the signed approval of the matron, this solution to be reviewed by the Attorney-General and subject to a vote by the subscribers [102]. The hospital board noted that in the previous month, fourteen patients were admitted, twelve were discharged, one died and fifteen inpatients remained. [103]. The Herald noted that there were seventeen inpatients, four with very serious conditions requiring two day nurses and two night nurses exemplifying the utmost necessity for the hospital. Work on the new wing was about to commence [104]. James Cowle and John Riley were admitted to the Zeehan Hospital on the evening train following an accident on the Hercules tramway. They were hit by a carriage running out of control back down a slope after a coupling broke. Cowle sustained a fractured skull and an injured side while Riley had a split lips and a laceration above the eye. Dr Borthwick attended their injuries at the site and they were reported to be recovering [105]. Mr John Minors died in the Zeehan Hospital of an unspecified cause. He was described as a popular, always kindly and helpful, old West Coast identity though only sixty-five [106]. The Zeehan Gymnasium surprisingly was the site of a fatal accident. Theodora Cameron, a thirty-two year-old from New Zealand, died in the Zeehan Hospital from injuries sustained in the gym a few days previously. He had been practising on a horizontal bar when he fell on an inadequate mattress and was paralysed below the neck presumably with a fractured cervical spine [107]. Mr Collings, a woodcutter, was transferred to the Zeehan Hospital by train with a broken leg when a tree fell on the log Collings was cutting near the Dundas Road [108]. Two men, Rupert Vaughan and Tom Statton, were injured in an explosion at the Western Mine and admitted to the Zeehan Hospital. Vaughan was transferred to the eye unit in Melbourne in the hope that the sight in one eye could be saved. Unfortunately, it was too severely damaged and was removed, though the sight in his other eye was unaffected. Statton was more severely injured with facial and bilateral eye damage such that he was completely blind. He deteriorated and died a few days later. [109, 110]. Drs Kennedy and Guinand submitted their resignation as honorary hospital surgeons to the Zeehan Hospital

board. Amongst other issues, these two doctors had given free service to the hospital, when other town private practitioners were able to charge for services. The hospital income was clearly given elsewhere. In Kennedy's case he was the driving force in establishing the hospital and gave eight years' prompt service day and night for free. The Herald complimented him on his dedication to duty and suggested a salaried full time surgeon should be appointed [111]. Patient numbers for September were eleven admissions, eleven discharges, three deaths and ten remaining in hospital [112]. Mr Kenney, a miner was admitted to the Zeehan Hospital with a broken leg after a horse fell on him at the Deep Lead mine [113]. Lionel Hobden was admitted to the Zeehan Hospital with an eye injury. He was hit by a flake of steel flying from the head of a drill and will probably lose the sight of that eye [114]. Not all trauma is caused by mining accidents. George Monaghan, a miner from the Beaconsfield and Lefroy mines was admitted to the Zeehan Hospital with three broken ribs from a pub brawl! [115]. Mr A.H. Manser, the contractor for the additions to Zeehan Hospital announced the building was nearing completion with plastering in progress he anticipated that the hospital would be able to take possession before the end of November [116]. The death of William Dunn was the subject of a coroner's inquest. He was said by his wife to have had an internal complaint for two years and spent some time in Zeehan Hospital. Following the evidence of Dr Robertson, the jury returned a verdict of death from natural causes [117]. The monthly report for patient numbers in October were nine admissions, eight discharges and fourteen remaining patients. These statistics of the number of inpatients, admissions, discharges and deaths sometimes contain simple errors of addition and subtraction such that the true numbers are not always apparent [118]. An inquest into the death of Mary Blong was held in the Zeehan Hospital. She had an altercation with her husband on the day of death and their relationship was poor. She was said to be of intemperate habits and died of suffocation from an overdose of carbolic acid. The verdict was suicide. The source of carbolic acid was unclear. Subsequently Mr Blong sought compensation claiming that money had been concealed in her clothing that was subsequently destroyed for sanitary reasons. The December patient numbers were eleven admissions, ten discharged, one died and eight remained [119, 120].

#### 7.6. 1899

An editorial in the Herald reported that there were six cases of typhoid fever in the Zeehan Hospital, and an undisclosed number receiving treatment at home. A week later the Mercury reported that one patient had died from typhoid. A further two days later it was reported that there were nine cases in hospital. It notes some unsanitary premises in town where kitchen refuse rots on site, and where dirty water is thrown out back doors to run through open drains that are not flushed or disinfected. The Herald considers that Zeehan with a congested population and no sewerage system is ripe for a more severe outbreak of typhoid. It cites Beaconsfield

where acquisition of money superseded hygiene such that there were just under a hundred cases of typhoid the previous year. It cites the domestic rainwater tanks which would not only trap rainwater, but also pollution from dust and dirt, and metals from the mines. Boiling before drinking was recommended as a standard safety measure. The Herald also recommended tuberculin testing for cattle to eliminate the disease from local herds and reduce bovine tuberculosis in the community [121, 122, 123]. The epidemic of typhoid escalated, another day later there were a total of eighteen cases in Zeehan Hospital of whom ten had typhoid, and another death from typhoid was recorded. Two weeks later there were twenty inpatients, over half of whom had typhoid [124, 125, 126]. Cecil Danvers, a fifty-nine-year-old former wood cutter died in the Zeehan Hospital of pneumonia [127]. A young man, W.J. Gillin died of acute pneumonia, and Mr Bransden died of typhoid leaving a crippled wife and six children, both dying in the Zeehan Hospital [128]. Mr Albert George Smith, a former timber man at the Western Mine, died in the Zeehan Hospital with a deteriorating 'abscess in his head'. It is not clear if this was intra- or extra-cranial [129]. Thomas Maura, fireman, and David Bidulph, driver was killed when the boiler on their train exploded at the Zeehan railway station. An enquiry was held in the Zeehan Hospital. The board consisted of three government representative and one other. Witnesses and experts gave varied opinions on the efficacy of the safety valves, the accuracy of pressure gauges and the pressure within the boiler, the maintenance of equipment and the skills of the operators. Some considered that the pressure gauge gave falsely low readings, some that the pressure safety valve failed to work at unsafe pressures. Ultimately the enquiry board supported by a jury delivered a verdict that opined that the explosion initiated in the firebox, perhaps due to the inadvertent addition of explosives, and that no liability could be blamed on the company. In no way could the railways be held responsible or liable for compensation. A conclusion considered unbelievable by many.

However, prior to 1900 workers and their families had to bear costs of work-related injury. Compensation could only be gained by proving management negligence by common law but the law was structured to prevent compensation claims. Employers were not legally accountable for injuries to workers if it was caused by another member of the workforce. Workers were considered responsible for the hazards of their employment, and if the actions of workers themselves contributed, in any possible way, employers were not liable for compensation. The increasing mechanisation and danger of the workplace, particularly in the mines, played a large part in the formation of trade unions and the development of the Australian Labour Party [130, 131, 132]. Dennis Denehey, a local prospector died aged forty-four in the Zeehan Hospital of an internal complaint described as consumption of the bowels [133]. Dr Gilbert E. Butler of Oatlands was appointed first Medical Superintendent to Zeehan Hospital by the casting vote of the chair

from Dr J Kennedy, previous honorary physician.

Gilbert Edward Butler was born in 1859, at Lampton Farm, Glenorchy, the third son of Henry Butler FRCS, surgeon and then speaker of the House of Assembly in the Tasmanian parliament. Gilbert was educated at the High School, Hobart and then left for London to train in the Westminster Hospital graduating MRCP, LRCS. After two years in the Westminster as house physician and surgeon, he returned to Australia to general in practice in Oatlands [134, 135]. Mrs Rodgers died in the Zeehan Hospital of unspecified cause or age [136]. Statistics for Zeehan for the month of August were twenty-six births and five deaths, an indication of the number of young families now in town. The hospital was estimated to be serving a population of ten to twelve thousand. The Zeehan Hospital figure for the same month were ten admissions, ten discharges, one death and ten remaining. It was reported that Queenstown hospital was unable to isolate patients with typhoid and one of their nurse had recently died of typhoid. [137, 138]. Augustus Moller, a sixty-eight-year-old retired miner died in Zeehan Hospital under the care of Dr Kennedy. He had been unwell in Zeehan Hospital for five months until three weeks previously when he had a fit in Vincent's fruit shop. Kennedy arranged his admission but he died soon afterwards [139].

#### 7. 7. 1900

William McDougald was admitted to the Zeehan Hospital with severe chest injuries and less severe lacerations to the face and neck sustained in the Emu Bay Mine by a blasting explosion. Again he believes that all laid charges had detonated. His injuries were not believed to be life-threatening [140]. W. McNee, a boy, was admitted to the Zeehan hospital with a badly burned foot and J.C. Laydon was admitted with several fractured ribs having fallen from a ladder [141]. The admissions to Zeehan Hospital in February included seventeen patients with pneumonia, four secondary to typhoid [142]. The following week there were six patients with typhoid in Zeehan Hospital amongst the sixteen admissions [143]. Albert Heinrich was admitted to the Zeehan Hospital following a wood chopping accident at the Three-mile in which it was said that the tendons and muscles were severed to the bone just above the ankle. A complex disabling injury apparently repaired by Dr Butler with thirteen stitches [144]. Mr J. Riley was admitted to the Zeehan Hospital under Dr Butler with a dislocated shoulder. A timber contractor, he had fallen at the Henty Goldmine [145]. David Stewart was admitted to the Zeehan Hospital under Dr Butler with a broken left arm and bruising to the body when the trolley he was riding at the Emu Bay railway tunnel got out of control and threw him off [146]. Four days later, the Mercury noted there were twenty-three patients in Zeehan Hospital, four of whom had typhoid [147]. A worker at the Zeehan smelter was admitted to the Zeehan Hospital with burns [148]. Hugh Martin, a twenty-one-year-old Victorian, was admitted to the Zeehan Hospital with a deep laceration to his right foot. He had been chopping wood on the

Emu Bay railway when his axe slipped apparently cutting through flesh and bone on the sole of his foot [149]. Edward Reardon was admitted to the Zeehan Hospital in a critical condition with severe injuries from a gelignite explosion. He was carrying several plugs of gelignite in the Emu Bay railway tunnel when his shirt caught fire from the candle he was carrying and the gelignite exploded causing severe burns and bruising to the front of his body [150]. The telegraph sang the praises of Dr Gilbert Butler for creating a model institution. Noted for promptness of action, excellent organisation and kindly attentive manner, the paper felt he had fulfilled his commitment to Zeehan and hoped he would stay a long time. In July after one year in Zeehan the board voted unanimously to appoint him for a further year and noted that there had been no deaths for five months [151, 152]. The Zeehan Hospital was sorry to note the resignation of the matron, Miss Broadbent, who had played a large part in ensuring a high standard of professional care. In May the hospital was sometimes empty and had eighteen admissions and sixteen discharges with no deaths for the month [153]. Miller, a boy was admitted to the Zeehan Hospital with a severe

axe wound [154]. Dr Mackenzie of Strahan was taken ill with either of the related illnesses, Bright's disease or rheumatic fever. As his wife was away ill in Melbourne with bronchitis, Dr Kennedy thought he should be admitted to the Zeehan Hospital while Dr Crawford took over Mackenzie's practice [155, 156]. The monthly meeting of the Zeehan Hospital board noted ten admissions, thirteen discharges, thirteen remaining patients and no deaths. Again these figures were attributed to the skills of Dr Butler [157]. Mark Ireland, the manager of Mount Rex mine was admitted to the Zeehan Hospital with a longitudinal fracture of the femur following an accident in a carriage at Roseberry. Some eleven weeks later he was reported to be progressing satisfactorily but still in hospital. He was not able to return to work till the following January when a large number of the inhabitants of Avoca welcomed him back as he was a popular manager [158, 159, 160]. James Ball died in Zeehan Hospital from injuries sustained in a truck accident at the rail works [161]. Kenneth McIver, one of the early prospectors, a town identity, died in the Zeehan Hospital, age and cause of death unspecified [162]. (Figure 4)



**Figure 4:** The pharmacy at the Zeehan Hospital in c 1900. •Tasmanian Library, State Library of Tasmania

### 7. 8. 1901

The annual figure for Zeehan Hospital for 1900 were two-hundred and eleven admissions, by far the greatest since the opening in 1894, and ten deaths [163]. Mr Jones died in the Zeehan Hospital as a result of local bush fires and a collection has commenced for his wife who also lost her home [164]. Peter Wheeler was admitted to the Zeehan Hospital with a broken leg sustained in an accident at the Hercules Mine when he was hit by a truck that had run off the haulage line [165]. Patient numbers for the Zeehan Hospital in March were twenty-two admissions, twenty discharges, two died and thirteen remaining in hospital [166]. Mr Hooper was admitted to the Zeehan Hospital with an unspecified accidental injury sustained at the Macquarie Heads breakwater [167]. April figures

for Zeehan from the Registrar-General of births and deaths were twelve births and seven deaths. Including Lyell and Strahan there was an area excess of births over deaths by twenty-three. Dr Butler was relieved during his holiday by Dr W.R. Graham whose attention had been much appreciated [168]. Mr R.L. Harris, a prospector, died in the Zeehan Hospital of pneumonia though only aged forty-one. He had previously discovered the Mount Tyndall Copper mines and was the original holder of the Harris Reward gold mine sections [169]. Dr Gilbert Butler performed a post-mortem examination on the body of Bessie Whitelaw and gave evidence at the trial of Anne Chalmers who was accused of Whitelaw's murder. Butler stated that she had been 'in a certain condition' for three or four months, a gentle euphemism for pregnancy. A sharp foreign



body had been introduced into the uterus presumably in an attempt to procure an abortion. However, as a result she had an internal wound and died of shock. It is not made clear if this is haemorrhagic shock or septic shock or both. Dr Kennedy saw her just before death and thought 'she had been tampering with herself'.

On the judge's recommendation the jury returned a verdict of not guilty [170]. Dr Butler reported to the monthly meeting of the hospital board that in the previous month there had been twenty-one admissions, fifteen discharges and four deaths, two being moribund on admission. There were eight inpatients at the start of the month and ten remained at the end. During the month, a total of five hundred-and ninety-two consultations were made on in- and out-patients and five hundred and forty prescriptions had been dispensed by the chemist. Ward two had been thoroughly cleaned during that time and the hospital was deemed to be progressing satisfactorily [171]. Mr F.B. Baker, a shift manager at the Comet Mine, was admitted to the Zeehan Hospital with a fractured scapula. While climbing down a shaft ladder, he thought he had reached the bottom and let go falling some thirteen feet [172]. Mr Bonney was admitted to the Zeehan Hospital under Dr Butler having injured his hand on a circular saw at the port of Pillinger in Macquarie Harbour. Butler had to amputate two fingers [173]. P. Burke, age about thirty, was admitted to the Zeehan Hospital under Dr Butler with three fractured ribs and a right sided penetrated lung, presumably a pneumothorax in a serious condition. Concepts of thoracic drainage for pleural fluid or for a pneumothorax with an underwater sealed drain were in their infancy until the huge numbers of chest injuries in WW1 impelled progress in thoracic surgery. Burke's management is not described. He had been thrown out of a runaway railway trolley over a tip-head on the British Zeehan property. His fellow surface-man Tuttle had managed to get off the trolley before it reached the tip-head [174]. James Griffin, a well-known butcher and packer at Mount Read, was admitted to the Zeehan Hospital with a broken leg just above the ankle, having caught his foot on a corduroy or log track. He was conveyed to hospital on the Dundas tramway and the bone was set on arrival [175].

### 7. 9. 1902

Dr Butler reported at the monthly hospital board meeting that twelve patient were present at the start of the month, nine were admitted, seven were discharged, one died leaving thirteen inpatients at the end of the month. There had been four hundred-and-twenty-seven consultations and three hundred-and-fifty-three prescriptions. The resignation of Nurse Rogers after three years was recorded [176]. Frederick Good was admitted to the Zeehan Hospital following an apoplectic or epileptic fit. Good, an undertaker was on the Dundas train to arrange a funeral in Dundas when taken ill [177]. William Hudson was admitted to the Zeehan Hospital with a deep laceration in the sole of his right foot when he missed a log and drove the axe-blade into his foot while chopping timber

at the Five Mile, Dundas [178]. Frank Huxley was admitted to the Zeehan Hospital with a severe injury to his right eye. Huxley, the assistant to the district surveyor, Mr Wilson was chopping wood when a splinter entered his eye and it is feared he will lose the sight in that eye [179]. Mr W. Jordan died in the Zeehan Hospital where he had been under the care of Drs Deane and Butler with a 'complication of disorders' only a few months after the death of his wife. He had been licensee of the Victoria Hotel in Zeehan and worked in Mr Clarke's business in Strahan and Zeehan. He had been transferred from Strahan to the Zeehan Hospital in the hope that more constant nursing attention might help [180]. William Linquist, a former barman and billiard marker at the West Coast Hotel died of heart disease in the Zeehan Hospital [181]. Mrs Dineen was admitted to the Zeehan Hospital with a broken leg sustained when she fell trying to prevent her two dogs fighting at Dundas [182]. A young woman named Smith was admitted to the Zeehan Hospital yesterday suffering from sulphuric acid poisoning. No further details are given as to whether this was accidental or not, nor of the outcome [183]. In November there were seven patients in hospital at the commencement of the period, sixteen were admitted, twelve were discharged, and one died leaving apparently nine in hospital. Simple arithmetic may not be the paper's forte! There were five hundred-and-seventy-two consultations and five hundred and eight prescriptions filled [184].

### 7. 10. 1903

In January there were eight patients in hospital at the start of the month, five were admitted, six were discharged and one died leaving six in hospital according to the medical superintendent's report [185]. The new Zeehan Hospital operating theatre was opened with a large attendance of subscribers and friends to witness the event. Dr Butler gave a short speech as did Senator O'Keefe and various members of the board [186]. John Perry, a seventeen-year-old blacksmith, was killed in a shooting accident and his body conveyed to Zeehan Hospital for an inquest. He had been out shooting near the Henty River with two others when one stumbled discharging his gun accidentally. Perry was shot in the chest and died within ten minutes. A railway gang assisted in carrying Perry by boat and train to Zeehan [187]. Safety catches on guns were first introduced in the 1880s but were obviously not in use here.

Peter Buchanan, a sixty-nine-year-old prospector was brought into the Zeehan Hospital in poor health by Constable Marshall. He had been deteriorating alone in his hut for three weeks [188]. Frank Long, the original pioneer of Zeehan, was admitted to Zeehan Hospital after suffering for several days with an injured arm. He had been found in distress alone in his remote hut. Long had found galena, a silver-led ore on the banks of Pea Soup Creek near Zeehan in 1882, following which Zeehan grew to be Tasmania's third largest city called the 'Silver City of the West'. A memorial was created in Zeehan commemorating his achievements [189].

Alexander, a young boy was admitted to Zeehan Hospital suffering from a bruised leg following a minor accident on the Hercules tramway [190]. Mr F. Johnson, a miner at Mount Farrell, was admitted to the Zeehan Hospital suffering from a severe injury to his leg. While sharpening an axe prior to a wood-chopping event he slipped and cut his leg just above the patella. Apparently, he suffered a severe haemorrhage but was in no danger [191]. Dr Butler, the house surgeon at the Zeehan Hospital vaccinated seventy-one people in two days. The nature of the vaccine is not recorded. Available vaccines by 1903 included smallpox, cholera, rabies, tetanus, typhoid fever and bubonic plague, typhoid would perhaps seem the most likely in view of the incidence in Zeehan. Butler was reappointed as medical superintendent for another year at the monthly board meeting [192, 193]. Zeehan Hospital hopes to have an X-Ray machine shortly. A concert arranged by the United Friendly Societies at the Gaiety raised about £50 towards the cost [194]. Andrew Kinsella was admitted to the Zeehan Hospital under Dr Butler with a foot injury caused by an accidental blow with an axe requiring amputation of three toes.

Mr J. Burt, an elderly wood chopper, was admitted to the Zeehan Hospital to set a broken right arm caused by a tree falling on him [195]. Mr Jackson was admitted to the Zeehan Hospital with severe bruising of his right big toe when a bar of bullion fell on him at the Tasmanian Smelter Company's works. Mr McGuinness, a wood chopper for Dunkley Bros, injured his right foot when an axe glanced off a piece of timber into his leg. Both were attended by Dr Grinrod [196]. The Mercury announced that Zeehan Hospital was to have an X-Ray machine [197]. Mr H. Bomford, a forty-year-old woodcutter, was admitted to the Zeehan Hospital with a compound fracture of his lower leg just above the ankle. He was cutting timber at Dundas when the spar swerved and hit his leg breaking the bone and exposing his ankle joint [198]. Michael Maher, a tributor, was admitted to the Zeehan Hospital with suspected internal injuries caused by a fall of about twenty-feet down a shaft on the New Mount Zeehan property six days previously. He had hoped the pain would pass, but his condition deteriorated. He died a week after admission from internal injuries [199, 200, 201]. Workers Compensation legislation changed rapidly between 1900 and the mid-1920s. Employees were only required to prove that their injuries occurred in the workplace to qualify for compensation without a requirement to prove employer negligence. Lump sums were paid to dependents following a fatal accident, while injured workers received half pay. Terminology did not include females till 1970. In the twenty-first century, Maher would almost certainly have had an exploratory laparotomy with a high probability of surgical repair and survival. In 1903 it was not perceived as optimal management. The first successful laparotomy without anaesthesia was as far back as 1809, and the first laparotomy for a bullet wound was performed in 1881. However, this did not become the prevailing management until WW1, and even then, there

was little improvement in mortality until surgical techniques were refined. The Vikings recognised the concept of 'gut-shot' with arrow wounds. If an oral mixture of leek and garlic could be identified by smell at the site of a wound, death was inevitable [202]. During the American Civil War, a mortality rate of 82.2% was noted for penetrating abdominal wounds. John Abernethy said, 'nature would have nothing to do with these cases: but stood by and shook her head, and left the patient to his hopeless fate' [203]. Mr Hook sustained a scalp wound when struck on the head by a piece of timber, and a boy on the Argent tram was kicked on the chin by a horse. Both were admitted to the Zeehan Hospital under Dr Butler for attention [204].



Figure 5: Memorial to Frank Long

#### 7.11. 1904

Details for the previous year were presented at the 1904 Annual General Meeting. One hundred and seventy-one patients, one hundred and twenty-six males, forty-five females were admitted in the year compared with one hundred and fifty-nine patients in 1902. Seven males and three females died. Five of these were deemed incurable on admission. The daily average number of patients was just over eleven and the average length of stay was eighteen days. There were a total of ten thousand and fifty-one consultations and nine thousand and seventy-one prescriptions dispensed an average each day of twenty-seven and twenty-four. This was an increase over 1902 of eight-thousand, three hundred and fifty consultations and two thousand and fifty-three prescriptions [205]. Mr Hine, a married man, was admitted to the Zeehan Hospital under Dr Borthwick following an explosion at the Tasmanian Smelters, causing severe facial burns and damage to one eye. Initially Borthwick thought he would be blind in that eye, but a day later he was hopeful that Hines may recover full sight in six to seven months [206]. Mr Shaw, a wood chopper at the Comstock Mine, was admitted to the Zeehan Hospital under Dr Butler for a dressing to a wound to his left thigh sustained when his axe slipped inflicting a three-inch laceration [207]. The hospital data was reported by the medical superintendent at the monthly board meeting. On February 9th there were ten remaining inpatients, there were twelve admissions, ten discharges and one death leaving eleven inpatients on March 8th. In the month there were one thousand and ninety-seven consultations and nine hundred and nineteen prescriptions dispensed. It

was hoped that the new X-Ray machine would arrive next week. It is impossible to conceive how fractures were managed before the imaging era [208].

Matthew Power, an elderly miner was found deceased at Mount Read. His body was removed to the Zeehan Hospital morgue by Constable Bryant where Dr Butler performed a post-mortem examination. Power was understood to have been drinking heavily for several days. No other conclusions were published and an open verdict was returned at the inquest [209, 210]. Dr Butler gave the monthly report, there were thirteen inpatients on April 12th, eleven were admitted, six were discharged and there were no deaths leaving eighteen in hospital at the end of the four weeks. There had been eight-hundred and thirty-one consultations and six hundred and twenty-two prescriptions. Drs Butler and Hoskins visited Mount Farrell and arranged to receive night telephone communications from there and Mount Read up-to midnight only. A luxury not permitted the author for fifty years [211]. The new X-Ray machine in Zeehan Hospital was demonstrated to interested on-lookers by Mr Schmedlin, an expert from Sydney. Much improved diagnosis and management, particularly of fractures and chest diseases would be expected [212]. Mr Alf Dolan, proprietor of the Comstock Hotel, was admitted to the Zeehan Hospital with a fractured leg sustained when a horse fell on him. The leg was reported to be fractured in three pieces, an accuracy perhaps thanks to the X-Ray machine [213]. George, the young son of Mr W. Hine, mine manager for Mr F.O. Henry, was admitted to the Zeehan Hospital with a bullet wound in his hand. Leo Hine was in the habit of carrying a loaded gun which he kept under his pillow at night. He forgot to take it to work and his two younger brothers found it. Unfortunately, when playing with the gun it discharged and shot George in the hand. Although his hand was extremely swollen, Drs Butler and Hoskins were able to localise the bullet with the X-Ray machine and remove it with significant relief of pain [214, 215]. Dr Butler travelled to Mount Farrell to transfer George Clarke to Zeehan Hospital. Although a physically strong young man, he was severely ill with pneumonia [216]. A week later Dr Butler reported to the hospital board that the medical and nursing staff of Zeehan Hospital was extremely busy with an epidemic of influenza. In the past month there had been twenty-two admissions, twenty-four discharges and thirteen remaining inpatients. Consultations rose to one thousand, eight hundred and ninety-five and prescriptions rose to one thousand and twenty-one [217].

An eleven girl, Teen, died of burns and shock in the Zeehan Hospital. She was standing at her home in Oceana with her parents with her back to an open fire when her dress caught on fire. By the following morning her condition had deteriorated, Dr Hoskins made a house call, applied dressings and arranged transfer to hospital already in a critical condition. The son of Mr C. Denham was admitted to Zeehan Hospital with a fractured arm sustained when the truck at the Western Mine on which he was playing flipped

over [218]. Dr John Kennedy, Zeehan's most popular first doctor and driving force behind Zeehan's Hospital was reported to have died in Sydney to the regret of the Zeehan town citizens [219]. Henry Morgan, a miner at the Hercules Mine, was conveyed to the Zeehan Hospital on the North-East Dundas train with what was initially diagnosed as a broken ankle. A stone fell onto his ankle, but the blow was mitigated as the impact was broken by another rock first and he sustained only a sprained ankle [220, 221].

## 8. Tenth Anniversary

The Zeehan Hospital was opened in September 1894, some twelve years after the commencement of mining in the area. Three medical conditions predominated the first decade, typhoid, mining explosions and wood chopping injuries. The most inpatients with typhoid at a time was ten. Mining explosions caused three fatalities and seven non-fatal accidents. Fourteen patients were admitted with wood chopping or axe injuries. There were ten other mining incident fatalities and eighteen non-fatal mining injuries including those on mine trams and railways. Occasionally mine owners arrived to provide assistance. In no case is compensation nor responsibility recorded. Help for widows and children came from benevolent public subscription, not wealthy business-men.

There were two gunshot injuries, one rapidly fatal, one relatively minor, in both cases there was little safety in the gun ownership and use. The maximum consultations in one month was one thousand, eight hundred and ninety-five, over sixty per day and the most prescriptions was one thousand and twenty-one. Lead and other metal poisoning at this stage is conspicuous by its absence.

## 9. The second decade 1904-1914

Dr Butler performed a post-mortem examination on the body of Thomas Henry Carey in the Zeehan Hospital following his death in an accident at the Spray Mine. The most significant finding was severe engorgement of the lungs from which dirty water could be exuded by compression. There were superficial lacerations and abrasions about the head, about the right side of the body and hip, three broken teeth, frothy watery matter in the nostrils, mouth and stomach and gritty substance inside the mouth. Drowning was clearly the cause of death, and the superficial injuries were compatible with a fall of perhaps ten feet. Witnesses stated that Carey had been operating a steam pump when he fell. The inspector of mines deemed it to be a safe workplace and the jury duly returned a verdict of accidental death by misadventure with no person considered liable [222, 223]. Dr Butler performed a post-mortem examination at the Zeehan Hospital on the body of Malcolm Davy, a prospector aged about fifty who was found deceased at the races. He was found to have a dilated heart and was deemed to have died of cardiac syncope or natural causes at a coronial enquiry [224]. Oliver Adams, the underground manager of the Magnet Proprietary Mine was admitted to the Zeehan Hospital with pneumonia [225]. An internal dispute between the matron, Miss Massey, and Nurse Anderson, with threatened legal action for slander, dominated

ed the local papers for two months, with suggestions of an external enquiry or a Royal Commission to solve the issues dogging the hospital. Clinical issues absented themselves from the newspapers for a long period. One unfortunate outcome was the departure of the well-regarded and popular Dr Hoskins, the assistant to Dr Butler, for a practice in Longford [226, 227].

### 9.1. 1905

The annual figures for Zeehan Hospital were presented to a board meeting. There had been two hundred and five admissions of whom fifteen had died, seven with pneumonia. Six of the deaths were deemed incurable on arrival. A total of twelve thousand, seven hundred and seventy-seven consultations were made, an average of thirty-five every day, and the thousand five hundred prescription were dispensed [228]. Alexander Reid, the bookseller died fairly suddenly in the Zeehan Hospital, cause of death and age were not specified. The board meeting decided the hospital needed the services of two doctors working independently of each other, both being responsible to the board. Dr Butler accepted the senior position to be paid £210 annually, while the junior doctor was to receive £190 annually. Subsequently Dr J. Watt of Dunedin was appointed to the second position. He arrived at the start of May. However, one day later he submitted his resignation believing there was insufficient work for a second doctor! Watt also considered the climate of Dunedin was preferable to that of Zeehan! He was permitted to leave after only one month of his contract [229, 230, 231, 232, 233]. Edward Ericson died in the Zeehan Hospital and was subject to a coronial enquiry. The evidence of Dr Butler and the police revealed that Ericson drank large quantities of horse liniment with two bottles found under his bed. A verdict of cardiac syncope caused by the accidental consumption of liniment was returned! Liniment usually contains alcohol, acetone, methyl salicylate, menthol, capsaicin, belladonna, chloroform and aconite. It can be consumed as a very cheap form of alcohol, but its other contents, particularly aconite, known as Wolf's Bane in Anglo-Saxon England, make it very toxic [234, 202]. John Meredith was admitted unconscious to the Zeehan Hospital under Dr Butler following an explosion in the Montana Mine just over a mile north-west of Zeehan. A recovery was anticipated thanks to his robust constitution. He also had severe leg injuries, but two weeks later he requested a visit to the hospital from a friend who was asked to construct a pair of crutches for Meredith [235, 236]. The medical superintendent presented the occupancy figures for the four weeks ending May 9th. There had been sixteen inpatients initially, eight admissions, eleven discharges, one death leaving twelve inpatients. There had been six hundred and fifty-six consultations and five hundred and forty-seven prescriptions [237]. The medical superintendent presented the occupancy figures for the four weeks ending August 8th. There had been thirteen inpatients initially, fourteen admissions, twelve discharges, one death leaving fourteen inpatients. There had been seven hundred and twen-

ty-three consultations and five hundred and six prescriptions [238].

### 9.2. 1906

H. O'Toole was admitted to the Zeehan Hospital under Dr Butler with severe bruising following an accident involving trucks at the West Comet Mine. Some trucks ran away downhill for a mile, then crashed throwing O'Toole out onto the bank. Dr Butler arrived within half an hour and found his injuries were not as severe as first thought though he was brought into hospital on the night train [239]. Patient data for 1905 was presented to the board. There had been one hundred and eighty-two admissions, less than the two hundred and five in 1904, one hundred and thirty-seven males with fifteen deaths and forty-five females with three deaths. Eleven of the deaths were deemed incurable on admission. The average length of stay was twenty-six days and the average number of inpatients about thirteen. There had been eight thousand six hundred and sixty-seven consultations and seven thousand, one hundred and sixty-four prescriptions giving daily averages of twenty-four and twenty, respectively [240]. J.D. O'Brien, a commercial representative of the Co-operative Clothing Company of Melbourne was admitted to the Zeehan Hospital after falling over in Roseberry and broken his leg [241]. Roseberry has an outbreak of typhoid and several cases required admission to Zeehan Hospital [242]. A. Dawson, messenger at the local Post and Telegraph Office, was accepted by the Zeehan hospital for diagnostic radiology for a leg complaint that has persisted in spite of medical and nursing attention [243]. The typhoid outbreak became more severe with the Medical Superintendent reporting twenty admissions with typhoid during the month, but no deaths. Nineteen inpatients were present on May 8th, twenty were admitted, twenty-three were discharged, there were no deaths leaving sixteen inpatients on June 12th. There had been seven hundred and thirty-one consultations and nine hundred and eighty-eight prescriptions [244, 245]. In July there were fifteen inpatients with typhoid and eight with pneumonia. One hundred and twenty-five patients had been admitted to Zeehan Hospital in the previous half year with only one death. A commendable figure in a typhoid outbreak [246]. By August there were twenty-five typhoid cases in the Zeehan Hospital, though none admitted the day prior to publication. Two days later three patients with typhoid were admitted in one day [247, 248]. Two weeks later Dr Butler reported there were thirty-one patients in hospital, still twenty-three with typhoid. There was a total of thirty-seven cases of typhoid in town and the hospital was seeking a house to act as a convalescent ward. Dr Butler had made one thousand, four hundred and twenty-five consultations and one thousand, two hundred and thirteen prescriptions were dispensed [249]. Peter Knight was admitted to Zeehan Hospital with typhoid. A recent arrival in Zeehan, it is postulated that he contracted the disease by drinking infected milk [250]. Jack Weatherhead was admitted to the Zeehan Hospital with life-threatening burns. He fell into a fire at the Whelan Brother's camp when intoxicated. His

clothes and hair were burnt off him. The skin of his upper body reportedly fell off when he was touched. With extensive third degree burns he was not expected to recover. Somewhat surprisingly he survived for three weeks before passing away in an era before intravenous fluids, antibiotics and skin grafts [251, 252, 253]. Admissions to Zeehan Hospital with typhoid peaked at twenty-seven cases in mid-August, though all were said to be progressing favourably [254]. W. Ransom, a young man, was admitted to Zeehan Hospital with a severe eye injury. He was hit in the right eye by a metal fragment while cutting down on a fishplate belt. His right eye had to be excised, but his vision in his left eye was unimpaired. Charles Bassington was also admitted to Zeehan Hospital under Dr Butler with a severe foot injury. While chopping wood at the North-East Dundas, his axe cut between his toes through to the sole of his foot [255]. W. Fleming was admitted to the Zeehan Hospital with unspecified serious injuries caused by falling from a scaffold at the ore smelters [256]. Monthly figures for Zeehan Hospital were twenty-nine inpatients on September 11th, the highest reported figure in twelve years, twenty-one admissions, twenty-six discharges, moribund on admission and died, two, leaving twenty-two inpatients on October 9th. During the month eight hundred and sixty-seven consultations were made and seven hundred and forty-five prescriptions dispensed [257]. Allan Headlam, aged about twenty-seven, was admitted to the Zeehan Hospital under Dr Butler with severe painful injuries including a fractured pelvis and ruptured bladder following an accident at the Tasmanian Copper Mine and died the following day. There was a rock fall from the roof of the mine and he was severely crushed needing transfer to hospital by the Burnie train. Inspector Harrison and the Roseberry mine manager drove to the mine the next morning. It was considered the timbering in the tunnel and the ground below were sound. An inquest was planned [258, 259]. By mid-November there were only eleven patients in hospital and none of them were suffering from typhoid fever. On October 9th there were twenty-one inpatients. In the following four weeks there were twenty-two admissions, twenty-nine discharges, three deaths, leaving eleven inpatients. There had been one thousand and eleven consultations and eight hundred and twenty-three prescriptions [260, 261]. In December there were seventeen inpatients [262].

### 9.3. 1907

James John Jeffries was admitted to the Zeehan Hospital under Dr Butler with a sprained ankle and bruising around the head and shoulders. He drove his truck into the wrong component of a shaft at the second level of the Comet Mine and he and the truck fell seventy-five feet into shallow water at level three breaking his fall. Butler attended the mine and arranged the transfer to hospital. Jeffries was most fortunate in what could well have been a fatal accident [263]. The chairman of the Zeehan Hospital board complimented the medical and nursing staff for their outstanding competence during the past year in dealing with normal levels of sickness

plus two epidemics. There had been ninety-six more admissions in 1906 compared with 1905. The average length of stay was twenty-six days, but eighty-three patient stayed over a month skewing the mean. Forty-one cases of pneumonia were admitted of whom five died, two being moribund on admission. This compared very favourably with Broken Hill Hospital which had an eighty percent mortality, and the national average mortality of fifty percent. The chairman could not identify any other hospital with so low a mortality. The second epidemic was typhoid. Fifty-eight cases were admitted with three deaths, a mortality of just over five percent, which compares very favourably with for example Kalgoorlie at the same time with a seventeen percent mortality [60, 264]. The reason for this low mortality is a matter for conjecture. As doctors and nurses it is easy to accept the suggestion of clinical brilliance, but other causes are more likely in the era before diagnostic bacteriology and serology for infectious diseases, intravenous fluids and antibiotics. Presumably, the cases of pneumonia were confirmed by radiology, though they may have been primary viral disease rather than pneumococcal disease. Typhoid was a clinical diagnosis of limited accuracy prompted by fever, rose red spots and splenomegaly. Zeehan with an abundant fresh water supply may have had lower bacterial loads than Kalgoorlie in an arid zone and the percent of correct diagnoses is anyone's guess.

