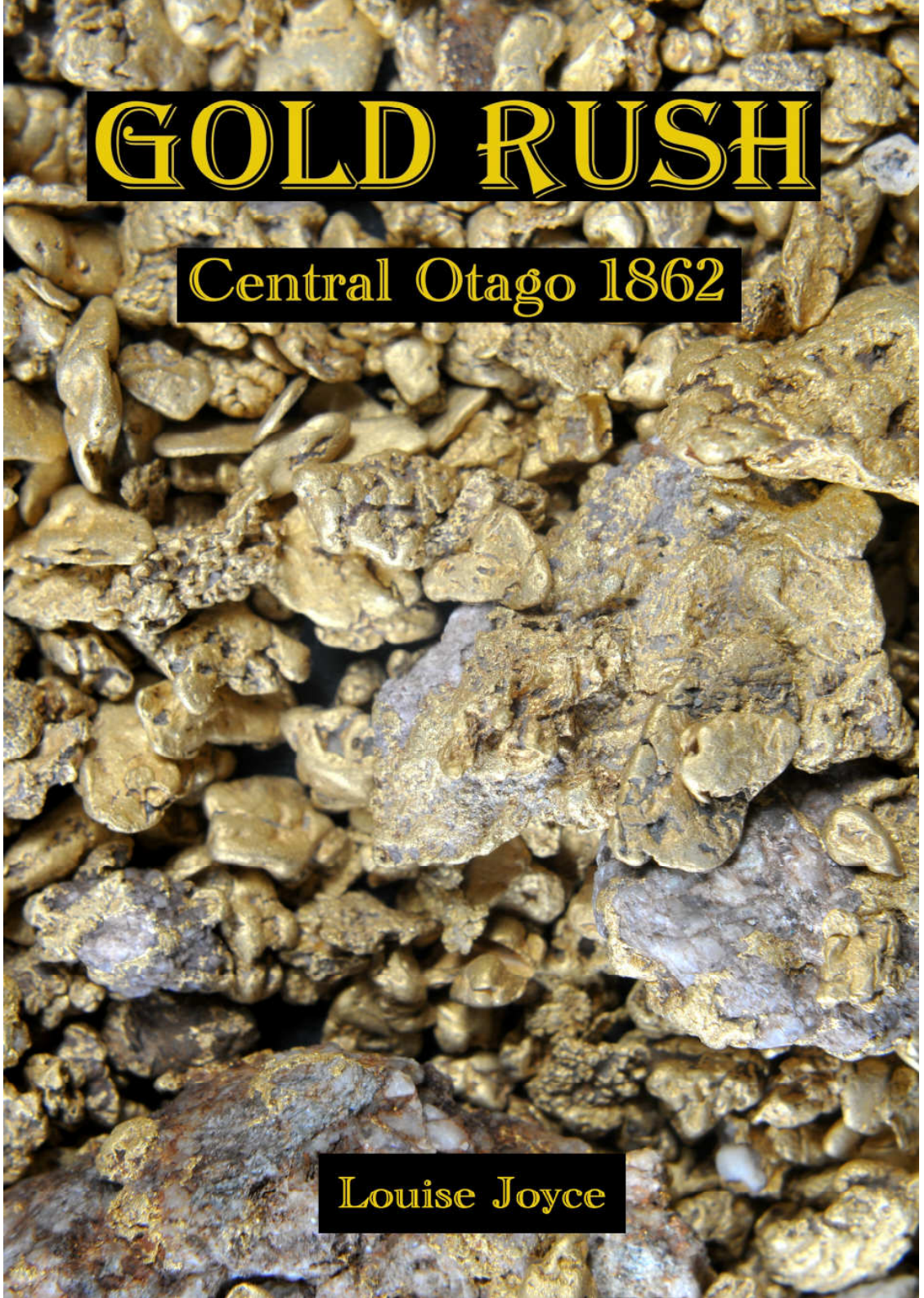

GOLD RUSH
Central Otago 1862
Louise Joyce

Published by Promote Dunstan Inc
PO Box 31, Clyde, New Zealand.

Editorial Service by Ric Oram
Designed by Rory Butler
Printed by Taieri Print
2012

ISBN 978-0-473-20171-5

CONTENTS

DUNSTAN GOLD 150

In March, 2010, a public meeting was called by Promote Dunstan to discuss how to celebrate the 150 years since gold was found in Central Otago – an area known by early miners as "The Dunstan". A committee was set up to encourage community involvement.

The Dunstan Gold 150 committee (chaired by Promote Dunstan's president, Rory Butler, the committee, Helena Heydelaar, Mike Rooney, Chris Cockroft, Louise Joyce, John Hanning, and Martin Anderson) organised a calendar of events for 2012.

The committee thanks its project manager, Karin Bowen, who pulled the strands together and liaised with various groups and people in Clyde and Alexandra, and to Joe Stevens and Steve Tilleyshort for their help.

George Watts and Mr Hesson using a cradle and pan at their claim below Aronui Road, Alexandra, about 1900. (Central Stories Museum)

The Discovery

On what was probably a bone-chilling winter's day in 1862, two men made a discovery in a wild desolate area that was to have a lasting effect on the fledgling province of Otago.

Exactly when Horatio Hartley and Christopher Reilly made their discovery of huge quantities of gold is not known but, in August, they loaded their riches onto their horses and made an arduous four-day trek over a mountain track to Dunedin.

The snow and cold forced one of them to "cave in" (probably suffering from hypothermia) and, for some time, his companion feared he would not hold out for the rest of the journey.

But, on the afternoon of Friday, August 15, they strolled into the office in Dunedin of the Gold Receiver, a Mr J.B. Borton, where they dropped a number of bags made of "old canvas and pieces of moleskin trousers...all roughly sewed with twine", onto his wooden counter.

The bags contained a breathtaking 87 pounds (just over 32 kilos) of gold, worth about 1.8 million dollars on today's (November 2011) market.

But that was not all. The gold was so thick on the ground that, according to the men, "an old woman could scratch more gold out with her fingers than all the miners on the Province could get elsewhere".

Those words, and the amount of gold the men recovered , sparked a gold rush that brought thousands of miners to the Dunstan Diggings. How did Hartley and Reilly manage to find such an El Dorado in a remote area of Otago province which few Europeans knew much about?

INTRODUCTION

Until the arrival of man, the inhabitants of the vast plains, valleys, lakes and mountain ranges of Central Otago were many, mainly flightless, birds such as duck, quail, kakapo and five species of large moa. Parakeets and the gigantic predatory Haast eagle were common as were reptiles — tuatara, skinks and geckos.

Much of the landscape was covered with dryland forest of trees such as lancewood, kowhai, totara, lacebark and tree daisies.

Millions of years of isolation came to an end with the arrival of the Maori about 800 years ago. Some braved the cold climate to settle in the coastal areas of the lower South island. Hunting parties ventured inland from the east, camping over the summer months to gather and stockpile food from the abundant supplies of wildlife to take back to the coast. Other groups passed through on their way to the West Coast seeking the highly-prized greenstone (pounamu), a form of jade.

The impact on the land was severe. The hunting and the burning of the forests by man and perhaps nature, wiped out the flightless birds and the tuatara. The populations of other birds were decimated; skinks and geckoes managed to survive. Native plants were replaced by grassland. Later, Europeans introduced invasive plants such as briar, thyme, hawkweed, and northern hemisphere conifers which still infest the countryside.

What was constant, however, was gold – much of it washed into the Clutha River and its tributaries. Maori did not value it. It is recorded that pre-gold rush, a native station hand picked up some small nuggets and tossed them into the Arrow River. But Europeans did.

When the hordes of gold miners descended upon Central Otago, they found a barren, desolate and treeless place. In summer the land baked under a burning sun and in winter, snow, ice and sub-zero temperatures were constant companions.

Undaunted, they set about their business. The face of the landscape was changed yet again. Their upheaval and destruction was on a scale which would be unthinkable today. Using rough and ready methods they mined, tunnelled, levelled hills, changed the course of rivers, blasted hillsides and gorges and, with dredges, ploughed up river beds, beaches and land to leave huge piles of tailings.

When the gold ran out, many of their tools and equipment were abandoned, some in areas so remote that one cannot help but admire the tenacity of these men.

These relics and their cave shelters, stone or mud brick huts and cottages dot the countryside and are now a treasured part of Central Otago's heritage.

A stone hut built under a schist overhanging rock. (Derek Hume)
Note : The rock in front of the hut has been cut to form a step.

The sesquicentennial of the discovery of gold salutes those early miners who braved unbelievably harsh conditions and endured many hardships. Their hopes and dreams are reflected in the names they gave their claims and dredges – Hopeful Gully, Hit or Miss, Last Chance, Poverty Beach, Linger or Die, Bonanza, Perseverance, Eureka, Golden Gully, Golden Gate, Golden River, Golden Beach, Golden Falls and Golden Link.

The Dunstan rush was responsible for catapulting Dunedin and Otago province out of the doldrums into a thriving, wealthy centre surpassing Auckland. In Central Otago the rush established many communities – Cromwell, Clyde, Alexandra, the Teviot Valley, Manuherikia and the Maniototo. Some became significant fruit-growing areas and others became farming centres all of which helped support the region when gold mining was no longer profitable.

THE EXPLORERS

By the time Europeans arrived, Central Otago was a bleak and desolate place with a landscape punctuated by dramatic schist tors and rocky outcrops. The first recorded European was Nathaniel Chalmers who, in the early 1850s, was driving cattle from Invercargill to Dunedin when he met a Maori chief, Reko. He agreed to guide Chalmers into the interior to look for suitable farming country and, in 1853, they and two other Maori set off.

Using the Mataura and Nokomai Rivers they crossed the mountains into the Nevis Valley, then to the Kawarau and Clutha Rivers. Chalmers became too ill to carry on and the group built a raft and floated down the river to present-day Clyde and then to the mouth of the Clutha.

The next recorded visitor is Otago's chief surveyor, John Turnbull Thomson. He came up the east coast from Dunedin in October, 1857, and after reaching a Maori settlement north of Moeraki, set off with his companions into the interior. Thomson came from a farm in Northumberland, close to England's border with Scotland, and named many places in memory of his birthplace.

St Bathans mountain range was called after Bathans St Abbey where his mother lived, and the Dunstan Mountains after Dunstanburgh Castle near the village of Dunstan.

The group ventured into the Ida Valley (named after King Ida, of Bamburgh Castle, near Thomson's birthplace) and came to a large river which Thomson recognised as part of the Clutha (then called the Molyneux) River. He called it the Dunstan River, but when he learned that Maori called it the Manuherikia, he changed the name on his map.

