The Queenstown Courier

The Official Publication of the Queenstown & District Historical Society

Fifty-Sixth Issue - May 1996

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The Courier is included in subscription.

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On 5th November 1995, our Society arranged a field trip to visit some historic bridges in the Queenstown area. Five members were given the task of researching and commentating on each bridge. So well was this done that their talks are recorded in this issue of the COURIER in detail. The talks included,

- 1. The Kawarau Falls Bridge, by Ray Clarkson
- 2. The Lower Shotover, by Marjorie Swan
- 3. The Kawarau (Gibbston), by Ray Timmins
- 4. The Edith Cavell, by Rupert Iles
- 5. The Ballarat Street Bridge, by Peter Mills.

The commentaries are as follows: (Editor)

The Kawarau Falls Bridge - Ray Clarkson The Kawarau Falls Bridge

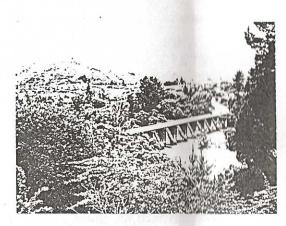
by Raymond J. Clarkson

The bridge at Kawarau Falls is in a situation in which the single narrow outlet to Lake Wakatipu corresponds with a shallow depth of water and the casy access to the eastern shores of the Lake with its more gradual slopes. The Falls, which registered an 8' drop at the time a bridge was proposed, were the most recent and third outlet to the Lake. They had developed either as a result of a weakness in the containing rock, or because of earthquake action.

Human habitation came with a small Maori settlement, then the establishment of W.G. Rees' second homestead when he shifted his farming base from Queenstown. The settlement at Frankton in the later part of the nineteenth century was also established with a Church, the Lakes District Hospital and Hallensteins flour mill on the river bank.

It was the incredible speed of mining penetration which threw emphasis on the outlet to Wakatipu. The rivers of Central Otago had been immensely rich in gold deposits, and only their beaches and edges had been worked. What riches lay in the beds as well! Gold discoveries breed enthusiasm, optimism and incredible flights of imagination. In 1867, the Kawarau was very low and rich unworked gold deposits were exposed. Schemes were suggested for lowering the river even further. Onto this scene came Julius Vogel and the genesis of the dam. Vogel, editor of the Witness and the

Otago Daily Times, and Parliamentarian responsible for the railway "think big" ideas of the 1870's, was a persuasive figure who had considerable influence when his novel "Anno Domini 2,000" containing the remedy for N.Z.'s economic troubles - damming the Kawarau - was published in 1889. It seemed a logical solution. This idea was not beyond comprehension to the gold seekers, exposed as they had been for many years to coffer dams, tunnels, dredges, races, and sluicing schemes always promising much, and down-playing the chances of success.



In 1911. Mr. D.McBride, runholder of Kawarau Falls station, whose homestead was on the south side of the Lake outlet offered to contribute a substantial amount to the construction of a bridge at the Falls. However, the Lakes District Council said that the estimate of £3,350 was too high, they would not contribute, and the idea lapsed.

But by 1922, despite greatly increased costs, the Council reconsidered and decided to go ahead with the scheme.

This action may have been the catalyst which promoted the next action. E.J. Iles, an engineer well known in Central Otago and gold mining circles who had already in 1920 suggested damming the river, combined with a group of businessmen in 1923 to propound a scheme to carry this out. The validity of this, and their lobbying success, resulted in widespread interest in the proposals and as a result the Public Works Department stopped work on the bridge.

It is very interesting to read the "Kawarau Gold" booklet (45 pages, well illustrated) published by the Kawarau Gold Mining Co. intended to supply information to intending investors. This most persuasive, enthusiastic, imaginative document puts forward the Company's project in the most glowing terms. All obstacles are easily countered and Mr. Iles' plan, simplicity in itself, would result in incredible riches being available to the claim holders and shareholders and would also benefit the nation. The Company's proposals were further strengthened by being endorsed by the

Government engineers. Scepticism vanished before the mass of evidence in support of the scheme, and the research papers of Professor Park of Otago University, whose Survey of 1907 was frequently quoted. As far as future developments were concerned, the sky seemed to be the limit. A dam was to be built on the Shotover, and the crowning achievement was to be the damming of Wanaka and Hawea, thus drying up the Clutha and the upper Molyneux.

After a year of hearings, submissions, arguments and objections from local bodies downstream, in January 1924, the dam licence incorporating a bridge was granted to the Kawarau Gold Mining Co. So much for Mr. McBride's modest scheme. The idea of a bridge and a dam serving different purposes had become one. The P.W.D. and Lakes District Council were relieved of any financial obligation. No wonder they looked favourably on the venture. So did the Dunedin Stock Exchange.

The bridge was to be 480 feet long by 12 feet wide and 35 feet above the water. It was to be supported on steel girders and eleven concrete piers.

On the 22nd November 1924, G.J. Anderson (Minister of Mines) fired the first shot before a large crowd. All the speeches reflected the high regard in which the ideas of the Company were held, and great financial optimism. The recently started bridge piers were demolished and work started on the estimated three month £30,000 project. The work force of 100-200, many of whom camped on the Frankton Racecourse and in the grandstand, augmented the Queenstown economy and the fortnightly pay day was a particularly riotous time in the town. However, the over-runs were almost of Clyde Dam proportions. Engineer Iles left the project which was not completed until August, 1926 and cost £100,000. This blowout was disastrous to the Company's future plans.

And so was constructed one of the strongest road bridges in the country. For ten years it led practically nowhere other than Mr. D.J. Jardine's Kawarau Falls Station while the controversy over the construction of the Lake Road and the argument between the Queenstown Council, the Lakes County Council, Southland Progress League and the Government raged. The problem arose over construction methods - because of depression times these were to employ a maximum number of workers and a minimum amount of machinery - and later Government start-stop policies. It was not until the road opened in 1936 that the potential of the bridge could be realised.

With the demise of the Company, the dam became the property of the Kawarau Dam Board in Wellington. Today, Transit N.Z. control the road over the bridge and the Electricity Division of the Ministry of Energy controls

the bridge and the dam.

References:

"Golden Days of the Lake County" F.W.G. Miller
"The Story of Wakatipu" D.A. Knudson
"Kawarau Gold" pub. Kawarau Gold Mining Co.
Lakes District Museum Archives.