A year after the 1906 Zeehan typhoid outbreak, Dr John Elkington, the chief public health officer, produced a scathing report on this and other medical issues. Elkington, a Victorian born in 1871, failed his medical exams at the University of Melbourne, but subsequently graduated from Edinburgh and Glasgow. In 1903 he was asked to return to Launceston to assist with an outbreak of smallpox where he naturally recommended mass vaccination. Subsequently he became Queensland and Australian Quarantine Officer establishing a number of laboratories in Australia and Rabaul to deal with infectious epidemic diseases. He died in Mooloolaba in 1955. Elkington's report commenced with stating that "The smaller local authorities remain for the most part in a condition of almost primeval insanitation, three and a half years of careful observation have forced me to the conclusion that in the great majority of rural districts, and in not a few of the larger towns, local sanitary administration is a mere pretence, and a farcical waste of the little money devoted to it. These communities live in a fool's paradise so far as any real protection from disease outbreaks is concerned. It is only too apparent that in certain cases this is due to the disinclination of a small but influential local class to pay for works done for the advantage of those whose sanitary interests they are actually appointed to safeguard.

Unless the new local bodies which will come into being under the Local Government Act can be induced to handle this matter of protection of the public from unnecessary and dangerous disease with much greater earnestness and skill than their predecessors have brought to bear on it, it will be only a matter of time before some

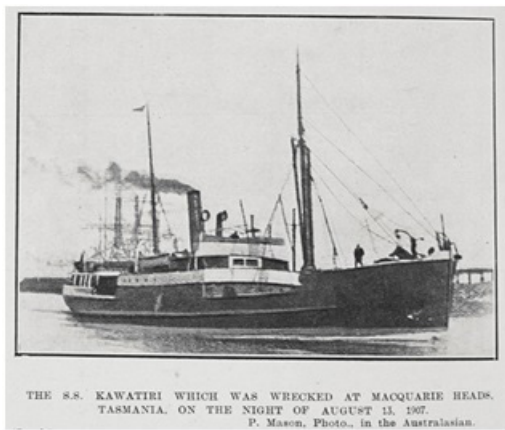
epidemic disaster will force on the question of removing altogether from their hands the local administration of so important and technical a statute as the Public Health Act [265].

Elkington noted that local doctors were paid little for public health duties and were hesitant to antagonise the wealthier and influential community leaders for whom profit is more important than community needs. Elkington and the newspaper editorials hoped that government action would ensure public safety was elevated to become the major concern. The 1906 typhoid outbreak in Zeehan was traced to infected milk and the three-year-old daughter of a local milkman. She had been in hospital for five weeks with accidental burns at the same time as a case of typhoid. Shortly after discharge she had an unrecognised subclinical attack of typhoid and probably infected five of her siblings and her mother who was actively involved in milk preparation and marketing. Forty-one of the one hundred and fifty-five households supplied by the dairy developed one or more cases of typhoid. Hospital precautions to prevent the spread of typhoid almost non-existent. Bedpans was scalded once daily only and that only one third strength disinfectant was used. Urine from typhoid sufferers and bedpan washings ran into a defective hospital drain and thence into an open gutter where children were seen playing and making mud pies. The local authorities in Zeehan confessed they were fearful to invoke the limited powers of the 1903 Public Health Act for fear of conflict with the wealthy influential or litigious businessmen in town. The Hospital Board's self-congratulations for dealing with the pandemic appear premature and erroneous [266, 267]. Admissions were reduced in the new year. Dr Butler's report as Medical Superintendent revealed fifteen inpatients on January 6th, fourteen admissions, twenty discharges and no deaths leaving nine in hospital on February 12th. In the month there had been eight hundred and thirty-three consultations and six hundred and forty-eight prescriptions [268]. Frank Moore, a woodcutter, was admitted to the Zeehan Hospital with a lacerated leg sustained when his axe slipped [269]. Charles Large was admitted to the Zeehan Hospital with severe burns to his foot caused by molten lead [270]. The hospital board decided to recognise the services of the matron and Nurses Hinds and Farrell for services above and beyond the call of duty during the typhoid epidemic with inscribed Maltese crosses [271]. Dr Butler as Medical Superintendent reported that on February 12th, there were nine inpatients, followed by twenty-three admissions, nine discharges and five deaths, three being incurable on arrival, leaving eighteen inpatients on March 12th. There had been seven hundred and thirty-seven consultations and five hundred and seventy-nine prescriptions [272]. A strike at the Zeehan Smelters shut down work on April 20th, 1907. The Mercury editorial considered strikers should be liable for criminal prosecution for the reckless loss of life and property caused [273]. The Clipper published a long editorial about the industrial health hazards caused by working in the Zeehan Mines in response to the Mercury. It

supported the young men threatening strike action and suggested they were only working in the mines because their fathers were now too sick. It suggested that the constitutions of these young men would be ruined from work in the mines like their fathers. The Clipper referred to industrial lung disease and the pleomorphic effect of lead poisoning, while deriding the rich owners concerned with their wealthy lifestyle with the best perfumes and single malt whisky. The Clipper advised reading the list of men dying in the Zeehan Hospital from lead and other metal poisoning. This list is unavailable [274]. The Zeehan Hospital recorded another month with no deaths in May [275]. Mr Edgar Haywood, a popular local identity was admitted to the Zeehan Hospital with a non-specified mild illness but made a rapid recovery to return home [276, 277]. Dr Butler as Medical Superintendent reported that on May 14th, there were twelve inpatients, followed by eighteen admissions, twelve discharges and no deaths, leaving eighteen inpatients on March 12th. There had been eight hundred and twenty-three consultations and six hundred and forty-five prescriptions [278].

Joseph Murphy was admitted to the Zeehan Hospital under Dr Butler with a five-inch-long deep gash in his buttock requiring dressing. A drill was driven into Murphy as he descended in the cage perhaps impacting on the side of the mine shaft before being pushed back into Murphy. Hubbard, a thirteen-year-old boy, was also admitted under Dr Butler with a severe injury to his right foot sustained when his axe slipped while chopping wood with an axe. He required amputation of four toes [279]. Dr Butler informed the Zeehan Hospital board that this was the eighth anniversary of his initial appointment to the hospital, and that the number of subscribers had increased from about three hundred to eleven hundred. The hospital statistics were eighteen inpatients on June 11th, admissions twenty, discharges twenty-two, died two, both moribund on admission leaving fourteen inpatients on July 9th. He had consulted with seven hundred and forty-eight patients and the pharmacist had dispensed five hundred and forty-nine prescriptions. Sixty-five patients had presented to casualty [280, 281]. The ship Kawatiri was wrecked at Macquarie Heads on 13th August 1907 with six fatalities while endeavouring to enter the harbour. The harbour is Australia's second largest harbour, some six times the size of Sydney Harbour, yet the exit to the sea is only one hundred and twenty meters wide. The tidal flow in and out can reach ten knots making crossing the bar very hazardous, possible with sailing ships only with conjunction of wind and tide. Mrs East of Dundas, one of the survivors, was admitted to Zeehan Hospital suffering from shock and exposure as well as a cut leg and bruising. She had lost her wedding ring and another ring while clutching at rocks on the shore. She noted two men rowed away without rescuing any women and children, and she spoke briefly to Mrs Hodnett, a stewardess, before the lady was washed away and drowned. [282, 283]. **(Figure 6)**





**Figure 6**

Dr Butler's figures as Medical Superintendent for the month were, fourteen inpatients on July 9th, twenty admissions, twenty-four discharges, one moribund on arrival and died leaving nine inpatients on August 18th. There had been eight hundred and twenty-eight consultations and seven hundred and forty-nine prescriptions. Presentations to casualty increased to one hundred and ninety-five [284]. Max Schmidt was admitted to the Zeehan Hospital under the care of Dr Borthwick, Dr Butler being at Tullah, with severe injuries to his right hand requiring dressing and bruising of a leg. He had commenced working in the Mount Read mine only two weeks previously when one of two or three placed explosives at the mine face detonated immediately and the third only later as Schmidt returned to the mine face knocking him down and crushing his hand [285, 286].

The monthly Medical Superintendent's report for the month showed nine inpatients on August 13th, twenty-four admissions, twenty-two discharges and no deaths, leaving eleven inpatients on September 10th. He had nine hundred and seventy-three consultations and eight hundred and thirty-eight prescriptions were dispensed. One hundred and forty-one patients attended casualty [287]. John Wright, a forty-five-year-old miner was admitted to the Zeehan Hospital under Dr Butler with a severe compound comminuted fracture of his left leg. While delivering telegraph poles to Emu Bay, one swung round delivering a severe blow to his leg. His mates carried him ten miles through snow to Mount Read when he was cared overnight at the Hercules mine, then conveyed him to hospital by train the following day where it was thought an amputation was essential to save his life. Wright was still in hospital in mid-November following the amputation and funds were raised partly by an arranged concert at a crowded Gaiety Theatre, by the Druids' Lodge of Zeehan, the Victorian Grand Lodge, the Silver City Lodge, the Tasmanian Grand Lodge and the Caledonian Society to support his family. Any form of worker's compensation is conspicuous by its absence [288, 289, 290, 291]. Twenty-nine patients were admitted to Zeehan Hospital in September 1907, including Mr H Daniels, former manager of the Zeehan Bell Mine suffering from an acute episode of pneumonia [292, 293].

William Fleming, a forty-four-year-old married man recently arrived from Hobart, was admitted to the Zeehan Hospital under Dr Butler with a dislocated right shoulder, a severely lacerated left elbow and other cuts and bruises. While replacing woodwork on the Montezuma Bridge of the North-East Dundas Railway he slipped and fell into the creek bed where he was found bleeding profusely from a cut extending from above his right eye to the top of his head. Dr Butler reduced the dislocation and stitched up the lacerations and considered Fleming fortunate to have no more severe injuries. On the same day William Shirley fell from the Mount Lyell Company's aerial ropeway and was admitted to the Zeehan Hospital with a fractured rib [294]. Mark Langdon was admitted to the Zeehan Hospital suffering from dropsy or heart failure. He had recently been involved in the search for survivors from the Alfhild wreck [295]. Bernard Charles was admitted to the Zeehan Hospital under Dr Butler for surgical management of a deep laceration on his foot. He was working for the Telegraph Department on the new line to Emu Bay near Roseberry when he cut his foot but was progressing well after surgery [296]. Victor Holland, aged about fifteen was admitted to the Zeehan Hospital where a bullet was successfully removed from his calf by Dr Butler. He and John Hay had been examining a pea rifle at Granville Harbour when it accidentally discharged into the front of his leg. He was able to return home after surgery [297, 298].

#### 9.4. 1908

Mr H.J. Stevens, secretary of the Tullah Medical Union was admitted to the Zeehan Hospital on the advice of Dr Borthwick with a broken tibia sustained while trying to hold a fractious dray horse prancing and plunging in front of him. Three friends bound and splinted his leg and arranged his admission [299]. George Wallace was admitted to the Zeehan Hospital with a severe laceration of his foot sustained while wood-cutting at North-East Dundas [300]. Dr Butler gave the medical superintendent's report for January. There were fourteen inpatients on December 10th, twenty-six admissions, thirty discharges, and no deaths leaving ten inpatients on January 14th. He performed nine hundred and two consultations, seven hundred and sixty-two prescriptions were dispensed and a hundred and twelve patients were seen in casualty [301]. A case of enteric fever or typhoid was admitted to Zeehan Hospital from Tullah [302].

Mr J. Smith was admitted to the Zeehan Hospital following an apoplectic or epileptic fit in the street, but the Herald thought his many friends would be pleased to hear he was recovering uneventfully and should be discharged soon [303]. The son of Mr W. Cameron was admitted to the Zeehan Hospital with pneumonia. Mr R. Wild died in the Zeehan Hospital with dropsy. Born in Lancashire, he was unmarried and had worked as an engine driver with the Government Railways for nineteen years, the last six months in Zeehan. Age and nature of his cardiac condition are not given [304]. The monthly Medical Superintendent's report revealed

twenty-one admissions, eighteen discharges and three deaths leaving eleven remaining inpatients [305]. John Price, age twenty, died of unseasonal typhoid fever in the Zeehan Hospital having arrived in Zeehan from Bendigo only a few months previously [306]. Two men were admitted to the Zeehan Hospital with axe injuries from chopping wood. Albert Farrelly sustained a deep cut, five inches long, in his left leg working at North-East Dundas, and J. Cadby was admitted with a cut foot [307]. F. J. Jacobson cut his right leg while wood chopping for Messrs Dunkley Bros near the Western Tramway. Dr Butler happened to be nearby and was able to dress his wound before transferring him to Zeehan Hospital [308]. Mr Dan Morgan of Lee's Siding was admitted to the Zeehan Hospital with a dislocated elbow which was reduced by Dr Butler. Mr J. Miller was admitted to the Zeehan Hospital having injured his knee and leg when he slipped from the Emu Bay train. He was left out overnight, so was also suffering from cold and exposure [309]. Patient numbers reported by the medical superintendent for the past month were eleven inpatients on 1st March, followed by thirty-two admissions, twenty-seven discharges, and two deaths leaving fourteen remaining inpatients. There had been one thousand, three hundred and twenty-four consultations in the month [310]. The foundation stone of the convalescent ward was about to be laid. It was agreed that this should be laid by Mrs Butler, the surgeon's wife. An anonymous gentleman offered to donate a suitably inscribed stone [311]. The medical superintendent reported that there were fourteen inpatients on April 14th, followed by sixteen admissions, sixteen discharges and one death leaving thirteen inpatients remaining [312]. Michael Galvin, a miner aged about forty-two was admitted to the Zeehan Hospital under Dr Butler with fractures of the skull and pelvis. A worker at the Dreadnought Mine, when walking from his camp to the Renison Bell huts along the Emu Bay Railway, he fell about thirty-five feet down a cutting and was knocked unconscious. His workmates carried him to the hospital [313]. The monthly medical superintendent's report showed twenty admissions, seventeen discharges and two deaths leaving twelve remaining inpatients [314]. A post-mortem examination was performed on the body of James O'Neill by Dr G. Butler in the Zeehan Hospital after O'Neill fell dead in the Silver Spray Mine. The air quality of the mine was deemed excellent. Severe fatty degeneration of the heart was discovered and the coroner's verdict was death from natural causes [315]. Richard Smith, a woodcutter working at the North-East Dundas Five Mile, was admitted to the Zeehan Hospital with a severe axe wound to his ankle [316]. Horace Reginald Sherrin, age seventeen, died in the Zeehan Hospital of injuries received at the Tasmanian Smelting works. He endeavoured to replace a dislodged belt on machine while it was still running and sustained horrific injuries to his arm as it was dragged around by the belt until his body jammed against the building timbers halting the machine. Initially conscious, he stated that he thought he had broken his arm and was found by Dr

Butler not only to have a fractured humerus but also torn away the tissues in his axilla including the brachial plexus and artery. Butler amputated the arm after consulting colleagues but Sherrin went into shock and died two days later. Herbert Green, the Inspector of Machinery had deemed the machine safe a few weeks before. The coroner considered that belts should only be replaced by specifically trained personnel when the machine was stationary. The jury returned a verdict of accidental death within twenty-five minutes [317, 318]. The Medical Superintendent's monthly report revealed twelve inpatients on July 14th, followed by thirty-one admissions, twenty-six discharges and two deaths leaving fifteen remaining inpatients. There had been eleven thousand, two hundred and forty-one consultations and one hundred and forty-eight outpatients. Even with four doctors that is still a hundred consultations per day per doctor [319]. Arthur Smith, a twenty-four-year-old worker on the Emu Bay Railway was admitted to the Zeehan Hospital under Dr Heyer with a fracture of his left leg plus severe bruising of the left ankle, and a severe contusion of the right ankle. He was riding on a motor trolley when the brake failed, his truck skidded and he crashed into another truck near the Pieman's Bridge

[320, 321]. John Waterman was admitted to the Zeehan Hospital with a severe axe wound to one foot sustained when felling a tree at the Three Mile. Mr Gay, aged thirty-five, was admitted to the Zeehan Hospital with severe injuries from the premature explosion of a charge being used for rock blasting. Initially the charge failed to detonate properly, so his fellow worker, Edward Dwyer, inserted a small charge of gelignite, then a moil to clear the debris and hit it with a hammer unsurprisingly exploding the charge. Gay took the full force of the blast. Both his legs were broken and part of his right hand was blown off as well as numerous minor injuries to other parts of his body. Dwyer had minor injuries and was treated in Strahan. Dr Butler found Gay to be in severe shock with compound comminuted fractures of both tibia, as well as the loss of his thumb and two fingers of his right hand. His general condition was too poor for the indicated bilateral amputations and death was inevitable. Coroner's court verdict was death by misadventure [322, 323, 324, 325]. The medical officer's report stated there were sixteen patients in hospital on August 10th, followed by twenty-two admissions and discharges with one death leaving fifteen remaining inpatients [326].

Mr R.W. Alford, a mining expert, was admitted to the Zeehan Hospital under Dr Butler with a stroke considered to be serious. He was at Rumney's Camp to report on the North Dundas Mine when he lost speech and power on the right side of his body [327]. George Walkley, a wood-cutter, was admitted to the Zeehan Hospital with a severe laceration of his foot sustained when chopping wood with an axe near Eden necessitating removal of his toe [328]. The Medical Officer's report for the previous four week stated there were sixteen inpatients on September 8th, followed by twenty-five admissions, twenty-six discharges and one death leaving

fourteen remaining inpatients. There were one thousand and twenty-eight consultations, eight hundred and sixty-four prescriptions and a hundred and one visits to casualty. [329, 330]. Money was raised for the benefit of Mr E. Johnson who had been in the Zeehan Hospital for three months with defective vision, a duration of stay that would not be seen as necessary a century later [331]. Thomas Scrumpter, a resident of Five Mile, North-East Dundas, was admitted to the Zeehan Hospital under Dr Heyer having cut off one toe and lacerated the next with an accidental axe wound [332]. Dr Butler reported that there were fourteen inpatients on October 14th, followed by eleven admissions, ten discharges and one was admitted to the Zeehan Hospital with a fractured thigh. Other details such as age or causation are not given [334]. Dr G. E. Butler performed a post-mortem examination on the body of Edward Tame, alias Edward Phillip, a prospector age about fifty-five in the Zeehan Hospital. His body was found in a valley at Heemskirk after a few days search. Butler found a circular hole in the forehead just to the right of the midline with multiple bone fragments inside the skull. The facial bones also appeared to have multiple fractures. There was some blood on his boots. Autopsy was otherwise unremarkable and the decomposition of the body was compatible with death two weeks previously. There was nowhere nearby where he could have fallen and the coroner's verdict after police evidence was murder with repeated blows with a blunt instrument by person or persons unknown, with the main suspect being Tame's partner Henry Herbert Vincent. Vincent was subsequently sent to Hobart for trial but the case was rapidly dismissed for lack of evidence [335, 336, 337, 338]. Harry James, a Dundas woodcutter, was admitted to the Zeehan Hospital with a severe laceration to his shin just above the ankle from an accidental blow with his axe.

Mr Nathan Leatherbarrow, originally from Wigan, Lancashire, of unspecified age died in the Zeehan Hospital having been admitted several months ago with equally unspecified 'acute suffering' for some considerable time [339]. The medical superintendent reported that there were fourteen patients in hospital on November 10th followed by thirty admissions, twenty-nine discharges and four deaths leaving fifteen inpatients on December 8th. There had also been nine hundred and sixty-three consultations, six hundred and seventy-nine prescriptions, and one hundred and five outpatients treated [340, 341]. Mr Vandemeir was admitted to the Zeehan Hospital with multiple bruises, a fractured elbow and a deep scalp laceration which requires suturing following a fall of earth at the Comet Mine [342]. Alfred King, a mining surveyor at the Hercules Mine was admitted to the Zeehan Hospital under Dr Heyer with spinal concussion and shock after a rock fall on top of him [343].

### 9.5. 1909

Andrew Pursell, age eleven from Firewood Siding, was admitted to the Zeehan Hospital under Dr Heyer with a severe laceration of his left hand following an accident with an axe. One of the fin-

gers was nearly severed, and another partly cut through, but Dr. Heyer was hopeful of saving both fingers [344]. The Medical Officer reported that on January 12th there were fifteen inpatients, followed by seventeen admissions and eighteen discharges leaving fourteen remaining in the hospital [345]. Duncan Donaghy, a popular former road foreman was admitted to the Zeehan Hospital critically ill with pneumonia and pleurisy [346]. Lennox Simpson, a boy, was admitted to the Zeehan Hospital with a bullet wound. His uncle, Thomas Simpson, was cleaning a revolver at Comstock, when the gun discharged accidentally shooting Lennox in the front of the thigh. The bullet was located by the X-rays at the back of the knee, and successfully with subsequent favourable progress [347]. Charles Thomas was admitted to the Zeehan Hospital with three severely crushed fingers. He was working on the new Stanley River Track bridge being erected over the Pieman River when his hand was crushed between two logs [348]. Frank McGurk, an eleven-year-old boy was admitted to the Zeehan Hospital under Dr Heyer with a deep laceration of the knee exposing the joint suffered from a fall from the cutting in front of the hospital [349]. The March Medical Superintendent's report showed that there were eleven admissions, three discharges and no deaths leaving twelve inpatients [350]. Albert Birkett, a nineteen-year-old miner died in the Anderson's Prospecting Association Mine at Dundas of anoxia and smoke inhalation. His body was moved to the Zeehan Hospital for a post-mortem examination and inquest.

His shift commenced at 4.00pm when the air quality was reasonable, but by 7.00pm the air was foul and his shift ascended to the surface. At 9.00pm they tried to return to the workings again, but according to a witness, Cornelius Beresford, the air was so foul a candle would not burn and they started to ascend, a process that took two to three hours. However, Birkett announced he was done and collapsed. His body was retrieved the next morning. It was thought the smoke arose from burning ore bags at the bottom of the shaft. Dr Butler was summoned and arranged the transfer of Beresford, still in a confused state to the Zeehan Hospital. The police and Mr Harrison, inspector of mines were also summoned to inspect the scene. The coronial enquiry verdict was death from carbon monoxide poisoning. The jury took twenty minutes to achieve this verdict and to state that no blame could be attached to anyone [351, 352, 353]. Dr Butler delivered the Medical Superintendent's report for the month stating that there were twenty-six admissions, twenty discharges and one death leaving seventeen inpatients. There had been one thousand and forty-nine consultations, nine hundred and nineteen prescriptions and one hundred and sixty-one presentations to casualty [354, 355]. Mrs Hampton and Mrs Williams, both from Roseberry, were admitted to the Zeehan Hospital with unspecified problems. Mrs Williams required six men to carry her half a mile from her home to Roseberry Station [356]. Mr Peter Buchanan, a seventy-one-year-old prospector, was admitted to Zeehan Hospital suffering from pneumonia. He had been an early prospector on the West Coast back in the 1860s and currently lived

an isolated life on his selection [357]. Robert Cooper, a woodcutter was admitted to the Zeehan Hospital under Dr Butler with a four inch laceration to his foot and toe sustained when his axe slipped. William Derry, a little boy aged nearly two, son of Frank Derry, a worker at the Ring of Valley mine, was also admitted to the Zeehan Hospital having severed two toes from playing with an unsecured sharp axe [358]. Dr Butler gave the Medical Superintendent's report for the month stating that there had been twenty admissions and twenty discharges with no deaths leaving seventeen inpatients [359].

Mr W. Dossett was admitted to the Zeehan Hospital with a dislocated ankle from an accident while busy in the West Strahan railway workshop and was reported to be progressing favourably. This is a rare injury in isolation and is usually associated with a fracture of one of the ankle joint bones [360]. The June Medical Superintendent's monthly report showed that eighteen patients had been admitted, twenty-three discharged and one had died leaving eleven inpatients [361]. Mr T. Colter was admitted to the Zeehan Hospital under Dr Butler with a severe injury to his knee joint sustained when he fell wheeling a barrow across a plank near the Adelaide Mine. He had apparently sustained a fractured thigh a few months previously though a log falling on him at North-East Dundas, though evidence of this is not found in Tasmanian papers [362]. William Radford was admitted to Zeehan Hospital under Dr Butler with injuries to his back and legs following an accident. He was working for the Emu Bay Company when the railway trolley on which he was travelling ran out of control into an obstruction on the line and tipped over pinning Radford underneath. He subsequently sued the company claiming the trolley brake was defective, and there were problems with the wheels, the decking, the trolley driver not being observant and the size of the trolley. He was out of work for months, mainly with 'post-traumatic neurasthenia'. The court case heard medical and engineering witnesses and other workers before the jury returned a verdict in favour of the defendant Emu Bay Company. It was not an era when employers were found responsible for any accidental trauma or death, particularly when the resultant damage was psychiatric rather than physical [363, 364]. Mrs Williams of Roseberry, who was admitted to Zeehan Hospital two months previously with an unspecified illness, was reported to be recovering and able to move about, but it was expected to be another month before she regained full strength, suggesting a neurological problem such as Guillain-Barre syndrome or a cerebro-vascular accident [365]. Dr Butler in the Medical Superintendent's report stated that twenty-four patients had been admitted, nineteen discharged, one had died and that one hundred and forty-two patients had presented to casualty. He also reported that this was the tenth anniversary of his original appointment to Zeehan Hospital [366]. George Mullins, a woodchopper was admitted to the Zeehan Hospital suffering from a severe axe wound to his leg [367]. Mr E. Gillow, a shift boss at the Rose-

berry Primrose Mine was admitted to the Zeehan Hospital with a large laceration to his right leg sustained while adzing a piece of wood. He was transferred at night by the motor trolley and was said to have severed a large blood vessel [368]. Mr William John Rigby age seventy-three died in the Zeehan Hospital of unspecified causes after twenty years working in the Dundas Comet Mine [369]. William Atkinson was admitted to the Zeehan Hospital with a severely cut foot though no further details were given [370]. Mr H. Wilcox was admitted to the Zeehan Hospital under the care of Dr Butler after slipping in the snow on the Strahan to Zeehan line and 'straining sinews in his leg'. Mr Rose, a minor working on the Adelaide Mine crushed his thumb when hit with a hammer while turning a drill was also admitted under Dr Butler. Children as young as five could be found in the workplace at that time. Dr Butler also reported that there were sixteen inpatients at the start of the month, followed by twenty-four admissions, twenty-five discharges and one death leaving fourteen inpatients [371, 372]. Mr Harold Slater, though only twenty-six, died in the Zeehan Hospital two days after admission with a combination of typhoid, pneumonia and Bright's disease. Slater, a clerk with Brumby and Co and a native of Devonport was in a 'very low condition' on admission [373, 374]. Herbert Lawler, the son of Mr and Mrs W.J. Lawler of East Devonport was admitted to the Zeehan Hospital with blood poisoning or bacteraemia [375]. Sydney W. Sharp, a nine-year-old boy was admitted to the Zeehan Hospital with a broken leg suffered when he slipped of a log at Williamsford [376]. During the past four weeks there were twenty-seven admissions, twenty-five discharges and two deaths at the Zeehan Hospital [377]. Edward Crane was another young man admitted to the hospital with burns sustained at the Tasmanian Smelting Works. He thought some molten slag on the floor was cold but when he put his foot in it, the molten ore splashed up his leg causing burns that required dressings [378]. Mr J. Wilkinson, manager of the Adelaide Mine had returned to work appearing well after being admitted to the Zeehan Hospital for a few days with an undisclosed diagnosis [379].

The monthly figures for Zeehan Hospital were sixteen admissions, ten discharges and two deaths, both moribund on arrival, leaving eighteen inpatients [380]. Mr Jack Laughlin, an elderly and much loved resident of Dundas died in the Zeehan Hospital of an unspecified but acute condition. A former stalwart of his church and the Methodist Sunday School, he left a wife and large young family [381]. Frank Sinclair was admitted to the Zeehan Hospital with a cut sinew at the back of his left leg suffered while working with an adze at the Bell siding. If this indicates a severed Achilles tendon it is a serious injury but the terminology is obscure [382]. William Simms was admitted to the Zeehan Hospital on the same day as Sinclair with a severely lacerated wrist sustained when he fell on a glass bowl in a hotel in Tullah and severed arteries, tendons and nerves. He was initially treated by Dr Prendergast to stop haemorrhaging. On transfer by train and ambulance he was also seen

by Drs Cox and Bailey. If the report is accurate Sims would have required re-anastomosis of arteries, tendons and nerves or more probable before micro-surgery an amputation especially because a significant avascular period occurred while being transferred. Simms was however discharged home some two weeks later with the statement that 'it would be sometime before he will have the use of his hand, suggesting the vascular lesion at least was not too severe [383, 384, 385, 386]. Dr Cox as acting Superintendent reported that there had been sixteen admissions and eleven discharges leaving twenty-one inpatients [387]. A boy, McMahon and 'Bobo' Jones were both admitted to the Zeehan Hospital under Dr Prendergast with accidental injuries. Jones had severe bruising above the ankle, not a fractured leg as initially feared, and McMahon's injuries were not documented [388]. Mr D. Gillespie died in the Zeehan Hospital of pneumonia. A well-known prospector, he developed the illness during a trip to Mount Balfour [389]. George Connelly, the foreman of the timber train at the Hercules mine died shortly after admission from pneumonia. A native of South Bruny, he left a widow and four children [390]. Dr. Butler, reported that there had been eighteen admissions, twenty-four discharges and three deaths leaving twelve inpatients [391].

#### 9.6. 1910

Dr Butler suffered a brief illness and was unable to attend the board meeting where the medical report showed there had been fourteen admissions, five discharges and one death leaving thirteen inpatients. A few days later Dr Butler was recovered enough to resume medical duties [392, 393]. Annual figures for Zeehan Hospital for 1909 were a total of two hundred and thirty-eight inpatients of whom fourteen died. Six were moribund on arrival and four others were incurable. The death rates were 6.75% compared with 7% for 1908, then the lowest in Tasmania. Of the one thousand, six hundred and twelve outpatients, nineteen had enteric fever, twenty had pneumonia and fifty-four suffered accidents. The chairman noted the workload for the years and considered the low mortality rate 'spoke volumes' for Dr Butler [394, 395]. There were two deaths in Zeehan Hospital in January, one of whom was moribund on arrival. There were thirteen inpatients at the start of the month, twelve patients in the hospital at the end of the month, following eight admissions, seven discharges and two deaths. This was the lowest number of admissions since the hospital opened, it was agreed that Dr Butler should visit Williamsford and stay overnight once a month [396, 397]. Mrs Quantrill was admitted to the Zeehan Hospital under Dr McKenzie with an unspecified diagnosis. Following discharge, she complained to the board that she was not given sulphur baths as agreed and ordered and that the food was unfit for an invalid. Dr McKenzie on second thoughts decided the sulphur baths were contraindicated for her condition and neither doctor nor matron were aware of any problem with the food. Quantrill failed to attend the hearing and the board decided there were no grounds for complaint. Sulphur baths can be

used for treating skin diseases such as eczema or simple rashes, but is contraindicated for acute dermatitis, pustular or erythrodermic psoriasis, weeping, blistering or infected lesions. It is also contraindicated in the presence of many internal diseases. The diagnosis of Mrs Quantrill is not given [398]. In March, the Medical Superintendent reported nine admissions and twelve discharges leaving eight inpatients [399]. In May Dr. Butler, the Medical Superintendent reported that there had been eight admissions, nine discharges and no deaths leaving eight inpatients at the end of the month. There had been six hundred and ninety-three visits, five hundred and seventy-four prescriptions and seventy-one visits to casualty [400, 401]. Mrs Henry Osborne of Tullah died from blood poisoning or septicaemia in the Zeehan Hospital after a week in hospital. Her age was not specified, but she was survived by an eight-month-old baby daughter [402, 403]. The Medical Superintendent, Dr Butler, reported that there had been ten admissions, ten discharges and one death leaving eight inpatients. He also reported that this was the eleventh anniversary of his initial appointment to general felicitations [404, 405]. The Medical Superintendent, Dr Butler, reported that there had been six admissions, five discharges and one death leaving eight remaining inpatients [406]. Mr Albert Hall, a government railway fitter, died in Zeehan Hospital after a long unspecified illness, sadly leaving seven young children, now orphans as their mother died a year ago [407]. Mr Ben Watkins, the local member of state parliament, was admitted to Zeehan Hospital having become unwell while escorting other parliamentarians through the West Coast Mine. He was found to have mumps and as implied by his genial disposition, was able to be discharged within a few days [408, 409]. George Wyatt died in the Zeehan Hospital after being bed-ridden there for two and a half years. Formerly one of the most powerful men in the district, his back was broken by a rock fall in a Spray Mine stope on March 14th, 1908. Presumably, he was rendered paraplegic or perhaps even quadriplegic [410, 411]. Dr Butler's report for the four weeks ending October 11th revealed eleven patients in hospital on September 13th. Followed by twelve admissions, twelve discharges and two deaths leaving nine inpatients remaining. During the month there had been one thousand and thirty-three consultations, eight hundred and five prescriptions and ninety-eight visits to casualty [412]. Frank Tensen was admitted to the Zeehan Hospital with a deep laceration to his foot when he cut it with an axe clearing timber at the Renison Bell Mine [413]. Mr A. Floyd, a miner from Williamsford, was admitted to the Zeehan Hospital with an unfortunate injury to his right eye. He was passing a man spalling, or breaking into fragments, a large rock, when a splinter flew off with considerable force into his eye [414]. Two males were admitted to Zeehan Hospital on the same day with wood cutting injuries. John Dunkley severely lacerated his hand with a circular saw at Dunkley's Ltd sawmill near Tullah and Roderick Peace, a boy living in Westwood St, Zeehan, cut his foot with an axe [415]. Two men were admitted

to Zeehan Hospital after suffering injuries when a rail trolley went off the rails and threw both out near Williamsford on the North-East Dundas line. Alban Lewis, a twenty-six-year-old worker at the Hercules mine, suffered a cut on his knee requiring suturing, and Mr Fred H. Edwards, a commercial traveller for Messrs York and Co, had several teeth knocked out of his lower jaw and severe lacerations around his mouth and chin [416]. Mr Henderson was admitted to the Zeehan Hospital with facial lacerations and bruising from a dynamite explosion in the Renison Bell Mine. He was collecting caps and fuse from the surface to fire a hole in the mine face about 5.00pm when they exploded. It was thought he had added a fuse to the cap. His workmate heard the explosion and found him with facial injuries and bleeding but his eyes were fortunately undamaged. First aid was administered by Mr Briggs, the manager, and Dr Steve Ford. A car was procured from Rosebery to transfer him to hospital [417]. Owing to the rapidly increasing population in the towns surrounding Zeehan, the hospital board decided another doctor was required to service the outlying areas. Dr I. Barrett had been appointed to commence immediately [418]. Dr Butler's report for the four weeks ending December 13th revealed eleven patients in hospital on November 16th, followed by thirteen admissions, thirteen discharges and one death, moribund on admission, leaving ten inpatients remaining. During the month there had been eight hundred and fifty-one consultations, six hundred and seventy-three prescriptions and one hundred and ninety-eight visits to casualty. Dr Butler also reported that a patient had been discharged for making insulting remarks to the matron and nurses [419, 420]. Benjamin Krull was admitted to the Zeehan Hospital with a broken rib adjacent to the spine sustained when he slipped from a corduroy track onto a tree stump between Renison Bell and Boulder Mine. It is not clear if this was a radiological or clinical diagnosis as fractured ribs are notoriously difficult to detect on Chest X-Rays [421].