Thomson stumbled on traces of gold in the Lindis River and although he reported his discovery, it made no impact. Instead, it was his favourable impressions of the Manuherikia valley and its "fine pasture" which captured the interest of another group of pioneers seeking their fortunes.

THE RUN HOLDERS

In December, 1857, the Shennan brothers, Alexander and Watson, set off from Milton for Central Otago looking for land to raise sheep. Runholders had already snapped up land as far as the Waitahuna River, but the brothers went further. Several days were spent exploring the Manuherikia Valley and, on returning to

Dunedin, they applied to the Provincial Government for the lease of two blocks of land on both sides of the Manuherikia River. One they called Galloway, after the district they came from in Scotland, the other, Moutere (Maori for "land almost surrounded by water"). It was a total of 100,000 acres (just over 40,000ha). Part of their property included the land on which the towns of Alexandra and Clyde are built.

The brothers brought in their sheep in 1858, and were the first to occupy a run in the Clyde-Alexandra district. The land that Watson Shennan described as "well grassed and watered, a very land of promise" attracted others who made claims covering a vast area. Other early runholders — among them A.C. Strode and William Fraser (Earnscleugh), the Black brothers (Ophir), the McLean brothers (Morven Hills) — were joined by, or sold to, W.A. Low, R. Campbell, John Butler, the Glassford brothers, William Leask, Andrew Jopp, and James McArthur.

Eventually, just five runs occupied the whole of the Alexandra, Clyde, Earnscleugh and Manuherikia districts.

It was at Earnscleugh station where William Fraser, who bought out his partner, A.C. Strode, introduced rabbits to Central Otago. His bright idea was that rabbits would be great sport for hunters. But, with no predators to cull their numbers, the rabbits multiplied and virtually took over his huge property. They ruined Fraser and he sold in 1893. The rabbits soon overran the region in such vast numbers that the grazing industry was nearly destroyed.

They were not the only thing to overrun the land. Thousands of miners were about to invade, turning it into New Zealand's version of the American wild west, thanks to two men slogging away in a gorge.

FIRST REPORTS OF GOLD

Signs of gold were detected as early as 1856 in the Mataura River in Southland. The following year surveyer, Thomson, identified "colour" (traces of gold) in the Lindis Gorge. About the same time assistant provincial surveyor Alexander Garvie was surveying south-eastern Otago. A member of his party, John Buchanan, an experienced miner, found colour in several streams as well as in the Clutha, Manuherikia, Pomehaka and Waitahuna Rivers.

But Garvie's report, like that of Thomson's, was ignored which was rather odd considering the Provincial Government was offering a reward of £1000 for the discovery of a payable goldfield.

In March, 1861, a road gang in the Lindis Gorge found some small nuggets, sparking a small rush. Just over two months later, an Australian, Gabriel Read, decided not to try the Mataura River but to explore an area in Tuapeka. This was where a station hand, Edward Peter, born in India and known as Black Peter, found gold in 1858.

Read, an experienced gold miner, was unimpressed with Black Peter's site and continued upstream. He followed a tributary stream and came to wide gully just before dark, and did a quick test dig. Less than a metre through gravel was a soft slate — and he saw "the gold shining like stars in the Orion on a dark frosty night".

His discovery set off New Zealand's first major gold rush at what become known as Gabriels Gully on the outskirts of Lawrence.

It was not the last. Eighteen months later, a second rush — this time to the Dunstan — triggered a stampede which was to encompass the whole of Central Otago and west to the Arrow and Shotover Rivers to create settlements now known as Arrowtown and Queenstown.

THE CLUTHA RIVER

This mighty river contained much of the gold. It came to be feared and respected by the pioneer sheep farmers, gold miners and early settlers; it is treated with caution today.

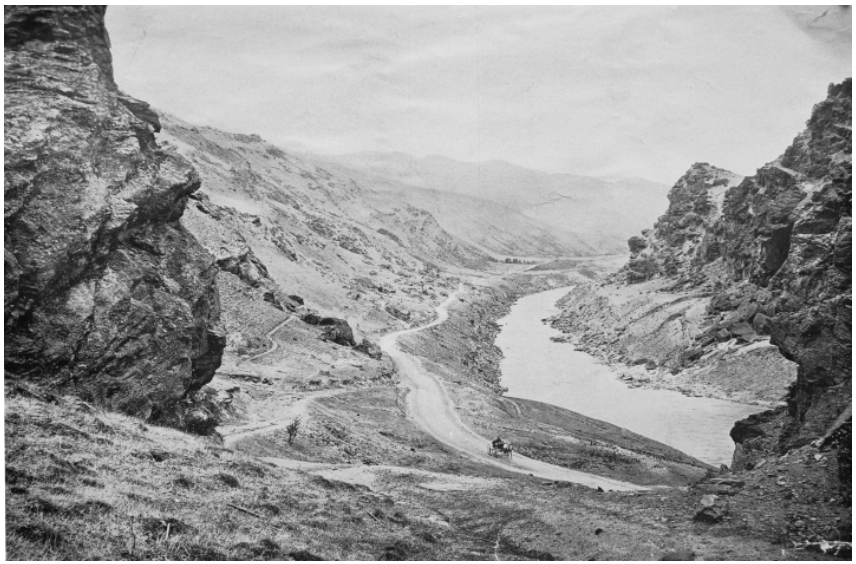
It is the second longest and the highest volume river in New Zealand, discharging a mean flow of 614 cubic metres per second. It is also the swiftest and is listed among the world's fastest-flowing rivers.

The Maori knew it as Mata-au (meaning a "current" or "eddy in an expanse of water"). In March, 1770, Captain James Cook in the *Endeavour* sailed past the wide river mouth near present-day Balclutha (where the river splits) and thought it was a harbour. He named it after his sailing master, Robert Molineux (Molyneux). Around 1846, Scottish settlers called an island in the river mouth Inch Clutha. Clutha (*Cluaidh*) is gaelic for the Clyde River running through Glasgow. Our river gradually acquired two names – Clutha and Molyneux. By 1889 this was causing some confusion and in September the *Otago Daily Times* demanded the river be officially recognised as Molyneux. However, the name Clutha stuck and Molyneux gradually faded, although it lasted well into the 20th century.

The Clutha is the "daughter of three mighty lakes" — Wanaka, Hawea and Wakatipu. It begins its 338km journey to the Pacific from Lake Wanaka where it is joined by its first main tributary, the Hawea River. Flowing through ancient glacial terraces, it meets the Lindis River before becoming Lake Dunstan, an artificial lake created by the Clyde hydro-electric dam.

Fifty kilometers from its source, the river reaches Cromwell, partially submerged as the lake gradually formed while the Clyde dam was built between 1982 and 1993. Here it is joined by the Kawarau River ("the meeting of the waters") flowing from Lake Wakatipu. Once through the Cromwell Gorge, it passes Clyde and, at Alexandra, is joined by the Manuherikia River before entering Lake Roxburgh, another artificial lake created by the Roxburgh dam which opened in 1956. It reaches the Pacific at Molyneux Bay near Balclutha.

The Clutha, like any river, floods. The October, 1878, flood caused great damage downstream and swept away the bridges at Bannockburn, Roxburgh and Beaumont. The beautiful suspension bridge at Clyde eventually succumbed to the current and its remains, like the others, floated past Balclutha out to sea. A hundred years later, almost to the day, flood waters inundated more than 12,000ha with a loss of more than 21,000 livestock.



The Clutha River flowing through the Cromwell Gorge. (Clyde Historical Museum)

In November, 1999, another flood caused serious damage to many riverside communities, particularly Alexandra. This one submerged parts of the town

which escaped flooding in the 1878 flood. Although the river was only 80 percent of the volume of the 1878 flood, the severity was attributed to a rise in the riverbed from silt which has accumulated behind the Roxburgh dam.

AN "EXTRAORDINARY RICH FIELD"

It is not known exactly when or where Horatio Hartley and Christopher Reilly struck rich quantities of gold on a sandy beach in the Dunstan (Cromwell) Gorge, but it cannot have been many days after their mid-autumn arrival in 1862. They turned up at nearby Earnscleugh Station in April and came to an arrangement with owner William Fraser who would sell them tea, sugar, flour and mutton every fortnight, stable their horses and give them newspapers to read.

Station hands had no idea that the men were finding significant quantities of gold because they kept moving up and down the banks of the gorge. They thought the men were just prospecting when, in reality, they were picking off the richest areas of gold.

Hartley and Reilly's fabulous secret was eventually revealed after their hair-raising, 177km winter journey to Dunedin using the rough mountain trail (later known as the Old Dunstan Road) which crossed the Rock and Pillar Range.

News of their deposit of 87lbs (32.5kg) of gold with the astonished Gold Receiver, Mr J.B. Borton, appeared in the *Otago Daily Times* the next morning and caused great excitement.

The newspaper reported that the miners would not reveal the source of "this rich parcel" — they wanted guarantees they would receive the reward offered by the Provincial Council to anyone who discovered a payable goldfield — but quoted one of them, "there was room for plenty more where they had been working".
It was to be another three days, while an agreement over the reward was hammered out, before the location of the gold was publicly revealed.

A collection of nuggets found in Central Otago.

The newly-appointed Secretary to the Goldfields, Vincent Pyke, examined the gold and concluded that the "thin, worn and scaly" flakes had been "subjected to the prolonged action of water amongst pebbles and boulders." He was familiar with earlier reports of "colour" being found in the interior and that year had spoken to a steamboat skipper, Captain Murray, who said the Clutha River reminded him of the Fraser River in Canada's Northern Territories, where there was a rich gold strike in 1858. He thought that "gold in quantity would be discovered higher up the river".

Pyke consequently made an educated guess that Hartley and Reilly's gold had come from somewhere near Wanaka. Pyke later wrote that Hartley was "very cool and circumspect" but that Reilly was "in a very excited state". From that reaction, Pyke knew he was on the right track and threatened to go there himself and find the gold which would deny them the reward. The miners caved in and told him where the gold had been found.

The story appeared in the *Otago Daily Times* on Tuesday, August 19, with headlines proclaiming an "Extraordinary Rich Field". Hartley and Reilly, the paper reported, had "found gold wherever they tried".

Gold Fever

Dunedin, already in a high state of excited anticipation after the first report in the paper, was brought to fever pitch when the second report hit the streets. Groups gathered on street corners discussing the new goldfield. Shops were crowded with men buying supplies and equipment. Horses and saddles doubled in price. The level of excitement was thought to have been greater than the first find by Gabriel Read the previous year.