The Lower Shotover Bridge - Marjorie Swan

The Lower Shotover Bridge

by Marjorie Swan

During the Gold Rush miners were on the move all over the Shotover River. There were so many people that roads appeared like lightning. The river had to be crossed somehow, and all sorts of ideas were used. At the Lower Shotover a punt was eventually brought into use. This we know, because the Lower Shotover Hotel was built in 1860 on the east bank of the river near the punt. It was usual for a hotel to appear near regular crossing places. Beside the hotel was a blacksmith's shop, then a school and schoolhouse. A Mr Hansen, who lived at Lake Johnson as a boy, used to walk from there to the Lower Shotover school - quite a hike!

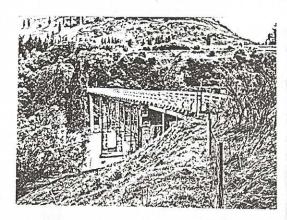
The first bridge followed. It was a strong, low, wooden construction which started at the east bank of the river and crossed over the main stream only: then the decking sloped down to the dry riverbed. Travellers had to cross the dry river bed, fording any more streams, until they reached the other bank, west side. The road rose fairly steeply up the west bank. It was a very dusty, fine silted road, not easy to negotiate.

One early settler, J. B. Thompson, well remembered this road, and when he had one of only three cars in the district, he sometimes had to be pushed up the road.

Another early settler commented that it was a low bridge, and water more often went round it than under it. Fortunately there were not many floods and seldom was it unable to be crossed.

Jopps Mail Coach, operating between Arrowtown and Frankton, was

pulled by four horses, and carried as many as thirty people at once. It had to get passengers to alight and walk up the hill, especially the river bank and Mcintyre's Hill (near Arrowtown).



Arthur Jenkins, another early settler of Arrowtown, recalled his 16th birthday. On that day he drove a wagon-load of grain with five horses. He drew up to the Lower Shotover Hotel, ordered and drank his first beer before carrying on to Frankton. This first bridge carried many people. horses and loads for many years until a higher, longer bridge was thought necessary.

Plans were drawn up and after a lot of deliberations the contract was let to a Wellington firm for £7530, the bridge to be completed in fourteen months. This contract was let in 1909. Progress was painfully slow - there were many stops and starts, materials were not suitable, and the Council didn't think the piles were on solid rock. The contractors took the Council to Court requesting £3000 for lost time and wages. After many hold-ups and arguments, Council cancelled the contract and asked the Government to take over. They did, and a month later one of the piers fell into the river.

The Wellington contractors admitted they had been wrong. The mess was all cleared up and new parts sent for. The bridge was finally finished in 1915.

This higher bridge was a composite truss structure, 566' long and 53' from deck to water. One passing bay was built into it - as settlers said, a horse and gig couldn't back!

The main portion of the bridge rests on ferro concrete cylinders and the trusses on concrete bases. To this day the bridge still carries the pipes from the Arrow irrigation scheme.

The cost:

Government	£ 3000	
Arrowtown Borough Council	£	50
Queenstown Borough Council	£	25

This old bridge carried thousands of people, horses, wagons, buses, cars and great loads of freight for 60 years. It was closed in April 1975 and the same day the new curved concrete bridge we use today was opened. This new bridge cost \$1.5m.

Piles for the earlier bridge can be seen below this new bridge when the river is low.

The house of Tudor design, belonging to Mr and Mrs Britten, is built on the very spot that the first hotel (later named Ferry Hotel) was built. At a later date it was shifted across the river to be near the high bridge. Later again it was shifted back across the river to where it sits today. Both shifts were made by Mr J. Shaw of Arrowtown with his traction engine.

In 1958 Fred (Popeye) Lucas and his wife took over the hotel. However in 1971 the licence lapsed. It is now a private residence offering Bed and Breakfast.

The Kawarau bridge - Ray Timmins The Kawarau Bridge

By Ray Timmins

Kawarau Bridge opened December 1880.

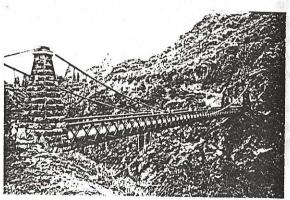
If you had travelled from Dunstan to the Arrow in 1862 your most direct route would have been up the Kawarau to the Kirtleburn (Roaring Meg), then up to the tops and down to the Cardrona just above the hotel, then to the Crown Terrace, and Tobins Track to the Arrow. This steep and long route was necessary because of the difficulty of crossing the Kawarau River with its swift current and deep gorge. The miners were able to cross by the natural stone bridge (foot) just above the Meg when going about their work, and to and from the pub just below the entrance to the gorge. This route was only for the nimble, not suitable for horses and left the traveller on the wrong side of the river if going to the Arrow.

Edwards Ferry, where the Victoria Bridge now stands, and the Morven Ferry, below where Chard Farm is, improved the route and avoided the steep climb, but ferries, although used well into the present, were, especially in the

swift narrow gorges, limited in size, subject to the mood of the river and of the ferry keeper, and available only at specific times. The Morven ferry could not take a coach and horses together, which resulted in both the coachman and the horses getting very wet at each crossing, and it appears that there were even greater problems at Edwards.

In 1874 the provincial government and the council had a bridge built at Edwards Ferry (the Victoria). A John McCormick was the builder, who also took over Edwards hotel and built a new stone hotel on the right bank. Nothing now remains of this, as when the present bridge was built the road was rerouted right through the hotel site.

The Morven Ferry and notorious Sand Hills road remained.



In 1878 funds became available for a second bridge to complete the Dunstan (Clyde) Arrowtown coach road. The result was the Kawarau Suspension Bridge, described in NZ Industrial Heritage as the finest example of a suspension bridge in New Zealand and which won for its designer the prestigious Telford Award of the Institute of Civil Engineers.

This engineer was H P Higginson an Englishman with experience in Russia, Mauritius, and India before entering Government service in New Zealand and who was in 1878 in private practice in Dunedin.

Several sites were proposed for the bridge the first being the site of the Morven Ferry, but this was deleted after the disastrous flood of 1878, another site was dropped after a family of miners staked a mining claim on it and tried to sell this to the council for £200.