### 9.7. 1911

H. Roles, a jockey, was admitted to the Zeehan Hospital with a head injury sustained at a race meeting. He was pitched off his horse and was transiently knocked unconscious. On admission he was found to have a broken upper jaw and concussion but was progressing well by the following day. That month thirteen beds were reported to be occupied and there had been one death [422, 423, 424]. The annual report for 1910 was presented to the board on January 31st. There had been one hundred and fifty-four inpatients with twelve deaths, six males, six females. Forty-five of them were accident cases with two deaths, fifteen cases had pneumonia and all survived, five had enteric fever with one death and there had been no deaths from tuberculosis. There were eighty-seven various other cases with three deaths. The percent of deaths is given at 0.8%, though 7.7% appears the correct calculation. In 1909 the rate of deaths was 0.75%. One thousand, two hundred and fifty-seven outpatients were seen, nine thousand, six hundred and

ninety-nine consultations were performed and seven thousand, seven hundred and ninety-five prescriptions were dispensed [425]. Dr Butler reported twenty-two admissions and no deaths leaving fourteen remaining inpatients. His appointment as one of the two hospital medical officers was confirmed [426]. The Medical Superintendent's report revealed twelve admissions, fifteen discharges and one death leaving ten remaining inpatients [427]. The monthly hospital board meeting noted a daily average of twelve inpatients with one death. Isolation chalets for patients with tuberculosis had been completed. Providing a doctor for Rosebery was noted to be financially unsuccessful, though no details of clinical efficacy are given. A complaint about Dr Bailey was referred to a subcommittee, and Nurse Steer was paid an honorarium of two guineas as locum matron [428]. Dr Alban Best, L.R.C.P., L.R.C.S., Edinburgh, currently practising at Waratah, was appointed second medical officer at the Zeehan Hospital and district and is expected to commence duties by the end of the month [429]. Miss Quarterman resigned the position as matron of the Zeehan Hospital [430]. Mr W. Sawley was admitted to the Zeehan Hospital with a non-resolving cut on his foot. The lesion was said to be developing 'unfavourable features', presumably infection, having been cut 'some time ago', and been 'used too much and too soon' [431]. Thomas Thomas, the four-year-old son of George Thomas, was admitted to Zeehan Hospital with severe burns. In the absence of his mother he had been playing with matches and set his clothes alight. He ran into the street, a blazing mass, and by the time help arrived his clothes had all been consumed and he was severely burnt from head to foot. Sadly, predictably he did not survive and his funeral was a few days later [432, 433]. In July, the hospital recorded eight admissions and one death [434]. John Watkins of Dundas was admitted to Zeehan Hospital with a fractured thigh suffered when he was kicked by a horse [435]. James Howell was admitted to the Zeehan Hospital with a severe axe wound to his right foot sustained while chopping a knotty piece of wood at the Zeehan-Dundas mine [436]. Mr J. Corrigan was admitted to the Zeehan Hospital with a fractured leg. Described as an elderly man, he was still trucking ore at the Boulder Mine when a truck struck his leg. Constable Wilson was also admitted to the Zeehan Hospital with suspected pneumonia which was prevalent in town [437]. The board stated that there were currently seventeen inpatients and that influenza was prevalent in the town. They also reported there had been seventy-seven admissions, eleven hundred consultations, nine hundred prescriptions and one hundred and thirty-six patients seen in casualty during the month. An application to the government to construct an infectious diseases ward was proposed [438, 439, 440]. Vivian McGuinness was admitted to the Zeehan Hospital under Dr Butler with an axe injury. A young lad, he had been chopping wood when his axe slipped and he sustained a painful injury to his foot almost severing his right big toe which Butler found necessary to completely amputate [441]. An unnamed young lady



was admitted to the Zeehan Hospital with burns about her face and body [442]. The average number of inpatients for the previous four weeks was fourteen with no deaths, though four days later the figures were ten inpatients with one death [443, 444].

The matron has taken over the reporting role stating the average number of inpatients was sixteen with twenty-eight admissions, twenty-eight discharges and one death leaving thirteen inpatients remaining. Two hundred and sixty-seven outpatients had been treated [445]. John Illslow of Williamsford was admitted to the Zeehan Hospital with a presumed sprained ankle [446]. Arthur Penton was admitted to the Zeehan Hospital with an axe wound in his foot [447]. John Gannon was admitted to the Zeehan Hospital with an unspecified injury following a fall at the Hercules Mine [448]. The matron again reported that there were thirteen patients in hospital on November 13th, followed by twenty-eight admissions, twenty-five discharges and no deaths leaving sixteen remaining inpatients. One hundred and fifty-four outpatients had been treated, and there had been a total of one thousand and sixty consultations and eight hundred and forty-three prescriptions dispensed. Dr Barratt reported one hundred and eighteen consultations in a fortnight [449]. A complaint about Dr Barratt that had been under review for months was deemed to be groundless, nevertheless it was proposed that he should receive three months' notice [450].

### 9.8. 1912

The matron announced the monthly figures for the four weeks ending January 6th, 1912. There were sixteen inpatients initially, followed by nine admissions, twenty discharges and no deaths apparently leaving six inpatients. The average bed occupancy was eight, one hundred and seventeen outpatients were treated, an average of 4.33 per day. Dr Butler consulted six hundred and forty-seven times and the pharmacy dispensed four hundred and forty-eight prescriptions [451]. Raymond Turley, aged four, was admitted to the Zeehan Hospital under Dr Butler with a fatal gunshot injury. He and his brother Harold were playing with a pea rifle when it discharged. Butler was unable to locate and extract the pellet even with the aid of X-Rays and a probe. Although the site of the wound is not specified, it must have been at the site of a vital organ as Raymond died the following morning. The coroner declared this to be an accidental death. The concept of securing guns, unloaded, in a locked compartment away from children, or having safety catches was not considered for one moment [452]. The annual figures for Zeehan Hospital for 1911 were announced at the January board meeting. There were six residual patients on January 1st, 1911, followed by two hundred and fourteen admissions, a total of one hundred and fifty-four males, sixty-six females. The average length of stay was fifteen days and the average number of occupied beds was 11.5. There were fifty accident cases, six with pneumonia, eight with enteric fever and five with phthisis

or tuberculosis. None of these died, but in the miscellaneous other cases, three males and three females died, three of these being moribund on admission. The 2.7% death rate was a record low figure for Tasmania. There had been eight thousand, one hundred and ninety-seven consultations in the Zeehan district, nine hundred and sixty-seven in Rosebery and seven thousand, seven hundred and ninety-five prescriptions dispensed in the past year. The possibility of opening an obstetric ward in Zeehan Hospital was discussed [453]. A patient from the Renison Bell Mine, other details undisclosed, was admitted to the Zeehan Hospital with suspected enteric or typhoid fever. Other sick residents in the vicinity are suspected of also having enteric fever [454]. The matron reported the hospital information for the previous month. Initially there were five remaining inpatients, followed by fifteen admissions, one death and nine discharges leaving ten remaining inpatients. The average daily number of inpatients was 10.2. One hundred and fifty-six outpatients had been treated, a daily average of 4.4. There had been nine hundred and twenty-eight consultations and six hundred and forty-nine prescriptions in Zeehan and fifty-seven visits in Rosebery [455]. Mr Tasman Beard was admitted to the Zeehan Hospital severely injured in a premature explosion at the Tasmanian Smelting Works with grave fears for his survival and he died the following day. No further details of the explosion or injuries are given. Mr J. Johns, a married employee of the Emu Bay Railway company, was admitted to Zeehan Hospital under Dr Butler with severe lacerations to his right leg and the right side of his head when a sleeper he was loading slipped and fell on him [456, 457]. Mrs Ellen Kemp, age twenty-one, was the subject of a coronial enquiry following her death at home in North Dundas. She was an epileptic known to Dr Butler, who arrived when summoned to her house just after death. She appeared unwell for a week with fits and an upper respiratory chest infection. Post-mortem examination by Butler revealed only gynaecological disease, there was purulent fluid in the uterus, a markedly enlarged left ovary and a ruptured blood vessel in the left ovary. It was his opinion that she died of haemorrhagic shock and the coroner returned a verdict of death from natural causes [458]. Archibald Barnes, the four-year-old son of Mr and Mrs A.W. Barnes, was admitted to the Zeehan Hospital following an explosion. He found some unsecured dynamite and in endeavouring to set it off, he severely damaged his left hand losing his thumb and three fingers as well as having a fragment of metal embedded in his right knee. Dr Barrett was summoned to the home in Colebrook and advised admission [459]. Louis Kerr, aged twenty was admitted to the Zeehan Hospital with a wood chopping injury in the bush near Zeehan in which he almost severed three toes [460]. A Royal Commission commenced into the maladministration of the Zeehan Hospital Board. The press had ignored clinical matters for the best part of a year while devoting time and space to small-town politics, internal disputes with the matron, widespread community and media criticism and dis-

satisfaction culminating in a Royal Commission commencing the previous day. The dispute was commenced when the matron considered in her expert opinion that a probationer was not up to the required standard and Dr Butler discharged a patient for offensive behaviour and language directed at the matron and nursing staff. The commission findings were that Dr Butler and the secretary were the parties at fault and should be given two months' notice. Mrs James Grimes was admitted to the Zeehan Hospital for diagnostic evaluation of 'indisposition' with no further clinical details give beyond a hope of early discharge back to her husband in Tullah [461, 462]. Mr W.H. Nobes, chief clerk at Messrs J.S. Munro and Co's, was admitted to the Zeehan Hospital for a consultation with both Dr E.G. Butler and Dr Alban Best as he was in a critical state of health. He was diagnosed as having appendicitis and pneumonia. Although the doctors performed a successful appendectomy, his condition deteriorated and he died two days after admission. A quiet, well liked and respected gentleman, he had only been married four years, leaving a wife and young son. Though in poor health for months, he had been reluctant to complain when nearly moribund [463, 464]. J. Curtain, a miner, was admitted to the Zeehan Hospital with fractured ribs and internal injuries sustained when crushed by a large chunk of ore at the Hercules Mine [465]. The matron's monthly report revealed twenty-one admissions with an average daily bed occupancy of seventeen. The doctors had performed one thousand, two hundred and eighty consultations and seen two hundred and sixty-five outpatients, while the pharmacist had dispensed eight hundred and twenty prescriptions [466]. Carl Holm, the ten-year-old son of music professor Herr Holm, was admitted to the Zeehan Hospital with a broken femur having been knocked down and run over by a delivery cart [467]. Dr Butler denied a rumour that he would be leaving the district, as he had more than seven hundred private patients on his list regardless of his position as medical superintendent. His skilful treatment and attention and those of the matron and nurses were complimented by Mr Henry Price, a recent inpatient in Zeehan Hospital [468]. Mr J. Walsh, a train guard on the Williamsford railway line, was admitted to the Zeehan Hospital with suspected non-severe internal injuries caused by the door of an engine shed falling on him [469]. Mr Leslie Griffiths, a representative of the Cooperative Society of Zeehan aged eighteen, was admitted to the Zeehan Hospital. A victim of a crime, he was found gagged and semi-conscious under a shop counter in Strahan and as yet unable to give a lucid account of events. He had left Zeehan with stock to the value of £100 and was found with £30 in his possession. Crime has been a rare cause for admission.

However, the doctors thought him to be a malingerer, so he left planning to walk to the Renison Bell Station on the Emu Bay line to catch a train to Burnie. However, the police suspected him of embezzlement and arrested him to attend the police court the following day. Griffiths admitted he had invented the whole story

and stated that he had posted the stolen money to his mother. He confessed the error of his ways to the local clergyman, the Rev C. C. Duggan, and the JPs hearing his case. He was sentenced to three months imprisonment suspended for a good behaviour bond of £50 over the next year, and the refund of £6/16/2 stolen from his employer [470, 471, 472]. The dispute between Dr G. Butler and the Zeehan Hospital board continued. Dr Butler maintained the body that terminated his employment was not legally constituted and appealed to the Full Court in Hobart, who ultimately gave a verdict supporting Butler and recommending his reappointment, though Butler did not reapply [473, 474, 475]. In the previous four weeks, there were twenty admissions, nine discharges and one death, leaving fifteen remaining inpatients. Two hundred and sixty-three outpatients had been treated, seven hundred and forty-five prescriptions dispensed and one thousand, one hundred and twenty patients consulted [476, 477, 478]. Herbert Geard was admitted to the Zeehan Hospital under Dr Butler with a broken leg. He was working at the Primrose Mine when a large piece of rock fell off the face and jammed his leg against the wall breaking his leg above the ankle, according to the report both bones, presumably the tibia and fibula, requiring setting of both bones [479]. Dr Donald McRae, the newly appointed surgeon to the Zeehan Hospital was expected about this time aboard the New Zealand ship Wanui though it was then weatherbound [480]. Frank Weiske was admitted to Zeehan Hospital under Dr Butler with severe soft tissue injuries to his right leg. He was hauling logs for Messrs. Dunkley Bros Ltd at Dunkley Town when he had a problem with the drum of a steam log hauler. When levering a rope on the drum with a pole, the pole broke and he fell on the cogwheels stripping the flesh from his groin to the knee. He was said to be doing as well as possible [481]. The next event in the history of Zeehan and its mines was its best known and greatest disaster. Forty-two men died in a fire at the Mount Lyell Mine, seventy-three escaped on the first day but many could only be rescued after several days entombed at the lower levels. Dr Butler and former Matron Rose Carter attended the sick at the pit head but there do not appear to have been any casualties admitted to the Zeehan Hospital. A subsequent Royal Commission returned an open verdict with no blame attached to the mine owners, a possibility that could have bankrupted the owners. There was a suggestion that the fire was deliberately started by a trade union leader. The lack of fire-fighting equipment, alarm systems and alternative escape routes was noted, but no blame was attached [482]. Victor Birkett was admitted to the Zeehan Hospital with a broken right leg sustained at the Primrose Mine when some dislodged timber rolled over him [483]. Dr. G. E Butler announced that he would be able to continue caring for his private patients from Zeehan and Dundas in the Zeehan District Hospital provided they continued weekly payment of three pence to the hospital [484]. Ronald Dennis was admitted to the Zeehan Hospital under Dr Best with a fractured upper arm caused by a 'man-killer' or

loose large branch fell seventy or eighty feet on to his arm while working in the bush for Messrs Dunkley Bros Ltd. He was considered fortunate not to have suffered a more severe or fatal accident. Mr Black, a woodcutter employed by Mr J.L. Howard was also admitted to the Zeehan Hospital with a deep laceration to the left foot from his axe [485].

Miss Rose Carter, late matron of Zeehan Hospital was farewelled by her friends and supporters following her recent dispute with the board and resignation. Dr G. Butler presented her with a purse of sovereigns [486]. Dr Alban Best commenced duties now as medical superintendent and would report future patient statistics. The matron reported that four weeks ago there were twenty-two inpatients, followed by twenty-two admissions, two deaths, and twenty-six discharges leaving sixteen remaining inpatients [487]. Mr H. Wroe was admitted to the Zeehan Hospital under Dr Butler for an unspecified serious operation [488]. Francis Davis, a boy from Hatfield in the Waratah municipality, died in the Zeehan Hospital from diphtheria according to the medical superintendent. Great care was taken in isolating and disinfecting the ward. The matron reported that there had been twenty-five admissions, eighteen discharges and no deaths with an average daily bed occupancy of twenty-one leaving twenty-three remaining inpatients [489]. The body of Mr Henry Walker, an 'elderly man, aged about sixty-two' was taken to the Zeehan Hospital for a post-mortem examination and then an inquest in the Courthouse. He had just obtained a position laying tram tracks for James Harrison at Grieve's Siding, Queensberry mine, when he was found dead in the camp after a morning's work [490].

### 9.9. 1913

Richard Layton, a young man, was admitted to the Zeehan Hospital with a broken leg having fallen over an embankment at Williamsford. Regretfully the wound, presumably a compound fracture, became infected necessitating an amputation performed by Dr Best while the anaesthetic was given by Dr McRae. However, his condition deteriorated rapidly and death ensued within two hours. This sad story illustrates the hazards of compound fractures in the pre-antibiotic era. There was also some delay in Layton reaching hospital and delayed lavage with carbolic acid may have contributed to the final outcome. Early lavage of wounds with phenol was shown by Joseph Lister to reduce mortality from 50% to 15% [491, 492]. Mrs Elizabeth Hancock died in the Zeehan Hospital ten days after admission under Dr G. Butler. Her age and diagnosis are not specified but 'she had been ailing for some time' [493]. Two patients died in Zeehan Hospital in the past month, one was from diphtheria, always a concerning diagnosis, and the other, Richard Layton, was described as 'after surgery', though a more fair diagnosis would be sepsis following a compound fracture. The matron's reported that there were twenty-three inpatients a month ago, followed by ten admissions, seven surgical operations and

eighteen discharges leaving thirteen remaining inpatients. There had been two hundred and four outpatients, seven hundred and sixty-one consultations and six hundred and sixty-eight prescriptions dispensed [494, 495, 496]. The annual figures for Zeehan Hospital in 1912 were two hundred and fifty-three admissions, thirteen deaths, twelve thousand, one hundred and twenty-four consultations and eight thousand, four hundred and seventy-two prescriptions dispensed. Somewhat surprisingly the paper reports the recovery of four more bodies from North Lyell Mine more than two months after the disaster [497, 498]. John Evans a young man behaving in an eccentric fashion was admitted to the Zeehan Hospital was remanded for seven days medical and police observation [499]. The Matron and Medical Superintendent reported there were thirteen inpatients at the start of the month, sixteen patients were admitted, eleven males and five females, fifteen were discharged, twelve of whom were cured, two improved and one no better. Five patients died leaving nine inpatients on February 8th. The average daily bed occupancy was 12.3. Drs T Butler, G Butler and McRae each performed one operation under general anaesthetic, and two hundred and six outpatients were seen [500]. Denis Martin, aged about forty, was admitted to the Zeehan Hospital with painful but not serious facial lacerations and bruising on the body when some unexploded and unsuspected gelignite at the Hercules Mine blew up when struck by his pick. John Oldham, a thirty-four-year-old worker at the Tasmanian Smelting Company, was admitted to the Zeehan Hospital under Dr Terrence Butler suffering from shock and left sided contusions after being stuck in a machinery belt [501]. Mr J.J. Curtain was admitted to the Zeehan Hospital with unspecified 'indifferent health' over a few weeks. Currently working in the Hercules Mine, he had been a prospector on the West Coast for many years. Such non-specific symptoms could be due to metal poisoning amongst many other possibilities [502]. The Medical Superintendent reported six hundred and sixty-six consultations and seven hundred and sixty-nine prescriptions for the month. Two patients were seen as 'no longer fit subjects' for hospital treatment and the Superintendent of Police was asked to remove them from hospital [503]. Mr John Burke was admitted to the Zeehan Hospital under the care of Dr Terrence Butler with multiple injuries sustained when he fell off an engine on Dunkley's tramline. He was sitting on the engine in motion when he slipped and fell. Although the engine knocked him away the following truck ran over his hand causing two crushed fingers, a fractured left arm, a deep laceration on the right leg and a few other minor wounds. Dr Butler initially attended the injuries in Burke's home and arranged hospital admission [504]. Mr C. Ross was admitted to the Zeehan Hospital with injuries from hitting himself with a pick in the mines [505]. Miss Sullivan, the seventeen-year-old daughter of the Tullah Hotel licensee in Tullah was admitted to the Zeehan Hospital with an initial suspected diagnosis of diphtheria. Although isolated in hospital, three train

passengers had been exposed to possible diphtheria as she travelled to hospital. The carriage was fumigated and returned empty to Burnie. The other travellers exposed by totally inadequate precautions were fortunate when diphtheria was excluded in favour of a less serious infection, and Miss Sullivan was reported to be much improved, almost convalescent only a day later [506, 507]. The matron's report showed that twenty patients was admitted during the month. One had died, two discharged and ten remained in the institution [508]. Mr W. McLean was admitted to the Zeehan Hospital with the diagnosis of three fractured ribs though radiological confirmation is not recorded. McLean was working as a contractor at the Penzance tin mine trucking coke on the tram line when he lost control of the truck and was hurled against some logs [509]. The matron reported that there were ten inpatients at the start of the month, followed by twenty-two admissions, twenty discharges and no deaths leaving twelve remaining in patients who were all improving. The average daily bed occupancy was 12.3. Two hundred and seven outpatients had been seen, an average of 6.2 daily and nine hundred and fifty-four prescriptions had been dispensed. Dr McRae reported making three hundred and sixty-seven consultations for the month ending May 9th, 1913, an average of 11.5 daily [510]. Mr A. Montgomery, the State Mining Engineer of West Australia was appointed by the Tasmanian Government to review the Mount Lyell Companies mine. He received instructions hopefully in methods rather than results.

Salient statements were that no expense had been spared to make it thoroughly secure, and that there is a very complete water service throughout the mine, each drill being supplied with a base and jet for spraying purposes to lay the dust produced by boring, though no fire-fighting equipment was deemed available at the time of the fire. He considered that the work of all the stopes open in both the Mount Lyell and North Lyell mines was most carefully studied, and thought out before being started, and very systematically and thoroughly carried out, with every regard to the safety of the men employed. Montgomery noted that two men were injured at once by a heavy fall of part of the roof on September 21, 1912, attracting external criticism. He considered from his examination of the place and the coroner's inquest reports that the place where the fall occurred had been standing unsupported for years and was considered perfectly safe. He noted the terrible accident of October 12, 1912, in which forty-two men died in the North Mount Lyell mine from the poisonous fumes of a fire underground, and the calamity of September 21, 1912, in the Mount Lyell mine, in which three men were killed and two injured by a fall of roof. Montgomery noted that these fatal accidents brought the annual death rate from falls of ground per 1000 men employed underground in the Mount Lyell mine since the beginning of 1909 to 6.67, a high rate of mortality from mining.

However, he thought these must both be regarded as abnormal mishap, and if they are left out of account, the accident rate for

both mines compares very favourably with that prevailing in large mines in general and speaks well for the methods employed. A concept it seems to the author somewhat like saying Europe was a peaceful continent in the twentieth century except for two world wars! Montgomery noted manways between the different level stopes but inaccessible as there were no ladders or ropes for emergency escapes. Overall Montgomery considered from his inspection that close regard was paid to observing the rules and regulations under the Mining Act and the statutory' requirements which have been laid down to secure the safety and comfort of the men employed in the mine. He felt there was little, if any, ground for adverse criticism on this score [511]. Mr J.J. Law died in the Zeehan Hospital with an unspecified chronic illness after several weeks in hospital. In mid-May he was said to be improving and able to leave his bed, but soon after that he deteriorated and died, despite his careful treatment, his iron-will, and desire to be well again. Born in 1848, he was sixty-five at death. Initially a blacksmith he became a highly successful and popular horse-trainer and jockey. He left a widow and eleven sons and daughters [512, 513, 514, 515]. An outbreak of the highly infectious and potentially fatal diseases of scarlatina and diphtheria occurred in Zeehan in May 1913.

The Medical Officer of health reported the current epidemic of scarlet fever began on April 2nd, and there had been twenty-six cases by mid-May. Eleven were school children and three of these had not attended school for ten days or more. Cases were isolated at home and advised not to mix in public or attend school for six weeks. Houses were fumigated and drains were cleaned and carbolicised. The M.O. considered this outbreak to be in a very mild form. The disease responds well to antibiotics, though resistant from antibiotics has emerged in the last decade, unsurprisingly from China. Mortality in the pre-antibiotic era could be fifteen to twenty percent. The Medical Officer also reported that the diphtheria outbreak commenced on April 21st and that there had been eight cases to date, six in the one household which had been totally isolated. The drains were examined, cleaned, carbolicised and fenced to prevent cattle carrying the infection into the dairies. The three school children had not attended school for ten days or more. Schools were cleaned and disinfected. Two patients were swabbed with one being positive for diphtheria and one being inconclusive. Vaccination for diphtheria was not available till 1920. The mortality varied from 5-20% depending on age a century ago before antibiotics. The disease is sadly, predictably being seen again in the antivaccination era [516]. Mr Edward Donovan was admitted to the Zeehan Hospital with a deep laceration to his left foot from an accident with an axe while chopping wood [517]. Dr McRae took over the duties of Medical Superintendent from Dr Best who was complimented by the hospital board on the manner in which he had carried out his duties. The matron reported that there were twelve inpatients at the start of the month followed by twenty-one

admissions, sixteen discharges with three deaths leaving fourteen remaining inpatients. The doctors reported five hundred and fifty-three consultations, one hundred and fifty-eight outpatients treated and six hundred prescriptions dispensed [518]. Miss Pilling, the second eldest daughter of Mrs Pilling died in the Zeehan Hospital with meningitis after a short illness. She had been employed in the household of Mr J. Craze where she was a great favourite of the whole family. Presumably Pilling had bacterial meningitis as viral disease is usually benign and self-limiting. Knowledge of this condition was developing around this period. Meningococcal meningitis today still has a ten to twenty percent mortality while in the pre-antibiotic era it was over seventy percent. Vaccines were first prescribed years later in 1999. Diagnostic techniques were rudimentary. Intracellular micrococci in cerebrospinal fluid (CSF) were first identified in 1887, presumably in post-mortem samples as lumbar puncture (LP) had not yet been described. In the same year Anton Weichselbaum recognised the meningococcus, or as he named it *Diplococcus intracellularis meningitidis* as the causative microorganism of the clinical disease of meningococcal meningitis. The first LP was performed by Walter Essex Wynter, a physician at the celebrated Middlesex Hospital, by inserting a tube into the spine on four children with tuberculous meningitis. All died though it was a fatal disease at that time. Heinrich Quincke was the first to describe the insertion of a lumbar needle to drain CSF in 1891, and Arthur Wentworth of Harvard Medical School published a long paper on the diagnosis of cerebrospinal meningitis in 1893. Therefore, the doctors of Zeehan in 1913 would probably have been able to perform a LP and diagnose meningitis but been unable to provide any effective treatment [519, 520]. Mr George Dakin died of pneumonia in the Zeehan Hospital in spite of the care of Dr T. Butler. Dakin, the past shift boss at the Western Mine and current worker at the Montana Mine, became unwell only four days before his death, and was admitted to hospital from his bed at home on Dr Butler's orders [521]. The acting matron reported that there were thirteen patients remaining from the previous month, followed by twenty admissions, sixteen discharges and four deaths leaving thirteen remaining inpatients. The chairman added that there were about fifty outpatients per week, and the medical officer added there had been five hundred and ninety-eight consultations and eight hundred and two prescriptions dispensed [522, 523]. With regard to the doctors, the chairman stated that the board was willing to allow any resident doctor to be on the medical staff, except Dr. G. Butler [524]. Mr Frank Gorey, aged thirty, was the victim of the most horrendous and painful injuries in an accident at the Renison Bell Mine and succumbed en-route to the Zeehan Hospital. It appeared that he was cleaning a winch shaft with an emery board when his coat was caught by the shaft and he was pulled into the machinery. He was found just breathing with a hole in his neck and most of his clothing stripped off and wound around the shaft. Donald McRae gave evidence at the sub-

sequent coroner's court. McRae saw the critically injured Gorey on arrival in Zeehan by train from Renison Bell and ordered his removal to hospital, but he died before arrival. McRae examined the body and found fractures of the base of the skull and right jaw. The muscles of the right side of his face and neck were shredded into ribbons up to the skull vertex with the major blood vessels and nerves exposed. There was bleeding from the right nostril and on the roof of the mouth. In addition, there was bruising on the left side of the body, skin abrasions over the right thigh, several fingers of the right hand were torn and smashed, and oil marks on the right shoulder and upper arm from the winch. Witnesses and expert opinions were heard including a rule that winches should be fenced and cogs covered. The jury were able to return a verdict within thirty-five minutes of accidental death with no liability from anyone concerned. The Renison Bell management attended his funeral and gave a wreath to his widow and two children. It was left to the Very Rev. Father Bernard Murphy of the Roman Catholic Church to express an alternative viewpoint for the working man and his family which is quoted verbatim.

" The death of Frank Gorey has added another to the fairly long list of the industrial tragedies, another sombre chapter to the history of the mining industry in this province. Every company engaged in industrial and commercial enterprise had its record of such tragedies. The railway company, the shipping company, the manufacturing company, the mining company had their death records, some of them longer, some shorter. It was when these tragedies occurred with fatal regularity the people found themselves asking the questions. Were all these tragedies inevitable? Were none of them avoidable? Has the legislature done all that could be done to obviate the loss of valuable lives? Is the law as definite and as decisive as it should be or is it an abstruse problem for members of the legal profession to analyse and debate over the corpse of a dead man? Is the administration of the law as severely strict as it ought to be? There never was a time when it was more imperative that the people should have an answer to those questions because there never was a time in the history of nations when the feverish pursuit of wealth, for its own sake, was the intently absorbing passion that it is to-day. Some of the men engaged in that fierce commercial and industrial warfare - men who had abandoned the worship of God for the worship of Mammon - recognised no law superior to the law of 11½d.; and they are less concerned about the loss of a human life than an injury done to a valuable machine, for the obvious reason to replace the machine costs some money, whereas, when a man falls in the ranks, another is ready, if permitted, to fill the dead man's place, and take the risk that the dead man took. The memory of death is very bitter when it takes away in such a tragic manner one who was a good husband, a good father, and a good citizen. It was that sweet recollection of his good life which tempered in some measure the bitterness of the memory of his death and made it less difficult for those who mourned him to reconcile themselves

to their loss.” There is nothing further to add to the priest’s tragic observations [525, 526, 527]. Mr Walter Rumney, aged 45, was admitted to the Zeehan Hospital under Dr T. Butler with ‘an abscess in the head’, presumably an intracerebral abscess. When he failed to improve after seven weeks, he was transferred to the Launceston Hospital where an unspecified operation was performed, however he died another five weeks after surgery. Rumney left a wife and ten children aged between fifteen and eleven weeks. During the father’s illness, one daughter suffered from bilateral pneumonia but recovered, and a son, nine-year-old Frank died in the Zeehan Hospital with meningitis. A subscription was commenced in Zeehan for this tale of terrible sadness in the era before any form of welfare state [528]. Mr Mervyn A.L. Sydney was admitted to the Zeehan Hospital under the care of Dr Best with a fractured skull. He was working in the Hercules Mine when he fell some fifty feet down a pass. He was seen on site by Dr Jackson who ordered his admission to hospital. He was found to have a compound fracture of the skull, as well as facial cuts and abrasions. Best with the aid of Dr T. Butler decided trepanning was necessary because of intracranial hypertension. Sydney came through surgery and a full recovery was anticipated. The author, a physician is deeply impressed by the variety of skills expected of a rural GP a century ago, including orthopaedic and neurosurgery [529]. The matron reported there were nine inpatients at the end of the previous month, then twenty-one admissions, eighteen discharges and two deaths leaving ten remaining inpatients. Two hundred and eleven outpatients had been treated [530]. Dr Donald McRae resigned as medical officer and medical superintendent to the Zeehan Hospital with the intention of leaving town shortly [531]. John Jamieson, a forty-year-old single miner at the Primrose Mine, was admitted to the Zeehan Hospital with a broken leg sustained when barring down, or loosening ore with a bar following blasting and a large piece fell on him [532]. Albert Rowe, who had been admitted to the Zeehan Hospital a month previously with a serious axe injury to his foot was finally making good progress. His axe slipped while wood chopping at the Tasman River and it was initially feared he would be left with a useless foot. Rowe was finally becoming mobile by December after ten weeks in hospital under Dr T. Butler and was able to renew acquaintance with old friends. His brother Charles was also admitted to the Zeehan Hospital where he was treated by Dr T. Butler having sustained an axe wound at Griffith’s Siding. The medical board accepted the resignation of Dr. McRae. The matron reported ten remaining patients at the end of the previous month followed nineteen admissions and seventeen discharges leaving twelve remaining inpatients. There had been seven hundred and thirty prescriptions dispensed, two hundred and fourteen outpatients treated and five hundred and ninety consultations [533, 534]. Walter Sawley, the eldest son of S. and F. Sawley died in the Zeehan Hospital of unspecified causes at the age of four [535]. The medical superintendent reported to the monthly board meet-

ing that there were twenty-five admissions, twenty-four discharges and one death leaving twelve remaining inpatients [536]. Elizabeth Fahey, age seventy-one, died in the Zeehan Hospital under the care of Dr T. Butler, though the diagnosis was not specified. Her health had been deteriorating for a few months and a sudden seizure precipitated her final demise [537]. The medical superintendent reported twelve remaining patients followed by fourteen admissions, twenty discharges and four deaths leaving only two remaining inpatients. The average daily bed occupancy rate was 3.44 and there were four hundred and sixty-six prescriptions dispensed [538].

#### 9.10. 1914

The annual hospital report was devoted predominantly to financial affairs but it also commented that the most noticeable feature of the report was the very large increase of the percentage of deaths amongst the inpatients. Compared with the previous ten years average the percentage had jumped from 6.3 to 9.6, or nearly fifty-three percent, increase. No theory of causation was offered [539]. Mr Thompson, also known as Tas Piper, a forty-nine-year-old married miner, was killed and Alfred Courts was admitted to the Zeehan Hospital with minor facial and body injuries following an explosion at the Montana Mine. The previous day five charges were laid but only four detonated. Although advised by the shift manager to be observant, Thompson appears to have hit the charge when picking at the face and his head was blown off. Courts was some twelve feet back and was also suffering from shock [540]. Mr Denis Connolly, proprietor of the Roseberry Hotel and Mr H.F. Rider were admitted to the Zeehan Hospital with severe burns to the head, face and arms. They had been cleaning an acetylene gas generator, when Rider, believing the gas to be dispersed, lit a match causing an explosion which was felt a quarter of a mile away and demolished the building at the rear of the hotel. Dr T. Butler and Nurse Butler his wife dressed the wounds and arranged hospital admission. The Medical team arrived by motor, the first recording of a doctor arriving by motor car in Zeehan [541].

The medical superintendent reported that there were twelve remaining inpatients on March 7th, followed by twenty-one admissions, twenty discharges and one death leaving twelve remaining inpatients. The average daily bed occupancy was 11.67 and one hundred and sixty-three outpatients were treated, an average of 5.8 daily [542]. Mr Patrick Kilmartin died in the Zeehan Hospital under the care of Dr Butler with pneumonia. He appeared well one day and died within twenty-four hours, an indication of the severity of pneumonia in the pre-antibiotic era [543]. The medical superintendent reported that there were twelve inpatients at the start of the month, followed by twenty-six admissions, twenty-one discharges and two deaths leaving fifteen remaining inpatients. The average daily bed occupancy was 13.1 and one hundred and one outpatients were treated for a daily average of 3.9 [544]. Stanley Larsen, aged ten, died in the Zeehan Hospital with a severe head



injury. A tree being felled landed on his head causing a compound comminuted fracture of the base and vault of the skull. Dr G.E. Butler operated but the damage was too great and he died the following day. A coronial enquiry verdict was of accidental death [545, 546, 547]. John Rose, age 40, died in the Zeehan Hospital under the care of Dr Alban Best with bilateral pneumonia. He was taken ill suddenly while prospecting at the Wilson River. He was carried by his colleagues for over six hours to the Emu Bay railway line and taken by train to Zeehan. The day after admission, Dr Best did not perceive any danger but consulted with Dr G.E. Butler and was none too pleased with his condition. Rose died on the third day in hospital [548, 549, 550]. The Medical Superintendent's report for the month ending May 2 was fifteen patients remaining from previous month, admissions twelve, deaths two, discharges nineteen leaving six remaining inpatients. The average bed occupancy during the month was 7.67, and two hundred and thirteen out-patients were treated, a daily average of 7.6 daily [551]. Thomas Williams was admitted to the Zeehan Hospital under Dr Butler with a severe episode of pneumonia. Williams who had been working at the Stanley River, was carried by his fellow workers part of the way and also by motor trolley from Emu Bay [552]. Mr. J. D. Foley, a well-known comedian who had been appearing at the Zeehan Theatre Royal, was admitted to the Zeehan Hospital suffering from pneumonia [553]. Dr. Gordon J. Walker was appointed medical superintendent to the Zeehan Hospital to replace Dr Best under the same terms and conditions. Walker was born in Strahan, a son of the area, and graduated M.B., CM. from Sydney University. His junior house appointments were in the Hobart General Hospital [554]. The Medical Superintendent's report for the month ending June 30th was six inpatients remaining, followed by sixteen admissions, thirteen discharges and two deaths leaving seven remaining inpatients. The average daily bed occupancy was 5.9 and one hundred and thirty outpatients were treated, an average of 4.6 per day [555]. The Medical Superintendent reported there were seven inpatients at the start of the month, followed by seventeen admissions, thirteen discharges and one death leaving ten remaining inpatients. The average daily bed occupancy was 6.64 and eighty-five outpatients were seen for an average of 3.6 daily [556]. The Medical Superintendent reported there were nine inpatients at the start of the month, not the same figure as reported at the last month's meeting, followed by nineteen admissions, nineteen discharges and no deaths leaving nine remaining inpatients. The average daily bed occupancy was 9.03 and one hundred and sixty-one outpatients were seen for a daily average of 5.2 [557]. The matron's report again had a discrepancy from the previous meeting. She said there were initially seven remaining inpatients, then thirty-five admissions, twenty-eight discharges and two deaths leaving twelve remaining inpatients. The average daily bed occupancy was 12.25 with ninety-seven outpatients seen for an average of three daily [558]. Later that month Zeehan Hospital admitted one

of its own highly esteemed members of staff, in a critical condition, Dr. G. E. Butler. Butler who was suffering from pneumonia deteriorated and died a few days after admission. His son Dr T. Butler drove overnight from Hobart to assist in his care to no avail. A long eulogy followed in the paper extolling his many virtues and talents as a doctor, a citizen, a friend, a family man and the grief at his passing. The paper mentions specifically his foresight and role in ensuring the hospital was equipped with X-Ray apparatus, a convalescent home, nurses' quarters and an ambulance. It mentions his study of pneumonia and miners' phthisis and considers him to be an authority in Australia in this area. It mentions his support of local sports clubs and charities and his talent as a cricketer. He was a passionate supporter and investor in the Tasmanian mining industry. His death at only fifty-five is a reminder of the hazards, predominantly of infectious diseases to which doctors willing, unselfishly expose themselves every day for the greater good of their patients [559, 560, 561]. Twentieth Anniversary. The first two decades of death and disease in Zeehan Hospital. The unfortunate demise of Dr Gilbert Butler coincides with the twentieth anniversary of the opening of Zeehan Hospital. Not the event marker he would have anticipated! The major medical event of the decade in Zeehan for which the staff and hospital could do little was the death of forty-two miners in the fire at Mount Lyell. The decade was notable again for wood chopping injuries, deaths and injuries in the mines and surrounding infrastructure and various infectious diseases. Notable again for the total absence of compensation for dead or maimed workers from big business management. There were at least fifty-two deaths in the mines and surrounding infrastructure including servicing railways, some of whom entered the Zeehan Hospital only for a post-mortem examination. Three of the deaths were due to explosions of dynamite. There were forty-one admissions to Zeehan Hospital with non-fatal injuries. Three of these were due to explosions, including one child playing with the mines dynamite when it was kept in an insecure place in the boy's home. There were twenty-seven admissions to hospital with leg injuries from accidents with axes, usually woodchopping in the workplace though one was a toddler who found a very sharp, but unsecured axe at home. There were epidemics of infectious diseases, though precise numbers are elusive. Are twenty patients in hospital one month and thirty the next the same patients or different ones? Not all cases are admitted, some mild cases of typhoid, diphtheria and scarlet fever were isolated at home. However, it appears there were fifty-eight cases of typhoid during the epidemic in Zeehan with only three deaths, followed by three subsequent isolated cases, one of whom died. During the epidemics there were twenty-six cases of scarlet fever and eight cases of diphtheria. The two cases of meningitis died. Fourteen patients with pneumonia died and seven recovered. One man died from consuming horse liniment and a youth died from a gunshot injury when his colleague was carrying a loaded gun without a

safety catch. A few patients succumbed to slowly deteriorating health with no documented cause nor any clinical details. Numerous diseases are obviously possible including lead poisoning, but no cases of lead poisoning are documented, perhaps the disease was absent, not recognised or concealed and not admitted. Over two decades that amounts to sixty-five fatalities and sixty-six non-fatal injuries in the mining industry and forty-one admissions with injuries from axes. Over two decades there was not one compensable injury and all coroner's enquiries resulted in an accidental death verdict with no liability.