When the *Otago Daily Times* reached the Tuapeka goldfield that evening, miners read the report by lanterns and many abandoned their claims that night, charging off to the Dunstan.

The next day the stampede from Dunedin to the new goldfield was underway. Hundreds of men set off. Most had only a vague idea where to find the Dunstan, knowing only that it was somewhere "up the Molyneux River".

Employers were forced to considerably raise wages — by up to 50 percent — to keep staff; restaurants closed because cooks and waiters took off; an Auckland-bound ship, the *Lombard*, berthed at Port Chalmers, lost many of its passengers and crew who departed to the goldfield; competition to find wagons to transport merchandise to the goldfield was so great that rates up to £200 a ton were paid.

Six days after the announcement, it was estimated 2000 men were on their way to the new goldfield which quickly became known as the Dunstan Diggings.

There were three routes to the interior – the shortest, but most difficult and dangerous, was the rugged mountain track used by Hartley and Reilly over the Rock and Pillar Range and Rocky Ridge; from the Tuapeka goldfield over the Knobby Ranges to the junction of the Clutha and Manuherikia Rivers, and the longest, but the easiest, by steamer to Waikouaiti and then inland through the Shag Valley (Pigroot) and the Maniototo Plains.

Gold fever over-rode common sense. The majority of the miners were men in their 20s who carried a swag containing their worldly goods and mining tools on their backs. Most had no idea what sort of country they would have to cross to reach diggings or the severity of the winter climate.


THE MINER.

The *Otago Daily Times* warned there was no food, fuel, or mining equipment available on the route to the Dunstan. It also advised it would take about a week of hard slog over rugged snow-covered country in harsh winter conditions.

But hundreds set off anyway. Most could carry only enough supplies for five or six days and they were exhausted by the time the Dunstan was reached.

ON THE DUNSTAN

The first miners came from Gabriels Gully because they had a good two days start on the others. They were dumbfounded when they neared the gorge, expecting this new El Dorado would be like Gabriels Gully — a flat valley where they could dig a hole and find gold. Instead, they found a rocky gorge with steep, rocky cliffs and a deep, swift flowing river. One newspaper correspondent wrote that he "had never seen such savage scenery".

Hartley's Beach which yielded such early rich rewards was an obvious starting point, but the miners had no idea where to find the gold or how to extract it. Most of them had come from the Australian gold fields and, unlike the Californian miners, did not understand this was alluvial gold, extracted by panning or

cradling in the shallows and bars of rivers or streams.

By the time Hartley arrived on August 28, about 2000 angry men were milling around cursing him for luring them "into this infernal place to starve". He was immediately the target of their frustration; some threatening to throw him into the river. Fortunately, he was accompanied by three mounted police and Captain Jackson Keddell, unofficially the goldfield's commissioner. An eye-witness who described Hartley as "a fine type of the American gold-seeker", reported that "Hartley in a few words explained the mode of working, and his self-possession and evident truth prevented further trouble". The miners watched in disbelief as Hartley waded into the river, shovelled some sand into a tin pan and, to their astonishment, washed out several ounces of gold. The gold, he explained, was in the sand and in the rocky crevices of the shingle bars stretching into the river.

A wild scramble followed to peg out claims on all the sandy beaches in the gorge. There was just one problem – the majority did not have the equipment to work their claims. Hartley's impression was that "most of those on the ground had hurried up with the idea of getting good claims by being first in the field".

Hartley's Beach in the Cromwell Gorge, 1865, now beneath Lake Dunstan.
(Hocken Collections, Uare Toaka o Hakena, University of Otago)

There were no trees, so there was also a scramble for wood for fuel and timber to build cradles which could sift greater quantities than a pan. Desperate meas-

ures were called for: one man at Moutere Station, buying food, spied a baby's cradle made from a wooden gin case. The occupant, just a few weeks old, was lifted out and a sale was made for £5 ($10).

The first warden at the Teviot diggings, R.H.W. Robinson, reported that the "very floors of the homestead at Galloway Station were torn up and sold to be made into cradles".

Another miner removed a door from one of the out-buildings at Mt Ida Station and carried it on his back over the Raggedy Range to the diggings. He was hotly pursued by an irate farm manger with revolver in hand, but the miner managed to reach Dunstan and disappear into the crowd.

No Tucker

As more and more men arrived, a lack of food became a problem. Many were given meals by Moutere, Galloway, and Earnscleugh sheep stations which quickly ran out of supplies and turned away hundreds of men begging for flour or bread. Some returned to Waikouaiti or Tuapeka for provisions.

By the end of August things were so desperate that Watson Shennan transported sheep from Moutere to slaughter-yards he set up about 2km from the mouth of the gorge, while Fraser at Earnscleugh ferried sheep carcasses across the Clutha. Up to 800 miners camped there and queued to buy the unsalted mutton selling at a shilling (10c) a pound. The encampment was soon called Muttontown and was a life-saver for the early arrivals.

It was not until the first week of September that the first drays carrying provisions arrived from Waikouaiti. The flour sold within half an hour. Some miners took matters into their own hands and stopped drays, not only forcing the drivers to sell them flour, but setting the amount they would pay. At Captain Baldwin's station on the Tuapeka route, the manager doled out flour with one hand; in the other he carried a loaded double-barrel gun.

The situation eased as more food wagons arrived and merchants set up shops, including grog-shops, to supply the hungry miners.

New Gold strikes

On September 23, 1862, the Dunstan was proclaimed a goldfield by the Superintendent of Otago Province, John Richardson, and Captain Jackson Keddell was appointed the goldfield's commissioner.

The *Otago Daily Times* had predicted that a gold rush, "unprecedented in the mining annals of this colony" would take place and that a huge influx of people could be expected when the news reached Melbourne and the Victorian gold fields in Australia. The prediction was true and, by late September, about 3000 men were working claims (24ft by 24ft – about 54 sq m) with an average yield of about 2oz a day. The entire length of the Clutha River from the junction with the Kawarau River down to the gorge below the Manuherikia River, as well as part way up the Manuherikia, was a mass of miners. Those who had no tents took shelter where they could find it – in caves, rock overhangs and hollows in the river bank.

But September also brought an annual event which forced the miners to stop work: as the snows melted, the river rose – very quickly. Overnight, it increased by 3m, washing away piles of gold-bearing gravel and submerging the beaches. Many miners refused to believe locals who told them it would be autumn before the river went down again. While they waited, some tried their luck in the gullies and streams along the gorge, finding payable gold. But after a few weeks, with the river showing no signs of dropping, the miners conceded defeat. Many looked elsewhere in the district.

They were not disappointed. One of the richest finds was in Conroys Gully, across the Clutha at Earnscleugh, where one miner was reported to have washed 200oz (6.2kg) of gold from just one tin dish. Other prospectors fanned out to Bald Hill (Fruitlands), Butcher's and Blackman's Gullies all fed by water coming off the Old Man Range. Others found gold at Bannockburn, Bendigo and the Nevis.

By November, miners had penetrated the other side of the Old Man Range where the Fraser River rises amid swamp flats and peat bogs. Called Campbells, up to 200 men worked there until news swept the Dunstan about a rich new gold strike where the Arrow River flowed through a narrow gorge.

Hundreds immediately set off to Fox's (Arrowtown), named after William Fox, one of a group of miners who kept the discovery secret for a number of weeks. Not long after, a third rush was underway to the Shotover River and Cardrona.

The following year more goldfields were opened up at Blacks (Ophir), Hogburn (Naseby), Kyeburn, Dunstan Creek (St Bathans), Tinkers (Matakanui), and Thompson's (Drybread).

Five large goldfields were proclaimed by the Provincial Government between August, 1862, and October, 1863.

Estimates of the number of miners ranged from 11,000 to 15,000. The number dropped to 10,000 in December, 1864, when 6000 then took off to new goldfields in Marlborough, the West Coast and Auckland. By 1865, roughly 4000 remained on Otago.

The golden era of mining was ending.

HARTLEY AND REILLY

Hartley and Reilly names might have been widely-known after discovering one of Otago's richest gold fields, but details of their lives were not well recorded.

Horatio Hartley was born in Ohio in 1826 and was 22 when he joined the gold rush to California in 1848. There he met and befriended Irish-born Christopher Reilly.

The two men went on to the Victorian goldfields in Australia and then to New Zealand, arriving in 1862. They probably visited the Tuapeka goldfield before prospecting further up the Clutha River. They concentrated on an area about 20km below the junction of the Clutha and Manuherikia Rivers and found enough colour to encourage them to move further up to a wild and rugged gorge (the Cromwell Gorge). They prospected on beaches on the western bank (the true right of the river) in the gorge although they had few tools after breaking their shovel and, in another stroke of bad luck, their tin gold panning dish in a fall. This meant washing only a few handfuls of dirt at a time.

Finding Gold

Their luck dramatically changed however. In just one week, they collected about 40oz of gold at a site in the gorge later called Reilly's Beach. It was enough for the men to make the arduous journey to Waikouaiti to "get pack horses and an outfit for a winter campaign." Secrecy was the key, so on the way out, they crossed the river at Fraser's station (Earnscleugh) to avoid being seen. They went up the Manuherikia River and east through the Shag Valley to Waikouaiti, returning on almost the same trail taking great care to avoid places where they might be seen by people who knew them.

They were lucky that the winter of 1862 was the most severe experienced by the European settlers: the Clutha was extremely low because the mountain basins which fed Lakes Wakatipu, Wanaka, and Hawea which drained into the Clutha were frozen by hard frosts and heavy snowfalls.

On the true left of the Clutha (the eastern side) the low levels of the water allowed them to spot rock formations stretching into the river that were similar to what they had seen in California. Their instincts were correct.

The gold rush town of Clyde in 1870. (Central Stories Museum)

At the place later called Hartley's Beach, near the junction of the Clutha and Kawarau Rivers, clefts in the rock bars had acted like a giant sluice box which trapped a huge amount of gold as it tumbled down the river.

The men later told the *Otago Daily Times* that for the first four to six weeks they each retrieved 2-3oz a day and, as the river dropped even lower, they averaged about 12oz each day.

"We had nothing to do but set the cradle at the edge of the river and keep it going from morning to night, as one could get dirt and feed the cradle as fast as the other could wash it."

They started off cleaning the gold with quicksilver (mercury) but there was so much gold they were not bothered about losing some it by roughly cleaning it in the cradle.