Suspension bridges are the earliest known to man after the log fallen across a stream. The oldest such surviving is in China and was built of iron bar suspensions in 1470. Suspension was replaced by Arch and Truss bridges in Roman times, but as man became more skilled, suspension came back when the crossings were too long for other methods. Telford built a bridge using iron links in 1826 and there were experimental bridges using the "new"

wire ropes in 1830 but it was not until 1867 that a bridge using wire rope suspension was built at Niagara.

The plans for the Kawarau bridge were completed on the 3rd of June 1878, the site was pegged out by the 13th of June, a remarkable achievement considering that the only way to cross was at the ferry, and work started on June the 26th.

The builder was John McCormick (of the Victoria bridge and Hotel) and the bridge is of Ashler stone towers (squared local schist) with 14 ropes per side. The deck and stiffeners are of local timber. There is a very similar bridge at Ophir still in use but its stiffeners have been replaced with steel. Little is known of construction time except that miners (the same) cut a tail race across the access road at one stage. Upon complaining to the Council about this, the builder was told that it was his problem and to sort it out. A fault in the rock on the right bank caused the anchor plates to be changed to vertical shafts filled with Portland Cement, and for the site to be shifted several yards down stream. The very sharp turn on to the bridge from the left bank, the curse of many bus drivers and impossible for presentday buses, is said by some to be because of a further rock fault, and by others to be because of another claim being staked.

The rope suspension of this bridge curves inwards, being 6ft (2m) narrower at the centre than at the towers, to give lateral stability, a very new development at the time.

Despite these problems the bridge was opened on December 30th 1880 with due ceremony, the Garrison Band was present, and a banquet was catered by Eichardts. Some present objected to discrimination as to who sat down to the meal, but in a letter to the Editor, a writer refuted this and said that any miner who was respectably dressed was invited to sit with the dignitaries.

The cost of the catering (Fowl, Turkey, and Ham for 250 while all had an adequate share of the drinkables) at £78-11s-0d was the cause of much dissent with one councillor at the meeting of January 7th (no long shut down at Xmas) proposed that as the council had an excess of funds to cater to that degree then an immediate start should be made on a dray road to Macetown.

The building of two minor bridges (Swift Burn and Royal Burn) at the same time, and the coach road to Arrowtown was reality.

Most bridges and ferries had a pub close by, but this one had to be content with a phone bureau and post office run by a local miner between 1901 and 1905.

The new bridge was opened in 1963.

Today suspension bridges are used all over the world, built with new materials and technology, one in Japan being 1.8 km. In 1940 the Americans went too far but taught the world a lesson when the Tacoma narrows bridge, designed to withstand winds of up to I20 mph, began to fly like an aeroplane wing, developed waves 10 ft (3m) deep, and eventually destroyed itself in winds of 40 mph. We are now back to stiff decks, direct descendants of the bridge at the Kawarau.

In an arch bridge the weight is carried to each bank or pair of piers and tends to push out to the banks, with the load, or road, either above or below the arch. The reference states 'a suspension bridge is essentially an inverted arch', however as the suspension came first, I believe that the reverse is more correct.

Sydney Harbour Bridge is the longest single arch bridge at 503m (1650 ft). Humber Highway (UK) span is 1410m (4626ft) with towers 36mm out of parallel to allow for Earth's curvature.

Postscript 14/1/96

When speaking at the Kawarau Bridge visit two subjects came up, on which I had incomplete or rather insufficient information.

The first -- While I was aware that dredging parts had been lowered onto the river I had no information on dredging above the Meg (the natural bridge) up to where the Arrow joins. Now, thanks in the main to Alan De La Mare, I can say that between August 1901 and July 1903 there were 12 dredges built to work this part of the river, the capital of the companies in each case being between £7000 and £8500. The returns on investment were typically nil, the Meg and Annie doing the best with dividends of £6375 on a capital of £7500. It is unclear if the capital was always fully paid up, but certainly no fortunes were made. Some of the dredges, although built, did not even start work, foundering before reaching bottom. Various reasons for failure were given to shareholders, but whatever the cause all the companies, most of which were paper only in their later stage, had ceased trading by 1907.

The second point is rock drilling which I said was done by hand - The pneumatic drill was developed in 1861 for work in the Mont Cenis railway tunnel which links France and Italy. There had been steam hammers in use before that but it appears that they were not very satisfactory. In the late 1860's steam hammers were used in building the American Railways, where there was once a race between man (the legendary Jim Crow) and machine. The man won. Early use in New Zealand is not clear. Mr H A Gordon wrote

three books on mining and mine engineering for New Zealand, all of them published by the Government Printer and now very valuable. In the first two, 1889 and 1894, there is no mention of pneumatic (or steam) rock drilling. In the third, 1906, there is a section on air tools, and the statement that these should be used underground as they were faster, but for surface work hand drilling was cheaper. Gordon kept up with development and was well aware of work in other countries. He quoted widely from contemporary publications and correspondence from the USA.

It could be taken that pneumatic rock drilling came to this country between 1894 and 1906, however we know that in 1887 Bullendale had air compressors and air receivers. These could have been used for dewatering or even ventilation, but it seems unlikely that a mine as progressive as Bullendale having a supply of compressed air would not use the new technology. Do we have another NZ first at Bullendale? From the forgoing it would seem that yes, all the rock drilling at the Kawarau bridge was done by hand.

Edith Cavell Bridge - Rupert lles The Edith Cavell Bridge

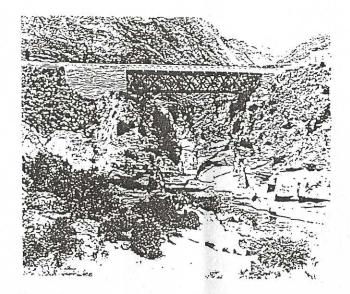
By Rupert Iles

(Talk to Historical Society Members, standing in the Shotover Jet Carpark.)

The beach here on this east side of the river is "The Morning Star Beach". In the middle of November 1862, Thomas Arthur and Harry Redfern found gold on the other side of the river opposite us. In less than 2 months Arthur's party won £4,000 worth of gold. Very quickly, with the subsequent rush of miners, there were around 1500 people here at Arthurs Point. Not only did the resident miners need to cross the river to work both sides, but this crossing would be the junction for those who were not going up the far side to Moonlight, but were going over the Skippers Saddle to Skippers and beyond.

At first people crossed the river on planks and then by a primitive foot bridge at flood level. Then by 1875 a wooden bridge was constructed by Mr J Turner for the Provincial Government. This was opened in March 1875, though at that time the approaches were not quite complete.

