

newsletter

The following is a copy of the Editorial from the *New Zealand Herald*, March 16 1870.

*Spectemur Agendo **

'Give every many thine ear, but few thy voice; Take each man's censure, but reserve thy judgement. This above all, — To thine own self be true. And it must follow, as the night the day, Thou cans't not then be false to any man'. **

The people of Auckland must be considered among the most conservative of mankind, as is particularly exemplified in matters of sanitary character. There are few places, we imagine, where nuisances most dangerous to health are nursed and kept in free play as they are in this city of Auckland. As a people, we seem to be careless of sanitary measures, and are quite accustomed to bear with removable health-destroying agencies as if they were mere matters of course. Our city authorities have done little in the endeavour to remove those causes of disease from among us, which necessarily accumulate in every large town. The streets are not regularly swept; the want of sewers causes surface water to lie in the streets, forming long lines of festering matter, giving out noxious and health destroying gases. Garbage lies about, and evil smells rise to warn the passer-by of decomposition, of foul atmosphere injurious to breathe. Then again, if we pass from the street to the yards of dwelling houses, we have accumulations of filth in receptacles which are scarcely ever emptied, which are not lined and cemented to prevent the adjoining ground being saturated with the foul matter, while the well from which the family supply of water is obtained is in immediate contiguity, and is in consequence polluted. Thus we have two great causes of sickness ever present among us, namely, impure water and a foul atmosphere. Were Auckland less favourably placed as regards certain natural phenomena, it would of necessity, be a most unhealthy place to live in.

And how can all this be altered? Easily, if we set about it; but only by judicious expenditure of a considerable sum of money. We can remove the offences which we all know about, only through the expenditure of money. And the sooner steps are taken to make the town more cleanly and more fit for residence of civilised beings,

the sooner shall we wipe off a great blot from our civic administration. That abomination, the Ligar Canal, has been written about over and over again, but is still a pestiferous ditch, the receptacle of every imaginable filth, bubbling in the noon-day sun, and for every hour of the day and night sending out poisonous gases to mingle with the air we breathe. And why is this filthy nuisance permitted to exist — an open, dirty, evil-smelling sewer, in the very heart of the city, with a City Board to look after such matters? Were this disgraceful state of things in existence through want of action of some distant or central government, instead of through the want of action of a local government, how loud would the demand be for an alteration? But we govern ourselves and we are content to be poisoned by ourselves.

And with respect to the filthy closet system, why could not a change for the better be made? Every one of these receptacles ought to be emptied and filled up by a given day, of which due notice should be made known, under pain of a fine for each day's neglect. The earth-closet system should be made compulsory; and if farmers would not undertake to bring soil and remove it again at stated periods, the City Board ought to do so. It is to be hoped that this will not be lost sight of when the Bill for incorporating Auckland is drawn. It is no use fancying we can continue living in Auckland as it is. We must have it cleaner and healthier, with fewer overpowering evil smells at each step we take, no matter in what direction we wend our way.

We now come to the standing nuisance, and with regard to the Queen Street sewer strangers may well wonder how a civilised community can permit such a disgraceful nuisance to exist for a single day. It will cost money to remove the nuisance, and that is the reason why it is not

removed. We shall not dwell on this nauseous subject. But we must nevertheless again raise our voice against the continuance of a do-nothing policy. The harbour is filling up very fast with the matter carried into it by the sewer and this will entail expense of a very serious character. This dispute has been, we believe, as to who is liable for the removal of the nuisance. The City Board appears to say that it has the right to discharge the washings of the city into the harbour, regardless of the injury and nuisance that may be caused thereby. The Government, as trustee for the harbour, has taken no action in the matter, but stands by regardless of the effect of the sewer on the harbour. We understand, however, that the present Superintendent is seriously considering how best to remove the nuisance complained of. There are two or three ways, any of which will be attended with expense. An iron pipe of large dimensions might form a continuation of the sewer to deep water, where there would be sufficient scour to carry away the large quantity of solid matter carried by the sewer into the harbour. This pipe could either run alongside the wharf or underneath it. Alongside it would be in the way of vessels; carried underneath it would probably so interfere with the by no means very sound piles in such a manner as would in fact preclude the work being done. But there is another method that might be adopted, that is, to divert the sewer at the corner of the Thames Hotel and carry it along Custom House Street to somewhere in the neighbourhood of Fort Britomart.