Revealing their Secret

The remote location must have boosted their confidence that they could protect their secret treasure trove and not be "rushed" by other gold seekers. They managed to get rid of a shepherd who hailed them by telling him the old tale "just making tucker", but a lapse of memory by Hartley nearly gave them away: He made a trip to McLeod and Gibson's store at the Lindis diggings to buy supplies and stayed overnight. Setting off the next morning, he left his notebook behind. It contained dates and places where he and Reilly had prospected and details about the sale of 40oz (1.2kg) of gold to buy horses and supplies. It was enough to raise the suspicions of a Victorian miner, Watson, and his three mates, Docherty, Davies, and McMasters. They hatched a plan to give Hartley a head start and then Watson, with a week's provisions, would follow him.

One can only imagine Hartley and Reilly's shock and consternation when Watson appeared on their beach just as they had finished working for the day. Lying in full sight was a dish containing the day's takings – about 20oz – but, amazingly, Watson walked past without noticing it. With great presence of mind, an outwardly calm Hartley made him welcome and invited him to their tent for a meal and a bed.

Somehow they managed to pull the wool over Watson's eyes. Reilly pretended to be suffering from bad rheumatism and told Watson they were going back to Australia because they had found no gold. Watson believed them and later reported to his mates that he "found them decent fellows" but they were not getting any gold.

It rattled the pair but, in the end, they were forced to declare their find. The Provincial Government, desperate to stimulate development and increase the population of a struggling Otago, offered a reward to whoever found a new, payable goldfield. The Provincial Council's decision was based on the rush to Gabriels Gully in 1861 which brought a huge influx of people from Australia and further afield. A census taken in July, 1862, showed Dunedin's population was 5850 while that of Tuapeka, where all the miners and supporting services were, was 11,472.

Three parties were equipped by the Government to prospect for gold in selected rivers. One group, led by Henry Stebbing, reported a find of payable gold in the Knobby Range, but wanted more time to test the field before making the location public.

Stebbing finally made his report on July 18, 1862, to the Warden at Tuapeka, but he was too late. Hartley and Reilly had beaten him by three days.

LAW AND ORDER ON THE DUNSTAN

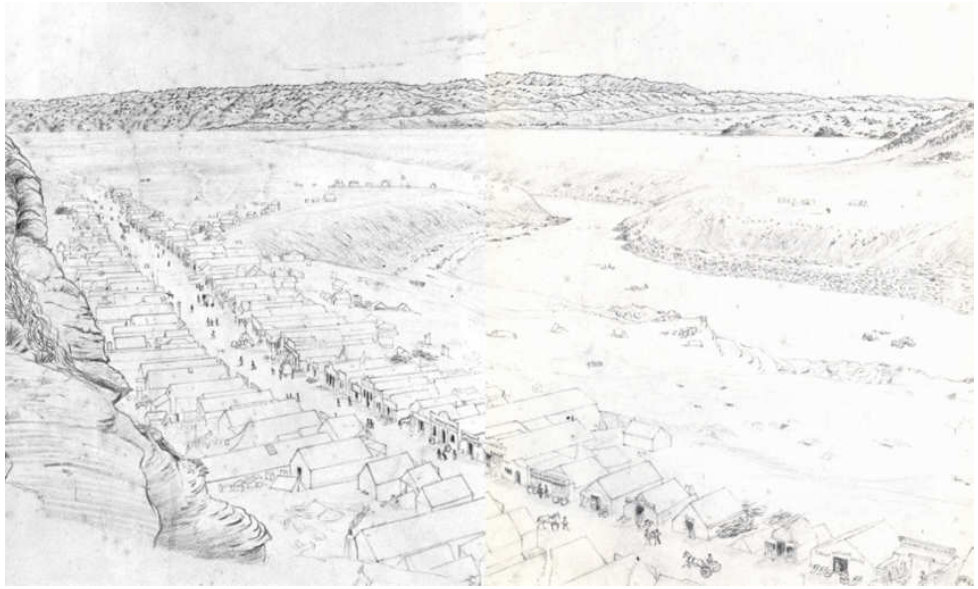
Among the thousands of men from Victoria and California who poured into Central Otago's goldfields were those with no intention of lawfully gathering gold. There were former convicts, some dangerous, from Australia; others had criminal records, and then there were those who could not resist the temptation to steal other's gold.

In September, 1862, Police Commissioner Jackson Keddle, who had accompanied Hartley back to the Dunstan, pegged out a site for a police base in Clyde.

It became known as "the Camp" and was primitive, lacking even furniture. There were two tents, a box for the commissioner to sit on, a police inspector (Morton), and the gold receiver (Richmond Beetham).

Clyde, or Hartley Township as it was then called, was similar to America's Wild West. There was drunkenness, fighting and squabbles over food and fuel, and gold claims mainly caused by inadequate mining regulations.

Theft was common. An *Otago Daily Times* correspondent reported he had been "stuck up" while asleep in his hotel bedroom in Cromwell and robbed of his money, compass, and knife. The thief was not caught, but if he were, punish-



Dunstan Gold Diggings, a sketch by W.J.Jeffreys about 1863. (Courtesy of G.L.Cumming)

ment would have been as severe as the sentences given to James McGovern and Charles McLaughlin: they each received two years hard labour in early 1863 for stealing a mining cradle.

In November it was reported that gambling and fighting had become prevalent and many "bad characters" were in the district and although they could be arrested on minor charges, the lockup was so small they were left alone.

Store keepers banded together to hire a private watchman to check the rear of business premises to bolster the two policemen patrolling the street.

Gold shipments were of concern: although an armed escort protected shipments to Dunedin there was no safe place to store the gold awaiting shipment. The safe was too small to hold all the gold and, as the *Otago Daily Times* reported, the "Gold Receiver's tent is a mere calico shell, and utterly unsafe."

The situation improved somewhat in late November when two police houses and a lock-up were sent from Dunedin along with more policemen, bringing the force to 12. But they were grossly overworked and under-staffed covering Clyde and Alexandra and doing escort duties.

Serious crime usually happened in the lonely, rugged hills. A ruined hut in the Kawarau Gorge was said to be the place where Philip Levy and his gang used to hide to rob and kill passing miners. A person travelling on the road between Clyde and Alexandra was robbed of his money and, in a violent hold up near Alexandra, two German miners were lucky to escape with their lives.

Bodies, some bearing evidence of foul play, were often seen floating down the Clutha. The skull of one body recovered at Alexandra was beaten in and numerous wounds had been inflicted before death. A skull found at Mutton Town Gully had a hole in it like one made by a pick.

Many miners whose names were never known simply disappeared, some through accidents or by drowning. Others vanished in suspicious circumstances and the bodies of many bore signs of violence. Their killers were never found.

Robberies in Clyde

The Dunstan diggings escaped the attentions of the violent Australian bushrangers and their gangs, but there were two major robberies.

The first, late in December, 1863, was on the Cairnmuir Range, opposite Clyde (the road to the Lookout) when Bank of New Zealand agent John Skinner set off

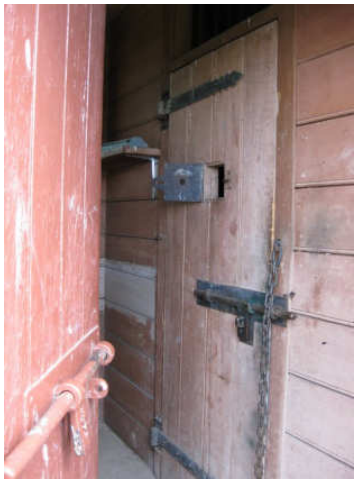
on his regular trip around the diggings with £1000 ($2000) to buy gold. He crossed the Clutha by ferry and rode up the Cairnmuir track on his way to Bannockburn and the Nevis. Suddenly, from behind a large rock (still known as "Bankers Rock") he was ambushed by two masked men waving pistols.

Skinner did not argue, giving them the cash. They left him tied up under the rock, but Skinner freed himself and returned to Clyde.

The police were alerted and arrested two men, Thomas Parker and Thomas Cunningham, who had just crossed the Clutha on the Earnscleugh station boat. When searched, one of them had a marked half crown coin which had been in the bank the previous day.

Three months later, a Dunedin judge sentenced Parker to 10 years hard labour and Cunningham to six years. The money was never found. Perhaps Cunningham picked it up after his release or perhaps it is still somewhere in the Cairnmuir Hills.

Another robbery in August, 1870, was talked about for years: Clyde was the overnight stopping place for the gold escort from the Arrow and Cromwell diggings. It was too much temptation for an Arrow shoemaker called George Rennie and police constable Malcolm McLennan who cut a duplicate key to the prison cell where gold was stored overnight.



A door leading to a cell in the Ophir Jail built in 1900. (Louise Joyce)

A consignment duly arrived, and £14,000 ($28,000) worth of gold and banknotes was locked up and the keys handed over to Inspector Dalgleish. At midnight, when McLennan was supposedly on guard, he and Rennie loaded the gold onto Rennie's horse. Rennie took off but the gold was too heavy for the horse, so he hid parcels of it in the Cromwell (Dunstan) and Kawarau Gorges. When he reached the Gentle Annie his horse could go no further. Rennie turned it loose, hid the saddle and then made a fatal mistake: he tried to burn the bridle, his false whiskers and clothing but he was seen by Harry Cook who was searching for some animals.

When the theft was discovered, suspicion fell on McLennan and then when police learned about Cook's strange discovery, they arrested Rennie. He confessed and named McLennan as his accomplice. All but two bags of gold was recov-

ered. The case was controversial because Rennie received six years hard labour (later reduced) but the jury found McLennan not guilty. He was, however, dismissed from the police force.

VINCENT PIKE

A major personality and force on the Otago goldfields was Vincent Pyke. He was described as "one of Otago's ablest politicians and most effective advocates" and is remembered as the namesake of the former Vincent County and of today's Vincent Community Board.

Born in 1827 in Somerset, England, he emigrated to South Australia in 1851 with his wife and four sons and daughter. He spent two years as a gold miner, but his skills at oratory and his championing of miners' rights soon led him into politics. He represented Castlemaine district in the Legislative Council and held various civil service positions until, in 1862, he landed in Otago "in pursuit of health". (Pyke suffered from poor health most of his life and was inclined to overindulge in food and alcohol.)

Vincent Pike
(Central Stories Museum)

In May, 1862, he was appointed a commissioner by the Provincial Council charged with setting up a gold fields department. (The title was changed a few months later to secretary).

Barely a week after his appointment Pyke presented detailed mining regulations, based on those in Victoria, Australia, to replace the previous unworkable ones. These were so good that they became the foundation on which the country's gold mining industry developed.