In theory there were profound changes to the workers' compensation act in the first two decades of the twentieth century. Workers covered by the legislation were only required to establish that their injuries were work related in order to quantify for compensation. There was no longer an obligation to establish employer negligence. Initial statutes provided cover to workers in dangerous employment, with compensation payable where an injury arose out of and in the course of employment. While, if a worker was killed, his dependents were entitled to a lump sum, workers who were injured received only 50% of weekly income and no contribution to medical costs. This only applied to males and did not seem to apply in Zeehan. The medical superintendent reported that there had been thirty-four admissions, twenty-one discharges and two deaths leaving twelve remaining inpatients [562]. Mr. James Hobart Weavill died at the Zeehan Hospital after several week's illnesses. Another case with no diagnosis, no clinical features and no age. Many diseases are possible including lead poisoning [563]. The Medical Superintendent reported there were nine inpatients remaining from previous month, twenty-two admissions, eleven discharges and one death leaving nineteen remaining inpatients. The daily average bed occupancy was 13.8 and there had been one hundred and nineteen outpatients with a daily average of 3.9 [564]. Rod Dhu was admitted to the Zeehan Hospital with a broken rib, strained back and shock following a fall against the side of a moving cage at the Argent Flat Mine [565].

### 9.11. 1915

Miss Elsie Colson, aged seventeen from Strahan, was admitted to the Zeehan Hospital under Dr Gordon Walker with slight concussion, facial abrasions and a strained back. She fell off a swing and was hit on the head as it swung back rendering her briefly unconscious [566]. Mr Isaac Peoples, an elderly resident, died in the Zeehan Hospital after an unspecified but prolonged incurable internal illness [567]. The Medical Superintendent reported there were fourteen residual inpatients on December 16th, followed by fifteen admissions, fourteen discharges and one death leaving fourteen remaining inpatients again. The average daily bed occupancy was 14.3 and twenty-three outpatients were seen for a daily average of 0.6 [568]. The Medical Superintendent reported there were fourteen residual inpatients on January 11th, followed by six admissions, a quiet month, fourteen discharges and no death leav-

ing six remaining inpatients again. The average daily bed occupancy was 11.5 and sixty-three outpatients were seen for a daily average of 3.15 [569]. The Medical Superintendent reported there were six residual inpatients eleven admissions, thirteen discharges and two deaths leaving only two remaining inpatients. The average daily bed occupancy rate was 6.5 and one hundred and seven outpatients were seen for a daily average of 3.8 [570, 571]. The Medical Superintendent reported there were two remaining inpatients, followed by eleven admissions and five discharges leaving eight inpatients remaining giving a daily average bed occupancy of 5.7. Sixty-three outpatients were treated in the month for a daily average of 2.03. Nurse Holmes resigned for her position to join the Australian forces overseas as a nurse [572, 573, 574]. Dr Gordon James Walker has given notice to the Zeehan Hospital to accept a post at the Hobart General Hospital. According to the Mercury, Walker had been appointed Junior House Surgeon at the General, though this seems unlikely as these positions are undertaken for the first year or two after graduation and Walker had done these before his appointment to Zeehan. He may have been proceeding to specialist training [575]. The Visiting Committee report stated twenty-two patients remained from the previous month, while twenty-four were admitted during the month and twenty-three were discharged. After two deaths, there were twenty-one remaining inpatients with an average daily occupancy of 21.4. a large increase on the previous month for no stated reason [576]. Mr William Baker, aged sixty-five, was admitted to the Zeehan Hospital under the care of Dr G. Walker with a fractured left humerus cause by a fall of rock at the Penzance Tin Mine, North Dundas. In a remarkable feat of endurance, Baker was obliged to walk fourteen miles in cold wintery conditions to the Renison Bell Mine before he could obtain assistance from a Mr N. Plews who helped him reach the hospital [577]. Dr Cameron was appointed new acting Medical Superintendent at the monthly hospital board meeting. The Superintendent, Dr G.J. Walker, reported there were nine remaining patients in hospital in April, followed by nine new cases, seven being admissions and two being births, the first time births were recorded. Then there were eight discharges and one death leaving nine remaining inpatients for an average daily bed occupancy rate of 7.4. There were also thirty-eight outpatients for a daily average of 1.3 [578, 579]. Arthur Charles Chandler died in the Zeehan Hospital following severe abdominal injuries sustained in the Dreadnought-Boulder Mine. He appears to have been struck from behind by a runaway truck. Initially he was able to talk and was distressed only by back pain so was transferred to Zeehan Hospital. However, the seeds of his death were sown, he deteriorated and died the following day under the care of Dr Donald Cameron who subsequently performed the post-mortem examination. The omentum was torn and large intestine was severed leading to fatal peritonitis. Today an emergency laparotomy with intestinal anastomosis and lavage may have saved him. During the

coronial enquiry there was discussion about the adequacy of the brakes and if they were applied, and about the adequacy of onsite training. The jury were able to return a verdict of accidental death at the Dreadnought-Boulder Mine within half-an-hour and insufficient evidence to explain the movement of the truck [580, 581]. Mr Andrew Sandstrom died in the Zeehan Hospital at the age of sixty-nine with an unspecified prolonged illness [582]. Dr Ronald MacQueen, MB BS Sydney University, was appointed at the Zeehan Hospital board meeting to replace Dr Walker [583]. The matron reported there were eight remaining inpatients at the end of the month, followed by twenty-two admissions, nineteen discharges and three deaths leaving again eight remaining for an average daily bed occupancy rate of 11.2. One hundred and twenty-three outpatients were seen for a daily average of four [584]. The Matron reported that there were eight remaining inpatients from the previous month, followed by fifteen admissions, fourteen discharges and no deaths leaving nine remaining inpatients. Average daily bed occupancy was 10.7 and two hundred and twenty-three outpatients had been seen for an average of 6.4 patients daily [585]. Dr. James Weir, M.B. C.M. (Glasgow), arrived at Zeehan yesterday from Sydney to commence duty as medical superintendent to the Zeehan District Hospital and the Medical Union [586]. George Dwyer, age five, the son of Albert Dwyer, was admitted to the Zeehan Hospital with fractures of the right tibia and fibula having fallen down a bank in Bolstead Street but was reported to be progressing well [587]. The medical report at the July board meeting stated that there were twenty-three admissions and the daily bed occupancy rate was 13.2 [588]. Dr James Weir in his first report as Medical Superintendent stated that thirteen patients were remaining from the previous month, followed by thirteen admissions, eleven discharges and two deaths leaving thirteen remaining inpatients. The average daily bed occupancy rate was 9.6 and eighteen outpatients were seen for a daily average of 0.6 [589, 590]. Mr W. Martin, the captain of a ketch in Macquarie Harbour was admitted to the Zeehan Hospital with an acute and serious, but unspecified illness [591]. The Medical Superintendent reported for the month ending September 29th that there were eleven patients remaining from the previous month, followed by eight admissions, one birth, one death, and twelve discharges leaving seven remaining inpatients. The average daily bed occupancy rate was 8.4 and fifteen outpatients had been treated for an average of 0.4 per day. The Matron reported there had been four minor operations, one major operation, and four anaesthetics during the month [592]. Dr J. Weir as Medical Superintendent reported there were initially seven remaining inpatients for the month ending October 28th, followed by two admissions, one death and five discharges leaving three remaining inpatients. The daily average bed occupancy was 4.7 and there were fifty-eight outpatients for an average of two daily [593]. The Medical Superintendent reported there were three remaining inpatients at the start of the month ending November 23rd, fol-

lowed by eleven admissions, four discharges and no deaths leaving ten remaining inpatients. The daily average bed occupancy was 6.4 and there were seventy-seven outpatients seen for a daily average of 2.6 [594].

Mr H. Hangton was admitted to the Zeehan Hospital with a broken leg sustained when he was riding in a truck along the tram line at Rosebery and the truck left the rails and he was thrown heavily to the ground [595]. The matron reported that there were two major and four minor operations during the month [596]. Mr. Kenneth McPherson age 51, a resident of the West Coast for over 20 years, died at the Zeehan Hospital yesterday. A married man with six children, he had worked as a miner and prospector, contracting silicosis or miner's phthisis which caused his demise [597, 598]. Dr. James Weir as Medical Superintendent reported for the month ended January 29th that there were eleven remaining inpatients at the start of the month followed by thirteen admissions and twelve discharges, eight of them being cured and four relieved. After two deaths none of the discharges were deemed incurable and there were ten remaining inpatients. Dr Arthur E. Panting, a New Zealander graduated with MB BS BSc, was appointed Medical Superintendent of the hospital, to take up his duties forthwith, though the place of Dr Weir is not clarified [599]. Annual figures were presented to the board meeting, however there were some inaccuracies. During 1915 one hundred and sixty-three patients were admitted totalling one hundred and seventy-four with the eleven remaining inpatients, one hundred and five being male and sixty-nine being female. The daily average bed occupancy was 10.02. One thousand and ten outpatients were seen for a daily average of 2.27 Twelve patients died. There were six major and thirty-six minor operations. There were thirteen accident cases with no deaths, seven cardiac cases with three deaths, four cerebral haemorrhages with one death, seven cases with pleurisy, three with pneumonia, nine with an acute abscess, four with a carbuncle, five with scabies and one confinement. These figures omit the death in May of Arthur Chandler in an accident and the second birth during April [600, 601]. The Medical Superintendent's report for month ending February 23rd, 1916, revealed ten remaining inpatients initially followed by sixteen admissions and thirteen discharges, ten of whom were cured and three relieved. After one death there were twelve remaining inpatients. The average daily bed occupancy rate was 11.8. The Superintendent claimed there had been no deaths since he took over. Presumably this is Dr. A. Panting and the one death in the month was under Dr Weir. He stated that the patients were mostly elderly with long-standing health issues for whom comfort measures were appropriate. He noted about one hundred and fifty outpatients with many abscesses and septic wounds and that W. Clarke after a bad accident was making a remarkable recovery. Clarke had a 'serious and painful' though not clinical detailed injury when his right hand was cut by a circular saw at Dunkley's Sawmill two weeks earlier [602, 603]. Mr Jesse Capell was treated

by Dr Panting having fallen on his axe while prospecting in the bush and cut his knee [604]. Dr A. Panting reported as Medical Superintendent that there were twelve inpatients remaining on March 22nd, followed by twelve admissions and nine discharges, six of them cured and three relieved. There were also two deaths leaving thirteen remaining inpatients with a daily average bed occupancy of 11.8. One hundred and twenty outpatients had been treated, and three operations performed, one requiring anaesthesia. Panting noted that many elderly patients had been admitted and their prospects were not good at the start of winter. One patients died from a combination of silicosis and tuberculosis, an infant died from pneumonia and what is described as summer complaint, diarrhoea due to bacterial contamination of food. There were three births and one newborn failed to survive [605, 606]. Mr J.C. Climie was admitted to the Zeehan Hospital and died a week later with no specific clinical diagnosis. Aged either eighty-five or eighty-seven, he had been in good health with a good memory until shortly prior to his admission. A well-known and popular figure, he had been a surveyor and played a large part in surveying railway lines in the area [607, 608]. Percy Lorenzo Murray who had been a patient in the Zeehan Hospital between April 25th and May 15th, 1915, and between June 30th and July 3rd under Drs Walker, Cameron and Weir with a hemiplegia, acute bronchitis and pleurisy died suddenly in the Renison Bell Mine and was the subject of a coronial enquiry. Dr Panting gave evidence that he had seen Murray a month earlier when his wife said that his memory had been poor since his stroke the previous June. Panting also found his lungs were in an advanced stage of miners' phthisis, and that his heart was evidently strained. He appeared better on a follow-up visit on April 4th having walked to Zeehan from Renison Bell.

However, he collapsed and died suddenly, Panting performed the post-mortem finding low grade meningitis and an advanced stage of consolidation of the lungs. Panting considered death was from 'asphyxial syncope', a term not recognised today however the coroner concurred [609]. Dr Panting's report as Medical Superintendent stated that there were thirteen inpatients remaining from the previous month, followed by twenty admissions and sixteen discharges, eight of whom were cured and eight relieved. After two deaths there were fifteen remaining inpatients, and the daily average bed occupancy was 14.3. During the month one hundred and fifty outpatients were treated and six operations performed, three of which required general anaesthesia. Panting considered most patients to be progressing well, but felt many beds were occupied by the elderly infirm who needed a nursing home not an acute bed, a situation unimproved for a century in Australia. He also considered the patient records had been improved [610]. John Mitchell and Robert Johnson were admitted to the Zeehan Hospital under Dr Panting following injuries. A log rolled on Mitchell at Heemskirk causing some trauma to the lungs, but no fractures, and Johnson was unloading a truck at Renison Bell when struck on

the side of the face by a piece of timber causing a 'rather severe injury' [611].

Mr James Dhu, a recent inpatient in Zeehan Hospital having suffered miner's phthisis over the previous two years died in Melbourne. The Herald opinioned that the open air treatment in Zeehan had improved Dhu's health and optimistically and probably unrealistically had hoped the warmer Victorian climate would be beneficial but in vain. [612]. Arthur Morris, a miner at the State Argent Flat Mine, was admitted to the Zeehan Hospital with two fractured ribs and internal injuries sustained when a fall of rock struck him on the back [613]. Dr A. Panting performed a post-mortem examination in the Zeehan Hospital on the body of Denis Callaghan which had been found in the Florence Dam and pronounced that death was due to drowning or perhaps severe hypothermic shock on immersion in near freezing water. Callaghan, aged about sixty, had recently been in the hospital where he appeared to be ageing fast and depressed. Other witnesses described the discovery of his body, and that recently he appeared impoverished and depressed, some thought suicidal. The coroner's enquiry was adjourned pending the testimony of a friend [614]. Dr A. Panting gave the following Medical Superintendent's report. For the month ending May 30th there were initially fifteen inpatients, followed by eighteen admissions, twenty-four discharges, of whom thirteen were cured and eleven relieved, leaving nine remaining inpatients. The daily average bed occupancy rate was thirteen. One hundred and sixty outpatients had been treated and eight operations had been performed. Lead protectors had been improvised for the X-ray machine which was working well [615]. Dr A.E. Panting performed a post-mortem examination in the Zeehan Hospital on the body of James Dwyer, a miner and prospector, finding blood in the mouth, trachea, oesophagus and stomach. His impression was aspiration of blood and asphyxia as the cause of death. Bleeding sites were not identified. His wife said he was about seventy and suffered from repeated retching over the day prior to sudden death at home. The coroner's verdict as advised by Panting was suffocation due to gastric haemorrhage. Today we would consider this to be a case of Mallory-Weiss syndrome though this was not described till 1929 [616]. Mr Hugh E. Quigley, licensee of the Zeehan Caledonian Hotel, was admitted to the Zeehan Hospital having become suddenly unwell with a cerebral haemorrhage. Quigley was said to be in a serious situation but making satisfactory progress, the most common published medical report regardless of severity [617]. Dr A. Panting reported there had been one case of diphtheria in the district but thanks to the vigorous measures imposed it was limited to one case only [618]. Dr Panting as Medical Superintendent reported that there were nine inpatients remaining from the previous month, then sixteen admissions and fourteen discharges, nine of whom were cured and five relieved and two deaths leaving nine remaining inpatients. The average daily bed occupancy was 11.5. Dr Panting in his little commentary noted that in a quiet months,

there had been two cases of cerebral haemorrhage, one of whom died. He thanked Dr Love for anaesthetising patients at times inconvenient to Dr Love. He recommended the hospital obtain more surgical instruments if more operations were planned as he had personally provided most of those in use. Panting also noted that the problem with the X-Ray apparatus had not been addressed as he requested [619]. Dr Panting reported for the month ending August 31st, there were ten remaining inpatients at the start of the month, then ten admissions and twelve discharges, seven cured and five relieved, leaving eight remaining inpatients. Seventy-two outpatients were seen and two major operations, one of particular complexity performed with anaesthetics kindly given by Dr Love [620]. Dr. Arthur E. Panting as the Medical Superintendent reported that for the month ending October 31, there were nine inpatients at the start of the month, then nineteen admissions and eighteen discharges, sixteen of whom were cured and two relieved. There were two deaths leaving eight remaining inpatients with a daily average bed occupancy of 9.17. Sixty-seven outpatients were treated and there were three deliveries and two major operations [621]. Dr Panting as Medical Superintendent reported that for the month ending December 5th, there were eight inpatients remaining from the previous month, followed by fourteen admissions and eight discharges, five of whom were cured and three relieved. There was one death leaving thirteen remaining inpatients for an average daily bed occupancy of 10.3. seventy-five outpatients were treated and seven operations were performed, four major and three minor. Panting also gave a long comprehensive list of the new surgical instruments he had been able to purchase with the funds raised by the last Zeehan Hospital Ball. He considered these instruments altered the status of the hospital to that of the best equipped on the Coast [622].

The infant son of Mr and Mrs Gilbert Muir, of Tullah, was admitted to the Zeehan Hospital under Dr Panting, Dr Cameron of Tullah being on leave over Christmas, having injured his mouth last week playing with stick [623]. Mr Flight, a young butcher employed at the Renison Bell Mine was admitted to the Zeehan Hospital under Dr Panting having accidentally nearly severed his left thumb while making sausages. Charles Muir was also admitted to the Zeehan Hospital under Dr Panting with a fractured right femur sustained when loading logs at the Dunkley Bros sawmill when one log rolled on top of him. After Panting set his leg, he was said to be doing as well as possible [624].

The annual statistics for the Zeehan Hospital were announced. In 1916 there had been one hundred and seventy-three admissions, with an average daily bed occupancy through the year of eleven, one thousand two hundred and fifty-five outpatients and forty-three surgical operations, twenty-two considered major and twenty-one minor. Thirteen patients died, three being considered moribund on arrival. There were twenty-one accident cases, fourteen cardiac conditions, four pneumonias, and eleven confinements. The Her-

ald numbered operations a little higher at twenty-nine major and thirty-one minor operations [625, 626]. The Medical Superintendent's report for the month ending January 31st, 1917, was six remaining inpatients at the start of the month followed by seventeen admissions and twelve discharges, seven of whom were cured and five relieved. There were eleven remaining inpatients and the average daily bed occupancy was eleven. Thirty-two outpatients were seen. One major operation was performed notable for the first administration of rectal anaesthesia in Tasmania freeing the second surgeon to provide more assistance. Rectal anaesthesia dates back to Pirogoff administering rectal ether in 1847. While often used in children, the technique is limited by low bioavailability of drugs, marked variation of pharmacokinetic and pharmacological results, and poor predictability of the clinical effect in any individual patient. Drugs are subject to first pass metabolism in the liver and only the non-ionised portion of anaesthetics is absorbed with that dependent upon rectal Ph. An interesting concept but results are not seen as being as predictable as intravenous or inhaled agents [627, 628]. Dr A. Panting's monthly Medical Superintendent's report revealed there were eleven remaining inpatients at the start of the month followed by fifteen admissions and fifteen discharges, eleven of them cured and four relieved. There was one death leaving ten remaining inpatients for a daily average bed occupancy of 14.78. the one death was a sixty-three-year-old miner with advanced miner's phthisis and cardiac disease. There were thirty-three outpatients treated and several minor operations performed [629]. Jack McCarthy, age eleven, the son of E.J. McCarthy, was admitted to the Zeehan Hospital in a serious condition with acute appendicitis. He was apparently much improved following surgery [630]. The Medical Superintendent, Dr. A. E. Panting reported for the month ended March 31st that there were ten patients remaining from previous month, then there were twenty-two admissions and sixteen discharges, eight of whom were cured and the other eight relieved, leaving sixteen remaining inpatients with a daily average bed occupancy rate of 12.7. During the month seventy-eight outpatients were treated including six having minor surgery. There were no deaths, three confinements and two major and six minor operations on inpatients. with anaesthetics given by Dr Anderson [631]. Victor Roy Ramsdale, aged seven weeks was admitted to the Zeehan Hospital under the care of Dr Panting and died four days later to be the subject of a post-mortem examination and coronial enquiry. The prior history was of a normal delivery of a healthy boy, a fourth child to the Ramsdales, followed by the development of chafing of the legs, progressing to severe infected ulcerating dermatitis extending from the knees to the rectum, intermittent constipation, wasting and weight loss and convulsions. Evidence was given by the child's parents, the hospital matron and nurse, the young lady employed as assistant by the family and Panting. Victor was treated with regular washing and topical olive oil and powders for constipation. There was delay in

the mother seeking medical advice as she had been erroneously informed that Dr Panting would not see Victor as he had not attended the confinement. Dr Panting's autopsy found no evidence of any internal disease, the intestines were normal with a partially digested meal detected. He was of the opinion that 'death was due to a marasmic condition brought on by septic absorption from the large, ulcerated surface on the body', and the coroner agreed. Co-existent infantile diabetes could explain the wasting and chronic skin infection but is very rare before the age of one. No comment was made on the state of the pancreas or urine testing for sugar. Bowel disease or malabsorption appears excluded by the post-mortem [632]. Mr. C. R. Howroyd, a member of the Tasmanian Parliament, cancelled a speaking engagement during a political campaign to enter Federal Parliament to consult Dr Panting with a non-specified acute illness. Whatever his malady it must have been of a very serious nature for although elected to the House of Representatives on May 5th, he died on May 10th making him the shortest serving Australian Federal MP to date. Mr Frederick Deacon died in the Zeehan Hospital at the age of sixty-three from miner's phthisis from which he had suffered progressively for a few years after working in the Zeehan Mine for twenty-years [633]. Dr Panting's medical superintendent's report showed that sixteen patients remained from the previous month, following which there were fifteen admissions and one confinement with seventeen remaining inpatients at the end of the month. The average daily bed occupancy was 19.5 with a peak of twenty-two. Eighty-eight outpatients were treated and ten operations performed successfully, five major and five minor [634]. John Thomas Powell, a woodcutter, was admitted to the Zeehan Hospital under Dr Panting with a fractured clavicle and other injuries sustained when a runaway truck jumped the rails at the Pyramid Bridge near Oceana [635]. Mrs F. Carlson was admitted to the Zeehan Hospital under Dr Panting to have a fractured femur set. An elderly lady, she slipped walking up a hill to her home in Williamsford. Today that would be considered a minimal trauma fracture, a fall from normal body height and a marker of osteoporosis [636]. Mr A.J. Spotswood was admitted to the Zeehan Hospital under Dr Panting with Rheumatic Fever for special treatment. His age and clinical details are unspecified, though the Herald records that he is making satisfactory progress as they do for the recovering or sometimes the near moribund! Somewhat surprisingly this is the first case of rheumatic fever noted in the press in thirty-six years [637]. The Medical Superintendent's report presented by Dr Panting showed there were eleven remaining inpatients from the previous month, followed by sixteen admissions, and ten discharges, nine of whom were cured and one relieved, for a daily average bed occupancy of 12.16. After one death, a patient in a moribund condition on arrival, there were sixteen remaining inpatients. There were one hundred and twenty-seven outpatients, two confinements and two operations performed, one major and one minor [638]. Mr W. Freeman was ad-

mitted to the Zeehan Hospital under Dr Panting having severed the middle two fingers of his right hand near the knuckles while working with a circular saw for Dunkley Bros sawmill near Roseberry [639]. Medical Superintendent's report for the month ending July 31st was of sixteen patients remaining from previous month, followed by fourteen admissions, seventeen discharges, sixteen were cured and one was incurable. There was one death leaving twelve remaining inpatients and the average daily bed occupancy was thirteen. Eighty-four outpatients were treated, there was one confinement and four operations performed, two major and two minor [640]. Mr Martin Healey was admitted to the Zeehan Hospital under Dr Panting for a successful operation for an unspecified chronic complaint [641]. Mr Thomas McGrath, aged about eighty, died in the Zeehan Hospital after two months hospitalisation having been in failing health, though the diagnosis is not specified. A native Irishman and popular local identity, he had been a traveller, gaining the nickname Taranaki in New Zealand, an explorer, a poet and miner [642]. The Medical Superintendent, Dr Panting reported that for the month ending August 31st, there were twelve remaining inpatients at the start of the period followed by sixteen discharges and twelve discharges, eight cured and four relieved for a daily average bed occupancy of 12.29. There was one death leaving thirteen remaining inpatients. There were three confinements, two operations, one major and one minor, and eighty-eight outpatients treated. During the period there had been a considerable number of inpatients developing mental symptoms including one man threatening violence in the men's ward. In the absence of a secure ward and restraints, in spite of being very ill he was removed to a police cell at 4am. Panting felt the board should consider appropriate management plans and facilities should the situation arise again [643, 644]. Mr William Jones, an elderly but still working wood-chopper was admitted to the Zeehan Hospital under the care of Dr A. Panting with a broken left jaw, severe scalp wounds and an injured left thigh when a falling tree branch struck him at Dunkley Town [645]. Gwendolin Harris, aged ten, the daughter of Mr and Mrs C.P. Harris, died in Zeehan Hospital from pneumonia, a reminder that in the pre-antibiotic days death from pneumonia was tragically not limited to the elderly and infirm [646]. William E. Mausley, age twenty-four was admitted to the Zeehan Hospital under the care of Dr Panting with a comminuted fracture of the left arm. While working with an air compressor driving a diamond drill at the Roseberry Mine, his sleeve became entangled and his arm was drawn into the machinery. This is not the first case admitted to Zeehan Hospital where clothing became entrapped in a machine causing severe injury. Mausley had just enlisted in the A.I.F and was on leave before commencing service completing his service in the mine. However, Panting doubted that the arm could be saved [647]. The Medical Superintendent, Dr Panting reported that there were thirteen remaining inpatients from the previous month, then fifteen admissions and twelve discharges,



nine cured and three relieved. There were three deaths, two of them being aged seventy-five and eighty, and two confinements leaving thirteen remaining inpatients for an average daily bed occupancy of thirteen. There were three operations, two minor and one major [648]. Dr A.E. Panting attended Mr Jas. Hill who suffered a severe axe wound just above the knee while working in the bush near Comstock. Marie Powell, a little girl, was admitted to the Zeehan Hospital under Dr Panting with a greenstick fracture of her arm when she fell from a fence at Oceana, on the Strahan Zeehan line. She was conveyed to hospital by motor [649]. Dr. A. R. Panting as Medical Superintendent reported for the month ending October 31st that there were thirteen patients remaining from previous month, followed by eight admissions and ten discharges, seven cured and three relieved leaving eleven remaining inpatients for an average daily bed occupancy of 11.7. There were one hundred and seventy outpatients, one confinement and two major operations performed during the month [650]. Dr. A. E. Panting, the Medical Superintendent reported for the month ending November 30th that there were four remaining inpatients at the start of the month, followed by twenty-one admissions and twelve discharges, nine cured and three relieved. One of the admissions brought from Tullah had diphtheria and was placed in a house little better than a shack, prompting Panting and the board to seek government finance once more to create an infectious diseases ward. There was one death leaving seventeen inpatients remaining for a daily average bed occupancy of 15.8, There were two confinements, eight operations, three major and five minor and one hundred and seventy outpatients [651, 652].

### 9.12. 1918

Robert Cooper was admitted to the Zeehan Hospital under Dr Panting with a dislocated knee, sundry abrasions and shock sustained when he fell about eighty feet down a pass working at Hill's Tribute on Queen's property. He was carried on a stretcher by his mates and neighbours to the ambulance which conveyed him to hospital [653]. The annual figures for the hospital presented by Dr Panting revealed a total of one hundred and eighty-seven new admissions making a total of one hundred and ninety-three with the six cases already in hospital, one hundred and six males and eighty-seven females with a daily average bed occupancy of 13.79. There were fourteen accident cases, sixteen cardiac cases, eleven with pneumonia, fifteen confinements and nine deaths. Sixty-six operations were performed, twenty-two major and forty-four minor and one thousand, two hundred and ninety-two outpatients were treated, a daily average of 3.64 [654]. Mr Edwards was admitted to the Zeehan Hospital suffering from influenza progressing to pneumonia. Also admitted at the same time was Mr George H. Hanigan who died in the Zeehan Hospital after a week in hospital with renal disease. He had worked in the area for thirty-five years and was engaged as an engine-driver by the Heemskirk Tin Syndicate when he became unwell. The aetiology of his renal diseases is not given,

but here is a case where lead poisoning would be high on the list of diagnostic possibilities [655, 656]. The Medical Superintendent, Dr. A. E. Panting reported for the month ending January 31st, 1918, there were eighteen patients remaining from previous month average, then sixteen admissions and twelve discharges, nine cured and three relieved. Following one death there were sixteen remaining inpatients for an average daily bed occupancy of 10.7. There were sixty-six outpatients, one confinement and one major operation. The figures do not add up again, but there was no report for the previous months stating residual inpatients [657]. Zeehan Hospital received a visit by the Governor of Tasmania, Sir F.A. Newdegate, Lady Newdegate and Miss Newdegate [658]. James McGurk, aged seventeen, was admitted to the Zeehan Hospital with ankle injuries described as a torn ligament, a broken bone and extravasated blood. He was working on the Argent property when the surface of a shaft gave way and he slid and rolled twenty-five feet down a steep slope. In spite of his injuries, he was able to walk to the shaft and ascend the ladder to the surface [659]. Dr. W. J. Bird as locum Acting Medical Superintendent reported that there were sixteen remaining inpatients at the start of the month followed by thirteen admissions and eleven discharges, seven cured and four relieved and one death leaving seventeen remaining inpatients on February 28th, 1918, for a daily average bed occupancy of 14.4 [660]. Dr Bird and the board again requested the Chief Government Secretary to assist in the provision of an infectious diseases ward following a local outbreak of diphtheria though no further clinical details are given. Dr Bird considered that accommodation rented from the municipal Council on a temporary business was unsuitable [661]. The March hospital figures were in a novel format with a plethora of deliveries. Ten adults were admitted, eight were discharged and eleven left in hospital. There were seven boys and two girls born, six infants discharged, and six left in hospital at the end of the month [662]. Mr Robert Clarke died in the Zeehan Hospital under the care of Dr Panting. Although age eighty-five, he had been carrying thirty pound loads of tin from Mount Heemskirk to Zeehan until recently when he broke his shoulder and went downhill rapidly. A local identity and raconteur, he migrated from Lancashire to Australia in 1857, and spent much of his life prospecting for gold including in Ballarat, Rockhampton, the Peel and Snowy Rivers and many sites in New Zealand. He also worked as a gardener and once met the notorious bush-ranger Frank Gardner [663]. The Medical Superintendent, Dr. A. E. Panting reported for the month ending March 31st, that there were seventeen remaining in patients from the previous month, followed by ten admissions and eighteen discharges, nine cured and nine relieved for a daily average bed occupancy of 9.1. Following one death there were eight remaining inpatients. In a light month there had been fifty-five outpatients and four minor operations. Panting noted that the X-Ray machine battery was non-functional and that it had become an indispensable piece of hospital equipment within a few years. The practitioner of a century later would be completely lost

without imaging [664]. The Medical Superintendent reported there were seven residual inpatients at the start of the month, followed by nineteen admissions and fourteen discharges, eleven cured and three relieved, leaving twelve remaining inpatients with an average daily bed occupancy of 13.13. Sixty-three outpatients were treated, there were three confinements and four operations, three major and one minor [665]. Mr Chas Laundry, a popular local boot-maker and miner, died in the Zeehan Hospital, with no specific diagnosis stated, under the care of Dr Panting leaving a widow and young family. Age only forty-seven, he had several recent operations by Panting over twelve months that the Herald describes as 'highly successful' but his condition had been deteriorating for several months with a perceived inevitable outcome. This recalls the quote attributed to Molière, that the operation was successful, but the patient died [666]. Medical Superintendent reported there were twelve patients remaining from previous month, followed by twenty-one admissions and nineteen discharges, twelve cured and seven relieved leaving fourteen remaining inpatients for an average bed occupancy of 15.9. Thirty-three outpatients were treated, there were two major operations and one confinement. One case of diphtheria was reluctantly admitted in the absence of suitable isolation facilities [667]. Mrs. David Jones age sixty-three died in spite of treatment in the Zeehan Hospital with an unstated disease [668].

Dr Panting performed a post-mortem examination on the body of the fourteen-year-old boy, Thomas Leonard Fahey, son of William Fahey who expired suddenly, when seized with a fit of coughing. He was supposedly ill from a cold, and a cough. Panting announced to the coronial enquiry that he found the body to be that of a well-nourished young male 14 years of age with no external marks of violence. Only one lung was found to be present, that on the right side being represented by a fibrous root. Its place was occupied by a large unilocular hydatid cyst filled with a glairy fluid which was frothy. Similar fluid was found blocking the air passages and mouth.

Panting considered that death use due to the rupture of this cyst and consequent asphyxiation and the coroner agreed. Presumably, a normal right lung had become infected with hydatid rather than a maldeveloped cystic lung developing secondary infection with hydatid though that is not clear [669, 670]. Mr. James Kirkwood, a resident of the West Coast for thirty years aged eighty-four, died in the Zeehan Hospital of unspecified cause or chronicity [671]. Thomas Lynch, a youth and son of Mr P. Lynch was admitted to the Zeehan Hospital under Dr Panting with a severe laceration of the head. He was struck on the head with a brake handle when riding on the engine of the train which runs between Tullah and Emu Bay railway siding at Farrell and fell off [672]. The Medical Superintendent reported that for the month ending June 30th, there were fourteen remaining inpatients remaining from the previous month, followed by fourteen admissions, two deaths, both of them

being very aged, and fifteen discharges, twelve cured, three relieved, leaving eleven remaining inpatients for an average daily bed occupancy of 10.1. There were also fifteen outpatients, four operations, one major and three minor, and one confinement [673]. For the month ending July 31st, the Medical Superintendent reported eleven patients remaining from previous month, followed by fifteen admissions, nineteen discharges, fourteen cured and five relieved, and one death leaving six remaining inpatients for a daily average bed occupancy of 11.4. There were also thirty outpatients treated, three minor operations and two confinements [674].

Mrs T.H. Vincent died in the Zeehan Hospital under the care of Dr Panting with a non-specified but lengthy illness with terminal pneumonia. Her age was also not specified but she left a husband, a young family and many friends [675]. Alfred Lapham, a fettler, was admitted to the Zeehan hospital suffering from an axe wound in the foot [676].

The Medical Superintendent reported for the month ending the month ending August 31st, that there were six inpatients remaining from the previous month followed by sixteen admissions, ten discharges, four cured, five relieved and one incurable plus one death leaving eleven remaining inpatients for an average daily bed occupancy of nine. Fifty-four outpatients were treated, five operations performed, one major and four minor and there was one confinement [677]. The Medical Superintendent reported for the month ending the month ending September 30th, that there were eleven inpatients remaining from the previous month followed by thirteen admissions and two discharges, both cured, leaving fifteen remaining inpatients for an average daily bed occupancy of nine. Two minor operations were performed, there was one confinement and another patient with diphtheria was admitted to be isolated in inadequate facilities [678].

The Medical Superintendent reported for the month ending the month ending October 31st, that there were fourteen inpatients remaining from the previous month followed by eleven admissions and fourteen discharges, thirteen cured, one relieved, leaving eleven remaining inpatients for an average daily bed occupancy of 16.23. Five minor operations were performed, there was three confinements and one hundred and twenty-five outpatients treated [679]. Mrs. Luttrell, wife of Warden Luttrell, was admitted to the Zeehan Hospital with a non-specified serious illness for which an operation may be performed. However, three weeks later, she was stated to have made a good recovery without surgery and would be discharged within a few days [680, 681]. Mr. William Nelson was reported to be an inpatient of Zeehan Hospital in a critical state of health with influenza and died the following day with pneumonia. He had resided in Zeehan for thirty years and had been a partner of Edward Swepson who died a few days earlier also with pneumonia following influenza. Though many local residents had caught influenza, Swepson was the first death. Swepson, Nelson and G.S. Richards had been co-owners of the Kapi mine, N.E. Dundas.