It should ever be remembered that the filling-up of the harbour between the breakwater and the wharf is a matter of most serious importance and ought to be most carefully guarded against. We protested at the time the breakwater was constructed, and part of the wharf was made a continuation of Queen Street, against the plans adopted, on the ground that there being no wash of the tide through an opening or openings under the wharf there would be a rapid filling-up of the space between the breakwater and the wharf. Were two or three archways now made under the solid part of the wharf, there would be considerably less silting up than is now going on, for then there would be some scour where now there is absolutely none. To carry the sewer on only such a distance that that the solid matter taken down by it would be merely deposited out of sight, but not where the scour of the tide would carry it away, would be a great mistake. The subject requires consideration, so that the harbour may be injured as little as possible, and the present nuisance be at the same time effectually abated.

There is another nuisance to which we must allude, and that is the wretched tumble-down shanties on the site of the old Supreme Court House. There is a splendid site, capable of being put to really profitable account and also of obtaining an architectural ornament of the town. The Ligar Canal cleansed and filled up, and a small sewer made there, the site in question might, part of it, be let on lease for building purposes, with a provision that buildings of a certain character only should be erected upon it, and the other portion would be specially suitable for a Town Hall and corporate buildings, including a free public library. If we could see these things brought to pass, Auckland would be purged of some of its nuisances, it would be a healthier town to live in, and other important advantages and benefits would be secured."

Transcribed from the original by John La Roche FIPENZ.

* *Spectemur Agendo*: Let us be judged by our actions.

** "Give every many thine ear ..." This (much truncated) famous piece of advice is spoken by Polonius to Laertes shortly before Laertes leaves for France, in William Shakespeare's *Hamlet*, Act I, scene iii (59–80).

The *New Zealand Herald's* article on Auckland's historic Birdcage Tavern being returned to its previous site after being shunted up Franklin Rd while the Victoria Park motorway tunnel is dug can be found via the following link: www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10653929

The historic Birdcage Tavern started its slow move towards new temporary lodgings on September 1st. Read the *New Zealand Herald* story via the following link: www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10670290

The July 2010 GridHeritage newsletter, *Heritage Happenings* can be found on the following website: www.gridheritage.org.nz

Book Review

No Job Too Big – A history of Fletcher Construction Volume 1 – 1909-1940

by Jack Smith

Fletcher Construction, celebrating 100 years of operations, has constructed so much in New Zealand that there seems to be very little that they have not built or had a hand in. This book, the first of three volumes, is a major contribution to the history of construction in New Zealand. Two other books have been written for the Fletcher Centenary, *Pride of Place* by Peter Shaw and *Fletchers: A Centennial History of Fletcher Building* by Paul Goldsmith. Both of these books have considerable interest and good historical information, but Jack Smith's *No Job Too Big, Volume 1*, is a more comprehensive, meticulously researched and very well-written book about Fletcher's achievements up to 1940. Volume 2 is soon to be published.

Jack Smith FIPENZ MBE, became General Manager of Fletcher Construction in 1967 at the age of 39 and retired as Executive Director of Fletcher Holdings in 1988. He started as an engineering cadet at Wellington City Council and gained an AMICE through Victoria and Canterbury universities. Recruited by Fletcher's in 1952, he took a leading role in many major projects. These included Auckland's Jellicoe Wharf, Tasman Pulp and Paper Mill at Kawerau, Ohakuri diversion tunnel, Kuratau hydro station, Te Kuiti and Orawia cement works, Christchurch to Lyttelton tunnel, motorway bridges in Auckland and Wellington, the Manapouri investigation shaft and the Marsden A Power Station.