He took up journalism in 1873 in Dunedin and also wrote a series of novels as well as the invaluable *History of the Early Gold Discoveries in Otago,* before being elected a Member of Parliament for Wakatipu. He was the first MP for Dunstan and fought hard for Central Otago's railway, roads and bridges. He also championed the breakup of large run holdings so the land could be made available for small freehold farms.

Pyke travelled extensively throughout Otago's goldfields where he mixed with everyone. In spite of being erratic, imperious and of uncertain temper, he was blunt and honest and was held in genuine affection by the small mining and farming communities in Central Otago.

Vincent Pyke died on June 4, 1894, aged 67, and is buried in Dunedin's northern cemetery. His wife, Frances, died in Clyde on May 6, 1898. Her grave is in Clyde cemetery.

THE CHINESE MINERS

The history of the Dunstan rush would not be complete without a salute to the hundreds of miners who came from China to seek their fortune.

The first group of Chinese arrived in Dunedin in 1866, although some might have arrived earlier. They were fitted out by Chinese stores and headed inland to the goldfields. One group, described by a newspaper as "ten interesting specimens from the Flowery Land", reached Dunstan township about the same time as many miners were abandoning their claims to head to the West Coast to newly-discovered goldfields there.

They were welcomed specially by the shop traders, and they proved to be industrious, hard-working and frugal. They took up abandoned claims, worked the tailraces and cradled the banks of the Clutha when it was low. They worked seven days a week, 10 to 12 hours a day.

All of them were Cantonese and most wore traditional dress – a long tunic reaching the knees and wide pantaloons. They were great gamblers (pakapoo was a favourite) and many were addicted to opium smoking.

Chinese miner cradling for gold on the Molyneux riverbank. (Central Stories Museum)

They did not like tents and preferred to build something more substantial, whether it was of mud-brick, schist rock or whatever came to hand. The remains of their huts and stone walls which enclosed a cave or a schist overhang can still be seen in the hills around the Dunstan.

Chinese miners outside their hut. (Clyde Historical Museum)

By 1868 the census return listed Clyde's mining population as 44 Europeans and 50 Chinese. In Alexandra there were 148 Europeans and 100 Chinese. According to figures compiled by a Presbyterian minister, the Rev Don Alexander, just over 1500 Chinese arrived in New Zealand by 1871. Their numbers caused alarm and in 1881 a poll tax was introduced to deter them from coming to the country. It was repealed in 1944 and in 2002 the New Zealand Government officially apologised to the Chinese for the suffering it caused.

For a time these "celestial people" (another description in some newspapers) were tolerated by the European miners, but their ability to recover a lot of gold on ground which had previously been worked over by Europeans caused resentment. It is with sadness we read today about how the Chinese were treated by the European miners on the goldfields and the prejudices which lasted well into the 20th century.

One of the worst appeared in the *Southland Times* in mid-1863, with a report that "a Chow-chow has at last found his way to Dunedin. These pests of the colonies may now be expected here in droves; but John Chinaman will not find himself so much 'at home' in this part of the world as in Victoria or New South Wales. Some of the friends of these interesting bipeds should warn them of the risk they run in rushing to New Zealand diggings as the banks of the rivers here are much steeper and the current much stronger ...."

They were often the butt of "good natured" teasing which sometimes went too far. Practical jokes were played on them and in the early 1890s things turned nasty in Alexandra when they became the target of a vicious campaign. Stones were thrown at their houses, windows were smashed and they were abused in the street often by people pulling their long queues (pig tails). The Chinese had great difficulty convincing the police and the courts that they deserved justice.

Most of the Chinese in the Dunstan did not speak English but, in devious ways, they often got the better of the Europeans in their dealings over land, water, and materials.

Some Chinese became part of the local business community. A butchery was established in Clyde while, in Alexandra, they opened shops and took over the Royal Mail Hotel and a billiard saloon. They also entertained Europeans at the gambling sessions they ran. When the gold ran out, many stayed on, some working as cooks in the big sheep stations and others establishing market gardens and orchards.

Although the Chinese preferred to send the bones of those miners who had died back to China for burial near family for a peaceful afterlife, there are some Chinese graves in secluded areas in the Clyde, Alexandra, Naseby, St Bathans, Omakau and Cromwell cemeteries.

Charles Wong Gye

Gye was a familiar figure on the goldfields — employed as the official Chinese interpreter and a sworn constable based at Clyde to police the Chinese miners.

Apart from his birth in Guangzhou about 1835 and the name of his parents (Wong Hung, a merchant, and his wife, Leong Sum) nothing is known about his early life.

He left China for Australia where he did two things that were most unusual for those times: going to University where, in addition to his mother tongue of Mandarin, he became fluent in English and French, and also married a European,

Harriet Asquith, a needlewoman, in Melbourne.

By the late 1870s the family had moved to Dunedin where he kept a store. With the support of 18 of his fellow storekeepers, Gye applied to the Justice Department as an interpreter and for policing duties in the Chinese community.

In 1882 his £50 annual salary was increased by £10 and he was described as being "well conducted". But seven years later it was alleged he interfered with evidence of a Chinese witness in a court hearing and, although respected by both Chinese and Europeans, was dismissed. His petition for an inquiry and compensation was rejected. He, his wife and 12 children continued to live in Clyde (their cottage is featured in "Walk Around Historic Clyde" brochure) and his descendants still live locally.

He died from pneumonia on May 16, 1911, and is buried in the Clyde cemetery.

Lye Bow (Lai Tung Pou)

Bow is mainly remembered for making available an improved water supply to early Alexandra as well as supplying fruit and vegetables from his flourishing orchard and market garden at Butchers Gully.

Records show that Bow came to the Dunstan from the county of Dungguan (Tungkoon) near Canton within two years of the gold rush, and electoral rolls later describe him as '"storekeeper".

He owned about 5ha on the outskirts of Alexandra where his orchard and market garden flourished because he had the right to what was almost as valuable as gold – two heads of water from Butchers Creek (a water right allowed the holder to take a certain quantity from a race). One head equals one cubic foot of water flowing past a point in one second (a cusec).

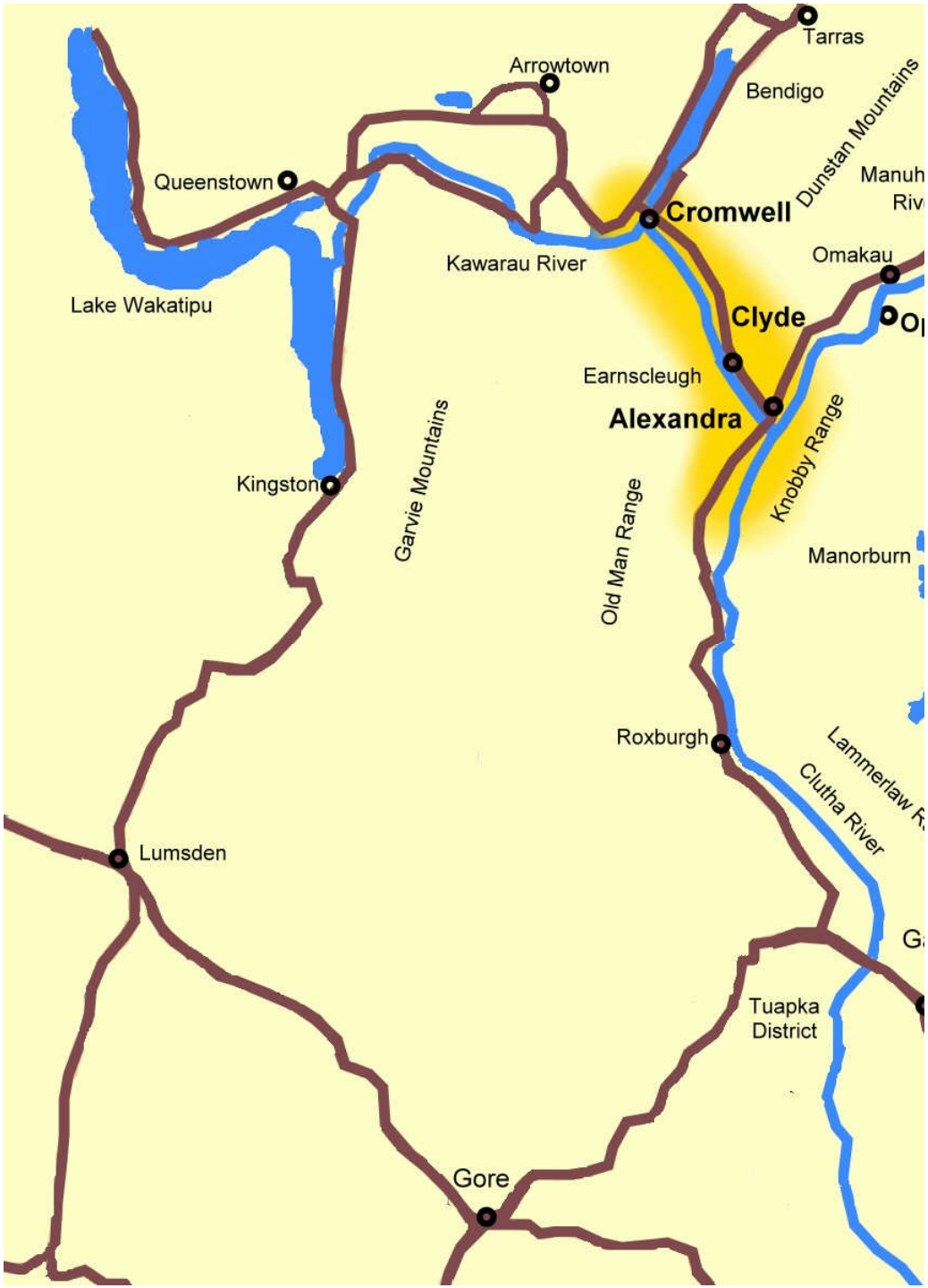
Ever since Alexandra was established the town had been plagued with water problems, with various councils trying to provide clean water. An approach was made to Bow in 1899 for his water, but that was dropped in favour of yet another costly scheme using the Chatto Creek race.