Mr T Fergus was the District Engineer and the plans were drawn by Mr Charles Banks. The span was 140 feet and the timber local "birch" (Fagus Fusca).



The accompanying photo from the "Golden Cobweb" by H A Glasson, shows this bridge with another bridge which evidently was not the first bridge.

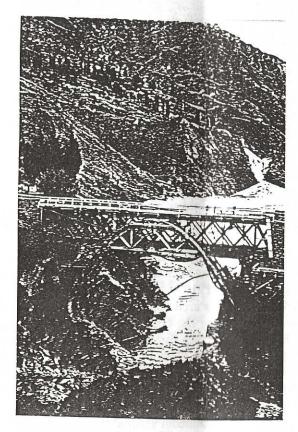
Then on 1st November 1917 work commenced on the present bridge with a free Government grant of £5,300. It was built in record time by Mr Steve Aburn and was opened on 1st November 1919.

This bridge which is ferro concrete rib arch construction, was the second of its kind in New Zealand, the first being the Grafton Bridge in Auckland. The designer was Mr F W Furket, Inspecting Engineer of the Public Works Department, who brought the idea back from Europe.

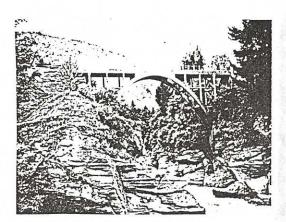
The bridge is 145 feet long by 14 feet 3 inches wide, and some 94 to 100 feet above the river and 1240 feet above sea level. It contains 35 tons of steel and some 500 cubic yards of concrete. The shingle for the concrete came from the river here. Tests carried out in Dunedin showed that concrete from this gravel was superior to other samples from Logan Point, Oporo, and a pit near Mr J Cockburn's property.

This bridge was built over the previous bridge so the present approaches are the same.

The Wakatip Mail of 18 February 1919, reported that the bridge was opened on Thursday 13 February 1919 by the Hon. H D Guthrie, Minister of Lands.



Quote - "At 3pm a large number of people from all parts of the district assembled at the north end of the bridge in readiness for the opening ceremony. MrWilliam Chairman of the Lakes County Council, spoke and said this was the third bridge that had been completed in his term of office. The first over the Upper Shotover opened in 1901, the second over the Lower Shotover opened in 1915. The latest and the most permanent was the one they now beheld. The Minister spoke and said that many people predicted a catastrophe for the Grafion Bridge, saying that its own weight would bring it down. The Queenstown Brass Band was in attendance. A procession was formed and headed by the Hon. H D Guthrie and Mrs Cockburn. When the entrance of the bridge was reached, Mrs Cockburn cut the ribbon which was stretched from side to side. A proceeding which was snapped by a Knight of the Camera present. procession then threaded



its way to Mrs
McChesney's Hotel where
all present were guests of
the Lakes County Council
for afternoon tea, in a
charmingly decorated
marque close to the hotel.
A social and dance was
held in Mr Cockburn's
barn in the evening, to
celebrate the bridge
opening."

"There is an interesting story concerning the manner in which this bridge was named the Edith Cavell bridge. An old miner named Jack Clark lived in a sod hut overlooking the new bridge. He had a most beautifully arranged flower garden marked out in artistic designs, the beds representing the four suits in cards-hearts, diamonds, clubs and spades. Before the opening day of the new bridge John Clark so wished that this new bridge should be called Edith Cavell bridge, after the British nurse who was executed by the Germans in Belgium a few years before, that he painted in large red letters a quarter of a mile from the Queenstown side of the bridge on a high fence on a high face of rock which is still visible, 'To Cavell Bridge'. He also approached the chairman of the county suggesting that the bridge should be named Edith Cavell bridge in honour of Nurse Cavell's great service to the Empire. This suggestion was not recognised at the time and after the bridge had been officially opened John Clark painted on the bridge 'Edith Cavell Bridge'. This legend later became worn off, but by that time the name had been accepted. so that to this day through the persistence and loyalty of John Clark it is called the Edith Cavell bridge." - Quote from "Golden Days of the Lake County" by FWG Miller

There are two foundation stones on the approach to the bridge from the east. One for the 1875 bridge - low down on the left approach wall. One on the left pillar for the present bridge.

There is a plaque on the right hand pillar detailing both stones. This plaque was placed there by the Queenstown and District Historical Society.

The inscription on the 1875 stone reads as follows:

Erected 1875

J McAndrew Esq Superintendent

Thos. Fergus Esq District Engineer

W J Robertson Esq J.P. First Mayor of Queenstown

E McAffery Foreman Mason

(Followed by the well known Masonic Symbol)

The Ballarat Bridge - Peter Mills

The Ballarat Street Bridge

By E.C. (Peter)Mills

16 January 1882: Tenders were let for a bridge capable of withstanding both wagon and saddle horse traffic by the Queenstown Community Council. Tenders: There were seven tenders submitted, ranging from £288 to £910.

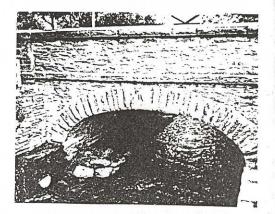
17 Feb 1882: Mr W. McLarn whose tender price was £288 was declared the successful tenderer. The bridge was to be finished by 17th May 1882. During the early stage of construction Mr W. Clark, the bridge building inspector, reported that he was not satisfied with the size of stone being used, and after a long and somewhat heated debate within the Q.C. Board the inspector's concern was overridden, as it was resolved that the construction to date complied with the design plans of the engineer, Mr Mollison.

17 Apr 1882: Mr Clark, the bridge building inspector, reported on the progress to date and a progress payment of £66 was made to the contractor who at this time requested permission to deviate from the original contract by using lime mortar for the parapets and the side walls. Permission was granted on certain conditions being adhered to.

23 Apr 1882: Mr McLarn made a claim on the Council for £50 to cover the loss of stone. This was most probably caused by flooding as there was mention that construction had been delayed by the creek flooding. The Council ignored Mr McLarn's claim.