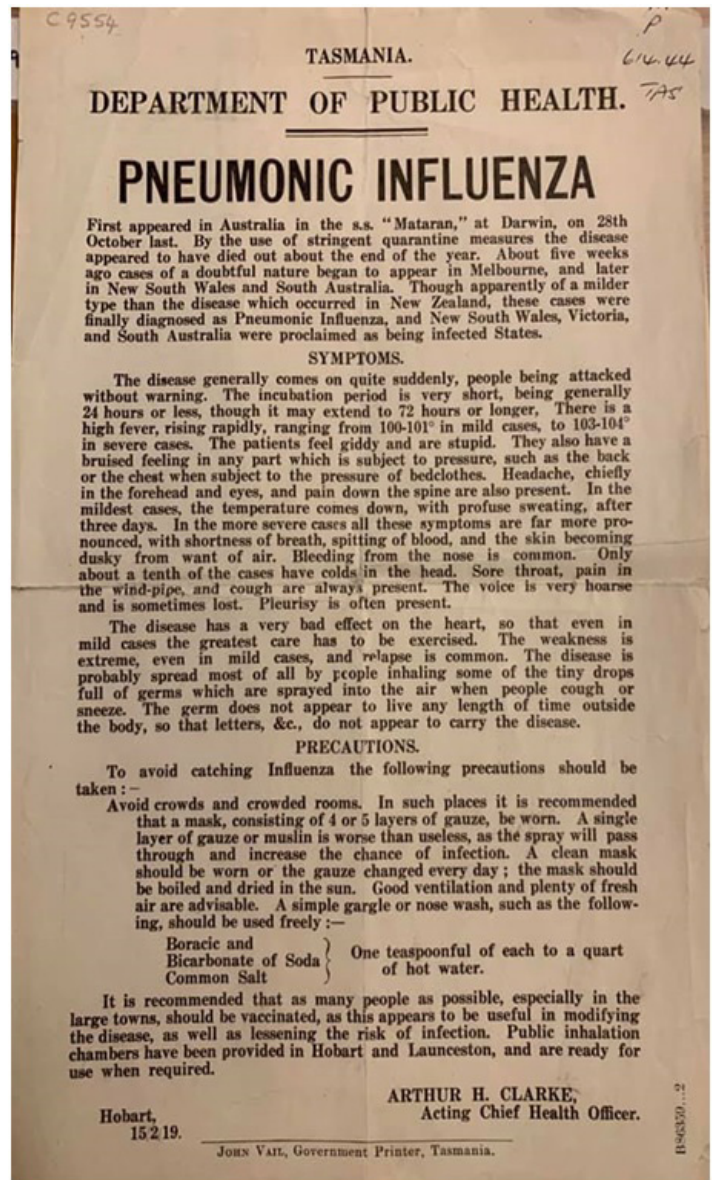
Swepson first arrived in the area thirty years earlier and had been an ardent prospector and esteemed member of the community. On the day of Nelson's death, Richards also became unwell with influenza and was admitted to the Zeehan Hospital, according to the Mercury, 'in a low state'. After several days when recovery was very uncertain, he turned the corner and improved rapidly [682, 683, 684]. Mrs J. Lawler, aged sixty-four, died in the Zeehan Hospital under the care of Dr Panting of peritonitis, having been unwell for several weeks with influenza. She and her husband James were licensees of the Commercial Hotel, Renison Bell, and also of the ill-fated Palace Hotel. Zeehan, which was recently demolished by the big fire [685].

Mr W. Moyle was admitted to the Zeehan Hospital under Dr Panting following a serious accident at the Argent Mill and a week later reported to be recovering well. Another inpatient, Mrs Bergman who had been critically ill for months was also reported to be improving. Mrs E.J. McCarthy, who had also been critically ill was mobilizing around the grounds with discharge expected shortly [686]. Mr George H. Hanigan died in the Zeehan Hospital after a week in hospital with renal disease. He had worked in the area for thirty-five years and was engaged as an engine-driver by the Heemskirk Tin Syndicate when he became unwell. The cause of his renal disease is not stated and perhaps unknown but lead poisoning would be a definite possibility [687]. The Medical Superintendent's report for the month ending November 30th, 1918, stated that there were fifteen patients remaining from the previous month, then twenty-seven admissions and twenty-one discharges, eighteen cured, two relieved and one incurable. There were two deaths, one moribund on arrival, leaving nineteen remaining inpatients with an average daily bed occupancy of seventeen. One hundred and twenty-nine outpatients were treated, fifteen minor operations were performed and there were two confinements. The Medical Superintendent noted the month had a large number of serious cases treated, all of whom required very close nursing attention. The urgent need of a refractory and infectious diseases wards was noted, as was the need for new bedsteads, splints, extension apparatus, surgical instruments for eye and bone operations, and furniture for the convalescent room. The X-Ray machine was noted to have been much in use during the current outbreaks of influenza and pneumonia. The Refractory Ward is apparently defined as the ward usually located at the front of the building to accommodate unmanageable women, and women of bad character including prostitutes! [688]

(Figure 7)

The Medical Superintendent's report for the month ending December 31st, 1918, stated that there were eighteen patients remaining from the previous month, then seventeen admissions and eighteen discharges, twelve cured and six relieved. There were two deaths leaving fourteen remaining inpatients with an average daily bed

occupancy of 17.3. Erroneous figures again. One hundred and twenty-nine outpatients were treated, fifteen minor operations were performed and there were two confinements [689].



**Figure 7:** Statement from the Acting Chief Health Officer concerning the influenza epidemic of 1918-1919. Vaccines, Masks and Social distancing were recommended at a time when the best medical advice was widely appreciated as the best and safest option before the ignorance of 'influenza' a century later!

### 9.13. 1919

Mr A. I. Bigwood, manager of the A. M. A. Stores and a prominent unionist, was admitted to the Zeehan Hospital having taken suddenly ill yesterday with a nervous breakdown. His condition, although not critical, is serious, demanding careful nursing and prolonged rest [690]. Miss Bridget O'Hara died in the Zeehan Hospital of an unspecified disease. She was said to be the oldest resident of Rosebery, though her age is not given. Previously she had kept the Post Office and a general store [691]. The hospital re-

ported that there had been no cases of influenza or pneumonia for the year to date and that inoculations were available in the hospital. It would be over another decade before the influenza virus was isolated and identified, vaccines in 1919 were against *Haemophilus influenzae*, the perceived pathogen at the time. The only effective therapy of the period was a blood transfusion from a donor who had recovered from influenza, a good source of antibodies [692]. The Annual Hospital Report showed that there had been two hundred and six inpatients, seven hundred and eighty-nine outpatients and eleven deaths. Forty-four operations had been performed and there were twenty confinements with one pair of twins. The X-ray apparatus had been repaired and in the opinion of the Telegraph was one of the best in Tasmania if not Australia. Dr Panting was complimented on his zeal and ability as was the capability of the matron and nursing staff [693, 694]. Mrs Vollprecht, the wife of the headmaster of West Zeehan State School, was admitted to the Zeehan Hospital under Dr Panting with influenza and pneumonia. The school was isolated and closed. Another gentleman from Rosebery was also admitted with suspected influenza and one hundred and twenty-four inoculations were given at the hospital [695, 696].

The Medical Superintendent reported that for the month ending January 31st, 1919, there were fourteen patients remaining from the previous month, followed by eighteen admissions and fourteen discharges, eleven cured and three relieved. There were four confinements and one death, being moribund on arrival, leaving seventeen remaining inpatients with a daily average bed occupancy of 13.16. One hundred and twenty-four outpatients were treated and fifty-four inoculations given. Carpentry work in the X-Ray department had not been completed owing to a contractual failure [697]. The Medical Superintendent reported for the month ending March 31st, 1919, that there were eleven patients remaining from the previous month, followed by twelve admissions and ten discharges, nine cured and one relieved leaving thirteen remaining inpatients for a daily average bed occupancy of 13.13. One hundred and forty-one outpatients were treated and several minor operations were performed [698].

Lloyd Aldred, aged eight, was readmitted to the Zeehan Hospital under Dr Panting after three weeks treatment as an inpatient for pertussis. While travelling home to Strahan with his father he fell from a train crossing the Austral Bridge sustaining a compound fracture of his right leg and some internal injuries. Subsequently Eric Frederick Joseph Aldred, on behalf of his son, Frederick Lloyd Aldred, proceeded against the Commissioner of Railways in the Supreme Court for the recovery of the sum of £300, compensation for damage received by falling from a train, on April 7 last.

Lloyd had fallen from a door on the train and the case centered on the door fastening. Mr Aldred stated that Lloyd had merely lent on a door which then opened with minimum pressure and the Railways claimed their fastenings were the best available and would not open so easily. Dr. A. E. Panting, sworn in as expert witness stated

said Lloyd had previously been in hospital for three weeks with pertussis, but on the day he was discharged, Panting was called to see him again after the accident. He saw Lloyd in Eddy's house at the Smelters where he was semiconscious and in a state of shock with a compound fracture of his leg plus abrasions and bruises of his leg and tenderness of his groin and back. He was in hospital for a further three months with a considerable amount of pain and debility. He finally made a reasonable recovery with a little bowing of his leg for, Panting said, a broken leg is never quite as good as it was before the fracture. The judge returned a verdict in favour of the Railways continuing a theme of nearly forty years in which commercial interests always dominate private individuals regardless of trauma and safety provisions. He stated that it was necessary for the plaintiff to prove beyond doubt that the defendant had failed to provide a secure fastening to the door of the carriage in which the plaintiff was travelling [699, 700, 701].

The Medical Superintendent reported for the month ending the month ending April 30th, 1919, October 31st, that there were thirteen inpatients remaining from the previous month followed by twenty-two admissions, thirteen discharges, ten cured, three relieved, and one death leaving twenty-one remaining inpatients for an average daily bed occupancy of 14.8. Four major abdominal operations were performed, three of which were described as 'life and death' cases, and all recovered well. Four minor operations were also carried out and sixty-two out-patients treated. The hospital experienced a very busy month for both medical and nursing staff. The male ward was filled beyond capacity and the female ward had only two empty beds. It was hoped the infectious diseases, and detention wards now under construction should be finished by the end of the month [702]. John Connell was admitted to the Zeehan Hospital under Dr Panting with a fractured pelvis sustained when he slipped down a mountainside at the Olympic Mine and fell against a tree. He managed to crawl up to the railway line where Mr D. Williams heard his cry for help and helped him to Rosebery where a car was found to convey Connell to hospital. Depending on the severity and anatomical site, this may be a serious injury involving major blood vessels and vital internal organs, and probably requiring lengthy bedrest [703]. Dr A.J. Kerr performed a post-mortem examination on the body of John Mackrill in the Zeehan Hospital for a coroner's enquiry following his sudden death at the Five-Mile. Kerr found an emaciated near starvation corpse of a man about sixty-five years old, but with no marks of violence. He had chronic valvular heart disease and a fracture of the third cervical vertebra. This fracture probably from a fall perhaps due to poor health and instability or some other trauma crushed the spinal cord and caused almost instant death. Sub-Inspector Pemberton of the Police reports being called to the body which was lying at the bottom of a bank. Margaret Kleim reported finding Mackrill dying at the bottom of the bank. A verdict of accidental death was returned by the coroner. His emaciated state may well have been associat-

ed with osteoporosis increasing the risk of vertebral fracture from mild trauma [704]. The Medical Superintendent reported that for the month ending May 31st, 1919, there were twenty-one patients remaining from the previous month, then thirteen admissions and twenty discharges, fourteen of whom were cured, five relieved and one incurable. Following two deaths there were supposedly thirteen documented remaining inpatients for an average bed occupancy of 14.06. There were also sixty-eight outpatients seen [705]. The Medical Superintendent, Dr Panting reported for the month ending June 30th, 1919, that there were thirteen patients remaining from the previous month, followed by twelve admissions and fourteen discharges, eleven cured and three relieved. There was one death leaving ten remaining inpatients for an average daily bed occupancy of 11.7. Ninety-three outpatients were treated and there were two confinements [706]. Mr C.J. Moxon, manager of the Hercules Mine, was admitted to the Zeehan Hospital with a nervous breakdown for which prolonged treatment was expected to be necessary before he could return to his duties [707]. The Medical Superintendent, Dr Panting reported for the month ending July 31st, 1919, that there were eleven patients remaining from the previous month, followed by fourteen admissions and sixteen discharges, twelve cured and four relieved, leaving nine remaining inpatients for an average daily bed occupancy of 12.03. Eighty-nine-three outpatients were treated and there were one confinements [708]. The influenza epidemic was now rampant across Tasmania. Dr Panting as Local Health Officer inspected incoming trains, though travellers were few and mostly wearing masks unless the only occupant of a carriage. Two travellers not wearing masks were taken by the police for further questioning. One visitor from Linda was detained in the Zeehan Hospital for testing. One patient in Zeehan Hospital with influenza had recovered sufficiently to be discharged and the other inpatients were reported to be recovering. Two other patients with influenza, isolating in town were also recovering [709]. Mr Grimshaw died in the Zeehan Hospital one day after developing influenza associated pneumonia. One mild case was admitted, one was about to be discharged and the other influenza inpatients were recovering. The citizens of Zeehan were very concerned about people from Strahan with influenza passing through Zeehan and sought some form of lockdown [710].

Dr Panting reported the admission of two patients to Zeehan Hospital with mild influenza, no complications were detected. The other inpatients with influenza were convalescent except one with secondary pneumonia [711]. Mr James McCutcheon, a ganger on the Strahan-Zeehan railway line, has been discharged from the Zeehan Hospital and is convalescing well at home. He had been severely ill for some weeks with a non-specified illness such there were fears he might die, and his parents were summoned to his bedside, but now he is about to leave for a holiday in Hobart with his parents. Had McCutcheon suffered from influenza the reader would expect that diagnosis to be stated. He joins the list of patients for whom

metal poisoning is one possible diagnosis [712]. At the monthly meeting it was announced that the infectious diseases ward was ready to open and the Matron reported that the average daily bed occupancy rate was thirteen [713]. Miss Ivy Wolfe was admitted to the Zeehan hospital after an accident with an axe. She was trying to split a piece of wood when the axe slipped and almost severed her little toe. Her uncle Private W. Cowie, just returned from the front in France, administered first aid and assisted her to the hospital. Mrs J. Beaumont was also admitted to the Zeehan Hospital with a non-specified serious illness [714]. The Medical Superintendent's report for the month ending September 30th, 1919, showed twelve patients remaining from the previous month, then thirty-eight admissions and forty discharges, thirty-seven cured, two relieved and one incurable leaving ten remaining inpatients for an average daily bed occupancy rate of fourteen. One hundred and twenty-two outpatients were treated and there were two confinements. Panting noted that the current influenza pandemic appeared to have spent itself and there were currently only two convalescent cases in the hospital. There had been thirty-seven influenza inpatients treated in six weeks since August 16th with one death. Panting appended a list showing only three of these contracted the disease in Zeehan, evidence for the benefit of lockdown in viral pandemics a century ago [715].

Dr Panting as Medical Superintendent reported for the month ending September 30th that there were ten remaining patients at the end of the previous month, followed by nineteen admissions and seventeen discharges, eleven cured and six relieved. After one death there were eleven remaining in patients for an average daily bed occupancy of eleven. There were one hundred and five outpatients and one major operation. Dr Panting also reported that the lights failed in a large part of the hospital over a weekend and the council did little to rectify the problem for several days [716].

Harold Rawson, the youngest son of Mr Walter Rawson, was admitted to the Zeehan Hospital with an acute intestinal obstruction for which he had a major operation with some improvement but his condition was still regarded as critical. [717]. Young Miss Gladys Watkins was admitted to The Zeehan Hospital under Dr Panting suffering with a badly smashed hand as a result of a log rolling on it. It was necessary to amputate the thumb [718]. The infant child of Mr and Mrs F. Connors, Renison Bell, died in the Zeehan Hospital after surviving the crisis of pneumonia only to succumb fairly suddenly to meningitis [719]. The Medical Superintendent, Dr Panting, reported that for the month ending November 30th, 1919, there were eleven remaining patients from the previous month, followed by thirty-one admissions and twenty-seven discharges, twenty-three cured and four relieved. There were two deaths leaving thirteen remaining inpatients for an average daily bed occupancy rate of 13.6. There were one hundred and fifty-five outpatients treated, two major operations and one confinement [720].



#### 9.14. 1920

The Medical Superintendent, Dr Panting, reported that for the month ending December 30<sup>th</sup>, 1919, there were twelve remaining patients from the previous month, followed by twenty admissions and twenty-one discharges, eighteen cured and three relieved. There were four deaths leaving seven remaining inpatients for an average daily bed occupancy rate of 10.5. There were one hundred and sixty-three outpatients treated and one confinement [721]. The annual figures for the Zeehan Hospital for 1919 were two hundred and thirty-five admissions and twelve remaining from the previous year making a total of two hundred and forty-seven patients, one hundred and forty-two males and one hundred and five females. Average daily bed occupancy rate was 12.89. This forty percent increase on the previous year was largely attributed to the influenza pandemic. There were seventeen accidents, ten heart cases, sixty-five with influenza, five with associated pneumonia, eleven lobar and bronchopneumonia, two typhoid, one diphtheria, fifteen confinements and fourteen deaths. Sixteen operations were performed. The board acknowledged the long hours of duty and expert professional qualities of Dr Panting and Matron Weller [722].

The Medical Superintendent reported for the month ending January 31<sup>st</sup>, 1920, that there were seven patients remaining from the previous month followed by fifteen admissions, eleven discharges, ten cured and one relieved and one death leaving ten remaining inpatients for an average daily bed occupancy rate of 9.7. There had been one hundred and sixty-eight outpatients treated, four operations, one major and two minor and one confinement [723].

Dr. A. E. Panting stated this would be his last year in Zeehan. When he first came here, he said he would stay at least three years, but no longer than five years, and the five years would he completed in January next. He spoke now so that the board would had adequate time to be able to appoint his successor. He did not like the idea of leaving for he had been happy in Zeehan and disliked severing connections with the people, but he had to consider his family and get back to the city. If the board agreed, he would endeavour to obtain another doctor to fill his place and would promise to do the best he could for subscribers [724]. Dr Panting as Medical Superintendent reported for the month ending February 29<sup>th</sup> that there were ten inpatients remaining from the previous month, followed by ten admissions and eleven discharges, nine cured and two relieved leaving nine remaining inpatients for an average daily bed occupancy rate of ten. One hundred and seventy-two outpatients were treated mainly to change dressings [725]. Harold Armstrong was admitted to the Zeehan Hospital where he was found to have two fractured ribs following an accident at the North Mount Farrell Mine. He was working under an earth rise when there was a significant fall of earth on top of him [726]. The Medical Superintendent reported for the month ending March 31<sup>st</sup>, 1920, that there were nine patients remaining from the previous month followed by twenty-three admissions and seventeen discharges, fifteen cured

and two relieved leaving fifteen remaining inpatients for an average daily bed occupancy rate of thirteen. There had been two hundred outpatients treated, four operations, one major and two minor and three confinements. Dr Panting also stated that the X-Ray tube after years of good service had failed and he recommended the purchase of two to avoid overworking one tube [727].

Dr Panting announced that he would move to Launceston from Zeehan and had purchased Struan, a very valuable property right in the heart of the city of Launceston on the riverbank, near the Royal Park gates. It stands in an acre of grounds, comprising an orchard and gardens. The building is a handsome two-storied residence and was built in the '70s. For some time, it was occupied by Lord Gormanston. when he was Governor of Tasmania. It afterwards became the residence of the late Dr. Pike, and after his death, and during recent years, it was occupied by Sister Massey, a one-time matron of the Zeehan District Hospital, for use as a private hospital. A decade ago in 2011 it still existed as part of the Supreme Court in Launceston [728]. (Figure 8)

Mr George Stirmaker was admitted to the Zeehan Hospital under Dr Panting with a broken little finger on his left hand sustained when jumping for a football. Unfortunately, for he is an excellent pianist, he required amputation of the terminal phalanx of the finger [729]. The Medical Superintendent's report for the month ending May 31<sup>st</sup>, 1920, revealed there were thirteen patients remaining from the previous month, then thirteen admissions and fourteen discharges, twelve cured and two relieved leaving twelve remaining inpatients for an average daily bed occupancy rate of thirteen. One hundred and thirty-four outpatients were treated, there were three minor operations and one confinement. Dr Panting expressed his gratitude for the unfailing loyalty and cooperation of the hospital staff and the unfailing courtesy of the hospital board [730]. Dr Panting gave his final report to the Zeehan Hospital Board. He stated that he had consulted one thousand and fifty patients over five weeks, requiring visits in two hundred cases, presumably home visits compared with outpatients, for an average of two hundred and ten consultations, and forty-two visits per week. Dr Fisher, his replacement was commencing duties that day [731]. John Berry, an employee of Dunkley Bros, died in the Zeehan Hospital after months of suffering from an unspecified illness and of an unspecified age [732].

Dr. Walter Fisher, the new Medical Superintendent reported for the month ending June 30<sup>th</sup>, 1920, that there were twelve patients remaining from the previous month, then nineteen admissions and twenty discharges, thirteen cured, and seven relieved for an average daily bed occupancy rate of 11.7. After three deaths there were eight remaining inpatients. One of the deaths was a very old man who had a prolonged illness with cancer in the neck, the second was a premature birth and the third had a weak heart after also being born prematurely at seven months. There had also been ninety-eight outpatients. Dr Fisher also requested a pay rise as he



considered £30 per annum was not enough for the amount of work he had to do, including the numerous operations, especially on amongst children. The board agreed in principle to a £22 salary increase but deferred the request for three months to observe progress [733]. The Medical Superintendent reported for the month ending from July 7th to August 3rd, 1920, that there were thirteen patients remaining from the previous month, followed by twelve admissions and eleven discharges, nine cured and two relieved. After three deaths there were eight remaining inpatients for an average daily bed occupancy of 9.5. There had been one hundred and eighteen outpatients and twelve operations, four major and eight minor [734]. The Medical Superintendent reported for the month ending August 31st, 1920, that there were ten patients remaining from previous month, then thirteen admissions followed by seven discharges, all cured leaving fourteen remaining inpatients for an average daily bed occupancy rate of ten. There were also ninety-eight outpatients, and eleven operations, six major and five minor [735]. H.W. Marshall was admitted to the Zeehan Hospital with severed scalding of his leg. He was camping at Trial Harbour boiling crayfish when a vessel of boiling water fell on his leg [736]. The Medical Superintendent reported for the month ending October 5th, 1920, that there were fourteen patients remaining from previous month, then twenty-three admissions followed by twenty discharges, nineteen cured, one relieved leaving fourteen remaining inpatients for an average daily bed occupancy rate of 12.7.

There were also one hundred and fifty-one outpatients, and eleven operations, four major and seven minor [736]. Dr Fisher and the Zeehan Hospital matron travelled to Tullah Hospital to see nurse Black who had contracted diphtheria from her diphtheria patients in the Tullah Hospital. She was reported to be improving. The matron remained at Tullah until a locum nurse from Launceston arrived [737]. The Medical Superintendent reported for the month ending November 3rd, 1920, that there were fourteen patients remaining from previous month, then eighteen admissions followed by twenty-four discharges, twenty-three cured, one relieved leaving eight remaining inpatients for an average daily bed occupancy rate of twelve. There were also ninety-one outpatients, eleven operations, six major and five minor, and two confinements [738]. The Very Rev B. Murphy was admitted to the Zeehan Hospital in a serious but unspecified condition [739]. The Medical Superintendent reported that there were nine patients remaining from previous month, then eleven admissions followed by five discharges, all cured, leaving fifteen remaining inpatients for an average daily bed occupancy rate of eight. There were also eighty-six outpatients, and eleven operations, three major and eight minor [740]. Mrs Cole was admitted to the Zeehan Hospital under Dr Fisher for a major operation with the assistance of Dr A. J. Hamilton of Strahan. The operation was considered successful though her post-operative condition was critical. The wife of the local constable, her age, diagnosis and surgical details are not divulged [741, 742].



**Figure 8:** Struan House 1941

### 9.15. 1921

The Medical Superintendent reported for the month ending January 4th, 1921, that there were ten patients remaining from previous month, then sixteen admissions followed by seventeen discharges

and one death leaving ten remaining inpatients for an average daily bed occupancy rate of 11.4. There were also eighty-eight outpatients, and eleven operations, four major and six minor. The figures do not add up, the reports of the previous and subsequent months

give figures of fifteen patients remaining in December and eighteen for the month ending January 4th [743].

The annual figures for Zeehan Hospital were stated as one hundred and ninety-three admissions plus seven remaining inpatients at the start of the year for a total of two hundred, one hundred and six males, ninety-four females, a decrease of seventeen from 1919. There were twenty-one accident cases, thirteen lobar pneumonia and bronchopneumonia, eight rheumatism, nine confinements and eight deaths. The average daily bed occupancy was 11.3.

One thousand five hundred and twenty-three outpatients received treatment, and seventy-five operations were performed, twenty-nine major and forty-six minor. Miss R. M. Weller, the past matron, and Miss E. G. Bessell, the current matron were both complimented by the board for the outstanding work and contribution to the Zeehan Hospital [744]. Miss Radford, the nineteen-year-old daughter of Fred Radford was admitted to the Zeehan Hospital under Dr Fisher with appendicitis. Two years previously she had swallowed a button suffering intermittent attacks of abdominal pain ever since, so it is hoped that an appendicectomy and retrieval of the button will prove curative [745].

Thomas Foley, a single man aged sixty-three, was admitted to the Zeehan Hospital in a moribund condition under Dr George Watson and died that night sixty-five minutes after admission. Foley had not been seen for a week, and the police found him alone in his cottage by a mine in a critical condition. On arrival his superficial abrasions were cleaned up with an antiseptic, and he was given an injection of strychnine by Sister Brennan. Dr. George G. Watson, reported his post-mortem finding to the subsequent coroner's inquest.

Watson found deep external bruises on the right side of the face and chest, hip, knee, and ankle, where his body had prolonged contact with the floor. Watson considered the lungs were practically normal, but the heart's valves on the right side were rather thickened. In his opinion death was caused by a stroke of apoplexy, causing him to fall on the floor, and to lie there incapable of movement, thus causing the sores mentioned to be formed by prolonged pressure. Gradual heart failure ensued, causing death, though no intracranial findings are documented.

Following further witnesses of Foley's solitary lifestyle and the absence of suspicious circumstances the coroner brought in a verdict of death due to natural causes in accordance with the medical testimony [746, 747]. The Medical Superintendent reported for the month ending February 2nd, 1921, that there were eighteen patients remaining from previous month, then twenty admissions followed by eighteen discharges, sixteen cured, one relieved, and one incurable and two deaths leaving ten remaining inpatients for an average daily bed occupancy rate of 11.5. There were also one hundred and one outpatients treated and thirteen operations, seven major and six minor [748]. The young daughter of Mr Albert Fowl-

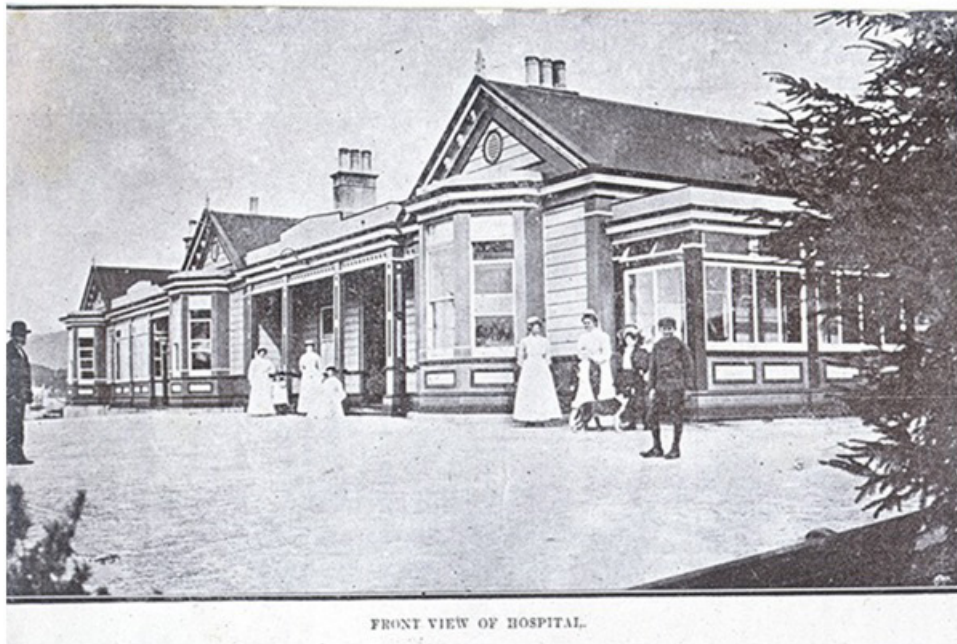
er died from diphtheria in the Zeehan Hospital. Two other members of her family were also suffering from the condition [749]. Mr P. Cowling, an accountant with Messrs. J. S. Munro and Co. was admitted to the Zeehan Hospital under Dr Fisher with a compound fracture of the tibia and fibula sustained in the hospital garden fete on the 'glideaway', otherwise termed "shooting the chute." Unfortunately, upon reaching the end of the ride, his legs become twisted causing the fracture. The safety of this shute appeared dubious as shortly afterwards a lad named Dunkley sustained a sprained ankle on the same apparatus [750, 751]. The Medical Superintendent reported for the month ending February 1921, that there were eight patients remaining from previous month, then nine admissions followed by eleven discharges, all cured, and one death leaving ten remaining inpatients for an average daily bed occupancy rate of 9.4. There were also eighty-five outpatients treated, three minor operations and three confinements [752].

Keily, a thirteen-year-old girl was admitted to the Zeehan Hospital under Dr Fisher with a fractured left leg sustained in a collision between two trucks on the Gorge tramline [753]. The Medical Superintendent reported for the month ending April 5th, 1921, that there were thirteen patients remaining from previous month, then nineteen admissions followed by nineteen discharges, eighteen cured, one relieved and one death leaving twelve remaining inpatients for an average daily bed occupancy rate of 17.3. There were also one hundred and thirteen outpatients treated, six minor operations and four confinements [754]. Dr W. Fisher performed a post-mortem examination on the body of Mr John Thomas Devine in the Zeehan Hospital for a coroner's enquiry. Devine, a horse driver, had been driving three horses when a tragic accident occurred. The front horse appears to have turned causing the second horse to fall and somehow a stake was driven into Devine's side, perhaps by the horse landing on top of him. Dr Walter Fisher reported he made an examination of the body of deceased, John Thomas Devine, at the Hospital morgue. On the right side of the chest he found a good deal of bulging and contusion of the tissues, beneath which the seventh, eighth and ninth ribs were fractured. In the mid axillary line on the left side of chest he found a large wound, into which a stake, about 12in in length was firmly jammed, from which blood was still issuing. On extraction of this stake, the heart and lungs showed signs of having been ruptured. There were no other marks on the body, and in Fisher's opinion death was due to the laceration of those organs mentioned above, which death must have been instantaneous. He considered that the horse must have fallen on deceased to cause the stake, 12in by 2in, to penetrate so deeply and firmly. The coroner returned a verdict of accidental death by being impaled on a stake, which ruptured his lungs and heart on the 5th day of April 1921, near Mather's Siding, on the Dundas railway line [755]. The three-year-old son of Mr Breaden was admitted to the Zeehan Hospital for surgery following an accident with an unsecured axe. The boy and his older brother were playing with an axe,

when the bigger brother accidentally chopped off the third finger of the left hand below the second joint [756]. Miss Linda Wortham was admitted to the Zeehan Hospital requiring surgery for a fractured forearm sustained while skating. Her progress following a serious operation was deemed unfavourable [757]. The Medical Superintendent reported for the month ending May 31st, 1921, that there were ten patients remaining from previous month, then nine admissions followed by eleven discharges, all cured, leaving eight remaining inpatients for an average daily bed occupancy rate of eleven. There were also one hundred and thirty-two outpatients treated, six operations, three major and five minor and four X-Ray examinations [758]. The Medical Superintendent reported for the month ending July 6th, 1921, that there were eight patients remaining from previous month, then ten admissions followed by six discharges, five cured and one relieved and one death leaving eleven remaining inpatients for an average daily bed occupancy rate of nine. There were also eighty-seven outpatients treated, five operations, one major and four minor and two X-Ray examinations. The need for a new maternity ward was again demonstrated when two confinements occurred during the same afternoon and the second infant had to be delivered in a general ward at some inconvenience [759]. Mr Ritson died in the Zeehan Hospital from an unspecified condition. He was said to be elderly and having been in declining health for some time having worked previously in the Montana Mine. Again he may have had any degenerative condition as well as lead poisoning [760].

Dr. A. B. Packham, M.B., Ch.M., as the new Medical Superintendent reported for the month ended July 31st, 1921, that there were nine patients remaining from the previous month, then eighteen admissions and twelve discharges, eleven cured and one relieved leaving fourteen remaining in hospital for an average daily bed occupancy rate of 10.67. there were also eighty outpatients seen for a change of dressings, nine operations, four major and five minor and four X ray examinations [761]. Mr H. Witton was admitted briefly to the Zeehan Hospital under Dr Packham having been briefly knocked unconscious when hit on the head by a football while referring the game [762]. The Medical Superintendent's report that for the month ending September 6th, 1921, there were fourteen patients remaining from the previous month, followed by sixteen admissions and seventeen discharges, all cured, and two deaths, leaving eleven remaining inpatients for an average daily beds occupancy rate of eleven. There were also one hundred and fifty-five outpatients, eight operations, three major, and two minor, and seven X ray examinations [763].

Dr Packham resigned from his position as Medical Superintendent to the Zeehan Hospital to commence a position in practice at Smithton [764]. Dr Tipping of Melbourne arrived in Zeehan to take over as surgeon to the Zeehan Hospital in succession to Dr. Packham as locum tenens until Dr. Kerr arrives from England to take up the permanent position as Medical Superintendent [765]. (Figure 9)



**Figure 9**

The Medical Superintendent reported for the month ending October 6th, 1921, that there were seven remaining inpatients from the previous month followed by thirteen admissions and twelve discharged, all cured, leaving twelve remaining inpatients for an average daily bed occupancy of 10.7. There were also one hundred

and eleven outpatients, eight operations, two major and six minor, three X-Ray examinations and two confinements [766].

Mr James Lawler, age sixty-two of Renison Bell, was admitted to the Zeehan Hospital, lapsed into unconsciousness and died two days later. He had been in declining health for two years and was

taken acutely ill quite suddenly. He had lost a hand three years previously in an accident. He had worked in the Western Mine for seven years, then entered the hotel business. He owned the Palace Hotel till it was burnt down, then the All Nations Hotel plus the Commonwealth Hotel at Renison Bell. Again here is a former miner in declining but undiagnosed poor health where metal poisoning is possible [767, 768, 769]. Mr William Brampton was admitted to the Zeehan Hospital under Dr Tipping with a scalp laceration requiring six sutures. He had somehow fallen from a roof at the Electrolytic Zinc Company local experimental plant [770]. The Medical Superintendent reported that for the month ending November 1st, 1921, there were thirteen inpatients remaining from the previous month, followed by fifteen admissions and twenty-three discharges, twenty cured, two relieved and one incurable. After one death there were eight remaining inpatients for an average daily bed occupancy of ten. There were also sixty-four outpatients, five operations, one major and four minor, five X-Ray examinations and one confinement. Again there is a counting error and the remaining patients at the end of the previous months was documented as twelve not thirteen [771].

Dr Tipping reported that he commenced duties on 29th November 1921 and that he had seen some forty outpatients in that time, some as visits and some in the surgery. A few required admissions to hospital and one case of diphtheria had been reported. Tipping favoured a preliminary phone discussion with clinical details to avoid walking a couple of miles to see a very sick child now able to be playing outside [772]. The Medical Superintendent reported for the month ending December 6th, 1921, that there were ten patients remaining from the previous month, followed by seventeen admissions and nineteen discharges, thirteen cured, four relieved and two incurable, and one death leaving seven remaining in hospital for an average bed occupancy rate of 8.5. There were also eighty-four outpatients and four operations, three major and one minor [773].

#### 9.16. 1922

Medical Superintendent reported for the month ending January 3rd, 1922, that there were nine patients remaining from previous month, followed by five admissions and nine discharges, eight cured and one relieved. After one death there were three remaining in hospital for an average daily bed occupancy of 5.3. There were also sixty-one outpatients attending for dressings, three operations, one major and two minor, and two x-ray examinations [774]. The Medical Superintendent's report for the month ending January 31st, 1921, showed three patients remaining from the previous month, followed by thirteen admissions and ten discharges, all cured, leaving eight remaining in hospital. The figures are incorrect again. There were also forty-five outpatients needing dressings, five minor operations and one X-ray examination. Dr Tipping, having completed his locum thanked the nursing staff for

their most valuable and expert assistance and similarly expressed gratitude to the administration [775].