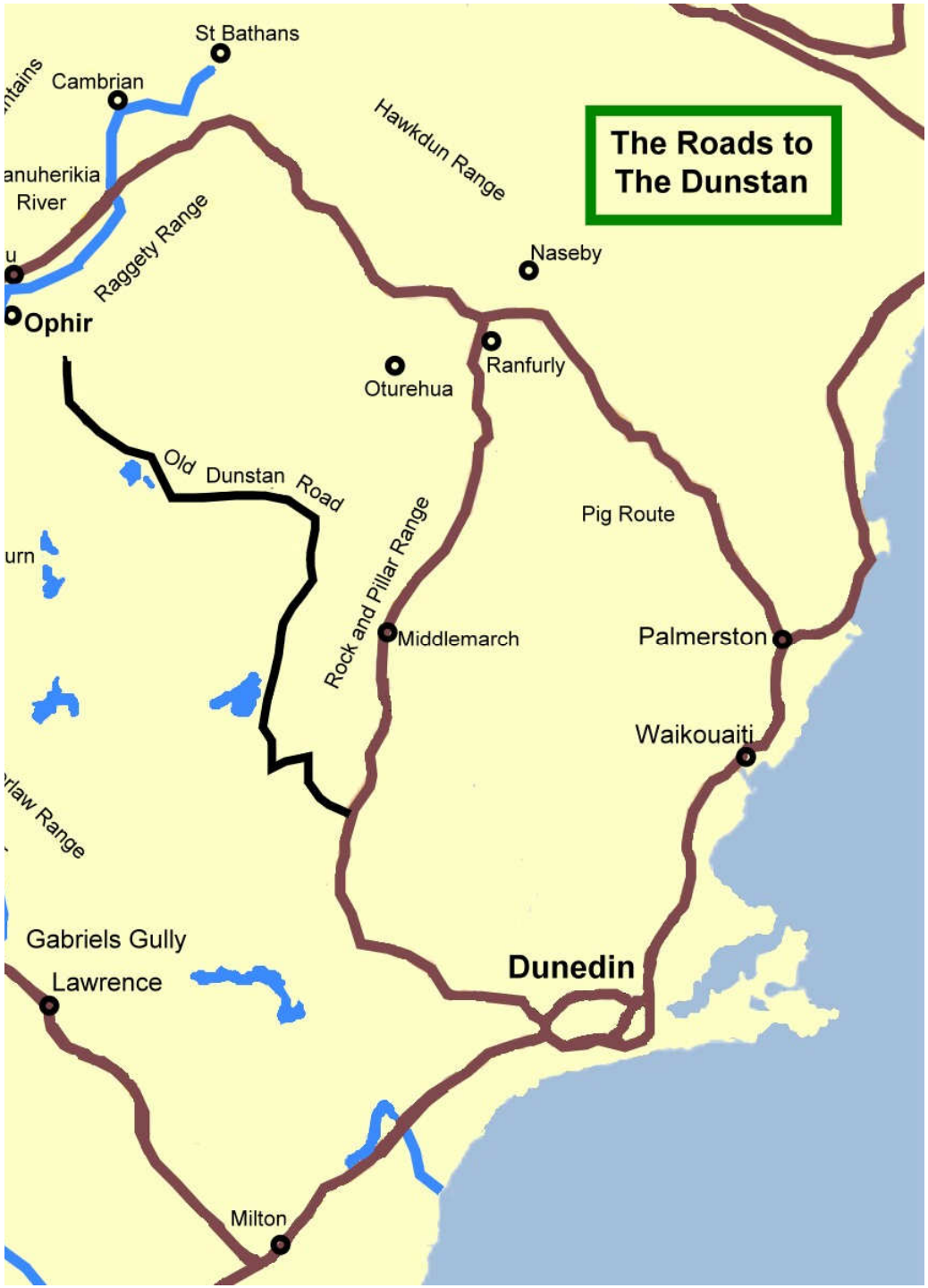
The Golden Beach Hydraulic Elevating and Sluicing Company also wanted the Butchers Creek water supply. Its owner, John Magnus, illegally diverted all of the water from Butchers Creek and, in 1896, Lye Bow took him to court and won.

Lye Bow (seated) and employees, 1920. (Central Stories Museum)

But another battle loomed: in 1905, the Lane brothers from Dunedin took over Magnus' company. One brother, Josiah, was particularly aggressive and laid claim to Lye Bow's water. Rather than let the Lanes have it, Bow offered it to the council. An agreement for the sale of the water for £500 was signed in November, 1907. The grand opening of the new water scheme took place on July 28, 1909, with Bow the guest of honour. The *Alexandra Herald* reported that the mayor "introduced Lye Bow whose grin bore sufficient evidence of his delight at seeing the scheme completed and the honour conferred on him by the Mayor".

Lye Bow was a much respected and familiar figure in Alexandra, often giving sweets to children while selling his produce. He died in 1930 when he was almost or was 100 years old. Much of his land was drowned when Butcher's Dam was built, although some of his plum and apricot trees and his cool store survive.


Tarras
Arrowtown
Bendigo
Dunstan Mountains
Queenstown
Cromwell
Manuh
Riv
Kawarau River
Omakau
Lake Wakatipu
Clyde
Earnscleugh
Alexandra
Garvie Mountains
Knobby Range
Kingston
Old Man Range
Manorburn
Roxburgh
Lammerlaw R
Clutha River
Lumsden
Tuapka
District
Gore


The Roads to The Dunstan
St Bathans
Cambrian
Hawkdun Range
anuherikia River
Raggety Range
Naseby
Ophir
Ranfurly
Oturehua
Old Dunstan Road
Rock and Pillar Range
Pig Route
urn
Middlemarch
Palmerston
Waikouaiti
rlaw Range
Gabriels Gully
Lawrence
Dunedin
Milton

Lye Bow's store partially buried to keep the fruit and vegetables cool. (Louise Joyce)

WOMEN ON THE DUNSTAN

The pioneer women who ventured into the hitherto unknown Otago interior were the wives of the run holders and shepherds. They faced many hardships, dangers and loneliness and, without them, many miners might have died because they were kind and hospitable to the many starving men who arrived on their doorsteps begging for food.

Sarah Cameron
(Central Stories Museum)

At the Tuapeka diggings, a census taken in July, 1862, recorded 11,472 people in Tuapeka; 148 female. Some joined the rush of miners to the Dunstan.

Sarah Cameron is believed to be the first woman on the Dunstan. She accompanied her husband, Lewis, who was in the first group of miners to leave Gabriels Gully on August 16, 1862, the day

after the news of the new gold strike was announced. The couple walked over the Knobby Range with their sons, five-year-old George and 16-month-old Lewis. It was an arduous journey with Sarah carrying the youngest. She gave birth to the first baby born in Alexandra — a daughter, born in February, 1864.

Like several other early women on the gold field, Sarah later went into the hotel business and became the highly respected proprietor of the Caledonian Hotel in Alexandra.

A Mrs Galvin and her husband arrived in Alexandra in 1862 where they kept the Union Hotel and then moved to Shingle Creek where they ran the hotel there as well as a 200ha farm.

In 1863, Susan and James Stuart operated a store on the Clyde-Cromwell road and when James started a punting business across the Kawarau River, Susan kept a hotel at Bannockburn.

Euphemia McKinnon ran the Highland Home Hotel at Clyde during her husband's ill-heath and continued to do so after his death in 1866. She also bought the Sydney Hotel.

Another early arrival was Kitty Holt. Her husband, James, was in the first group to abandon Gabriels Gully and helped the Cameron family during their trek to the Dunstan.

She and James were married in Clyde in 1865. James gave up gold prospecting and bought a coal mine in 1864 while Kitty ran various hotels in Clyde, including the Sydney Hotel and, by 1873, the Vincent County Hotel.

Kitty Holt (Central Stories Museum)

Then there were the women who gained notoriety in the canvas towns. There is no doubting prostitutes did a brisk business, some also ran sly grog shops (illegal selling of alcohol) in tents or disreputable houses known as dirty shanties. One of the most well known was Jessie McLeod (alias Kate O'Reilly) a prostitute who had regular tangles with the law. She dealt violently with anyone who angered her and gained a reputation as wild and immoral. Jessie

finally left, or was run out of, Clyde in early 1863 and moved to Queenstown where she bought a hotel.

Other early arrivals were entertainers. Most belonged to troupes which toured the gold fields entertaining miners in hotels and saloons. When the rush was at its peak, hotel owners competed for the best in musical or theatrical acts.

One of the most well-known groups was the Buckingham family. They arrived in Clyde in late 1862 and performed to crowded houses in the United States Hotel. They went on to Arrowtown and eventually opened a hotel there.

The women were expected to sing popular sentimental ballads or to perform burlesque similar to London's music halls. Some employed in hotels were expected to dance or sing for the patrons as well as serve behind the bar and do other domestic work.

A woman who made a significant contribution to the region's development after the gold era, was Ellen Darling. She arrived in Alexandra in 1863 on a scheme which provided servants for high-country sheep stations. The following year, she married a miner, Richard Dawson, who was working a 2.5ha claim in the rich Conroys Gully. The couple built a large house in Conroys (still occupied today and claimed by the family to be the first such house on the goldfields) and Ellen grew vegetables and berries which she sold to supplement the family income.

By chance, a consignment of a dozen fruit and two walnut trees arrived at the store run by Billy Theyers in Alexandra. It was destined for Galloway Station, which refused to pay the freight. In desperation, Billy offered the plants to Mrs Dawson, who took half. The rest went to her neighbour, Andreas Iverson, a Dane.

That purchase inspired the Dawsons to establish an orchard. Better quality soil was brought in by wheelbarrow and spread over land that had been mined and, as the gold ran out, a larger area was planted with stone and pip fruit. It was the start of a successful horticultural enterprise for the Dawsons who gave us the succulent cherries known today as Dawson cherries.

THE GOLD TOWNS
CLYDE, ALEXANDRA AND CROMWELL

With such a throng, it was not long before a township sprang up at the mouth of the gorge. The encampment was first called Coal Point because a seam of coal about nine metres thick was visible on the eastern side of the Clutha.

Soon it was known as Hartleys or Hartley Township, but also Upper Dunstan, then, Dunstan; finally Clyde, (after Lord Clyde Sir Colin Campbell, who commanded the British relief force during the Indian Mutiny in 1857.)

Clyde about 1868. (Promote Dunstan collection)

A second "tent town" called Manuherikia or Lower Dunstan was established several kilometres downstream at the junction of the Clutha and Manuherikia rivers. In 1863, the name Alexandra was adopted after the marriage of the 18-year-old Danish Princess Alexandra to the future Edward V11 of Great Britain.

Both Clyde and Alexandra grew quickly, although Clyde was bigger and busier. It was a "calico" (canvas) town filled mainly with tents occupied by about 4000 miners. One early traveller described it as "a motley collection of tents, of which a large proportion was devoted to grog-selling". By late September, 1862, Clyde had a huge variety of stores, banks and businesses selling everything a miner needed. There were also establishments where miners could lose their hard-earned gold.