19 May 1882: Two days after the bridge was scheduled to be finished Mr Clark, the bridge inspector, reported that progress had been insufficient to

justify the requested progress payment of £10. After another lengthy and heated debate it was resolved to make the progress payment of £10 and an extension of the time limit on the construction was granted until 30^{th} May 1882. At this time it was argued that the bridge was too 'humpy', the approach being too steep to allow the smooth flow of traffic. Many claims and counterclaims were made, but the QCB found that the bridge construction complied with Engineer Mollison's plans and that no fault could be rightly attributed to the contractor. It was decided to set aside an additional £20 to provide roading material to build up the bridge approaches. The final cost was £29, which again caused heated debate among members of the QC Board.



6 Jun 1882: Mr Clark reported that the bridge was completed except painting and coping. It was decided that the final payment of £177 be made when all work completed. However there was now a holdup due to the 'loss the Obviously stonemason'. there had been some disagreement between the building contractor and the stonemason.

7 Jul 1882: Mr Clark reported that the bridge had finally been completed. Mr McLarn's further request for the loss of stone (£50) was again declined.

28 Jul 1882: Mr Clark made a claim on the Council for 12/- a day for supervision of the building of the Camp St culvert. This claim was strenuously declined, and one councillor suggested that if he had taken his hat and coat off and done some real work his claim might have been considered. The Mayor of the day sprang to Mr Clark's defence, claiming that it would be very 'demeaning' for an inspector to indulge in manual work in public. Mr Clark's services were dispensed with soon after.

The Stonemason: James McNeill arrived from Scotland while still in his teens. He worked as a stonemason in the Oamaru district before proceeding to Alexandra where he worked as a stonemason on the old Manuherakia

Bridge close to the existing rail bridge. In 1882 he came to Queenstown and worked on the Ballarat St Bridge and at the end of that year started out in business on his own account as a stonemason. He built the McNeill Cottage in a typical Scottish traditional semi-detached style, hence the long windowless west wall. He lived in Queenstown until he died in 1920. One of his less noticeable constructions is the stone wall behind the Queenstown Cemetery.

Mount Pisa Station _ Murray McMillan

Mount Pisa Station
(152,000 acres)

by Murray McMillan

This land was taken up in 1860 by Myers and Wilken and sold in 1866 to Howell, Loughnan and Cocks who farmed in partnership until 1871.

In 1871 Pisa was taken over by The Loughnans - two brothers one working and managing the property - the other a court Judge firstly in India and then in Christchurch. This partnership finished in 1885 and Pisa was abandoned for a short time, because of very low commodity prices and the rabbit plague.

The property was taken up again in 1886 by Blackwood and Stronach of the Stock and Station agency Stronach and Morris. They got the place on its feet again and farmed it successfully until 1907, when they sold to Col. Cowie Nichols. The property was then carrying approximately 35,000 sheep. Managers for Nichols (who was stationed at the garrison in Dunedin, World War 1) were R J Hendrie 1907-12, who Nichols said was a better manager when drunk than stone sober! Mr Willis Scaife (a relation of Arthur Scaife) 1912-16, took over as manager at approximately 20 years of age. Mr George Paterson 1918-24 managed the property until it was sold to the N Z Govt. in 1924.

Much of the history of the Run has been passed on by Mr George Paterson's son Eric who still lives at Waikaka. The Station was then split up for returned servicemen from World War 1. The ballot was held on 18 February 1924 in the Lowburn Hall, with Homestead block drawn by my father for $\pounds 20$,000 plus stock and plant.

Pisa Station was now approximately 25,000 acres, and about the same boundaries as it is today. Of course the Pisa Flats were subdivided into 6 farms following World War II and developed with irrigation. Prior to this

development the Flats carried 30 head of cattle and "10 million rabbits".

My father farmed in partnership with his brother Donald, and this partnership lasted until Donald drew his own run at Garston. They started out with 9000 sheep and kept the stock numbers at about this level until the early 1930's when the depression and rabbits got on top. Stock numbers decreased to 3200 by 1941, and it wasn't until the advent of the rabbit boards (1949-50) that any control was established. By 1953 the property managed to carry about 5000 sheep.



I became involved with the station in 1968 (My father died in 1961 and the property was managed by my cousin Grant for a number of years). I then managed for a year, then bought out other family interests - our involvement continues. The station now carries 11,500 stock units.

The homestead was restored between 1974 and 1976, and the cottage in 1981-82. Murray and Jackie McMillan are the present owners of Mt Pisa Station.

Robert Lee, 1849-1911. Farmer, Businessman.

Robert Lee - Allan De La Mare

By Allan de la Mare

Robert Lee was born in Threepwood Hall, Haydon Bridge, Northumberland, and was a native of Allandale near Hexham. His father George had interests in farming, coal and lead mining and sawmilling. His mother's maiden name was Mary Henderson.

Lee followed his father's interests in farming where he had success in breeding black faced sheep. In 1881 mainly on account of his health Lee emigrated to New Zealand marrying Ellen Cook Johnson who was born at

Rokehope, Northumberland in 1854, before his departure. On his arrival Lee took up land at Taieri and the Otago Peninsula which was farmed under his direction for a number of years. In 1890 his experience in mining resulted in his taking an active interest in the opening up of the Castle Hill Mine at Kaitangata which later amalgamated with the Kaitangata Railway and Coal Company.

In 1897 he went to the U. K. where he successfully floated a company to take over the Castle Hill and Kaitangata Coal mines and the assets of the Orepuki Coal and Shale Company which had in 1879 attempted unsuccessfully to exploit the Orepuki shale deposits to produce oil, paraffin wax, tar and other by-products. The new company called The N. Z. Oil and Coal Company Limited had a capital of £180,000. Large buildings were erected at Orepuki, using bricks made on site and besides the usual products obtained from shale it was intended to mix shale and coal dust from Kaitangata to produce briquettes. Some £ 140,000 was spent but the venture was not successful and the works closed in 1902. Coal mining at Kaitangata continued to produce good returns.

Lee had many other interests in mining. In 1905 Lee with George Reid and Pat Lynch were the first to mine scheelite commercially at Glenorchy. Scheelite never produced good returns except during the two World Wars when the demand for the mineral made mining very profitable. In 1899 Lee was part of a syndicate working a claim at Monk's Terrace at the Sandhills on the Upper Shotover. The claim gave good returns though their plan to divert the Shotover River to expose the river bed was not achieved. It was not till 1920-30 that the immense Sandhills Cut was made by another venture which was unsuccessful.