Dr. Kerr, the new surgeon to the Zeehan District Hospital, telegraphed ahead to announce his arrival in Zeehan on the day of publication. This is the final citation from the local Herald which ceased printing with volume 33, issue 193 on 31st May 1922, a serious loss of local information for a researcher [776]. John Fulford, a middle-aged man, was admitted to the Zeehan Hospital with a simple fracture of the left leg sustained from a fall of earth on top of him at the North Farrell mine [777]. The Medical Superintendent reported that for the month ending June 6th, 1921, there were fourteen patients remaining from the previous month, then ten admissions and seventeen discharges, fifteen cured, one relieved and one incurable, leaving eight inpatients for an average daily bed occupancy of 4.8. Eighty outpatients were treated and there were two minor operations and two X-ray examinations [778]. Leonard Hess a young man, was admitted to the Zeehan Hospital suffering from contusions of the chest and arms having been trampled by horses. A stable boy at Williamsford, he suffered a fit and fell under the horses [779]. The Strahan health reporter noted there had been many individuals with upper respiratory infections, colds or influenza, in town, two of whom were admitted to the Zeehan Hospital, and one serious case of rheumatic fever. He also noted the lack of weekend medical attention while Dr Kerr was absent in Burnie [780]. The 1921 annual figures were belatedly announced at the July meeting. There had been two hundred and forty admissions plus ten inpatients from the previous year, making a total of two hundred and fifty, one hundred and twenty-four males, one hundred and twenty-six females. There were nineteen accident cases, eight of heart disease, nine cases of diphtheria, eight of tonsillitis, six of insanity, seven of varicose ulcers, four of pneumonia, four of cancer, twenty-two of scarlatina, eighteen confinements and seven deaths. The average daily bed occupancy rate was 9.8. Fifteen hundred and fifty-six out-patients received treatment and ninety-nine operations were performed, twenty-six major and seventy-three minor. Dr. Walter Fisher the medical superintendent, resigned March 31st, 1921, and Dr. G. B. Packham was appointed to the position. He however, resigned at the end of a four months, and was succeeded in succession by Drs. Tipping, Harrison, Collipy and Hamilton who each acted as locum tenens until the arrival of Dr. T. L. Kerr, who took up his duties in February last [781].

Mr William Fallon Johnson died from influenza in the Zeehan Hospital under the care of Dr Kerr after a week in hospital while his health slowly deteriorated [782].

Dr Kerr resigned his position at Zeehan Hospital to commence private practice in the south of Tasmania. He is to be replaced by Dr Clarence Rieger, M.B., B.S, currently assistant surgeon and junior resident medical officer at the Broken Hill Hospital [783]. Jean McEwan was admitted to the Zeehan Hospital with severe burns

sustained when her clothes caught fire at her home in Roseberry. She was standing near the fire when her dress caught alight. She was taken to Zeehan by the Emu Bay rail motor and admitted to the District Hospital by the matron, in the absence of the doctor for the week-end. Eight weeks later she was reported to be much improved, though she was not well enough to be discharged till April 1923, some eight months after the episode [784, 785, 786, 787].

The Medical Officer reported that for the month ended July 31st, 1922, there were two hundred and twenty-seven consultations and eighty-three house visits [788]. The Medical Superintendent, Dr. J. L. Kerr, reported for the month ending Sept. 6th, 1922, that there were four inpatients remaining from previous month, then there were seven admissions. And seven discharges, six cured and one relieved leaving six remaining inpatients for an average daily bed occupancy rate of six. Again there is an error in the reported numbers. There were fifty-two outpatient dressings attended and three minor operations [789].

Dr. Clarence Rieger, the recently appointed surgeon to the Zeehan Hospital arrived at Zeehan from Broken Hill and commenced duties [790]. Keith Jones, a son of Mr and Mrs Harry Jones of undocumented age, was reported to be recovering from an unspecified serious illness in the Zeehan Hospital [791]. Mr Beckett was admitted to the Zeehan Hospital suffering from a broken forearm and severe scalp lacerations sustained in an accident at Tullah [792].

The monthly hospital board meeting accepted Dr Kerr's letter of resignation and thanks to the board for their assistance and cooperation. The new medical superintendent, Dr Clarence O. F. Rieger reported that there were five remaining inpatients from the previous month, then twelve admissions and two discharges, one cured, and one relieved. Following one death there were fourteen remaining inpatients for an average daily bed occupancy of eight. There were also ninety outpatient dressings changed, five operations, one major and four minor and four X-ray examinations.

Rieger considered there were insufficient nurses to deal with a doubling of the workload. He sought more surgical instruments including a specific set of instruments dedicated to infectious patients only, splints and an improved X-Ray tube [793].

The Medical Superintendent, Dr. C Rieger, reported for the month of October that fourteen patients remained from the previous month, and that fifteen were discharged, thirteen cured and two relieved. There were eleven remaining inpatients after two deaths. There were also sixty outpatient dressings changed, eighteen operations, six major and twelve minor, nine anaesthetics, and three X-Ray examinations.

Rieger also requested for greater permanence of nursing staff as current constant changes militated against the best working of the institution [794]. The Medical Superintendent, Dr. C Rieger, reported for the month ending December 5th that twelve patients remained from the previous month, then there were twenty admis-

sions three discharges, one cured, one relieved and one incurable. There were eighteen remaining inpatients for an average daily bed occupancy of fourteen. The published figures have an error of ten patients. There were also fifty outpatient dressings changed, seventeen operations, four major and thirteen minor, nine anaesthetics, five X-Ray examinations and one confinement general anaesthetics administered [795].

Philomena Fahey died in the Zeehan Hospital shortly after surgery and was the subject of coroner's inquest. According to her father she had been an invalid for nearly four years. Two years previously she spent eight months in Launceston Hospital and had other admissions to Hobart and Zeehan Hospitals. She had spent most of the last two years in bed at home, becoming acutely unwell about four weeks prior to death. Giving evidence, Dr Clarence Oscar Ferrero Rieger, stated that he saw the deceased on November 26th, and had her admitted to hospital on November 29th. He performed an exploratory operation, presumably a vaginal examination, on November 30th and discovered a large uterine mass and advised an operation for removal. He discussed the problem with Dr. Panting on December 4th, who concurred. Rieger operated with the assistance of Dr. Hamilton, on the 11th of December. He commenced giving ethylene chloride and Matron Bessell continued with open ether. A large infected and gangrenous tumour was removed from the uterus. Dr. Hamilton left as the peritoneum was being closed. Fahey appeared well at closure but collapsed ten minutes later and could not be resuscitated in spite of artificial respiration for three-quarters of an hour and administration of stimulants. In Rieger's opinion death was due to heart failure from shock caused by the severity of the operation and the prolonged previous ill-health of the patient. The coroner brought in a verdict in accordance with the medical testimony. An immediate postoperative haemorrhage from a slipped suture would seem as possible a century later. An immediate reopening of the abdomen would be normal today [796, 797].

### 9.17. 1923

The Medical Superintendent, Dr. C Rieger, reported for the month ending January 2nd that nineteen patients remained from the previous month, then there were fifteen admissions, one death and sixteen discharges, fifteen cured and one incurable. There were fifteen remaining inpatients for an average daily bed occupancy of 13.16. There were also one hundred and twenty-nine outpatient dressings changed, fourteen operations, two major and twelve minor, seven general anaesthetics, one X-Ray examination and one confinement [798]. Frank Smith was admitted to the Zeehan Hospital under Dr Rieger with two severely crushed fingers on his left hand sustained in an accident when working in the engine room of the North Mount Farrell Mine [799]. Ellis Bugg, a nine-year-old boy resident in Tullah was admitted to the Zeehan Hospital under Dr Rieger with a severe injury to his hand. He found a live detona-



tor left carelessly on a road and unaware of its danger was trying to use it to replace a broken part of his toy aeroplane when the cap exploded. His first and second fingers and thumb of his left hand were severely damaged and the terminal phalanx of his first finger had to be amputated. Neither reporting paper considers the identity and responsibility of the original owner of the detonator [800, 801, 802]. Frank Emerton was admitted to the Zeehan Hospital with a deep laceration of his left wrist sustained when his axe shaft broke and he fell, landing on the very sharp blade [803].

Thomas Atkinson, a married man aged about fifty, was admitted to the Zeehan Hospital with blast injuries to the upper half of his body. He had been working on the filling operations at Bobadil Creek, near Rosebery, on the Emu Bay railway line, preparing a hole for putting in a shot and he accidentally spilt some powder about near the hole with the result that when he attempted to light the fuse there was a premature explosion. He was conveyed by motor to hospital where Dr. Walmsley operated upon his injuries [804, 805, 806]. Dr. R.E. Walmsley, the current Medical Superintendent reported for the month ended March 3rd, that seventy-one inpatients had been treated with an average daily bed occupancy rate of 11.3, and that one hundred and sixty-nine out-patients had been treated [807].

The Medical Superintendent reported that there were eleven patients remaining from previous month, followed by eight admissions and ten discharges, all cured. Following one death there were eight remaining inpatients for an average daily beds occupancy rate of 8.38. There were also one hundred outpatients for change of dressings, six operations, two major and four minor, two X-ray examinations and one confinement [808]. William Freeman, an elderly resident of Rosebery, was motored to the Zeehan Hospital with a severe leg injury sustained when a truck passed over one of his legs. The limb was so severely crushed that it was necessary to amputate the leg below the knee [809]. John Kennedy, a timber cutter at the Henty River, was admitted to the Zeehan Hospital with a deep laceration to his left foot sustained when his axe glanced of a log and hit his foot. Twelve stitches were required to repair the lesion [810]. William Murray, a miner employed at the North Mount Farrell Mine at Tullah, was admitted to the Zeehan Hospital with severe lacerations to the face and scalp when an earth falls caused a large, jagged fragment of rock to strike Murray on the side of his head [811]. The Medical Superintendent's report showed that there were nine patients remaining from the previous, followed by twenty admissions, fifteen discharges, all cured, and two deaths leaving twelve remaining inpatients for an average daily bed occupancy rate of 9.4. There were also sixty-six out-patients' dressing changed and seven general anaesthetics given [812].

Elizabeth Theresa Jones, aged 20 months, the daughter of Mr. and Mrs. Henry Jones, of Rosebery, died in the Zeehan Hospital under the care of Dr Rieger, and was the subject of a coronial enquiry.

Henry Jones, a miner, residing at Rosebery, deposed that on Saturday evening he was assisting to bathe the children. His daughter, Molly, aged eleven, poured hot water into a small bath, and while Jones was briefly absent, Elizabeth fell into the bath, sustaining severe scalds. First aid was applied, and the little girl was admitted to Zeehan Hospital.

Rieger stated that the child was treated and she passed a good night, but the following afternoon became worse and died, the cause of death being oedema of the lungs following on scalds. The coroner accepted the medical opinion and returned a verdict that the cause of death was accidental. She may have suffered inhalation of bathwater, bronchopneumonia or even hypoproteinaemia from cutaneous serous oozing of protein rich fluid though the time frame is short [813, 814, 815]. The medical superintendent, Dr. C. Rieger reported that for the month, there were ten patients remaining from the previous month, followed by twenty-five admissions and twenty-two discharges, all cured. After two deaths there were twelve remaining inpatients for an average daily bed occupancy rate of 13.96. There were also ninety-one outpatients, fourteen general anaesthetics, fourteen operations, seven major and seven minor and three X-ray examinations [816]. Dr Clarence Rieger performed a post-mortem examination of the body of John Swindale in the Zeehan Hospital and presented the finding to a coroner's enquiry. Rieger had been called to his residence after Swindale had been found deceased in his bed. Swindale was dressed in pyjamas and lying on his left side with no marks of violence. Rieger considered he was between sixty and seventy years of age and found evidence of deteriorating heart failure over the last fortnight. His house-keeper Sarah Edith Annie Sayers said that John Swindale had resided with her for fifteen years. He was a native of England with a wife in Queensland and a manufacturing engineer by profession with a business in Zeehan. He appeared well on retiring to bed but was clearly deceased the following morning. The coroner returned a verdict, in accordance with Rieger's medical testimony, that John

Swindale died of heart disease. [817]. The medical superintendent, Dr. Clarence Rieger, reported that there were twelve patients remaining from the previous month, followed by twelve admissions and eleven discharges, all cured. After one death there were seven remaining inpatients for an average daily bed occupancy of 10.9. There were also ninety outpatients for dressings, six operations, three major, three minor, five general anaesthetics, four X-ray examinations and one confinement [818].

The Zeehan Hospital Nurses serviced the outlying centres of Rosebery, Williamsford and Tullah on a regular basis. They reported a quite month with mainly minor injuries and a few septic throats among the one hundred and thirty-seven patients seen, but the district was mostly free from sickness. However, two patients were referred to the Zeehan Hospital and one, Harry Cox died in the



Zeehan Hospital, age and diagnosis not provided. A pleasant but retiring gentleman, he worked for a good many years at Mount Reid Mine and was an enthusiastic prospector who may well have been exposed to excess metal toxicity. As the eldest son of Mr H I Cox, then present librarian of the Southern Law Society, Harry Cox would not have been elderly [819, 820, 821]. Mr. Peter Erland Carlson, one of the mining pioneers of Tasmania died in the Zeehan Hospital of an unspecified diagnosis. Again a possible case of metal poisoning [822]. William Valentine, a well-known excellent local tailor who boasted that he had not spent one night out of town for thirty years, died in the Zeehan Hospital, age and diagnosis not specified [823]. Mr Erland Karlson, on the oldest Zeehan Residents, died in the Zeehan Hospital. His exact age and diagnosis were not specified [824].

The Medical Superintendent, Dr. Clarence Rieger, reported that there were nine patients remaining from the previous month, then fifteen admissions and thirteen discharges, twelve cured and one relieved. After one death there were eight remaining inpatients for an average daily bed occupancy of 8.65. There were also seventy-eight outpatient dressings changed, four X-ray examinations, three operations, two major and one minor, two general anaesthetics, and two confinements [825].

#### 9.18. 1924

The thirtieth year of the Zeehan Hospital commences. A major source of information, the Zeehan and Dundas Herald no longer publishes, though the Burnie Advocate appears to have taken over as a source of news from Zeehan. There are many less injuries from the mines than a decade earlier. Charles Bird was admitted to the Zeehan Hospital with an injury to his left foot and ankle sustained at Tullah when a truck containing Bird and some children crashed into another truck containing firewood [826]. The Medical Superintendent's report showed that the twenty inpatients and one hundred and seventeen out-patients were treated for the month, while fifteen general anaesthetics were given and the average daily bed occupancy rate was six [827]. Charlie Garrett, a small boy, was admitted to the Zeehan Hospital having severely injured his right leg and hip when he fell over while playing on the road near the hospital [828].

Mrs. George Dunkley, died suddenly in the Zeehan District having become seriously ill only two or three days before her death. Her age and diagnosis were not published. She had resided in Zeehan for many years, and was the wife of Mr. George Dunkley, the principal of the firm of Dunkley Bros. Pty. Ltd., wood and timber merchants [829].

A twelve-year-old boy who had been admitted to the Zeehan Hospital Infectious Diseases Ward a fortnight previously with typhoid was recovering well and there had been no further cases [830]. Three more patients were sent to Zeehan Hospital by the nurse visiting Rosebery Williamsford and Tullah, their conditions being unstated [831].

The Medical Superintendent, Dr. C. Rieger, reported that there were eight patients remaining from the previous month, followed by twenty admissions and twenty-one discharges, twenty cured and one incurable, leaving seven remaining inpatients. There had been one general anaesthetic and one major operation, seven X-Ray examinations and thirty-eight out-patients' dressings changed [832]. The Medical Superintendent, Dr. C. Rieger, reported having treated thirty inpatients and eighty outpatients, and having given eight general anaesthetics [833].

Max Tessier, a young boy, died from scarlet fever in the Zeehan Hospital. Strict isolation measures were observed and no further cases had been reported [834]. A local identity, Mrs. Hannah Quigley collapsed and died unexpectedly in the Zeehan Hospital having been apparently in good health. Her age and diagnosis were unstated though she left an eighteen-year-old son. The widow of H. E. Quigley who died nineteen months previously, Hannah was the licensee of the Caledonian Hotel [835].

Mr. Thomas Charles Goodall died from burns in the Zeehan Hospital. He suffered severe burns to his face, both hands, and left leg in an accident in his own home and death was considered due to shock and collapse. Goodall was a well-known mining expert who had managed several local mines. He was aged either thirty-three or fifty-five and he left a widow, three sons and two daughters [836].

Mr Bull, a member of the Electrolytic Zinc Company's Zeehan staff, was reported to be recovering well following unspecified surgery in the Zeehan Hospital and expected to be discharged shortly [837]. The Medical Superintendent, Dr. C. Rieger, reported that there were eight remaining inpatients from the previous month, followed by thirteen admissions and thirteen discharges, ten cured and three relieved. Following two deaths there were six remaining inpatients for an average daily bed occupancy rate of 5.3. There had been five operations, one major and four minor with five general anaesthetics, and sixty-six outpatients [838].

Mr. James Hunt, a long term resident of Zeehan, died a week after admission in the Zeehan Hospital in spite of treatment having been in deteriorating health for some time. His age and diagnosis were not given [839].

The Medical Superintendent, Dr. C. Rieger, reported that there were six remaining inpatients from the previous month, followed by thirteen admissions and sixteen discharges, fifteen cured and one relieved. Following one death there were two remaining inpatients for an average daily bed occupancy rate of 8.7. There had been two operations and sixty-one outpatients [840]. During the year 209 patient were treated [841].

The Medical Superintendent reported that there were two inpatients remaining from the previous month, then ten admissions and four discharges, all cured 4, for an average daily bed occupancy rate of 3.7, plus two operations and thirty out-patients [842].

Mrs Hutchins died in the Zeehan Hospital in spite of a brief but false rally having been ill for several weeks with an unspecified disease. Her age was unstated, thought she left two school children, Dick at present attending the Church Grammar School, Launceston, and their young daughter, Mary. Her husband was the manager of the Western Division of the A.M.P. Society, and her brother was Colonel Lord, Commissioner of Police [843].

## 10. The Fourth Decade 1914 – 1924

September 5th, 1924, was the thirtieth anniversary of the opening of Zeehan Hospital. The major medical problem of the decade was the influenza pandemic of 1918-1919. This H1N1 subtype caused up to fifty million deaths worldwide. There were at least sixty-five cases in Zeehan with at least two deaths. Other infectious diseases were less frequent than previous decades. There was one case of pertussis who died, one of scarlet fever who died, one of typhoid, four of diphtheria of whom one died, and sixteen of pneumonia of whom two died.

There were four deaths from miner's phthisis or silicosis. This condition was not reported in the first two decades of mining in Zeehan but obviously requires prolonged exposure to dust to develop. There were seven admissions with axe injuries including two in children from unsecured very sharp blades. Accidents in the mines and associated rail and timber industries remained frequent with one fatal admission and twenty non-fatal admissions. None were deemed compensable; none were seen as anything but an unpreventable accident.

There were sixteen fatalities in the hospital with no documented diagnosis, some acute, some after progressive illness. Obviously, degenerative diseases of ageing, natural causes are the likely cause, but metal poisoning may have contributed. There were two deaths with renal disease where lead poisoning is a definite possibility. Metal toxicity remained unreported, undiagnosed or possibly ignored. The medical superintendent's abbreviated report stated that fifteen inpatients and twenty-four outpatients had been treated [844].

Mr T.V.T. 'Davy' Clyde died in the Zeehan Hospital of an unspecified condition. A resident of Zeehan for thirty years, he had been on the hospital committee for years and was dedicated to all aspects of advancing public matters in town [845].

Mrs. J. Edwards and Mrs. Pybus were admitted to the Zeehan Hospital for serious operations which were successfully performed by Dr. Rieger and Dr. Hamilton. No further details were given [846].

### 10.1. 1925

Bob Nicholls died in the Zeehan Hospital from pneumonia and pleurisy complicating chronic miner's phthisis within twenty-four hours of admission. Born in Ireland he had worked in Heemskirk and New Zealand in mining and the dairy industry. He left a widow and ten children [847,848].

Martin Berechree was admitted to the Zeehan Hospital under the care of Dr Rieger complaining of deteriorating hearing and a painful ear. An early discharge with immediate relief was achieved thanks to the skill of Rieger in identifying and removing the ear wig that had taken up its dwelling in the ear drum [849]. The Medical Superintendent reported there had been nineteen inpatients for an average daily bed occupancy rate of 7.94. There had been six major operations, ten general anaesthetics and seventy-six outpatients [850].

The Medical Superintendent reported that during the month sixteen patients had been admitted and ten discharged. There were eight operations, three major and five minor and sixty-two outpatients treated [851]. Mr J. O'Brien was admitted to the Zeehan hospital suffering from pneumonia [852].

The Medical Superintendent reported that there had been twenty-three inpatients and seventy-one outpatients for an average daily beds occupancy rate of 9.07. There were also eight operations, three major and five minor [853].

The Medical Superintendent reported that eighteen patients had been admitted and twenty-one discharged. There had been ten operations, seven major and three minor, and nine general aesthetics [854]. Dr. Clarence Rieger resigned his position as surgeon to the Zeehan Hospital and will leave in two months. The News considered him to be one of the most attentive medicos in the history of the West Coast [855].

Mr A. Rawnsley was admitted to the Zeehan Hospital with a fractured left humerus sustained when he slipped on greasy turf during football practice for the Railway Team and fell heavily [856].

Darcey Turley was admitted to the Zeehan Hospital with a fractured wrist suffered from a throw while playing with other boys. Obtaining transport on a Saturday afternoon was a difficult but not insurmountable problem with the aid of company cars [857]. The Medical Superintendent reported that there were twenty-four admissions, fifteen discharges, and sixty-three outpatients seen during the month [858].

Jimmy Blair died in the Zeehan Hospital of pneumonia. A pioneer of the West Coast, he became sick at Mount Reid and his condition had deteriorated to far by the time he was admitted [859]

Dr W.A. Fleming, the newly appointed surgeon, gave a demonstration of the Zeehan Hospital's new £500 X-Ray plant to the hospital board. The unit was of the very latest type, combining all the newest radiographical appliances, and the test was entirely satisfactory [860].

Funds were raised for Mr. C. Lamb at a football games as he has been confined in the Zeehan Hospital for some time suffering from pneumonia [861]. Dr. A. T. Hamilton, of Strahan, recently returned from holiday, assisted Dr. A. Fleming in a major operation at the Zeehan Hospital. No further details were published [862].

Mr. Martin Connell, a West Coast mining veteran was admitted to the Zeehan Hospital. No clinical details were published [863].

Dr. A. Fleming presented the monthly hospital figures following a cordial welcome from the chairman. There had been twenty admissions, twelve discharges and five operations, two major and three minor, leaving twelve remaining inpatients. Fleming considered the X-Ray machine and the new midwifery ward to be entirely satisfactory, but strongly advised the addition of another trained nurse. Mrs Millhouse, who had lived on the coast for thirty-five years, died in the Zeehan Hospital after a lengthy unspecified illness [864].

There were two deaths in the Zeehan Hospital. Mr. Charles Lamb, although stated to be a very old resident, was still employed at the Hercules mine. He had recently recovered from an attack of pneumonia but succumbed to what was described as Bright's renal disease, a post streptococcal infection condition, but again a miner of many years may well have also had lead poisoning contributing to the kidney problem.

The other was Mr. P. Westerway, a former engine-driver and employee on the ferry service between Hobart and Bellerive. He was working at Williamsford and had a seizure. Though transferred to Zeehan Hospital he died later. No further details are given [865]. Mrs. R. F. Hetherington, of Renison Bell, was reported to be convalescing well after seven weeks in the Zeehan Hospital and was expected to be fit for discharge in a fortnight. Her diagnosis was not given [866].

Charles Worsley, a young man, was admitted to Zeehan Hospital with a fractured leg, sustained when he fell down an unseen shaft while prospecting near Rosebery. He was forced to crawl a mile before he was able to get assistance and was then brought to hospital by rail motor [867].

Emeo Antenen and Johan Senn, two prospectors recently arrived from Switzerland, were admitted to the Zeehan Hospital under Dr Fleming. They had intended to purchase some osmiridium but had not appreciated the wildness and remoteness of the Tasmanian bush. The mistakenly assumed a named place would be populated! Their boat capsized in the Pieman River with loss of all their possessions. They then had to trek across country for several days arriving in Zeehan exhausted, their clothes cut to ribbons by the bush, hypothermic and malnourished. Senn had to carry his older partner some of the way. Fleming sent Senn to hospital and found both his feet badly lacerated and frost-bitten, and his hands and arms were badly cut. He was weak from want of food. Antenen's condition was less severe and he improved rapidly with fluids, food and warmth [868,869].

The annual report for Zeehan Hospital showed that one hundred and sixty-nine inpatients, ninety-seven males and seventy-four females, and six hundred and seventy-nine outpatients had been treated in 1924 and that the average daily bed occupancy rate was

ten. There had been seventy-five operations, four thousand, seven hundred and sixty-four consultations and six thousand, three hundred and fourteen prescriptions dispensed for a daily average of 17.29. [870,871]. Master Tom Moyle, eldest son of Mr. and Mrs. W. Moyle, underwent an appendectomy in the Zeehan Hospital and was reported to be progressing satisfactorily [872].

Mr. James Donald, a fifty-year-old resident of Tullah and a native of Scotland died in the Zeehan Hospital after an unspecified illness extending over many months [873]. The infant son of Mr. and Mrs. Flight died in the Zeehan Hospital as did their previous baby, perhaps we would consider today of SIDS [874].

Mr. C. A. Owen, aged seventy-five, who was seriously burned in a recent fire, died of his injuries in the Zeehan Hospital. Born in Huddersfield, England, he emigrated to Australia in 1877 and worked as a watchmaker and jeweller. Widowed five years previously, he leaves two daughters [875].

The Medical Superintendent reported that there were twenty admissions and twenty-two discharges for the month. Six operations were performed, two major and four minor and five X-ray examinations [876].

Albert Midson, a fifty-seven-year-old miner and engineer, died in the Zeehan Hospital two weeks after he became ill in his mine at Dundas. He initially improved after surgery, but then deteriorated and died. No diagnosis was given [877].

John Turley, engine driver, was admitted to the Zeehan Hospital with a scalp and abrasions near the right ear. The back end of one of the big suction gas engines that drive the North Mount Farrell Mine company's plant shattered and Turley was struck by a piece of flying broken iron, causing shock and slight concussion. The Advocate was pleased to announce that the mining operations should continue uninterrupted. Turley must have recovered well as two months later he was organising music for a carnival [878,879].

George Tolner and Charles Richardson were admitted to the Zeehan Hospital following workplace accidents. Tolner suffered from shock and superficial lacerations to his knee and leg from an earth fall at the North Farrell Mine and Richardson had severe cuts to his foot and ankle from an axe catching a twig in a woodchopping accident at the Williamsford tin mine.

Master Teddy Moyle and Mr. Parkinson Johnson were both admitted with pneumonia. Dr. W. A. Fleming, since taking charge, considered he had a busy time and was very much over-worked. He thought the board was fortunate in having such a capable matron and staff to assist him and that the daily number of patients for some time past has been a record [880, 881].

The Medical Superintendent reported that there were twenty-five admissions and eighteen discharges for the month. Nine operations were performed, four major and five minor and six confinements [882]. The Medical Superintendent reported that there were sixteen patients admitted, and fifteen discharged leaving thirteen in-

patients remaining at the end of the month. Five minor operations were performed [883].

A boy named Webster was admitted to the Zeehan Hospital suffering from a fractured leg sustained when he fell whilst playing in the school recreation ground [884].

Walter Mullins was admitted to the Zeehan Hospital with fractures of the skull, clavicle and wrist and with internal injuries. He was working for Mr. J. O'Brien at Dunkley Town when he had a serious accident. He was loading a truck with timber when he and his load were thrown out and down an embankment. He told his workmate, Seymour, that the truck 'got away from him'. Two days later he was unimproved [885,886].

Mr. W. K. Whelan was admitted to the Zeehan Hospital for a serious operation. His postoperative condition was said to be satisfactory [887].

Mr. Martin Kean was discharged from the Zeehan Hospital after a few days as an inpatient with an unspecified condition. Dr Fleming removed Mr Harry Gannon's infected thumb nail in the hospital to prevent systemic sepsis [888].

## 10.2. 1926

Mr W. K. Whelan has been discharged from Zeehan Hospital to return home to Tullah having been an inpatient for seven weeks with an unspecified condition. He will not be fit to return to work for some time [889].

Mr. William Bishop died in the Zeehan Hospital with acute pneumonia secondary to long standing phthisis. He had worked in various mines on the West Coast since 1883, most recently in Tullah. At this time, Tasmania was the only State in the Commonwealth which had not done something for the relief of the unfortunate sufferers of minors' phthisis [890,891,892].

Mr. J. McGurk, of Rosebery, was admitted to the Zeehan Hospital for minor surgery [893]. The Medical Superintendent reported that there were thirty admissions and twenty-three discharges, all cured, leaving seventeen remaining inpatients. There had been eight operations [894].

The Medical Superintendent reported that there were twenty-seven admissions, twenty-six discharges, leaving twenty-six remaining inpatients. Eight operations were performed, one major and six minor, and there were a forty-three outpatients [895].

Mrs. L. G. Thorpe died in the Zeehan Hospital with spinal tuberculosis in spite of surgery undertaken by Drs Hamilton and Fleming. She was only 20 years of age at the time of her death and had been married only ten months [896].

The Medical Superintendent reported that there were fifteen remaining inpatients at the start of the month followed by seventeen admissions, twenty discharges, fourteen cured, four relieved and two incurable, and two deaths leaving ten remaining inpatients for an average daily bed occupancy rate of thirteen. Seventy-two outpatients were treated and ten operations, two major and eight

minor, performed [897,898].

L.H. Long was admitted to the Zeehan Hospital yesterday suffering from severe cuts and bruises and possibly a fractured right leg. He was driving a horse supplying Tullah with wood. When he released a wood truck caught in a cutting it moved and jammed Long against the bank [899].

Mr R. Gillow was admitted to the Zeehan Hospital with a severe bout of influenza. An epidemic was spreading rapidly in the Tullah district, and in some families practically everyone has caught the virus infection, some quite seriously. School attendance was markedly reduced [900].

Arthur Edgerton, the little son of Mr. and Mrs. W. Edgerton of Rosebery, died in the Zeehan Hospital. He had been admitted four weeks previously with a severe attack of acute appendicitis and failed to recover after an appendicectomy [901].

Mrs Agnes Holtum died in the Zeehan Hospital from influenza. She had been deteriorating at home in Tullah for a fortnight prior to admission. Her age was not stated but she left a husband and four young children [902,903].

The influenza epidemic continued to rage in the Tullah district, practically every home had a number of victims and few men were at work at the mine. Many had pneumonia and both Mr. R. Johnstone and Mrs. J. Fulford required admission to the Zeehan Hospital [904].

James Maggs, aged nine, was admitted to the Zeehan Hospital with a severe leg injury for which he was given a chloroform anaesthetic and many sutures were inserted into the laceration. He had been playing with other boys in a railway trolley on the new Sterling Valley line when another pushed the trolley, James jumped out and the wheels passed over his leg. He was cut from knee to the ankle almost down to the bone, his leg was partially crushed and severely bruised [905,906].

Arthur Walters was admitted to the Zeehan Hospital with severe bruising of the chest and arm sustained when he was wood sledging and thrown against a tree stump with great force [907].

Mr. H.A. (Tas) Bell died in the Zeehan Hospital from a cerebral haemorrhage following a fall down a flight of stairs at Mr J.A. Robertson's shop. Dr. Fleming was summoned and administered a stimulant, but Bell initially conscious, lapsed into unconsciousness, and never rallied. A coroner's enquiry followed in which Fleming stated that Bell's post-mortem disclosed a fracture of the skull on the right side from the vertex to the base with an intracranial haemorrhage as the cause of death. The coroner concurred with these remarks, and returned a verdict that death was accidental. He added that he did not consider the stairway reasonably safe, and it required some protection [908,909].

Although the influenza epidemic in Tullah had abated, other forms of sickness were common. Teddy Johnson, the young son of Mr. R. Johnson died in the Zeehan Hospital with meningitis. Four other

residents required admission to the hospital, one of whom Mr. L. Godwin was seriously ill. Sister Munck who had been working night and day, also became unwell and needed a break. Mr. M. Thornton has gone to the mainland in the hope of recuperating after his recent illness [910].

Mrs. H. A. Thomas was an inpatient in the Zeehan Hospital for several weeks with an unspecified condition but had recovered sufficiently to travel to Adelaide after discharge [911].

M. A. Maggs, of Tullah, was admitted to the Zeehan Hospital under Dr Fleming with another injury caused by an axe. When chopping wood, a large splinter flew up and became embedded in his eye necessitating careful surgical removal [912]. The annual figures for Zeehan Hospital in 1925 were of two hundred and ninety-two admissions making a total of three hundred and three cases, one hundred and sixty-three males and one hundred and forty-nine females, including the eleven remaining inpatients from the previous year. Two hundred and fifty-three were discharged relieved or cured, eleven were deemed incurable, eighteen inpatients remained at the end of the year and twenty-one died. The average daily bed occupancy was 15.74

There were thirty confinements, twenty-two accidents, seven infectious cases and a mixture of medical and surgical patients. One hundred and twenty-three operations were performed, twenty-eight major and ninety-five minor. One thousand, six hundred and sixty-seven outpatients were seen [913].

The medical superintendent reported that there were twenty patients remaining at the end of the month, followed by twenty discharges, nineteen cured and one relieved, for an average daily bed occupancy rate of fifteen. There were sixteen operations performed, five major and eleven minor. There was one confinement and fifty-three outpatients treated [914].

Mr. D. Connolly was an inmate of the Zeehan-Hospital for several weeks with an unspecified diagnosis and reported to be progressing well [915,916].

Mr. William Cady died in the Zeehan Hospital from miners' phthisis. His condition had been prolonged though his final illness and deterioration was acute [917].

The medical superintendent, Dr. W. A. Fleming, reported there were eighteen patients remaining in hospital from the previous month, followed by twenty-five admissions, twenty-five discharges, twelve cured, twelve relieved and one incurable and four deaths leaving fourteen remaining in hospital for an average daily bed occupancy rate of 18.3. There had been twelve operations, four major and eight minor, two confinements, three X-Ray examinations and fourteen outpatients treated. In the twenty-first century it is hard to conceive that only three of twenty-five admissions would require imaging [918].

Messrs. D. Connolly, E. Taggart and H. Jones, all inpatients of the

Zeehan Hospital with unspecified problems were reported to be making satisfactory progress [919].

The Medical Superintendent, Dr. W. A. Fleming, reported that for the month ending November 30th, there were fourteen patients remaining from previous month, followed by thirty admissions and twenty-three discharges, thirteen cured, eight relieved and two incurable, leaving twenty-one remaining in hospital for an average daily bed occupancy rate of 18.5. There had also been nineteen operations, two major and seventeen minor, five X-ray examinations, four confinements and forty-five out-patients [920].

### 10.3. 1927

Mr. Allan Kelly, a former underground foreman to the North Mt. Farrell Company, died at the Zeehan District Hospital. His age and cause of death were not specified but occupational conditions are obviously possible [921].

Mr. James Harrison, formerly Inspector of Mines on the West Coast, died at the Zeehan District Hospital at the advanced age of eighty-two of an unspecified disease, having been unwell for over a year. Born at Drogheda, North Ireland, he lived in England, India and New Zealand before arriving in Australia. He drilled for diamonds in Ballarat before being appointed supervisor of diamond drilling in Tasmania, and then Inspector of Mines. His cause of death could have been any degenerative or toxic condition [922,923].

Mr. W. King was admitted to the Zeehan Hospital with a small broken bone in his leg, possible the patella, but recovered rapidly and was discharged after some eleven days in hospital [924,925].

John Fulford was admitted to the Zeehan Hospital with a severe laceration of the leg. While boring in a mine, a large lump of rock fell on his leg and tore some flesh from the bone [926].

The Medical Superintendent reported that there were seventeen inpatients remaining from December, followed by twenty-seven admissions, twenty-eight discharges, twenty cured and eight relieved, and two deaths leaving fourteen inpatients at the end of January for an average daily bed occupancy of 16.3. There were also thirty-nine outpatients [927]

Mr. John Kalmbach, one of the early mining pioneers, died in the Zeehan Hospital from miner's phthisis aged sixty-two. He arrived in Heemskirk thirty-nine years previously and had worked as a miner and prospector ever since. He had been unable to work for some two years, living with his sister in the Commercial Hotel, and experienced a sudden deterioration before his death [928,929,930].

The Medical Superintendent reported that there had been twenty-four admissions and seventeen discharges, all cured, leaving eleven remaining inpatients for an average daily bed occupancy rate of 17.3. There had also been fourteen operations, three major and eleven minor, and fifty outpatients [931].

Mary and Matthew Jackson were admitted to the Zeehan Hospital with bullet wounds under Dr Fleming. The couple migrated from England to Victoria where she left him because of mistreatment. He deprived her of food and threatened to shoot her, so she moved to Zeehan where she took a position as housekeeper to the Kerslake family. Matthew arrived by train and when she refused to accompany him he suddenly pulled out a revolver, shot her in the left arm three or four times, then shot himself through the temple. He died shortly after admission to hospital, but Mary's wounds were not serious [932,933,934].

The Medical Superintendent's monthly report stated that there were twenty-nine admissions twenty-five discharges and two deaths for an average daily bed occupancy rate of 14.7. There were also eighteen operations, two major and sixteen minor, four X-Ray examinations and fifty-one outpatients [934].