Fletcher's founder, Jim Fletcher (later Sir James), who came to Dunedin aged 22 in 1908, was indeed a remarkable man. Contracting is not for the faint-hearted with its many risks and often minimal rewards. In June 1909 Jim and his business partner, Bert Morris, secured their first job on the Otago Peninsular to build a villa. Their high quality workmanship and the client's satisfaction enabled them to secure further work. Finance to keep the business going was a major problem and Jim had to borrow from a friend, and family in Scotland. Jim's brother, William, joined the firm in 1911 bringing £1,000 to the company. Jim's first cousin, Bill Smith (Jack's father), who was an experienced builder, also joined the firm in late 1911. They were soon winning contracts for large buildings, including Knox College, Ross Home for the Aged, Columba College, John McGlashan College and the University of Otago. Jim could see that

Auckland offered opportunities and successfully tendered for the Auckland City Markets in 1916. This led to further contracts in Auckland and a move into Wellington.

Major projects included the University of Auckland Arts Block, the Dilworth Building, the Civic Theatre, Victoria University's Hunter Building, Wellington Hospital and the National Bank building in Wellington. Industrial buildings included fertiliser works in Dunedin and Auckland, and Auckland Farmers' Freezing Company cool store at Kings Wharf in Auckland.

The 1930's Depression was a very difficult time for the company. The Chateau Tongariro started in 1928 had to be built in 17 months, but there were many difficulties including the client, Mt Cook Company, being in financial difficulties. Fletcher's completed the job in eight months but made an overall loss. Jim Fletcher was quick to respond after the Napier earthquake by sending Bill Smith, Gibby Lang and William Fletcher to Napier very soon after the earthquake, despite the difficulties of getting there. They quickly assisted in establishing tented camps. Within two weeks Fletcher's had erected a temporary building in Napier to house the six banks, paid for on a cost-reimbursable basis plus a five percent fee, and temporary bank facilities in Hastings also. However there was opposition from local builders who felt they should have first preference for work. Before permanent re-building could commence, there was a need for new earthquake-resistant building rules. Jim Fletcher was appointed to a committee along with 11 leading engineers to develop guidelines. In addition to helping to erect temporary structures in Napier, Fletcher's were able to quickly restore facilities to receive the apple harvest, thus aiding much needed assistance to the recovery.

Fletcher's continued to win major contracts, including the Wellington Railway Station, the Dunedin Post Office and the Dominion Museum, but Jim Fletcher was particularly concerned for the 80,000 workers who were unemployed because of the Depression. He suggested to the Government that unemployment funds should be used for re-housing in slum areas. It was estimated in 1935 there was a shortage of 20,000 houses and many more substandard houses needed replacement. Jim recommended a new government department of Building Construction and that if he were invited, he

would assist the head of this department, free of charge, for six months to prepare conditions plans, specifications and schedules of quantities for houses to be built on a mass-production scale. Arthur Tyndall who was appointed to head the department, had concerns that other builders would object to Fletcher's being given the work. Finally tenders were called and contracts got under way in 1937 for groups of houses in Lower Hutt, Miramar and Orakei, and other areas followed.

The start of World War Two led to growing shortages of materials and manpower. There was an urgent need for military buildings, such as Papakura Military Camp with the first stage built in only eight weeks by working 12 hour days.

Fletcher's achieved some remarkable feats. In 1919, Arthur Barnett's large drapery store in Dunedin was remodelled throughout, including a new ladies cloak-room over a single weekend. Nearly 100 carpenters, plumbers and painters moved in relays handling 13,500 linear feet (4,114.8 metres) of timber, installing plumbing and painting. All was complete for opening by 10.30am on Monday, although paint needed a little more time to dry. When the Social Security Building in Aotea Quay, Wellington, was destroyed by fire in February 1939, Jim Fletcher told the Prime Minister, Michael Savage, he could rebuild the four-storey block in eight weeks. The Public Works Department had estimated at least six months. Fletcher's worked 10-hour day and 10-hour night shifts with up to 700 workers on site. Two hundred more were preparing timber off-site. The building was completed, including a full concrete basement, sealed car parks, lawns and landscaped grounds in 39 working days! Fletcher's also pioneered the use of ready-mix concrete in 1937 at Certified Concrete in Auckland and Wellington, and they were the first to use tubular steel scaffolding in 1938 at a building in Wellington.

No Job Too Big is a remarkable record of the many achievements by Fletcher Construction in their first 30 years. For anyone interested in the history of New Zealand's development in the 20th Century, this book is very worthwhile reading. It is a fascinating story, well-written and illustrated. At a recommended retail price of \$44.99 for 342 pages, this is very good value.