In 1903 a party led by Lee took over the Bullendale mine on Skippers Creek from the Achilles Gold Mines Ltd. The venture was unsuccessful and the mine closed for the winter in 1905 and never reopened.

Lec's experience in mining led to his being consulted and involved as director in many ventures in Otago Central and the Waikaka valley during the mining boom. The Mining Investors Guide for 1901 shows him as a director in eleven dredging companies.

A little over a year before his death Lee acquired a farm at Lake Hayes which he named Threepwood. It was typical of Lee that he immediately set about carrying out an extensive scheme of irrigation using the water from Boundary Creek on the south bank of the Kawarau River. The water was brought over the river in 18 inch steel pipes at a height sufficient to command nearly the whole of his farm. It was a great engineering feat and the scheme

was probably one of the largest private ones in the country. Robert Lee had five children, four sons and one daughter. William, the eldest, lost his life in an heroic attempt to save the lives of some miners during an explosion at the Kaitangata Mine. Leo Lee (1888-1962) who took over Threepwood on his father's death had a distinguished career in farming and local government. He was a member of the Lake County Council for 24 years serving as chairman from 1929 to 1939. He was an enthusiastic supporter of the Lake County A & P Society holding the office of President from 1914 to 1933.

He took an active part in the Anglican Church holding beside other offices the position of People's warden for fourteen years. Lee retired from farming in 1934 moving to live in Queenstown. Here he was engaged in secretarial work for a number of local companies until he moved to Christchurch in 1947.

Lee married Beatrice Irene Kinsley Coates and there were three children of the marriage. Lee died at Christchurch on 29 May 1962.

Round Hill Gold Mining - Rex Austin The Round Hill Gold Mining

By W. Rex Austin

[The Round Hill Gold Mine near Colac Bay on the South Coast was one historic site visited by the Historical Society on 22 January 1996, arranged by Rex. Other sites included a Chinese Museum, Wakapatu private Maori Cemetery, Cosy Nook (a very early pa site) and the Printz homestead. No doubt Rex will write on these for a future Courier - Ed.]

This was without doubt New Zealand's most important Chinese settlement. Worked by Chinese gold miners for thirty years, it was extremely interesting for three main reasons:

- 1. It was the only goldfield in New Zealand where the Chinese did all of the initial development. In every other gold diggings the Chinese were as secondary both in New Zealand and Australia.
- 2. During a major period of depression in mainland China during the mid-1800s, thousands of Chinese sought relief from the frightening prospect of starvation and death. Previously a very insular and homogeneous society and race (they still only have 400 surnames) they were forced to

consider migration or perish. Many chose migration, which for them with their previous history was a courageous act. They spread all over Asia and some found sanctuary in America, Australia, and a few in New Zealand. But of all those communities, only in Round Hill did the Chinese outnumber the host populations.

3. Round Hill was the most southern Chinese settlement in the world.

The discovery of gold is believed to have belonged to two Italians, Sam Leecy and Antoni Mitchell, in 1865. But they did not expand on their chance discovery, and they left to take up fishing, it is believed, in Bluff. They left behind a considerable potential fortune and soon faded from the Southland scene.

From 1870 - 1890 the recovery of gold ranked Round Hill as No. 5 among all the goldfields in southern New Zealand. The gold-bearing area proved to be relatively compact - about 6.5 km by 11 km. Based on other areas, however, it was a very rich and rewarding gold-producing field. In 1881 the official records highlight its importance:

Waikaia	Stg € 2,472
Wakatipu	Stg £ 11,204
Mt Ida	Stg £ 27,500
Tuapeka	Stg £ 28,476
Dunstan	Stg £ 30,484
Round Hill	Stg £ 52,938

Goldfields produced differing quantities at different periods but 1881 best illustrates the Round Hill perspective. Long after the Chinese had gone and mining companies continued by monopolising the limited water supplies, £18,814 worth of gold was recovered in 1916 and as late as 1921 the return was still almost £13,000. It is estimated that more than Stg £1,000,000 was officially recovered from this remote Southland goldfield, and no-one knows just how much was dispatched unofficially through friends commuting home to mainland China, but the amount would have been substantial.

What made Round Hill unattractive to the non-Chinese was the huge physical effort that needed to be expended. The area was covered in heavy native bush, not easily removed. There was an acute shortage of water for washing the paydirt. Thirdly, the lack of gradient between the field and the

sea made the worked-over material very difficult to dispose of. There was only 14 metres of fall from Round Hill to Fouveaux Strait, 7 miles away. The Chinese employed a unique system of extracting gold. They tunnelled. This worked best beside small creeks. They used small water wheels to operate pumps to keep dry the tunnels which were often on relatively flat areas. The water recovered was sometimes used over and over again to wash the gold from the spoil. At its height there were over 500 Chinese miners working at Round Hill and possibly 150 Europeans.

The Canton township consisted of 23 main buildings plus another 123 huts fanning out across the field. The main buildings included a boarding house, an hotel of two stories, a public hall, a bakery, and at least five shops. There were numerous gambling joints, also places for indulging the habit of smoking opium, plus a further 39 residences. (Smoking opium was legal in New Zealand until 1901). At a later stage a church, a school, and a Chinese temple or joss-house were to feature.

The land, in common with all other goldfields, was owned by the crown following purchase from the Maoris. The buildings and businesses including the gold enterprises were supervised and controlled by the gold warden. In the case of Round Hill - Riverton - Orepuki, control was regularised by Mr Henry McCullock, who was also the magistrate for Invercargill.

One of the earliest Chinese miners and a man of substance among his people was Tipperary Ah Wing. It was his influence which united Chinese support for a Presbyterian minister, the Rev. Alexander Don, to help build a church at Round Hill. Unfortunately, Don never really came to master Chinese philosophy, and he lost their confidence. The unfortunate affair led to the building of the joss-house, and the transfer of Chinese attention in support of their traditional beliefs. It is supposed that this transfer exacerbated Don's mental breakdown, which led to his transfer to Central Otago.

Back in the township of Canton, much of the activity centred around traditional forms of Chinese customs. The grocer's shop regularly received shipments of food and medicine from their homeland. The Rev. Don reported the grocer opening a package of dried deer tendon and dehydrated lizards. The deer tendon retailed at 12/- a pound, and the lizards at 4/- a pair.