The body of Wilfred Rossington, aged thirty-eight, was taken to Zeehan Hospital after he was electrocuted on the Rosebery-Williamsford transmission line pending a coronial inquiry. Rossington with two other workmen were engaged between Zeehan and Rosebery replacing telephone wires, and a loose wire came into contact with the live power line. Rossington was heard to groan and collapse, he was briefly breathing heavily and unconscious, but efforts at resuscitation even after communication with a doctor and the police were unsuccessful. While the wiring and earthing may have been unsafe, the standard coronial verdict of unfortunate accident was pronounced [935,936,937].

The Medical Superintendent reported that there were thirty-five admissions and twenty-five discharges, sixteen cured and nine relieved for the month for an average daily bed occupancy rate of 15.1. There had also been thirteen operations, four major, and nine minor, and fifty-one outpatients [938].

A coroner's inquest was held into the death of John Kenny aged about eighty. He had recently spent nearly two months in the Zeehan Hospital with failing health of indefinite cause. He returned to his timber hut behind the Hotel Cecil where he died in a fire perhaps caused by his own candle. A verdict of accidental death was returned [939].

Mrs. J. J. Hill, aged thirty-nine, died suddenly in the Zeehan Hospital of an unspecified disease having previously been in excellent health leaving seven children, the youngest aged only four. Mrs Lomasney was admitted to the Zeehan Hospital with an unspecified condition [940].

Mr. W. Killalea was admitted to the Zeehan Hospital with a broken leg sustained in an accident at Tullah. Mr. Winakill was discharged from the Zeehan Hospital after a lengthy but unspecified lengthy illness. Mr. C. R. Lynch was an inpatient in the Zeehan hospital after major surgery and Mr W. Dixon was an inpatient with an unspecified problem [941]. Mr. Alfred Ernest Edwards died in the Zeehan Hospital aged fifty-eight having been an inpatient for

two months with heart disease. He had previously been an accomplished footballer of one of the football codes [942].

Messrs Cornelius and Thomas were admitted to the Zeehan Hospital with injuries sustained in an explosion at the Electrolytic Zinc Company's mine at Rosebery. A misfire the previous day had left some unsafe undetonated explosive in the mine. Cornelius was severely injured including the loss of both eyes. Thomas had only minor injuries. A third worker, Mackintosh did not require hospitalisation as he was suffering from shock and recovered rapidly, though he had only just resumed work after being injured by a previous explosion [943,944].

The combined figures of the two newspaper reports fail to add up. The Medical Officer reported that there were seventeen patients remaining from the previous month, followed by twenty-eight admissions, seventeen discharges and three deaths leaving a reported fifteen remaining inpatients when twenty-five appears correct for an average daily bed occupancy rate of 17.9. There had been fifteen operations one major and fourteen minor and fifty-one outpatients treated [945,946].

Annual figures for the Zeehan Hospital were a new record. There were eighteen inpatients at the start of the year, then three hundred and fourteen admissions for a total of three hundred and thirty-two. Three hundred and four were discharged, two hundred and ninety-six cured or relived, eight incurables, and eleven died leaving seventeen remaining inpatients.

There were seventeen accident cases, eighteen of appendicitis, eleven hernias, five cancers and forty-one confinements. The remainder were various surgical and medical cases. The average daily bed occupancy rates were 17.53 for males and 10.16 for females. Males had longer hospitalizations averaging twenty-two days as opposed to an average of 15.6 for females though the average ages at discharge were similar, males 34.76 and females 36.72 years.

Men succumbed to illness more rapidly than women averaging 5.22 days till death, while females survived 26.5 days on average. These figures do not mention severity of illness, though the men who died were older at 60.5 compared with the age at death of women at 49.

The average age of children at discharge was boys 5.85 and girls 6.22, but the average age of a child at death was only 0.8 years. There were one hundred and seventy-one surgical operations, thirty-seven major, and one hundred and thirty-four minor. There were one hundred and sixty-six X-ray examinations and one thousand nine hundred and forty-three outpatients treated, mainly for dressings [947]. Mrs. W. Clark was admitted to the Zeehan Hospital, diagnosis and age were not stated [948].

The Medical Superintendent reported that there were sixteen patients remaining from the previous month, followed by twenty-eight admissions, twenty-seven discharges, seventeen cured, ten relieved and three deaths. There were also seventeen opera-



tions, three major and fourteen minor, fifteen X-Ray examinations and one hundred and forty-three outpatients [949].

The Medical Superintendent reported that there were fifteen patients remaining from the previous last month, followed by twenty-three admissions and twenty-four discharges, leaving fourteen remaining inpatients for an average daily bed occupancy rate of 14.3. There were twenty-one X-ray examinations, fifteen operations, four major, eleven minor, and ninety-four outpatients [950,951].

Mr. J. Copping was admitted to the Zeehan Hospital with very severe injuries sustained when crushed between two logs. He was rolling a large log when it slipped back and pinned him against another one. His chest was very badly crushed, and his arm fractured in several places [952].

Zeehan Hospital had twenty-five inpatients with an average daily bed occupancy rate of 19.11 through October [953].

Mrs. John Smith died under the home care of Dr. Fleming, and matron and nurses of the Zeehan District Hospital. Her age and diagnosis were not specified but she had suffered from poor health for a couple of years. The choice of home-based terminal care was uncommon a century ago [ 954].

The Medical Superintendent reported that there had been twenty-three admissions and twenty-two discharges, fifteen cured and seven relieved leaving nineteen remaining inpatients. There had been sixteen operations, two major, fourteen minor, seven X-ray examinations and nineteen out-patients treated [955].

Mr. Julian Patrick Cronley, age fifty, died in the Zeehan Hospital with an acute severe gastro-intestinal haemorrhage. He managed the Zeehan Grand Hotel and had worked in hotels for many years suggesting that bleeding oesophageal varices and cirrhosis may explain his catastrophic fatal haemorrhage. A popular sports enthusiast, he left a wife and one son [956,957].

Two men were admitted to the Zeehan Hospital with injuries sustained from accidents. An elderly man, George O'Brien, fell in Mainstreet, inflicting a fairly large cut on the back of his head. A. Wells, a young man, was log-squaring with an axe at the Henty siding yesterday, when he cut deeply into his left leg below the knee [958].

#### **10.4. 1928**

The Medical Superintendent's reported that there were nineteen patients remaining from the previous month, followed by twenty-one admissions and twenty-one discharge, sixteen cured, five relieved, for an average daily beds occupancy rate of 18.10. There were twelve operations, four major, eight minor, three X-Ray examinations, and eighty-six outpatients treated [959].

Clarence Hodgetts, the youngest son of Mr. and Mrs. J. Hodgetts died in the Zeehan Hospital about two months after admission suffering from meningitis. A sad picture of severe unresolving brain

damage only eight years before the first sulphonamide became available is implied [960].

Mr. John Reynolds, a local businessman, had an operation in the Zeehan Hospital and was recovering well though no further details were given [961]. Constable L. Whitton was admitted to the Zeehan Hospital suffering from septic poisoning in the hand [962].

Wilfred Leary was admitted to the Zeehan Hospital with a severe laceration to the left thigh sustained when his can't hook slipped of a log while timber-getting in the vicinity of the Henty River [963].

Gordon Woods was admitted to the Zeehan Hospital with lacerations to his leg sustained when struck by a falling spar while working on a road near Tullah. His injuries were not serious [964].

The Medical Superintendent's stated that eighteen patients remained from the previous month, followed by twenty admissions, sixteen discharges, eleven cured, five relieved, and one death leaving twenty-one remaining inpatients for an average bed occupancy rate of 18.6. There were thirteen operations, three major, ten minor 10, three X-ray examinations and seventy-eight total out-patients treated [965].

Mr. A. McGill Brown, an eighth-year-old ironmonger, died in the Zeehan Hospital of an unspecified condition [966].

Max Brumby was admitted to the Zeehan Hospital following a riding accident. He was thrown from his horse which then rolled on him. He had a severely bruised hip and was unconscious on admission, but soon regained consciousness. [967]. Mrs Annie E. Albury died in the Zeehan Hospital after a brief unspecified but unexpected illness. Her age was not published though she was a widow [968].

Mr. James Joseph Toomey, forty-five-year-old licensee of the Beach Hotel, Burnie, died in the Zeehan Hospital of acute pneumonia while on a visit to Zeehan, having become unwell only a few days previously [969, 970].

Mr J.O. Evans, aged sixty-nine, described as an elderly resident, died in Zeehan Hospital of pneumonia. Previously a butcher for many years, poor health had enforced his retirement [971].

Gwen Sabelberg, aged eighteen, and Leslie Tomkins, age twenty-two, were admitted to Zeehan Hospital under Dr Fleming with bullet wounds. Tomkins approached the girl walking with her sister, Lucy, in Zeehan Main Street, having aroused his jealousy by proposing to attend the evening Anzac Ball with another youth. When she rejected his advances, he produced a small revolver and fired two shots, one bullet passing through her chest, just missing the heart and lungs, and the other injuring her cheek. He then turned the revolver on himself and fired at his head. The bullet entered his temple, rendering him unconscious. Both fell, but assistance was quickly available, and they were conveyed to the hospital. Gwen's wounds were considered most fortunately not serious but he was in a critical condition. Subsequently Tomkins improved and appeared

before Mr. James Ward, J.P., on a charge of having wounded Gwen Sabelberg with intent while still in custody.

Dr. William Albert Fleming, as the first witness detailed the wounds. He saw Tomkins initially in Mainstreet dazed and bleeding from the right temple. Following admission to hospital a skull X-Ray revealed two foreign bodies. The first was a small dark object behind and to the right of the bridge of the nose. Fleming was able to remove a bullet from his nose. The second was situated to the left of the brain, two inches from the top of the skull. No attempt has been made to remove the bullet from the brain.

Fleming saw Tomkins the day before the hearing He considered his condition was still reasonably mentally sound, but he had had slight paralysis on the right side of the face and in the right hand.

Fleming also admitted Gwendoline Sabelberg to hospital. He stated that that her general condition was good, with very little evidence of shock. She was bleeding from wounds on the face and chest. The face wound was small, penetrating one left cheek, and there was a small laceration on the right side of the bridge of the nose, but a small penetrating wound was present on the left breast. Fleming X-rayed her chest revealing a small dark object in the left breast, suggesting a bullet an X-ray examination of the face did not show any bullet. He performed an operation and removed the bullet which had penetrated one and a half inches. Gwen made a good recovery, and was discharged after ten days, unlikely to suffer a permanent disability through her wounds.

Tomkins was committed for trial at the next criminal sitting of the Supreme Court at Devonport. Bail was refused [972,973,974].

Mr Simpson was admitted to the Zeehan Hospital under the care of Dr Fleming with a head injury. A piece of rock had knocked him unconscious at the Rosebery Mine. He was seen in the Rosebery casualty department by Sister Wheatland and Fleming, then transferred to Zeehan [975].

The Medical Superintendent reported that there were fifteen patients remaining in hospital at the end of March, followed by thirty-two admissions, twenty-four discharges, eighteen cured, six relieved and three deaths for an average daily bed occupancy rate of 19.5. There were also eight operations, three X-ray examinations and ninety-four outpatients treated [976].

Sister Wheatland was admitted to the Zeehan Hospital under the care of Dr Fleming with appendicitis. She had continued nursing in spite of poor health for several days and was reported to be recovering well after an appendicectomy [977].

Mr. W. Guerin, aged fifty-nine died in the Zeehan Hospital of a prolonged but unknown condition. He had worked in the area for nearly forty years mainly as a teamster [978].

Mr. Martin Long, aka Martin Smith, aged 71, died in the Zeehan Hospital of an unspecified condition, though he had worked in the mines of the area for many years, most recently with osmiridium.

Osmium tetroxide is a highly poisonous chemical though Smith's exposure was unknown [979].

Mr. J. L. Howard died in the Zeehan Hospital with a cerebral haemorrhage. He had worked in the timber industry in the area for many years. He had recently spent two months in Melbourne addressing some unspecified health issue and claimed to be feeling extremely well. However, on the day of his death he went to lie down feeling unwell and was found in his room unconscious. He never regained consciousness [980,981].

Mr. Pike accidentally broke his leg at Rosebery about 6.30 p.m. on Saturday. No rail motor or other transport was procurable until noon on Sunday, and the unfortunate man did not arrive at the Zeehan Hospital till 3.00pm on Sunday, nearly twenty-four hours after his accident. Dr. Fleming had been requesting improved transport for sick people for months [982].

Mr. Thomas Wright, aged eighty-four died in the Zeehan Hospital of an unspecified condition [983].

Dr W.A. Fleming reported an outbreak of diphtheria in Zeehan. Twelve cases had been reported in the past three months. Seven of these had been admitted to hospital from the top end of the town, five of them from Fowler Street alone. There were still five diphtheria patients in the hospital. Every possible precaution was being taken to prevent a further spread of the disease. Fortunately, no deaths had occurred [984].

Mrs. Hubbard, an elderly resident who had been in deteriorating health for a few days, was admitted to the Zeehan Hospital under the care of Dr Fleming, suffering from pneumonia. A fortnight later she was reported to be nearly recovered and about to be discharged [985,986]. Mr Jim Ryan was reported to be recovering well following a non-specified operation [987].

The Zeehan Hospital annual report revealed there were seventeen remaining inpatients, thirteen males and four females from the previous year, followed by three hundred and two admissions, one hundred and fifty-seven males, one hundred and forty-five females for a total of three hundred and nineteen patients. Two hundred and eighty-six, one hundred and forty-nine males, one hundred and thirty-seven females were discharged cured or relieved. Fifteen patients, ten males and five females died, and nineteen patients, twelve males and seven females, remained at the end of the year. There were fifty-nine accident cases, ten of appendicitis, nine hernias, two cancers and thirty-nine confinements. The averages daily bed occupancy rate was 18.8, males 10.86, females 7.22. The average length of stay was 20.07 days, and the average admission length for those who died was thirty-four days.

The average age of patients discharged was, adults, males, 30.53, females. 24.46; children, males, 7.82; females, 8.16. The average age of patients who died was, males 62.65, females, 61.53, children, males 0.92: females, 0.56. There were one hundred and fifty-nine surgical operations, forty-two major, one hundred and

seventeen minor. One hundred and sixty-three X-ray examinations were taken and two thousand five hundred and fifty-eight outpatients were seen, mainly for dressings. The infectious disease ward was open for fourteen weeks for nine cases of diphtheria and two of scarlet fever [988].

The Medical Superintendent reported that a total of ninety-five cases had been treated for the month with an average daily bed occupancy rate of 20.15 [989].

Mr Len P. Saddington, was admitted under Dr Fleming to the Zeehan Hospital when an urgent appendicectomy was performed within an hour of admission. He had been seen by Sister Walker while visiting Roseberry where his condition was deemed to be serious so she accompanied him on the workmen's motor on the E.B. Railway illustrating the vital work carried out in this district by the bush nurses under the Montagu Medical Union.

On return to Rosebery railway station at 11 p.m., Sister Walker was called upon to attend the infant daughter of Mr. J. Chilcott, the child being seriously ill, finishing up a strenuous, but not unusual day's work about midnight [990, 991].

The Bush Nurse arranged three admissions to the Zeehan Hospital from Rosebery with unspecified sicknesses, Mrs V. Kleineck, Mrs O'Sullivan, and Mr H. Jones, the last being considered seriously ill [992].

Two men suffered injuries from an explosion at the Electrolytic Zinc Company's mine at Roseberry when some gelignite exploded prematurely and unexpectedly. John Lawler was admitted to the Zeehan Hospital suffering from shock with severe bruising of one side of his body and the flesh of his chest and thigh was severely lacerated by multiple small fragments of metal. He was the first patient to be conveyed to hospital by the new rail motor ambulance.

Thomas Fairfield had some facial abrasions but was able to return home after first aid [993].

A child who had been unwell for several days died en route to the Zeehan Hospital. No further details are available [994].

Mr. Harry Jones, aged sixty-one, died in the Zeehan Hospital of an unspecified condition having been in failing health for some considerable time. Owing to the absence of a west coast road, it took seven hours travelling to reach the hospital. His employment is not stated but he was an active union leader and probably would have been in the mines. He left a widow and nine children [995].

Mr. John O'Meara, aged seventy-one, died in Zeehan Hospital. He had spent his working life in the West Coast Mines and recently been in poor health. Miner's phthisis seems a likely diagnosis, but metal poisoning is also possible [996].

The Medical Superintendent's reported that there were twenty-two remaining inpatients from the previous month followed by thirty-four admissions, thirty-two discharges, twenty-six cured, six relieved, and six deaths leaving eighteen inpatients for an average

daily bed occupancy rate of 21.21. There were thirty-seven operations, nine major and twenty-eight minor, six confinements, four X-Ray examinations and fifty-six outpatients [997,998].

Mrs, Catherine Ledger died in the Zeehan Hospital, her age and diagnosis unstated.

Dr. W. A. Fleming, was undertaking his usual clinics at the time in Rosebery. Mrs Ledger was admitted at 2.00pm, Fleming received calls at 5.00pm, 7.00pm and 10.00pm that her condition was progressively deteriorating but he was unable to reach the hospital before she died as the motor rail carriage was out of action and there was still no road to Rosebery. Fleming presented these facts to the Public Works Committee in Burnie [999].

Mr. P. Thomas was discharged from Zeehan Hospital. The precise diagnosis is not clear but he was not expected to regain full use of his hand for some time. Accidental trauma or a stroke would seem possible [1000].

The Medical Superintendent reported that there were eighteen patients remaining from the last month, followed by twenty-nine admissions, twenty-six discharges, twenty-four cured, two relieved and three deaths leaving eighteen remaining inpatients for an average daily bed occupancy rate of twenty. There were fourteen operations, five major and nine minor, and fifty-two outpatients were treated [1001,1002].

Mr. Claude Sampson, was admitted to the Zeehan Hospital having become unwell at work. No further details are given [1003].

### 10.5. 1929

Mr. Charley Lynch died in the Zeehan Hospital of an unspecified age and illness. The Advocate reports that he worked for many years in mining and as a hotelier before he developed a 'deadly and incurable disease' causing a long illness before death. Again possible diagnoses are cirrhosis, miner's phthisis or heavy metal poisoning. The Advocate seems coy about labelling his condition [1004].

The Medical Superintendent reported that seventeen patients remained from the previous month, followed by twenty-four admissions, twenty-three discharges, twenty cured, three relieved and three deaths leaving fifteen inpatients remaining at the end of the month for an average daily bed occupancy rate of 13.87. There were also nine operations, three major, six minor, forty-nine outpatients and two confinements [1005].

The Medical Superintendent also reported having made seventy-five home visits for two hundred and thirty-six consultations and three visits to out districts. Three of Mrs. T. Healy's children were admitted to the Zeehan Hospital suffering from the effects of Ptomaine poisoning or acute gastro-enteritis, developing through the consumption of infected tinned meat. Two children had some for their breakfast and went to school. They were taken ill shortly afterwards and were sent home. The two elder children have some-

what recovered in hospital, but the other girl is in a rather serious condition.

In the 19th century, Francesco Selmi, an Italian chemist introduced the generic name ptomaine believing acute gastro-enteritis was caused by alkaloids in infected or decaying food. The term was disproven scientifically a decade earlier than the Healy childrens' illness when it became apparent that the disease was due to the direct action of bacteria rather than alkaloids. Ptomaine as a term fell out of expert medical use but persisted in newspapers [1006].

Mr. James Copping, of Rosebery, had another admission to the Zeehan Hospital. Following his accident in October 1927, he had a prolonged hospital admission, his broken arm could not be straightened and he had only recently returned to work. On this occasion while walking in the bush, he slipped and fractured the clavicle of his previously damaged arm [1007,1008].

Frank Thurstans was admitted to the Zeehan Hospital with a fractured clavicle sustained when a ladder at Hart's Mine, Renison broke and he fell on his shoulder [1009].

The Medical Superintendent's reported that there were fifteen remaining inpatients from January 15th, followed by thirty admissions and twenty-five discharges, eighteen cured, seven relieved, leaving twenty remaining inpatients for an average bed occupancy rate of 15.9. There have also been seventeen operations, six major, eleven minor, two confinements and forty-five outpatients [1010,1011].

Mr. James Vincent, a sixty-nine-year-old miner, died in the Zeehan Hospital from pneumonia. He had previously lost his right hand in a mining accident, but otherwise been well till two days before his death [1012].

The Medical Superintendent reported that in the month he had also made one hundred and fifteen home visits for three hundred and fourteen consultations and had visited Montagu ward three times [1013].

Jean Edgerton, the youngest daughter of Mrs Edgerton was admitted to the Zeehan Hospital with such a severe laceration of a toe that an amputation was required. She had been playing at Renison Bell unattended with an unsecured sharp axe which fell on her foot [1014]. The Matron reported the daily average number of beds occupied for the month was 20.4 [1015].

The Medical Superintendent reported the monthly home visits were one hundred in Zeehan, eleven to Rosebery, and one to Williamsford, with four hundred and three consultations. There were eighteen remaining inpatients from the previous month, followed by twenty-three admissions and nineteen discharges leaving nineteen remaining inpatients, the figures being erroneous unless there were three other discharges or deaths [1016,1017].

Mr. C. T. Thorne was admitted to the Zeehan Hospital following an accident at the Hercules Mine at Williamsford. A piece of heavy

timber fell and struck him on the hip. No broken bones were detected but it was feared he may have some internal injuries [1018].

Mr. Gilbert McCormack was admitted to the Zeehan Hospital, his age and diagnosis were not specified [1019].

The Medical Superintendent reported that there were nineteen remaining inpatients at the start of the month, followed by twenty-nine admissions, twenty-two discharges, fifteen cured, seven relieved and one still birth leaving supposedly twenty inpatients for a daily average bed occupancy rate of 20.0. The calculations are again faulty. There were also twelve operations, two major, ten minor, four normal confinements, four X-Ray examinations and forty-nine outpatients [1020].

Mr. J. Thorley was admitted to the Zeehan Hospital with chest bruising and several fractured ribs caused by a fall of ore at the North Farrell Mine. Owing to the lack of appropriate transport he was conveyed to Zeehan lying on a truck load of ore in the pouring rain! [1021].

The Medical Superintendent reported his home visits for the month as one hundred and five visits for four hundred and seventy-nine consultations plus three visits to Rosebery, and two each to Tullah and Williamsford [1022].

Jack Lamb, a former mining blacksmith, was admitted to the Zeehan Hospital seriously, ill, age and diagnosis were not initially specified. However, four weeks later he died having been in failing health for some time with heart failure [1023,1024]. Fred Green was admitted to the Zeehan Hospital, his age and diagnosis were not documented [1025].

The Medical Superintendent reported having made one hundred and twenty-seven home visits for two hundred and seventy-six consultations as well as four visits to Rosebery, two to Tullah and one to Williamsford [1026].

The Medical Superintendent reported that there were twenty-four inpatients remaining from the previous month, followed by thirty-two admissions and thirty-seven discharges, twenty-six cured, eleven relieved, leaving eighteen remaining inpatients for a daily average bed occupancy rate of 25. Again the addition is flawed [1027].

Mr. Robert Ewart died in the Zeehan Hospital after four months in hospital. His age and condition were unspecified but he had lived in the area for forty-five years having been an early explorer and resilient bushman opening up the West Coast [1028,1029].

Nina Grubb, the youngest daughter of the Grubb family, was admitted to the Zeehan Hospital requiring amputation of her leg. A severe accident would appear the most likely cause. A fund raising dance was held to assist the unfortunate girl [1030].

The Medical Superintendent reported that during August thirty-two patients were admitted and thirty-two were discharged, twenty-eight cured, four relieved. There were two deaths leaving

twenty-five remaining inpatients for an average daily bed occupancy rate was 23.2. There were ten minor operations, five X-ray examinations, nine midwifery cases and forty-four outpatients [1031].

The annual hospital statistics were announced. There were nineteen remaining inpatients from the previous year together with three hundred and twenty-four admissions made a total of three hundred and forty-three patients. Sixty-seven were accident cases. Two hundred and ninety-seven were discharged cured or relieved, one hundred and fifty-four males, one hundred and forty-three females, twenty died, thirteen males and seven females, and there were twenty-six left at the end of the year, thirteen males and seven females.

There were one hundred and eighty-eight surgical operations, sixty-seven major and one hundred and twenty-one minor, one hundred and eighty-six X-ray examinations and two thousand, five hundred and eighty-nine outpatients, mainly for change of dressings [1032].

Mr. T. Ellison was admitted to the Zeehan Hospital, his age and condition were not published [1033].

Alfred McShane, an aged bush-worker, was admitted to the Zeehan Hospital having been knocked unconscious by a tree limb falling on his head. He regained consciousness alone and also had some bruising and lacerations to his back. He was able to obtain assistance, then first aid at the Montagu Medical Union's surgery, from Sister Bampton, before transfer to hospital before he was reported to be recovering well [1034].

The Medical Superintendent reported that there were twenty-five remaining inpatients from the previous month followed by thirty-eight admissions and thirty-four discharges, cured or relieved, leaving twenty-nine remaining inpatients at end of month for an average daily beds occupancy rate of twenty-three [1035].

### 10.6. 1930

Mrs. Bernard Daley, a former long-term resident of Tullah, died in the Zeehan Hospital, age and condition unspecified, but she leaves a husband aged seventy-three and still in good health, and five adult children [1036].

The Medical Superintendent's reported that there were seventeen inpatients remaining from the previous month, followed by twenty-six admissions and twenty-seven discharges cured or relieved, leaving fifteen inpatients remaining for a daily average bed occupancy rate of 15.7. Again the addition is incorrect [1037].

Dr. Thomas Galbraith, the new appointment to Rosebery is expected at the end of this month and will commence work in February. The doctor comes from New South Wales having work experience in the Newcastle Hospital and at the Royal Hospital for Women, Sydney as well as general private practice.

The appointment to Rosebery will mark the successful termination

of long continued effort on the part of the board of management of the Montague Medical Union, to provide an adequate medical service for the Rosebery subscribers [1038,1039]. The average daily bed occupancy was 18.4 [1040].

Mr. J. Tobin and Mr. Fred Dick were admitted to the Zeehan Hospital, age and condition not Published [1041].

In the absence of Dr Fleming, the Matron reported that there were twenty-three remaining inpatients from the previous month, followed by thirty-four admissions, thirty-four discharges, twenty-seven cured, five relieved and one death leaving twenty-two remaining inpatients for an average daily bed occupancy of 25.5. There were fourteen operations, two major operations, ten minor, ten X-Ray examinations and ten deliveries [1042].

Mr. W. Folder, foreman at the Farrell Mine, was admitted to the Zeehan Hospital and was progressing satisfactorily, age and condition unspecified [1043].

Jack Crawford, a boy, was admitted to the Zeehan Hospital with severe bruising but no fractures when timber fell off a truck on top of him in the Electrolytic Zinc Co.'s yard at Rosebery [1044].

The Medical Superintendent reported that there were twenty-two patients remaining at the end of March, followed by twenty-three admissions and twenty-eight discharges, eighteen cured, nine relieved, and one self-discharge leaving seventeen remaining inpatients for an average daily bed occupancy rate of twenty-two. There were also nine minor operations, seven X-ray images, operations three midwifery cases and twenty-nine out-patients

In addition, the Medical Superintendent had made sixty-seven home visits for two hundred and forty-six consultations [1045,1046].

The Medical Superintendent reported that there were seventeen remaining inpatients at the end of the previous month, followed by fifteen admissions, nineteen discharges, eleven cured and eight and one death leaving twelve remaining inpatients for an average bed occupancy rate of 17.2. There were eight operations, one major and seven minor, ten X-ray images and one maternity case, plus twenty-six outpatients [1047].

Mr Ryan, father of Miss Florence Ryan of Strahan was admitted, with no more accurate a diagnosis than 'indisposed', to the Zeehan Hospital [1048].

Mr. F. A. Sherrin, age seventy-eight, died in the Zeehan Hospital having been increasingly unwell with 'rheumatism' for two years. Born in Manchester he migrated as an infant and worked as a butcher during his thirty-five-year residence in Zeehan [1049].

The annual statistics for Zeehan Hospital were announced. During the year there were three hundred and fifty-seven admissions, one hundred and eighty-nine males, one hundred and sixty-eight females, which, with twenty-six remaining from the previous year, fifteen males and eleven females, make a total of three hundred

and eighty-three. Of the total cases treated one hundred and eighty-seven males and one hundred and sixty-three females were discharged cured or relieved, two males left at their own request, and four males and two females died: leaving eleven males and fourteen females in hospital at the close of the year. Accident cases totalled twenty-three, appendicitis eleven, pneumonia fourteen, pleurisy eight, diphtheria three, scarlet fever four, meningitis two, infantile paralysis one, mental cases four, confinements sixty-five, the remainder being various surgical and medical cases.

There were one hundred and seventy-seven surgical operations, forty-six major, one hundred and thirty-one minor, one hundred and ninety-nine X-ray examinations and two thousand, six hundred and ninety outpatients.

The average number of beds occupied daily was 22.24, males 12.76, females 9.48. The average stays of patients discharged was males, 18.27, females, 19.63. The average occupation of beds by those who died was, adults, males, thirty days, females, one hundred and six days. Children, males four days, females four days. The average age of adult patients discharged was, males, 37.0, females, 26.54. Children, males, 7.0, females, 5.50. The average age of those who died was males, sixty-seven, females, eighty-two. Children, males, twenty-eight days, females, four days [1050].

The Medical Superintendent reported that there were twenty-three remaining patients at the end of the previous month, followed by thirty admissions, twenty-nine discharges, cured or relieved, and one death leaving again twenty-three patients remaining at the end of July for an average daily bed occupancy rate of twenty-four [1051].

Mrs. Hake was admitted to the Zeehan Hospital, age and diagnosis unspecified, and was said to be progressing favourably [1052]. Mr. George Tyler was admitted to the Zeehan Hospital, age and condition unspecified [1053].

Medical Superintendent reported that there were twenty-three inpatients remaining at end of July, followed by twenty-four admissions, thirty discharges, twenty cured, ten relieved and three deaths leaving fourteen remaining inpatients. There were also twenty operations, one major, nineteen minor, five X-Ray examinations, three confinements and twenty-nine outpatients. The Medical Superintendent also reported seventy-four home visits for two hundred and nine consultations [1054,1055].

Miss Edna Muir was admitted to the Zeehan Hospital for an unspecified critical operation. She was reported to be progressing satisfactorily, though full recovery was expected to be slow [1056].

M. Trickett, a miner, was admitted to the Zeehan Hospital with an eye injury and bruising about the head and chest sustained when an explosion occurred in the Hercules mine. Trickett was working with a pick in the bottom of a winze when he struck either a live detonator or an unexploded piece of gelignite. He managed to struggle about thirty metres when he attracted attention, and first

aid was rendered. The route down the side of the mountain into Williamsford is particularly bad and made the task of carrying the injured man extremely difficult.

The services of Dr. Galbraith were rapidly secured and he ordered Trickett to be sent to hospital for treatment. He was fit for discharge in about ten days [1057, 1058, 1059].

The Medical Superintendent reported that there were fourteen patients remaining from the last month, followed by forty-one admissions, thirty-two patients discharged, cured or relieved, and two deaths leaving twenty-one inpatients remaining for an average daily bed occupancy rate of twenty [1060].

Mr. A. Ferguson was discharged from Zeehan Hospital following an admission, age and diagnosis not specified [1061]. Murray Columbine, son of Mrs. Columbine was admitted to the Zeehan Hospital, age and condition unspecified [1062].

H. G. Jones, a young man working on the Stirling Valley track, was admitted to the Zeehan Hospital for urgent surgical treatment having cut his left hand severely, cutting a tendon [1063].

The two children of Mr. and Mrs. Wheatley of Strahan were admitted to the Zeehan Hospital suffering from an unspecified condition [1064].

### 10.7. 1931

The Medical Superintendent reported that there were twenty-three inpatients remaining at the end of November, followed by thirty-five admissions and thirty-two discharges, nineteen cured, thirteen relieved, leaving twenty-six remaining inpatients for an average daily bed occupancy rate of 23.0 There were also fourteen operations, one major, thirteen minor, six midwifery cases and twenty outpatients [1065].

The Medical Superintendent reported that there were twenty-three inpatients remaining at the end of December, followed by twenty-three admissions, twenty-one discharges, sixteen cured, five relieved and one death leaving twenty-four remaining inpatients for an average daily bed occupancy rate of 19.5. There were also twenty-three operations, three major, twenty minor, five X-Ray examinations, three midwifery cases and twenty-nine outpatients [1066].

The Board reported a deteriorating financial position reaching a crisis level with debts of £407. The closure of mines, and the possible imminent closure of Mount Farrell mine had reduced the number of hospital subscribers from over a thousand to less than five hundred in a matter of months. Dr. Fleming said the average daily bed occupancy rate was eighteen to nineteen and without government funding the hospital may have to close [1067].

Mr. Jack Crane was admitted to the Zeehan Hospital following a serious accident while working at Koyule [1068].

Mrs. E. Brewer, died in the Zeehan Hospital having been in ill



health for 'some time past' with an unspecified disease. Her terminal decline was precipitate [1069].

The Medical Superintendent reported that there were fifteen patients remaining at the end of March, followed by twenty-three admissions, and nineteen discharges, ten cured, nine relieved for an average daily bed occupancy rate of 16.7. There were also sixteen minor operations, five X-Ray examinations, two midwifery cases and thirty-six outpatients [1070].

The Medical Superintendent reported that there were nineteen patients remaining in hospital at the end of April, followed by twenty-two admissions, twenty discharges, cured or relieved, and one death, leaving ten inpatients remaining for an average daily bed occupancy rate of 12.8. there is an error of ten patients in one of the published figures [1071].

Mr. Gerald M. Guilbert, aged, 53, a carpenter employed at the Electrolytic Zinc Co.'s works, was admitted to the Zeehan Hospital following an accident which resulted in the loss of the four fingers of his left hand. He was dressing a piece of timber on the planing machine, and his hand came in contact with the knives of the machine, the first, second and fourth fingers being taken off close to the hand, and third finger being so badly mutilated that it had to be amputated [1072].

Mr. L. H. Dehle was admitted to the Zeehan Hospital, his age and condition were not specified [1073].

Mrs. P. Hutchings was an inpatient in Zeehan Hospital having been in ill health recently. Her daughter, Miss Zillah Hutchings was also in Zeehan Hospital in a serious condition having been unwell for a year. She died six weeks later in spite of several operations, but no further details were given [1074,1075].

Dr. Rutledge, a locum tenens, was himself admitted to the Zeehan Hospital with an unspecified condition and Dr Maxwell of Melbourne was appointed temporary locum tenens to care for all the hospital patients [1076].

The Medical Superintendent reported that there were ten patients remaining at end of May, followed by twenty-one admissions, eighteen discharges, twelve cured, six relieved and two deaths leaving eleven remaining inpatients for an average daily bed occupancy rate of 14.5.

There were also twelve operations, two major, ten minor, four X-Ray examinations, two midwifery cases and twenty-four out-patients [1077].

Mr. J. Turley, junior, of Tullah, was discharged home after spending many weeks in Zeehan Hospital with an unspecified illness [1078]. Mrs. Morrison was discharged after being an inpatient in Zeehan Hospital for a couple of weeks with an unspecified illness [1079].

The annual figures for Zeehan Hospital were announced. During the year three hundred and five patients were admitted. There were

three hundred and five discharges, one hundred and forty-two males and one hundred and sixty-three females cured and relieved, one male and one female were discharged incurable, and six males and seven females died for an average daily bed occupancy rate of 21.51.

There were twenty-six accident cases, ten appendicitis, twenty-seven pneumonias, eleven pleurisies, six hernias, seven mental cases, two meningitis, and fifty-three confinements.

There were one hundred and eighty-nine operations, forty-three major, one hundred and forty-six minor, one hundred and eighty-two X-Ray examinations and two thousand two hundred and ninety-six outpatients were given dressings [1080] Mr. Felix Burns, Rosebery, was discharged from Zeehan Hospital where he had been an inpatient for several weeks with an unspecified disease [1081].

Mr Robert McArthur, an elderly resident of Strahan, died in the Zeehan Hospital after an unspecified short illness [1082].

The Medical Superintendent reported that there were fourteen remaining inpatients at end of July, followed by fourteen admissions, seventeen discharges, nine cured, eight relieved and one death, leaving ten remaining inpatients, for an average daily bed occupancy rate of 12.6. There were also seventeen operations, one major, sixteen minor, six X-Ray examinations, two midwifery cases and twenty-four out-patients [1083].

Mrs. Wheatley was reported to be recovering well in the Zeehan Hospital following unspecified surgery a week earlier [1084].

Mr. Percy Penrose Truscott died in the Zeehan Hospital with some cerebral pathology. He became unwell while out prospecting and just managed to return home where he was seen by Dr. Fleming who ordered hospitalisation. He had represented Tasmania in inter-State shooting contests. He left a widow and two children [1085].

Mr. D. Morrison was reported to be recovering from an unspecified operation in the Zeehan Hospital [1086].

The Medical Superintendent reported there were ten patients remaining at the end of August, followed by thirty-one admissions, twenty-one discharges, twelve cured, nine relieved and one death, leaving nineteen inpatients remaining for an average daily bed occupancy rate of sixteen. There were also thirty operations, three major, twenty-seven minor, ten X-ray examinations, five midwifery cases and thirty-seven outpatients treated [1087].