Hotels such as Kilgour's and United States appeared, as well as skittle alleys and dancing and gambling saloons. Many "sly grog shanties" were housed in tents and huts where liquor was sold without a licence. By December, entertainment was being offered by two dancing saloons and a theatre "enlivened with the strains of a brass band".

Alexandra gradually took shape as those who missed out on a claim up the river at Clyde pitched their tents on a narrow riverside terrace, called Lower St, and worked the beaches of the Manuherikia and the Clutha Rivers. But the spring thaw soon wrecked their claims when the river rose (the Manuherikia River was

Limerick Street, Alexandra. (An early postcard)

not affected) and they were not only forced to abandon their claims but also their shelters. Many decamped in favour of a large plain above called the Town Terrace which is the site of present-day Alexandra.

Both townships were lucky to survive a series of natural disasters:

In the early evening of January, 1863, Clyde was severely battered when a violent storm thundered down the gorge and all but flattened the town with fierce winds that continued until the early hours of the morning. Vast quantities of dust and gravel were flung about, as were the buildings. Most were destroyed or severely damaged and it was reported that even the Court House, built of solid stone, was wrecked with Magistrate Jackson Keddle and the Gold receiver, Richard Beetham, narrowly escaping injury.

Many businesses – Lindsay's Ironmongery, a blacksmith, two stores, bakery, boot shop, saddler, chemist shop, two restaurants, an auction market, two soft drink manufacturers, the *Dunstan News* and six hotels — were damaged.

Main street of early Clyde. (Chris Naylor)

The town picked itself up, though, and rebuilt using more solid materials of wood, stone and iron. Many of those buildings survive today.

In July that year in Alexandra the street on the riverside terrace was flooded by the river and three years later (1866) a summer flood submerged its buildings. They were demolished or moved to the higher plain — fortunately so, because another flood in 1878 washed away the whole of the lower terrace.

Both towns continued to expand. A survey was made of Alexandra and a town plan was drawn as early as March, 1863, while, in early 1864, the Provincial Government gave Clyde's residents the opportunity to buy the land they occupied: the price 7/6 (75c) per foot (30cm) of street frontage.

In April, 1866, Clyde was proclaimed a municipality and divided into three wards each with two councillors. The mayor was Frenchman Jean Desire Feraud, a miner, horticulturalist and winemaker. Alexandra was proclaimed a municipality in May the next year with two wards, each with two councillors and a mayor, Robert Finlay.

At the time Clyde residents were able to buy their land, an *Otago Daily Times* reporter hoped "Dunstan would become the great centre of commerce and traffic in the province". But it was not to be: as the easily accessible alluvial gold dwindled, so too did the fortunes of both Clyde and Alexandra.

(It was the introduction of another method of gold extraction, the steam dredges, that would lead to boom times again.)

A third town known as "The Junction" and "Kawarau", now called Cromwell, grew at the other end of the gorge about a kilometre upstream of Hartley's beach.

Miners pitched their tents on the edge of a wide plain where the Clutha River met the Kawarau River, hence its early names. In late 1863, it officially became Cromwell, after Oliver Cromwell, the Puritan leader who overthrew the British monarchy and created a republic in 1653.

Cromwell was a major staging post for the gold being sent down from the Arrow and Shotover diggings. By late 1863, the population was about 500. The town had one street containing two hotels (The Junction and the Kawarau), some "pretty extensive stores"; the remainder made up of shanties. The police station was a "tiny calico erection … with an exceedingly picturesque ornament of a bullock-hide chimney".

Getting to Cromwell was hazardous. The track through the gorge from Clyde was narrow, rugged and dangerous, often subject to rockfalls. The first road on the west bank was washed away not long after it was finished. A bridal track ran along the other bank and engineers turned this into a road which was used until submerged by the lake which formed behind the Clyde Dam which opened in 1993.

Cromwell also had a large settlement of Chinese miners and their settlement was the best preserved example of a New Zealand Chinatown until it also was submerged.

OPHIR AND ST BATHANS

Ophir and St Bathans, with Clyde, are three of the most authentically preserved and significant gold rush settlements in New Zealand.

Ophir

Gold was found in Ophir (then called Blacks) in 1863 on land owned by local runholders, Charles Black and his brother, William. They were probably not that pleased because an early prospector, A. Reyman, wrote in December, 1861, that even though he and his men had been reduced to eating grass roots for three days, the station owner refused to give them food because he "did not want gold-diggers there."

Early Ophir. (Central Stories Museum)

By June, several thousand miners were at the diggings. Two other fields close by were later discovered, making Ophir a rich gold area. It was referred to as "the best poor man's diggings" because all a miner had to do was sink a 1.5m shaft, and there was the gold.

At its peak, Blacks was the district's commercial and social centre with a post office, two churches, a hospital, courthouse and police station and numerous stores and hotels.

It is impossible to calculate how much gold was found because for some months the amount was included in the figures for Dunstan. As the gold dwindled so did the diggers. In 1904, a railway line was laid on the other side of the Manuherikia River opposite Ophir and the town gradually faded into obscurity. That decline probably contributed to the preservation of many of Ophir's historic buildings.

St Bathans

The official record is that gold was discovered at St Bathans in May, 1863, by a group of Welshmen working in a gully which ran into Dunstan Creek which, in turn, ran into the Manuherikia River.

They worked in secret, like Hartley and Reilly, but they were discovered by prospectors which sparked a rush to the workings known as Welshmans Gully, (now called Cambrian).

Alexandra Peyman (or Reyman), who had eyed Welshmans Gully before the Welsh got there, was forced to try elsewhere and in February, 1864, in a gully on the opposite side of Dunstan Creek, he found gold. That set off another rush and the establishment of a tent town, Dunstan Creek. Two years later the name was changed to St Bathans. Like other gold mining towns, St Bathans thrived and was home to 1000 people a well as a number of hotels, gambling saloons and businesses.

St Bathans in the 19th century. (Central Stories Museum)

One man attracted by the gold was John Ewing, a Scot, who had arrived at Gabriels Gully in 1863, aged 19.

John McCraw in his book *The Gold Baron* tells the full and fascinating story of this entrepreneur and his mining activities in St Bathans. But briefly, the Ewing Company worked the three largest mining operations and extracted more than 100,000oz (3110kg) of gold from Vinegar Hill, the Scandanavian mine at Surface Hill and the Kildair Mine. The latter was amazing in that it operated the highest hydraulic lift in the world at that time with two vertical lifts, one of 34.09m and the other, 18.29m. Locals called it "the Glory Hole" and when water filled the shafts, the famed Blue Lake was formed.

Like most other gold mining towns St Bathans lapsed into obscurity as the gold vanished. Today, there is a mere handful of permanent residents.

WINDY, DUSTY, COLD

The weather in Central Otago was much harsher, from all accounts, than today. John McCraw in *The Golden Junction* writes that "the 1860s were the tail end of a long period of cold, stormy weather which had lasted for more than two centuries". It was described as "the little Ice Age" and was marked by heavy snowfalls, floods, and gales.

The entrance to the Cromwell gorge was probably the worst place to build a settlement because it acted like a giant funnel. Gale force winds regularly roared down the gorge destroying the calico and wooden buildings at Clyde.

The other major problem was dust. Reports from the Dunstan mention the "continual series of dust storms … with dust that defies description" and the "detestable dust storms". The "clouds of blinding, choking, micacious sand" often forced shops and houses to close. Court sittings were affected, with the magistrate, prisoners and spectators suffering from the dust which thickly-coated tables and chairs.

A newspaper correspondent in March, 1863, talked about "dusty Dunstan" and the eddies of sand that swirled about him as he galloped from Alexandra across the Dunstan plain. In the dense clouds that enveloped Clyde he described "begrimed individuals were dimly visible, flitting to and fro in the smother like ghosts in Hades". The dust went into every pore of the body and irritated eyes, ears, nose and throat. He also wrote he would not be surprised to hear the entire township being blown into the river and carried out to sea.

The dust and sand came from the beaches, flood plains and in the flat between Alexandra and Clyde. The land was covered with light vegetation but the activities of the gold miners, settlers and their grazing animals exposed vast tracts which were swept up by the strong nor'wester gales.

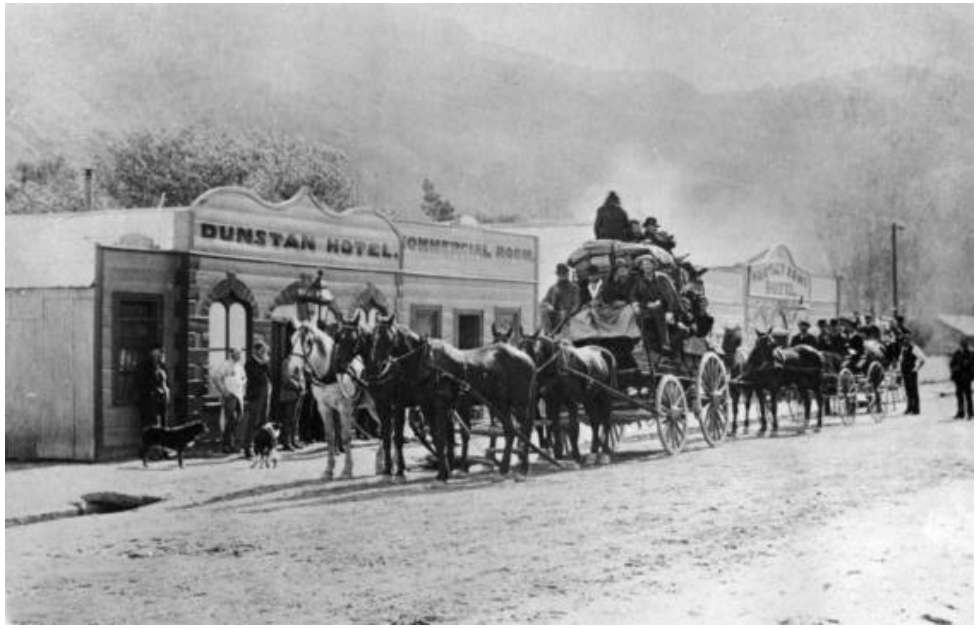
Dust in Alexandra was so bad that the town, at times, was almost uninhabitable. It was not until the 1920s that pine trees were planted to stabilise the sand. Planting continued into the 1950s.

Many people spoke of the scorching "tropical" heat and winter's frigid temperatures and snow. Miners died of hypothermia or suffered frostbite when they tried to cross the upland routes in winter because they ignored warnings or had no experience of extreme weather.