Lai Chong owned the hotel and billiard rooms. This was a two-storied structure called Taai in Lau (translation Peaceful Tower). Lai Chong was to apply for a sale of liquor licence to continue his trading until midnight. This was very probably the first licence of its kind in New Zealand. When the Chinese left, the hotel was sold for removal to the Hanning family of Riverton, and finally housed the Templeton family at Otaitai Bush on the

outskirts of Riverton. When she first arrived in New Zealand from England in 1956, Miss Mirrie Brumpton (who later married Rex Austin of Colac Bay) was possibly the last non-family member to spend a night in the old Round Hill hotel/gambling house/ opium den. She was a guest of the Templeton family. The decaying building was bulldozed down and burned in 1994.

Among the interesting and educated Chinese Round Hill settlers was Wong Fai Oon. Firstly he taught school because there were no women and therefore no children, school meant nightschool for Chinese adults. The lessons were primarily on speaking English. Wong was also a medical graduate from China. It was he who prescribed the cures for illness and also attended to the accident victims. Later, after he left Round Hill, he opened up business links at Lawrence and took up practice as a doctor for the Chinese in Queenstown.

In spite of the fact that most Chinese came to the country at the invitation of the New Zealand Government - indeed there was no other way except with the approval of Customs - the Chinese had their detractors. Theophilus Daniels, JP, Mayor of Riverton - Round Hill's nearest commercial centre - also Member of Parliament for Wallace, the electorate in which Round Hill is situated, was anti-Chinese. At a public meeting, agitating for restrictions to be applied to Orientals, he said "We must stop them, lest they introduce smallpox and other unknown diseases, and three quarters of our colony be swept away." Daniels introduced to Parliament the 'Chinese Mining Exclusion Bill'. The Bill failed, he lost his seat in 1884, and later still came under suspicion of malpractice. He was tried under the Corrupt Practices Act. Daniels fell rapidly from favour, and was forced to file for bankruptey.

During its lifetime, relatively small numbers of Europeans resided at Round Hill. When operations transferred to larger mining companies as the Chinese were forced to withdraw because the companies had literally 'cut their water off', the European numbers still remained quite low.

Ching Ming Day, a memorial ceremony honouring the dead, involves sweeping the graves of past relatives clean. Chinese fireworks are lit to ward off evil spirits and then the graves are lightly sprinkled with incense. Boiled eggs and chopped apples are scattered as a symbolic offering. Finally, as a comfort and to aid suffering and please the soul, brandy is sprinkled on the final resting places. Ching Ming was conducted each April by the Otago-Southland Branch of the New Zealand Chinese Association. They visited Chinese graves in the Riverton Cemetery and the practice only lapsed in 1972. That year the Riverton Borough Council sold the Chinese Burial section to an adjoining farmer. He bulldozed the gravestones over the river

bank. Today just one stone survives. It is in the Riverton Early Settlers Museum.

In Round Hill only two buildings survive. One old house survived as an implement shelter, and the joss-house also sold to a neighbouring farmer, who uses it as his farm workshop.

P.S. The largest single nugget of gold discovered in the Round Hill area was found by a European named Henry Ward. It was found in a location called Specimen Gully, and is called the Longwood Nugget. It weighed 36 ounces.

Society Field Trips.

Field trips have become increasingly popular, and the following list records trips conducted by the Society's committee since 1983. This list may also prompt members to recommend new places of interest to visit or repeat past trips with modifications. Trip numbers are shown in parenthesis. - (Editor)

1983/84	(Nov) (Feb) (Mar) (Apr)	Nokomai and Five Rivers Mavora Lakes and Mount Nicholas Station. Manapouri and Tokaro Lodge. Lowburn. Matukituki Valley.
1984/85	(Nov) (Jan) (Feb) (Mar)	Gibbston and the Kawarau Gorge. Traverse of the Nevis Valley. Cromwell and Clyde. Rees Valley and the Invincible Mine.
1985/86	(Dec) (Jan) (Feb) (Apr)	Sylvan Lake. Skippers. Lawrence. Local sites: Thurlby, Crown Tee, Morven Ferry.

1986/87	(Nov) (Jan) (Feb) (Mar)	Goldfields Park - Stewart Town - Bannockburn. The Branches Station.
1987/88	(Nov) (Jan) (Feb)	Gibbston Sylvan Lake Bendigo Mines
1988/89	(Nov) (Jan) (Fcb) (Mar)	St Bathans and environs. (40) Maóri Point and Skippers. Mitchells Cottage - Fruitlands (40) Glenorchy and Mt Alfred Scheelite Mines. (68)
1989/90	(Dec) (Jan) (Feb) (Mar)	Ophir. (27) Walter Peak Station. Riverton. (41) Cromwell (24)
1990/91	(Dec) (Fcb) (Apr)	Morven Hills Station - Lindis. (43) Mavora Lakes -Von Valley - Whites Cottage (86) Clyde. (45)
1991/92	(Dee) (Feb) (Mar) (Apr)	Speargrass Flat and environs. (59) Fairlight and Nokomai. (95) Rees Valley - Paradise - Arcadia House. (97) Brackens Gully - Glencoe Station. (54)
1992/93	(Nov) (Jan) (Fcb) (Mar) (Apr)	Skippers - Opening of restored School. (69) Kawarau Falls, Big Beach, Oxenbridge Tunnel. (66) Bendigo Station and Old Cromwell. (110) St Bathans, Becks etc. (68) Bannockburn and part of the Nevis Valley. (53)
1993/94	(Nov) (Jan) (Feb)	Lake Hayes, Ladies Mile etc. (80) Twelve Mile Greek to Sam Summer's Hut. (45) Manuherikia Valley - cancelled due to flooding.

	(Mar) (Apr)	Maori Point, Shotover River (Skippers) (30) Wanaka - Cardrona etc. (70)
1994/95	(Dec) (Jan) (Feb) (Mar) (Apr)	Arrowtown and environs. (30) Kingston and the Kingston Flyer. (51) Kinloch and Greenstone River mouth. (65) Matakanui and environs (Dunstan Mountains) (63) Earnscleugh and Pisa Stations.
1995/96	(Nov) (Dec) (Jan) (Feb)	Historic Bridges in the Queenstown area. (82) Earnscleugh & Pisa Stations, Monte Cristo. (91) South Coast: Round Hill, Wakapatu, Pahia, etc. (90) Gibbston Valley, Winery etc. (100)
	(Apr)	Historic Trees in the Queenstown district. (67)

Book Review

Arawata Bill - Elizabeth Clarkson ARAWATA BILL

By Ian Dougherty. Exisle Publishing, 1996. 160 pp. \$24.95.