Reviewed by John La Roche FIPENZ.



Engineering Journals in Auckland Libraries

Until recently when I visited librarians at the University of Auckland Engineering Library, Auckland City Library and MOTAT Library, I had no idea of the extensive collections of engineering journals they all hold. All have full collections of *New Zealand Engineering* going back to 1946 as well as lots of other journals and proceedings from British and American institutions, such as the Institution of Civil Engineers, Institution of Mechanical Engineers, Institution of Electrical Engineers, and the American Society of Civil Engineers, to name just a few. These collections generally go back to in the 19th Century, some as early as 1837, including articles about engineering structures in New Zealand. There is fascinating engineering information in all of these journals. Unfortunately they are rarely used, possibly because many of us are not aware of this great resource right here on our doorstep in Auckland. All the librarians were very keen to help and provide service.

You can view catalogues for the University of Auckland Engineering Library online at www.library.auckland.ac.nz and Auckland City Library at www.aucklandcitylibraries.com

Non-members of the University of Auckland Engineering Library are welcome to browse the shelves and can use the photocopiers. Books can be borrowed on inter-library loan.

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From the New Zealand Historic Places Trust

Outstanding heritage of Lower Nevis recognised

The considerable historical and heritage values of the Lower Nevis valley in Central Otago were formally recognised by the special tribunal that recently forbade the building of any dam on the Nevis River.

In its decision on the hearing for a variation to the Kawarau Water Conservation Order, the tribunal said it was “persuaded that the overall completeness of the remnant gold mining systems would indeed meet the definition of ‘outstanding’.”

The tribunal also said the expert archaeological evidence presented supported the view that the Nevis Valley is endowed with gold mining sites that form a unique system.

In its submissions the New Zealand Historic Places Trust (NZHPT) said the Nevis was a virtual outdoor goldfield museum as no other site of this nature had survived modification from residential development, horticulture or irrigation. It contained several largely intact gold mining systems from water races to the remains of a dredge in the river, as well as covering the different gold mining eras.

NZHPT Otago–Southland Area Manager, Owen Graham, says the tribunal’s decision was a positive outcome for heritage, recognising the significance of NZHPT’s research of the historic and archaeological values in the Lower Nevis valley.

The decision follows the NZHPT’s registration of the Lower Nevis Historic Area in June.

Wellington’s Trolley Buses – a 21st Century Revival

By Mike Mellor

Trolley buses once operated in many parts of the world, including countries where people drove on the left because of historical British influence, such as the United Kingdom itself, South Africa, Singapore, Australia and New Zealand. Wellington’s system is the only survivor of these British-influenced systems, and is heading into its second 60 years in good heart.

The original route

The northern terminus of Wellington’s electric tram system was at Thorndon Car Barns, opened in 1904. The first trolley bus route opened from here in 1924, extending the corporation’s transport network just over a kilometre along Hutt Road to Kaiwarra (now Kaiwharawhara) until its closure in 1932. There was just one “trackless tram”, with an Auckland-built DSC & Cousins & Cousins body on an AEC chassis. Its body survives in Wellington, in the care of the Omnibus Society.

The second network

In common with Auckland, New Plymouth, Dunedin and many other cities around the world, after World War Two Wellington chose to replace its trams with trolley buses. The initial route, opened in 1949, continued beyond the Oriental Parade tram terminus to Roseneath, and was extended to Hataitai School later that year. The next route was to Aotea Quay, to serve the new Social Security building. It closed 15 years later when that office moved, and was notable for being the only location in New Zealand where trolley buses reversed to turn round.

Tram conversion started in earnest in 1951 with the opening of the route to Wadestown – the tram–route had closed the previous year. Conversion continued to Karori (1954), Northland (1956), Seatoun and Miramar (1958), Aro Street and Brooklyn, the latter extended beyond the tram terminus to Mornington (1960), Lyall Bay (1963) and Island Bay (1964). New wiring ran from Waitoa Road in Hataitai to Hataitai School linking with the Roseneath service (1963), and the building of Wellington Airport across the Rongotai isthmus required the Seatoun and Miramar routes to deviate from the Coutts Street route that the trams had taken. The short Northland route closed in 1972.