Mr. James Hay died in the Zeehan Hospital. His age and diagnosis were not specified, though his death was a shock as he had been making satisfactory progress [1088].

The Medical Superintendent reported that there were nineteen inpatients remaining in at the end of September, followed by twenty-three admissions, twenty-four discharges, nineteen cured, five relieved, and one death, leaving seventeen remaining inpatients

for an average daily bed occupancy rate of 19.9. There were twenty-two operations, six major and sixteen minor, five midwifery cases four X-Ray examinations and thirty outpatients treated [1089].

Mr. Smith was admitted to Zeehan Hospital with appendicitis and was recovering well after surgery. His wife had only just been discharged after being an inpatient for several weeks, though her age and diagnosis were not published [1090].

### 10.8. 1932

The Medical Officer reported that there were twelve inpatients remaining at end of November, followed by twenty-seven admissions, twenty discharges, thirteen cured, seven relieved, 7 and one death leaving eighteen remaining in patients for an average daily bed occupancy rate of 15.6. There were also twenty operations, three major, seventeen minor, six midwifery cases, five X-Ray examinations and thirty outpatients [1091].

The Medical Superintendent reported that there were eighteen inpatients remaining at the end of December, followed by twenty-two admissions. The paper states that there were five patients were discharged cured with no further discharge details. A more probable figure would be five discharged relieved and thirteen discharged cured thus leaving twenty-two inpatients for an average daily bed occupancy rate of sixteen.

There were also thirty-one operations, nine major, twenty-two minor, ten X-Ray examinations, one midwifery case and thirteen outpatients [1092,1093].

Mrs. L. Williscroft was admitted to the Zeehan Hospital a few days previously with an unspecified condition [1094].

The Medical Superintendent reported that there were twenty-two remaining inpatients at the end of January, followed by twenty-three admissions and twenty-nine discharges, eighteen cured, eleven relieved, leaving fifteen remaining inpatients for an average daily bed occupancy rate of 17.2. The addition is incorrect by one.

There were also sixteen operations, four major, twelve minor, twelve X-Ray examinations, one midwifery case and eighteen outpatients [1095,1096].

Mrs. F. J. Atherton was admitted to the Zeehan Hospital for a surgical operation, no further details given [1097].

Mrs. Jenkinson was slowly recovering after a prolonged admission to the Zeehan Hospital was an unspecified diagnosis [1098,1099].

Mrs. L. J. Clarke was admitted to the Zeehan Hospital a fortnight previously with an unspecified serious illness but was recovering [1100].

The Medical Superintendent reported that there were fifteen patients remaining at the end of February, followed by eighteen admissions and twenty-one discharges, sixteen cured, five relieved, leaving twelve remaining inpatients for an average daily bed occupancy rate of 14.9. There were also nineteen operations, one major and eighteen minor, six X-Ray examinations, three midwifery cas-

es and thirty-three outpatients treated [1101,1102].

Miss E. J. Atkinson, who recently underwent an operation in the Zeehan Hospital for appendicitis was recovering well after discharge [1103].

Mr. F. G. Hess died in the Zeehan Hospital after an unspecified illness of a few weeks. He had been a resident of Zeehan for over thirty years [1104].

Mrs. F. Bennett and Mrs. H. Hampton were inpatients in the Zeehan Hospital. They were recovering though their conditions were not specified [1105].

The abbreviated Zeehan Hospital monthly report stated that there were twenty admissions, eight discharges and one death leaving fifteen remaining inpatients for an average daily bed occupancy rate of 14.8. There were also twelve operations, three major and nine minor, eleven X-Ray examinations and thirty-six outpatients [1106,1107].

Mrs. J. Andrew suddenly became sick and was conveyed to the Zeehan Hospital where she underwent surgery and was discharged two weeks later [1108,1109].

Dr. V. A. Fleming M.B., B.Sc., resigned after seven years as Medical Superintendent of Zeehan Hospital to the regret of the board and community who were profuse best wishes for the future and with compliments for his skills and diligence. Dr. R. H. Minton Connell, M.B., B.S., of Flinders Island, was appointed in his place [1110,1111].

Mrs. Birch died at the Zeehan Hospital after a short illness, her age and diagnosis were not published [1112].

The Medical Superintendent reported that there were thirteen inpatients remaining at the end of June, followed by twenty-two admissions and fifteen discharges, nine cured, six relieved, leaving twenty remaining inpatients for an average bed occupancy rate of 18.4. There were also thirty operations, two major, twenty-eight minor, three midwifery cases, two X-Ray examinations and sixty-one outpatients [1113].

The Medical Superintendent reported that nineteen inpatients remained on August 1, followed by twenty admissions, twenty-four discharges, eighteen cured, six relieved, and two deaths, leaving thirteen remaining inpatients for an average daily bed occupancy rate of sixteen. There were also eight operations, one major and seven minor, four midwifery cases and thirty-eight outpatients [1114].

Miss Joyce Andrew was admitted to the Zeehan Hospital for a tonsillectomy [1115]. The Medical Superintendent reported that there were fourteen inpatients remaining in the hospital at the end of August, followed by eleven admissions and ten discharges, six cured, four relieved, leaving fifteen remaining inpatients for an average daily bed occupancy rate of 12.9. There were also twenty-nine outpatients [1116,1117].

Mr. Don. MacDonald was admitted to the Zeehan Hospital under Dr. Minton Connell for suturing of a laceration. He was working for the North Mt. Farrell Mine, near Farrell Siding, when his axe slipped and inflicted a nasty cut in the calf of his right leg. MacDonald is expected to be confined to bed for some weeks. In 2021 he would probably expect to be discharged the same day. Mr. Wes. McNab, with whom Mr. MacDonald had been working, met with a somewhat similar accident; severely cutting his big toe with his axe. He was also admitted to Zeehan Hospital under Dr. Minton Connell for suturing of his wound [1118].

Mr. J. Hill, aged 66, a West Coast resident for over forty years, died in the Zeehan Hospital of an unspecified disease. [1119,1120].

Mr. George Bracken was admitted to the Zeehan Hospital with an unspecified severe illness which was causing anxiety amongst his relatives several days later. The report follows an article saying mumps was prevalent in town, though it is not clear if this was Bracken's condition. Months later the 'Advocate' reported that he had required a serious operation from which he had made an excellent recovery [1121,1122,1123].

William Gordon Scott died in the Zeehan District Hospital after a long but unspecified illness. A well respected citizen, he had occupied many important public roles in Zeehan. He had spent some time in England, but the climate proved too severe and he returned to Tasmania [1124,1125,1126].

Mrs. W. T. Moyle was admitted to the Zeehan Hospital seriously ill but was reported to be improving following surgery [1127]. Howard Bennett, a young man working at Powell's Siding, on the Strahan line, found a dead rat in his rat trap under his bunk. On reaching down to release the carcass he was bitten on the third finger of his right by a snake hiding under his bunk. Bennett grabbed his gun and shot off the end of his finger as a therapeutic measure to avoid envenomation and was then transferred to Zeehan Hospital suffering from shock for attention to the wound [1128].

The Medical Superintendent reported that there were twelve inpatients remained from October, followed by thirty admissions, twenty discharges, thirteen cured, seven relieved and three deaths leaving nineteen remaining inpatients for an average daily beds occupancy rate of sixteen.

There were also eleven operations, three major, eight minor operations, three midwifery cases and thirty-three outpatients [1129].

### 10.9. 1933

Peter John Sullivan, aged nineteen months died in the Zeehan Hospital from burns and shock having fallen into a large pot of boiling water which had just been placed on the floor. The pot had been used to boil some meat while Mr. and Mrs. Thomas Sullivan of the Terminus Hotel, Williamsford were busy cooking in the kitchen, taking their eyes off young Peter for a moment. He was severely and fatally scalded about the thighs, buttocks and back [1130].

The Medical Superintendent reported that there were nineteen pa-

tients remaining at end of November, followed by twenty-two admissions, twenty-four discharges, fifteen cured, nine relieved, and one death leaving sixteen remaining inpatients for an average daily bed occupancy rate of 14.9. There were also eleven operations, three major, eight minor, six X-Ray examinations, four midwifery cases and twenty-nine outpatients [1131]. Mr. F. Kershaw was admitted to the Zeehan Hospital, age and diagnosis not specified [1132].

The Medical Superintendent reported that there were sixteen patients remaining at end of December, followed by twenty-eight admissions and twenty-six discharges, nineteen cured, seven relieved and two deaths leaving sixteen remaining in patients for an average daily bed occupancy rate of 13.5. There were also fifteen operations, four major and eleven minor, four infectious cases, three midwifery case and twenty outpatients [1133].

Mr J H Dill, a seventy-eight-year-old former employee of the North Farrell Mine, was admitted to the Zeehan Hospital with cardiac disease, and died there three months later. A qualified chartered accountant, he had previously worked for mining companies in Ballarat and Melbourne [1134,1135].

The Medical Superintendent's reported that there were sixteen patients remaining at end of January, followed by seven admissions and eleven discharges, seven cured, four relieved, leaving thirteen remaining inpatients for an average daily bed occupancy rate of 13.1. There were also twenty-three outpatients, six operations three major, three minor, five X-Ray examinations, two midwifery cases and twenty-three out-patients [1136].

Mrs. W. Abel was admitted to the Zeehan Hospital, age and condition not specified, and reported to be making satisfactory progress [1137].

Mr. Mel. Elliott was admitted to the Zeehan Hospital, age and diagnosis not given, and reputed to be making satisfactory progress [1138].

Mr. J. McGurk died in the Zeehan Hospital, age and diagnosis not given, but he had lived in the West Coast for over forty years [1139].

The Medical Superintendent reported that there were thirteen patients remaining at the end of February, followed by twenty-nine admissions, twenty-seven discharges, eighteen cured, nine relieved, and one death, leaving fourteen remaining patients for an average daily bed occupancy rate of 16.12. There were also eight operations, three major, five minor, ten infectious cases, two X-Ray examinations, one midwifery case and thirty-three outpatients [1140].

Mild scarlet fever had been prevalent for several weeks in Zeehan and several cases had been admitted to Zeehan Hospital for isolation and treatment. Mrs. E. G. Williams, a resident of Rosebery for many years, was admitted to the Zeehan Hospital, age and diagnosis not specified, having 'been ailing for some time' [1141].

Mr. Ross. Hetherington was admitted to the Zeehan Hospital, age and diagnosis were not given [1142].

Frank Bradshaw, a shunter at the Zeehan railway station, was admitted to the Zeehan Hospital, having received serious suspected internal injuries when crushed between two trucks while shunting. Fortunately, his injuries were less severe than initially considered, he was severely bruised, but had no fractures [1143,1144].

The doctor reported that there were twenty-one patients remaining in the institution at the end of April the average daily bed occupancy was 17.8 and there were six unspecified infectious disease cases currently within the hospital. [1145]. Mrs. Johnstone was discharged from Zeehan Hospital where she had been an inpatient for several weeks with an undisclosed condition. Mrs. T. Gannon was also admitted to the Zeehan Hospital for a serious operation which was causing much family much anxiety [1146].

Dr. Minton Connell performed a post-mortem examination on the body of William John Cook, age seventy-four who had collapsed suddenly and died at home in Heemskirk. His body was packed on horseback and conveyed to the morgue along a tramline on a very challenging track. In places the track was underwater, the bridges were too dangerous and the track most uneven with deep holes and undergrowth across the track. The journey of sixteen miles took twelve hours from 4.00pm to 4.00am.

Dr. Minton Connell presented his finding to a coronial inquest. He stated that there was no evidence of external violence or foul play beyond a small bruise on the back of his hand and that death was probably due to heart failure though details of his examination of the heart are not given. The Coroner, Mr. R. W. Maskell returned a verdict that death was due to natural causes.

The police thanked the team conveying the body and the coroner informed the Attorney General of the state of the track and the impossibility of conveying a sick person to medical care rapidly [1147,1148].

Mrs. T. Gannon was admitted to the Zeehan Hospital and was said to be progressing favourably though her age and diagnosis are not stated [1149].

Mrs. Margaret Beck, aged seventy-nine of Renison Bell, died in the Zeehan Hospital from severe burns. She had fallen into an open fire at home and her clothes had ignited. Her husband said she was burnt all over and was 'black as a kettle'. Medical assistance was not sought at her request until forty-eight hours later when she lapsed into unconsciousness at home. She was visited at home by Dr. Connell and promptly transferred to hospital in a moribund condition but died later that night.

A verdict of accidental death was subsequently returned at a coronial inquest by the Coroner, Mr. E. W. Maskell. [1150,1151]. Henry Bennett, aged seventy-five, died in the Zeehan Hospital from exposure and hypothermia having fallen off his horse around 5.00pm

and not being found till 9.00am the following morning after one of the coldest nights of the winter. He was admitted unconscious, regained consciousness briefly then lapsed into unconsciousness again and efforts to revive him were in vain. The coroner subsequently returned a verdict that Bennett met his death in a natural way and not by any violent means [1152,1153,1154,1155].

Mrs. A. H. (Bort) Dutton, a long-time resident of Rosebery, died in Zeehan hospital after a prolonged but unspecified illness [1156].

Dr. Connell reported that there were eleven inpatients remaining at the end of April, followed by nineteen admissions, fourteen discharges, ten cured, four relieved, and one death leaving fourteen remaining inpatients for an average bed occupancy rate of 14.3. There had also been eight operations, two major, six minor, three midwifery cases, two X-rays examinations and thirty out-patients [1157].

The Medical Superintendent reported that there fourteen remaining inpatients at the end of June, followed by twenty admissions, nineteen discharges, fifteen cured, four relieved, and two deaths, thirteen remaining inpatients for an average daily bed occupancy rate of 12.9. There were also nine operations, four major, five minor, three midwifery cases, two X-Ray examinations and thirty-six outpatients [1158,1159].

Mrs T. Ganao was an inpatient in Zeehan Hospital for several weeks with an unspecified illness but was later discharged [1160].

Acting-Matron Huxley reported to the monthly board meeting that there were sixteen patients remaining from last month, followed by sixteen admissions and eighteen discharges, all cured, and three deaths leaving eleven remaining inpatients for an average daily bed occupancy rate of 13.3 There were also twelve operations, three major, nine minor, one X-Ray examination and twenty-six outpatients [1161].

Mr. J. J. Hill, was admitted to the Zeehan Hospital with a broken leg suffered while working on his silver-lead mine near Trial Harbour. He and his young son were removing a flat sheet from a trench about seven feet deep and had it almost to the surface when a piece of piping on which Mr. Hill was standing in the trench broke, and he fell into the trench. The edge of the flat sheet fell across his right leg and broke it between the ankle and knee. With the assistance of his son and then Sergeant Summers, Constable Long, and Dr. R. H. Minton Connell he managed to get out of the trench and was conveyed to hospital [1162].

The Medical Superintendent and the acting-matron reported that there were twelve remaining inpatients at the end of August, followed by nineteen admissions and twenty-three discharges leaving six (sic) remaining inpatients for an average daily bed occupancy rate of 10.2. There were also thirteen operations, two major, eleven minor, nine X-ray examinations, three midwifery cases and twenty-five outpatients [1163].

Mr. Mae Robertson was admitted to the Zeehan Hospital and reported to be recovering after a serious operation [1164].

The matron reported an average daily bed occupancy rate of 10.6 [1165].

Mr. Clyde Hampton was admitted to the Zeehan Hospital dangerously ill following an accident at Bulgobac. In company with Mr. A. Lapham he was in the bush examining timber when he was struck by a falling limb on the head and face. Transfer to hospital was problematic travelling through the bush, then by rail, then by rail motor ambulance. He was found to have a fractured skull and facial injuries but later was showing signs of recovery [1166,1167].

Walter Shuttleworth, aged only thirteen, died in the Zeehan Hospital in spite of the best attentions of Dr. Minton Connell, the matron, and nursing staff, from pneumonia after being sick for a fortnight [1168].

Mr. John Reynolds was admitted to both the Zeehan Hospital and the Melbourne General Hospital over a period of eight months. He had developed total paralysis of his legs but following radiotherapy and two operations was ultimately able to walk with the aid of crutches. The diagnosis is not specified but a spinal tumour, primary or secondary appears probable, though DXT was not limited to treating cancers in its early days [1169]. The Medical Superintendent reported that there were ten patients remaining from the previous month, followed by eighteen admissions, fourteen discharges, all cured, and two deaths, leaving twelve remaining inpatients, for an average daily bed occupancy rate of 11.1. There were also seven operations, four major, three minor, six X-Ray examinations, three confinements and eighty-four outpatients [1170].

Mrs. S. Klimeck was admitted to the Zeehan Hospital with appendicitis and had recovered sufficiently after surgery to be discharged home nearly three weeks later. The author was discharged three days after an appendectomy some twenty-nine years after Mrs Klimeck's admission [1171,1172].

Mr. Michael Curtin, age seventy, died in the Zeehan Hospital. He was admitted unconscious with pneumonia and remained unconscious until his death. He was an early district pioneer discovering mineral deposits near Williamsford [1173].

#### **10.10. 1934**

Mr. Bert. Ramsdale was admitted to the Zeehan Hospital for treatment to a deep laceration cutting into the bone of his left foot sustained in a wood chopping match at Williamsford. After turning on his block his axe glanced of the wood and cutting his left foot into the bone [1174].

The Medical Superintendent remaining that there were eleven inpatients remaining from the previous month, followed by twenty-three admissions, twenty-six discharges, all cured and one death, leaving eight remaining inpatients for an average daily bed occupancy rate of 11.9. There were also sixteen operations, two

major, fourteen minor, two confinements, three X-Ray examinations and sixty-seven outpatients treated [1175].

Norman Summers, an engine driver of Burnie, was admitted to the Zeehan Hospital by Dr. M. Connell for emergency surgery, having become seriously ill arriving in Rosebery on the Emu Bay railway mail train [1176]. Miss Eliza Garwood, age eighty-four, died in the Zeehan Hospital of an unspecified illness [1177].

The Medical Superintendent reported that there were nine inpatients remaining from the previous month, followed by twenty-six admissions, twenty-three discharges, all cured, and one death leaving eleven remaining inpatients for an average daily bed occupancy rate of 11.2. There were also seventeen operations, four major, thirteen minor and four confinements [1178].

The Medical Superintendent reported that there were ten inpatients remaining from the previous month, followed by twenty-four admissions, nineteen discharges, all cured, leaving fourteen patients remaining in hospital, a mathematical error again. There were also fourteen operations, five major and nine minor, three confinements, four X-Ray examinations and seventy-five outpatients [1179].

The Medical Superintendent's reported that there were fourteen inpatients remaining from the previous month, followed by thirty admissions and twenty-seven discharges all cured, leaving fifteen remaining inpatients, another mathematical error. There were also thirty operations, six major, twenty-four minor, six X-Ray examinations, four confinements and eighty outpatients [1180].

Mr. John Reynolds died in the Zeehan Hospital, his age and diagnosis were not stated.

Reynolds had been in business in Zeehan for some forty years and was a justice of the Peace, a councillor and Warden of the Municipality [1181].

The Medical Superintendent reported that there were fifteen inpatients remaining from the previous month, followed by eleven admissions, seventeen discharges, fifteen cured, two incurable and one death, leaving eight remaining inpatients for an average daily bed occupancy rate of 11.7. There were also nine operations, three major, six minor, five X-Ray examinations, one confinement, and eighty-eight outpatients [1182].

Mr. W. Matheson, an elderly resident of North Heemskirk, became seriously ill and in pain. He was conveyed for nine hours in the dark over sixteen miles by stretcher to the Zeehan Hospital where he had an urgent operation for appendicitis [1183].

The Medical Superintendent reported that there were eight inpatients remaining from the previous month, followed by eighteen admissions and fifteen discharges leaving eleven remaining inpatients for an average daily bed occupancy rate of 9.9. There were also fourteen operations, four major, ten minor, four confinements and eighty-nine outpatients [1184].

Mrs. George Amer was readmitted to the Zeehan Hospital but six

weeks later was reported to be recovering after a long illness and a serious operation [1185,1186].

The Medical Superintendent reported that there were eleven inpatients remaining from the previous month, followed by twenty-five admissions and twenty-four discharges, all cured, leaving twelve patients remaining in hospital for an average daily bed occupancy rate of thirteen. There were also fourteen operations, three major, eleven minor, four confinements, three X-Ray examinations and thirty-six outpatients [1187].

Mr. R. McIntosh was admitted to the Zeehan Hospital and died a few days later, age and condition not stated. He had worked as a commercial carrier for many years and was one of Strahan's oldest and most respected citizens [1188,1189].

Mr. Eric Cowie, was admitted to the Zeehan Hospital with an injury to his left arm sustained in an accident while driving a train but was improved after a month in hospital [1190].

The Zeehan Hospital annual figures for 1933 were announced at the monthly meeting. During the year there were two hundred and eighty-four admissions, one hundred and fifteen males and one hundred and thirty-three females. With thirteen remaining from the previous year, three males and ten females, there was a total of two hundred and ninety-seven patients. Of the cases treated one hundred and nine males and one hundred and thirty-three females were discharged cured or relieved, five males and two females died, and four males and eight females remained in hospital at the close of the year.

There were twenty-six accident cases, twenty-two of appendicitis, one mental disease, thirteen diseases of the nervous system, three cerebral hemorrhages, five cancers and thirty-three midwifery cases, the remainder being various surgical and medical cases. There were one hundred and sixty-three surgical operations, sixty-two major, one hundred and one minor, one hundred and eighty-eight X-ray examinations and two thousand and three outpatients' dressings were given.

The average number of beds occupied daily was 16.25, males 7.0, females 9.25. The average stay of patients discharged was 21.50 days for males and 25.03 for females. The average occupation of beds by those who died was twelve for males, six for females, and six for male children. The average age of patients discharged was thirty-eight for males, thirty-one for females, seven for male children, 5.43 for female children and the average age of those who died was seventy-two for males, 82.5 for females, and thirteen for male children [1191].

Mr. C. Walker died in the Zeehan District Hospital, age and diagnosis were not specified [1192].

The Medical Superintendent reported that there were twelve inpatients remaining from previous month, followed by twenty admissions, twenty-one discharges, all cured, and one death for an average daily bed occupancy rate of 12.7. There were also twelve operations, six major, six minor, three confinements, three X-Ray examinations, and one hundred and eighteen outpatients [1193].

Mr. Bert Maggs was admitted to the Zeehan Hospital following an accident at work. No further details were given beyond the fact that he was recovering [1194].

Mr. George Lee, an engine driver at the Mount Farrell Mine, died in the Zeehan Hospital his age and diagnosis were not stated though his job would expose him to coal and asbestos dust and metal toxicity [1195].

## 11. FORTY YEARS

By the last date, the hospital had been open for forty years. It was handed over to the medical staff and administration on September 5th, 1894. No further data is collected and the above publications are subjected to an analysis.

### 11.1. Fourth Decade 1924-1934

The contrast with previous decades was the percentage of named patients admitted to Zeehan Hospital for whom no diagnosis was given. A total of seventy-nine people were admitted with their condition unspecified, twenty-nine of them died, and fifty recovered. Many had been employed in the mines and lead poisoning was a possible diagnosis for many of them. The possibility of deliberate suppression of this diagnosis by mining and newspaper magnates has been discussed.

There were thirty workplace accidents requiring hospitalization with only one death, an unfortunate man being electrocuted in the mines. In the three previous decades there had been thirteen, fifty-two and one deaths respectively. The second decade was dominated by the Mount Lyell fire, and the last twenty years reflected the diminution of mining activity.

Four men died of miners' phthisis, one with concomitant pneumonia, a reflection of long-term lung damage from mining. Eleven patients were admitted with pneumonia, four of whom died. Two cases of meningitis were admitted with one death, perhaps the one with bacterial meningitis, while the survivor may have had benign viral meningitis. Five patients were admitted with diphtheria and all survived. Two patients were admitted with influenza with one death and a man with spinal tuberculosis died. Antibiotics arrived in the next decade, sadly just too late for many of these cases (Figure 10).





**Figure 10:** Dove Lake, Tasmania – beautiful but polluted

## 12. Contrasts with 2021

### 12.1. G.P. Surgery

General practitioners between 1894 and 1934 performed operations which today would be in the hands of subspecialist surgeons, particularly amputations by orthopaedic surgeons, appendectomy by general or abdominal surgeons and tonsillectomy by otolaryngologists. Some performed pathology testing, all were capable of taking X-Rays, both now done in specialist departments. The diversity of their skills is to be admired by all today's medical practitioners. The advent of carbolic acid sterilization and anaesthesia in the nineteenth century enabled this process, and the poor transport to and from remote areas such as Zeehan by rail or early motor vehicle rendered urgent local operations essential.

### 12.2. Antibiotics

Penicillin was discovered in 1928, but the first commercially available antibiotic was Prontosil Red, a sulphonamide in 1936, just after the four decades discussed in this article. Until that year pneumonia was often fatal, and bacterial meningitis nearly always fatal. While pneumonia may have been the old man's friend, sulphonamides were a better friend.

### 12.3. Workers' Compensation

Industrial worksites are much safer places than the mines of Zeehan over a century ago. Compensation is paid to the victims of accidents and to the dependents in the case of fatal accidents. Business accepts responsibility for compensation today whereas enquiries and the jury system of a century ago appeared a means of labelling awful accidents as just a misfortune with no blame to be allocated. Modern safety systems and appropriate onsite training protect the worker of today, perhaps not perfectly but infinitely better than in Zeehan mining days.

### 12.4. Environmental pollution

The best evidence indicates not only dangerous environmental pollution in the area today, but also a century ago. It is hard to believe that there were no industrial or domestic cases of lead poisoning seen in Zeehan Hospital between 1894 and 1934. Government and business are compelled to protect the environment in the 21st century whereas it was carelessly destroyed in the past to boost business profits for the owners.

### 12.5. Length of hospital stay

Many patients stayed for weeks or months between 1894 and 1934. The average length of stay was eighteen days in 1904, twenty-six days in 1906, whereas today admissions average a few days. Early mobilisation reduces deep vein thromboses, bed sores, urinary infections and chest infections. In 1970 when the author was a house physician in London, patients remained on bed rest for six weeks after a myocardial infarct. Today after a coronary stent many are home in one day. In 1970 a patient with pneumonia remained in hospital for radiological resolution. Today discharge after three days' intravenous antibiotics with continued oral antibiotics at home is usual. In the third week of December 1970, the author managed to discharge two thirds of the inpatients for a family Christmas at home with initial self-congratulations, but much later, realisation that their continued hospital stay was unwarranted!

### 12.6. Vaccinations

As noted previously, Dr Butler, the house surgeon at the Zeehan Hospital vaccinated seventy-one people in two days. The nature of the vaccine is not recorded. Available vaccines by 1903 included smallpox, cholera, rabies, tetanus, typhoid fever and bubonic plague. Typhoid would perhaps seem the most likely in view of the incidence in Zeehan. The vaccine for influenza was actually a

vaccine against *Haemophilus pneumonia*, perhaps with the serendipitous benefit of reducing secondary infection.

Since 1934, vaccines against mumps, measles, rubella, poliomyelitis, coronavirus (covid 19), hepatitis A and B, pneumococcus, influenza and pertussis amongst others have been developed and successfully reduced deaths a quantum amount. Smallpox was eliminated by 1978. Wild-type poliomyelitis is only found still in Afghanistan and Pakistan and elimination is within our grasp providing there is cooperation at a government level, though sadly, very surprisingly some oppose vaccination there.

In 1934 there was belief in the best available expert medical science, a belief that mankind should 'play as a team' and that all aspects of problematic issues should be addressed. Life does not always advance. Unfortunately, today there is belief in pseudo-experts on social media, some of whom are actually elected representatives, a narcissistic focus on narrow personal ideology before 'the team' and the 'big picture', and reduced compliance with vaccinations leading amongst other diseases to increased rates of optional diseases such as pertussis, measles and diphtheria with unnecessary fatalities.

In 2021 we are unfortunately threatened by 'anti-vaxxers', forged vaccine certifications, escapes from quarantine and deliberate public exposure by infected personnel putting others lives at risk. The covid vaccines are obviously not ideal vaccines, but we do not live in an ideal time. Little wonder this movement is included in the World Health Organisation's top ten risks to global health! A full transparent external independent review of the origins of Covid in Wuhan may also benefit the world. Team play!

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972. Launceston Examiner 5/5/1928
973. Burnie Advocate 2/6/1928
974. Launceston Examiner 14/6/1928
975. Launceston Examiner 5/5/1928
976. Burnie Advocate 5/5/1928
977. Burnie Advocate 21/5/1928
978. Burnie Advocate 8/6/1928
979. Hobart Mercury 4/6/1928
980. Hobart Mercury 8/6/1928
981. Burnie Advocate 8/6/1928
982. Burnie Advocate 12/6/1928
983. Hobart Mercury 13/6/1928
984. Burnie Advocate 14/6/1928
985. Burnie Advocate 30/6/1928
986. Burnie Advocate 13/7/1928
987. Burnie Advocate 24/7/1928
988. Burnie Advocate 31/7/1928
989. Launceston Examiner 11/8/1928
990. Burnie Advocate 18/8/1928
991. Burnie Advocate 18/8/1928
992. Burnie Advocate 1/9/1928
993. Burnie Advocate 14/9/1928
994. Burnie Advocate 19/9/1928
995. Burnie Advocate 25/9/1928
996. Launceston Examiner 28/9/1928
997. Launceston Examiner 4/10/1928
998. Burnie Advocate 4/10/1928
999. Hobart Mercury 5/10/1928
1000. Burnie Advocate 19/11/1928
1001. Launceston Examiner 8/11/1928
1002. Launceston Examiner 9/11/1928
1003. Launceston Examiner 15/12/1928
1004. Burnie Advocate 14/1/1929
1005. Burnie Advocate 7/2/1929
1006. Launceston Examiner 9/2/1929
1007. Burnie Advocate 9/2/1929
1008. Launceston Examiner 11/2/1929
1009. Burnie Advocate 22/2/1929
1010. Burnie Advocate 7/3/1929
1011. Launceston Examiner 7/3/1929
1012. Launceston Examiner 7/3/1929
1013. Launceston Examiner 9/3/1929
1014. Burnie Advocate 22/3/1929
1015. Launceston Examiner 12/4/1929
1016. Launceston Examiner 4/5/1929
1017. Launceston Examiner 9/5/1929
1018. Launceston Examiner 10/5/1929
1019. Burnie Advocate 11/6/1929
1020. Burnie Advocate 13/6/1929
1021. Burnie Advocate 2/7/1929
1022. Burnie Advocate 6/7/1929
1023. Burnie Advocate 16/7/1929
1024. Burnie Advocate 14/8/1929
1025. Burnie Advocate 17/7/1929
1026. Launceston Examiner 3/8/1929

1027.	Launceston Examiner 8/8/1929	1071.	Launceston Examiner 5/6/1931
1028.	Launceston Examiner 11/8/1929	1072.	Burnie Advocate 13/6/1931
1029.	Launceston Examiner 12/8/1929	1073.	Burnie Advocate 16/6/1931
1030.	Burnie Advocate 14/8/1929	1074.	Burnie Advocate 22/6/1931
1031.	Burnie Advocate 5/9/1929	1075.	Burnie Advocate 8/9/1931
1032.	Burnie Advocate 20/9/1929	1076.	Burnie Advocate 7/7/1931
1033.	Burnie Advocate 21/9/1929	1077.	Burnie Advocate 9/7/1931
1034.	Burnie Advocate 30/10/1929	1078.	Burnie Advocate 18/7/1931
1035.	Launceston Examiner 6/11/1929	1079.	Burnie Advocate 25/7/1931
1036.	Burnie Advocate 1/1/1930	1080.	Burnie Advocate 8/8/1931
1037.	Launceston Examiner 9/1/1930	1081.	Burnie Advocate 22/8/1931
1038.	Launceston Examiner 27/1/1930	1082.	Burnie Advocate 25/8/1931
1039.	Launceston Examiner 2/2/1930	1083.	Burnie Advocate 3/9/1931
1040.	Launceston Examiner 6/2/1930	1084.	Burnie Advocate 12/9/1931
1041.	Launceston Examiner 12/2/1930	1085.	Burnie Advocate 16/9/1931
1042.	Burnie Advocate 3/4/1930	1086.	Burnie Advocate 3/10/1931
1043.	Launceston Examiner 9/4/1930	1087.	Burnie Advocate 8/10/1931
1044.	Burnie Advocate 16/4/1930	1088.	Launceston Examiner 3/11/1931
1045.	Burnie Advocate 8/5/1930	1089.	Burnie Advocate 5/11/1931
1046.	Launceston Examiner 12/5/1930	1090.	Burnie Advocate 7/12/1931
1047.	Burnie Advocate 5/6/1930	1091.	Burnie Advocate 7/1/1932
1048.	Burnie Advocate 28/6/1930	1092.	Burnie Advocate 4/2/1932
1049.	Burnie Advocate 8/7/1930	1093.	Launceston Examiner 6/2/1932
1050.	Burnie Advocate 2/8/1930	1094.	Burnie Advocate 27/2/1932
1051.	Launceston Examiner 8/8/1930	1095.	Launceston Examiner 6/3/1932
1052.	Burnie Advocate 16/8/1930	1096.	Launceston Examiner 8/3/1932
1053.	Burnie Advocate 21/8/1930	1097.	Burnie Advocate 28/3/1932
1054.	Burnie Advocate 4/9/1930	1098.	Burnie Advocate 28/3/1932
1055.	Burnie Advocate 6/9/1930	1099.	Burnie Advocate 28/3/1932
1056.	Burnie Advocate 18/9/1930	1100.	Circular Head Chronicle 6/4/1932
1057.	Burnie Advocate 18/9/1930	1101.	Burnie Advocate 7/4/1932
1058.	Burnie Advocate 25/9/1930	1102.	Launceston Examiner 12/4/1932
1059.	Burnie Advocate 7/11/1930	1103.	Burnie Advocate 23/4/1932
1060.	Launceston Examiner 10/10/1930	1104.	Burnie Advocate 28/4/1932
1061.	Burnie Advocate 7/11/1930	1105.	Burnie Advocate 2/5/1932
1062.	Burnie Advocate 12/11/1930	1106.	Burnie Advocate 5/5/1932
1063.	Burnie Advocate 26/11/1930	1107.	Launceston Examiner 10/5/1932
1064.	Burnie Advocate 20/12/1930	1108.	Burnie Advocate 31/5/1932
1065.	Burnie Advocate 8/1/1931	1109.	Burnie Advocate 13/6/1932
1066.	Burnie Advocate 5/2/1931	1110.	Hobart Mercury 13/7/1932
1067.	Hobart Mercury 7/2/1931	1111.	Burnie Advocate 30/7/1932
1068.	Burnie Advocate 16/3/1931	1112.	Burnie Advocate 11/8/1932
1069.	Burnie Advocate 2/4/1931	1113.	Launceston Examiner 10/8/1932
1070.	Burnie Advocate 7/5/1931	1114.	Launceston Examiner 10/9/1932

1115. Burnie Advocate 4/10/1932  
1116. Launceston Examiner 7/10/1932  
1117. Hobart Mercury 7/10/1932  
1118. Burnie Advocate 5/11/1932  
1119. Burnie Advocate 7/11/1932  
1120. Hobart Mercury 7/11/1932  
1121. Burnie Advocate 29/11/1932  
1122. Burnie Advocate 3/12/1932  
1123. Burnie Advocate 11/3/1933  
1124. Burnie Advocate 3/12/1932  
1125. Burnie Advocate 6/12/1932  
1126. Launceston Examiner 8/12/1932  
1127. Burnie Advocate 1/12/1932  
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1133. Burnie Advocate 9/2/1933  
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1138. Burnie Advocate 13/3/1933  
1139. Burnie Advocate 27/3/1933  
1140. Burnie Advocate 6/4/1933  
1141. Burnie Advocate 8/4/1933  
1142. Burnie Advocate 1/5/1933  
1143. Hobart Mercury 5/5/1933  
1144. Burnie Advocate 6/5/1933  
1145. Launceston Examiner 6/5/1933  
1146. Burnie Advocate 27/5/1933  
1147. Hobart Mercury 24/6/1933  
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1155. Burnie Advocate 4/7/1933  
1156. Burnie Advocate 8/7/1933  
1157. Launceston Examiner 8/7/1933  
1158. Hobart Mercury 3/8/1933  
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1161. Burnie Advocate 7/9/1933  
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1174. Burnie Advocate 1/1/1934  
1175. Burnie Advocate 11/1/1934  
1176. Launceston Examiner 18/1/1934  
1177. Burnie Advocate 25/1/1934  
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1181. Burnie Advocate 19/4/1934  
1182. Burnie Advocate 3/5/1934  
1183. Hobart Mercury 21/5/1934  
1184. Burnie Advocate 7/6/1934  
1185. Burnie Advocate 12/6/1934  
1186. Burnie Advocate 30/7/1934  
1187. Burnie Advocate 5/7/1934  
1188. Burnie Advocate 28/7/1934  
1189. Burnie Advocate 1/8/1934  
1190. Burnie Advocate 30/7/1934  
1191. Burnie Advocate 1/8/1934  
1192. Launceston Examiner 8/8/1934  
1193. Burnie Advocate 9/8/1934  
1194. Burnie Advocate 28/8/1934  
1195. Burnie Advocate 5/9/1934