Reviewed by Elizabeth Clarkson.

"With his weapon a shovel
To test the river gravel
His heart was as big as his boots
As he headed over the tops
In blue dungarees and a sunset hat."

Denis Glover's "Arawata Bill" is a colourful, legendary figure based on the well known Bill O'Leary of history. His story, with all its adventure, mystery and feats of endurance, has been excellently and movingly told by Dunedin journalist and writer, Ian Dougherty.

Bill O'Leary lived for 82 years from 1865 to 1947 mostly in Otago and

Westland. He prospected for gold, searched for ruby mines, ran a ferry over the Arawata River and lived like a hermit for most of these years. No one could have known the Hollyford Valley, Martin's Bay and the West Coast better than Bill did.

Trampers and gold miners were often surprised to meet Bill O'Leary in remote parts. None more than the Dunedin men who went to mine gold on the West Coast in the early 1930's. "Is the war over?" they were asked. When Bill was told it finished about 15 years ago and that we had won he remarked "Queen Victoria will be pleased."

The human interest in the book is considerable. Not only do we learn of Bill and his loyal horse Dolly, companion of 20 years, but of Davie Cunn, the Shaws of Elfin Bay where Bill retreated during winters, and the Thompsons of Fernhill farm where he stayed during his old years.

Photographs, both colour and black and white enhance the book while footnotes, indexing and attention to detail reinforce the undoubted authenticity of Ian Dougherty's research. Everyone in the Wakatipu with an interest in local history, its romance and its myths will enjoy this story.

"Arawata Bill" is a fine publication from Exisle Publishing in its series "New Zealand Lives". Copies are available from the Bookshop, Lakes District Museum, Arrowtown.

Jottings

- The Committee has been most active commenting on, and presenting submissions concerning development of the Archer Cottage site, the Bungalow at 15 Marine Pde., the Emporium in Buckingham St. Arrowtown and supporting the Queenstown Heritage Trust and the Williams Cottage restoration. Also a detailed analysis of the buildings and trees listed in the new District Plan has been done.
- While our Society does not have the responsibility of running a museum, we are fortunate to be associated closely with the Lakes District Museum having two appointees Cicely Morrison and Duncan Wilson on that executive, together with Past President Ray Clarkson, an elected member.
- Members recently undertook an expedition under the leadership of Bruce Hamilton into the Greenstone Valley to look for the James Hector tree. While this expedition was unsuccessful it opened up the possibility of further enjoyable scientific incursions.

Rex Austin now has the Chandler Papers project into gear and this should prove to be a most worthwhile use of the Society's resources.

Long Gully sports Allan De La Mare

Sporting Item of Interest from The Wakatip Mail 17 March 1911 (Contributed by Allan de la Mare)

Long Gully Sports

The second annual gathering in connection with the Long Gully Sports Club was held at Long Gully on Saturday last, 4th inst. Excellent weather prevailed for the event, the only drawback, if any, for people attending the sports being the dusty roads. Nevertheless there was a very fair number present from Queenstown, Arthurs Point, Skippers and the neighborhood. The sports were very successful and gave much enjoyment both to those who participated in them and to visitors. The entries were good all round and keen competition resulted at times. The committee consisted of Messrs. T.J. Cotter, H.J.H. Lewis, J.A. Johnston, F. Ward, J. Flynn and H. Buckham, with a thoroughly live secretary and treasurer in Mr D. Ward. All of these were thoroughly enthusiastic in the discharge of their duties, but the hard-working one was the secretary. The Club is most fortunate in possessing a man of Mr Ward's ability. The sports were held close to the Welcome Home Hotel, so ably conducted by Mr and Mrs Lewis. The Club is therefore indebted to them for valuable assistance received. Excellent meals were provided at the hotel, such as would do credit to any leading city house. But the fame of Mr and Mrs Lewis, in this respect, was established long ago. The following are the results:-

Quoits- T. Cotter 1, T.Scott 2, J.A. Johnston 3. Eight entries. Putting the Stone-P.Johnston 1, J. Johnston 2, H. Buckham 3. Eleven entries. Stepping Competition, 50yds- C.Lewis 1, P.Callaghan 2, P.Ward 3. 21 Entries. Ship Quoits- H.Buckham 1, D.Ward 2, F.Ward 3. Eighteen entries. 120yds Handicap- A.D. Gunion 1, T. Kelly 2, A.McDowall 3. Five entries. Tossing the Caber- P. Johnston 1, J. Johnston 2, J. Flynn 3. Eleven entries. Hop, step and jump (handicap)- H. Buckham 1, C.Lewis 2, D.McMullan 3. Ten entries. Throwing the Hammer- D.Ward 1, H.Buckham 2, J. Thompson 3. Nine entries. All-aged Stakes- J. Flynn 1, T.J. Cotter 2, W. Warren 3. Ten entries, 100yds Handicap- T.Kelly 1, A.D.Gunion 2, A.McDowall 3. Five entries. Ladies' Race- Miss May Cotter 1, Mrs Lewis 2, Mrs Callaghan 3. Six entries.

The Lakes District Museum have on sale a very fine range of books, both historical and of local interest. Members of the Museum receive a 10% discount on any purchase. Society members are encouraged to become Museum members, and to facilitate joining, a membership form is included with this issue of The Courier. (Editor)

The Shotover River - Alan de la Mare
Let There be Light - Peter Chandler & Ron Hall
Goldfields of the South - John Hall-Jones
A Circlet of Gold - J.S. Murray
The Road to Skippers - Danny Knudson
Golden Canyon - F.W. Craddock
Going for Gold (Wilberforce Valley) - Howard Keene
The Story of New Zealand - Keith Sinclair
Fiordland Explored - John Hall-Jones
Men of the Milford Road - Harold J Anderson
Keas - Jerry Aspinall
Speculators' Dream - T.J. Hearn & R.P. Hargreaves
Wildflowers of Central Otago - Peter Johnson
Queenstown's King Wakatip - G.J. Griffiths

- Several NZ pictorial books
- NZ birds, flora and fauna
- A selection of children's books with a local theme (e.g. Skipper Goes Bungy Jumping - Jenny Coleman Earnslaw Dragon - Brian High)