After a 20-year break the Taranaki Street route to Newtown Park Zoo was wired, completing the conversion of all the tram routes except for Thorndon, followed shortly after by an extension of the Mornington route to Kingston. The system had reached its maximum length, and in 1987 the pioneer Wadestown-to-Roseneath route closed. The rest of the route network survives, though with greatly simplified wiring in the central business district.

Until the 1980s all trolley buses had British-built chassis: Crossley for the first 10 in 1949/50, British United Traction for the following 119 in 1951 to 1964. The 20-year break in route development was paralleled in vehicle purchases, and Volvo then became the preferred supplier. Sixty-eight B58 chassis' with Brown Boveri electrical equipment and Hawke or Coachwork International bodies were delivered between 1981 to 86, together with 20 B10M chassis with Ansaldo electrical equipment and NZMB-Hess bodies second-hand from Auckland, delivered for an aborted new trolley bus system there and not used. All have been withdrawn: many of the AnsalDOS were converted to diesel buses after disposal, in which guise they still operate along Wellington's streets.

The present-day system

Transport deregulation in the late 1980s-early 1990s saw significant changes in ownership. Wellington City Council sold its bus operation to the Stagecoach group from Scotland, who later sold it to New Zealand-based Infratil; it retained ownership of the overhead wires, now managed by its Wellington Cable Car subsidiary.

After much uncertainty about the future of the system, the 21st Century saw the drastic rebuilding of the B58s into a fleet of 60 new trolley buses with Designline bodies and electrics from Brazil: three two-axle prototypes and 57 three-axle production models. Wiring through the central business district is being streamlined with the re-opening of Manners Mall to buses, and the future of the world's only right-hand-drive trolley bus network seems reasonably assured.

An Engineering Mystery of the North Island Main Trunk Railway: F W Furkert and the Bet with the Minister of Public Works, William Hall-Jones

By Rob. Merrifield.

There is a well-known story of the rush to get the first through train from Wellington to Auckland in August 1908, when the Minister of Public Works, the Hon. William Hall-Jones (later Sir William), laid a bet with his Resident Engineer, Ohakune, over whether a train could carry Parliament to Auckland to meet the United States' "Great White Fleet", which was touring the world. Mr F W Furkert, the Engineer, brought the incomplete railway to a sufficient state that a train could travel through in time for the Parliamentarians to meet the American fleet. He did this by completing the major bridges in time and building a temporary line that had steeper grades, sharper curves and interim track standards.

Almost invariably when telling this tale, authors add the rider, "There is no record of whether the Minister paid out on the bet."

Colin McLeod, a former Commissioner of Works, has written of an address given by Mr Furkert in the early 1940s to a Karori church men's group on the completion of the North Island Main Trunk Railway. "He told us about the bet, with such a sense of humour, certainly not bitterness," Mr McLeod wrote.

So what did happen? Did Sir William pay out following the running of the Parliamentary special train? The sum of £1,000 was a large amount of money; twenty years later Mr Furkert received a salary of £1,200, as Engineer-in-Chief of the Public Works Department.

Sir William had a very strong reputation as being an honourable man. For example, when Liberal Premier, the Right Honourable Richard John Seddon was overseas for an extended period in 1906, Sir William, an Independent Member, was made Acting Premier. He did not take advantage of his position and stepped down again to allow Mr Seddon to resume as Premier upon the latter's return.

There is another clue. For over 100 years the Furkert family has held a telegram received at Ohakune on 27 July, 1908. This was sent by Sir William:

To: F W Furkert, Esq Res Engr Ohakune

“Ninety one thirty six first rate will pay the thousand in monthly instalments when you reach Otago as soon as last rail is spliced down send me an urgent wire and I will inform the House. Kind regards – Wm Hall-Jones”

I don't know the significance of the initial statement “Ninety one thirty six first rate” and assume it is a cost the Minister considers very satisfactory. The next statement is unequivocal: Mr Furkert's next job was in Dunedin and this is a clear statement of Sir William's intent. Next, the Minister wanted to be able to inform the House of Representatives of the last rail being laid as soon after it happened as possible.

The telegram has since been donated by Rod and Annette Furkert to the New Zealand Parliamentary Archive. My conclusion is that Sir William paid up, as set out in his telegram.