Coaches and wagons were caught in storms and snowdrifts and, by 1864, the Old Dunstan Road was abandoned by coach companies which, instead, used the

longer northern route via Waikouaiti and the Shag Valley.

The biggest loss of life was in 1863 after two months of heavy snow. Miners working in the remote Campbells, on the west side of the Old Man Range, feared they would be trapped and set off for Chamonix, a settlement on the lower slopes on the road between Alexandra and Roxburgh. Some left it too late and were caught in a blizzard. Up to 30 (no one is quite sure how many) died.

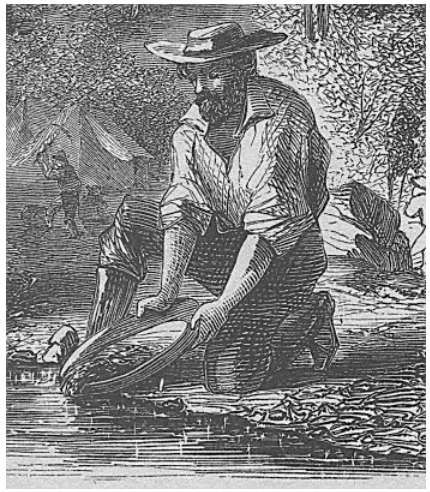


A coach ready to leave Clyde for Dunedin. (Clyde Historical Museum)

Some of the bodies were not found until the following spring. In the Nevis, two miners trapped by snow in their hut escaped up the chimney.

RECOVERING THE GOLD

Panning

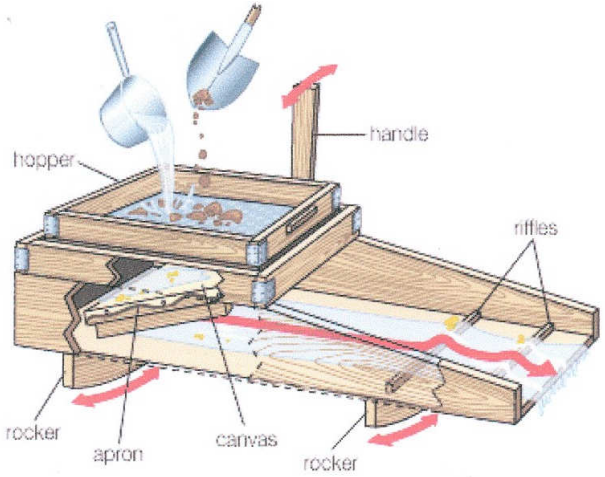


Early miners used basic equipment, the simplest of which was a tin pan – a dish sometimes with ridges around the inside to trap the gold as the water and other material is gently and gradually washed out of the pan. It was used mainly for prospecting – not for recovering large quantities.

Cradle

A faster method of recovering gold was the cradle or rocker box, so-called because it resembled a baby's cradle. It was used in the Californian gold rush and while there were several variations of the cradle, the basic components were the same.

It was a wooden box where gold bearing gravel (wash) was shovelled in the top (the hopper). Water was poured over the gravel while the cradle was rocked from side to side.



Any gold was washed from the bottom of the hopper to the base of the cradle and trapped against the riffles, a series of raised slats, for later recovery.

Sluicing

Initially, it was a ditch lined with flat stones which caught the gold from gravel shovelled into the flowing water. Later, wooden boxes (sluices) were used.

These had wood or metal strips on the inside plus matting or baize to trap the gold as the water ran through.

Hydraulic sluicing

This method used high pressure water to work elevated terraces or hillside deposits. Hydraulic elevators worked on the principle of using gravity and suction to "water blast" gold-bearing gravel and lift it to the surface – a method used at St Bathans. Getting the water to the mine site involved constructing extensive water races, some of which covered many kilometres. The remains of some can be seen today winding their way around hillsides — many now used as irrigation races to farms and orchards.

Hydraulic sluicing at St Bathans, 1881. (Central Stories Museum)

Mining

Mining for gold in hard rock required an expertise beyond the ability of the alluvial miners. It also required a major financial commitment because the gold had to be extracted from the quartz rock. The only method available then was to use rock-crushing stamper batteries.

The “Come-In-Time” stamper battery. (Louise Joyce)

The stamper battery was a machine driven by a water wheel or some other form of power which had rods with a heavy weight on one end. These were driven up and down to crush the quartz to expose the gold.

Rich quartz lodes were found at Bendigo, the Carrick Ranges and Skipper Creek, but mines in the Alexandra-Clyde basin were not so rich.

One of Central Otago’s most successful quartz-mining areas was Logantown and Welshtown on the Bendigo Loop Rd. Nearby is the best example of a stamper battery, “Come-In-Time”, on Thomson Gorge Rd which has been restored by the Otago Goldfields Heritage Trust.

The Dredging Era

By January, 1863, groups of miners were eyeing the riverbeds of the Manuherikia and the Clutha Rivers. Buckets lowered into the Manuherikia showed col-

our in the wash dirt, but the Clutha was too swift. One group brought a "diving apparatus" to Alexandra, but that did not work.

The first mechanical dredge was similar to that used by the Chinese for centuries. The spoon dredge, introduced in November, 1863, was a pontoon moored in the river with a long pole at one end. Attached to the pole was an iron rim shaped like a spoon with a bullock hide bag laced around it. A hand winch dragged the spoon along the river bed and when the bag was full it was raised and its contents washed in a cradle. About 13 spoon dredges operated on the Clutha, but most eventually sank or were converted to new models.

The Current Wheeler — two pontoons braced apart, a chain of buckets and a huge water wheel driven by the current of the river — was the next invention in 1886. It cost little to run and gathered good quantities of gold, but it had to be anchored in the middle of the river and was in danger of being overwhelmed by its tailings. Nevertheless, it was used until the end of the 19th century.

Meanwhile, experiments using steam were underway and, in 1881, the world's first commercially successful steam bucket dredge, the *Dunedin,* started work at Sandy point upstream from Alexandra. By the time it stopped working in 1901 it had recovered 17,000oz (528kg) of gold.

Dredging on the Clutha River, 1908.
(Hocken Collections, Uare Toaka o Hekena, University of Otago)

At the time it started working the Clutha, Alexandra was sinking into oblivion. The easily-extracted alluvial gold had all but gone and the nation was undergoing a depression. As a consequence, Alexandra's population dropped to about 400, businesses slumped and houses were vacant.

That changed, though, thanks to several people who bought four of the dredges laid off in the Wakatipu basin after a brief 12-month dredging boom there collapsed. The dredges were bought at bargain prices, dismantled and brought to work the river between Clyde and Alexandra. Their gamble paid off. The rich returns of gold revived interest in dredging, with dozens of companies formed to raise money to build more dredges to work the Clutha and its tributaries. Further encouragement came with the invention of a tailings elevator to deposit the unwanted washed gravel well behind the dredge which allowed it to work deeper water and the river banks.

Larger and more powerful dredges were built and, by 1897, 16 operated on the Clutha and Manuherikia with a further eight under construction. Alexandra became the gold-dredging capital of the world, bringing a huge increase in population mainly to service the dredging industry.

By 1903, a peak of 35 dredges worked the river beds, beaches, banks and the flats. The last dredge, the *Alexandra,* ceased operations in 1963, ending 100 years of dredging. The remains of *Earnscleugh No 5* can be seen in a large pool off the Clyde-Alexandra Rd and, at Earnscleugh, on the opposite bank are piles of tailings spread over 170ha, now an historic reserve.

HOW MUCH GOLD?

The exact amount of gold taken out of the Dunstan will never be known. A few miners took their gold with them when they departed while others sent it privately to Dunedin rather than entrust it to the gold escort coaches. A newspaper report in early October, 1862, stated that "published accounts prove that between 2000oz and 3000oz [62 - 93kg] have been brought to Dunedin by private hand".

The initial weeks of the rush yielded so much gold that buyers in Clyde ran out of banknotes to buy it. The first gold escort in early October took 6031oz (171kg) on packhorses to Dunedin and each fortnight when the gold was dispatched the amount increased — such as the December 8 gold escort which took 12,800oz (363kg) to Dunedin.

By the end of 1862 more than 70,000oz (2.2 tonne) ended up in Dunedin banks worth about NZ$157million on today's market prices.

Loading gold on the escort at Roxburgh in 1860s. (Clyde Historical Museum)

In 1863 the first four months 53,024oz (1.6 tonne) was recorded as coming from the Dunstan goldfield.

Between 1895 and 1922, six and a half tonnes was recovered by dredging the Clutha and Manuherikia Rivers.

MODERN MINING IN CENTRAL OTAGO

Several small mining ventures have occurred in recent years but in June, 2009, a large-scale mining operation started in Earnscleugh, near Alexandra.

L&M Mining, a Christchurch-based private company, was granted resource consent in 2004 to mine the alluvial deposits in an old channel of the Clutha River but nothing was done until higher gold prices encouraged the company to activate its project.

The company originally planned to mine 255ha, but has reduced it to 150ha over seven years working around the clock.

An open cast mine, about 20m deep, uses a recovery plant which floats on groundwater, and works ground untouched by the huge dredges which started operating in the Clutha River more than 100 years ago.

L&M's recovery plant in Earnscleugh, 2011. (Ric Oram)

The area being mined is estimated by L&M to contain about 110,000oz (3.4 tonne) of gold.

L&M has put in place a number of safeguards to protect the environment and is restoring the landscape as mining progresses across Earnscleugh flat. The company is also in constant contact with a liaison committee of local residents and environmental consultants.

HOW GOLD WAS CREATED

Take a look at a piece of gold jewellery. You are looking at a metal which has its origins in space. It is literally star dust. This unique bright metal comes from stars that once sparkled in the universe.

When a star reaches the end of its life, having used up all its fuel, it collapses; an event known as a supernova. That collapse forces the protons in atoms that make up the star to collide, causing intense heat of hundreds of millions of degrees. That is called fusion. No-one is exactly sure how it happens, but scientists do know that it is only in a supernova when temperatures are so high that the rare, odd numbered atom with 79 protons is formed

— and that is what we know as gold.

There is evidence that our solar system and the creation of the planets were enriched with metals, including gold, by more than one supernova. The theory is that some of the gold atoms thrown into space joined a gaseous cloud that eventually formed a planet.

When Earth was formed about four and a half billion years ago, gold atoms were part of its creation. These atoms lay deep below the surface and as earth's surface rose so, too, did gold-bearing rocks in various parts of the world.

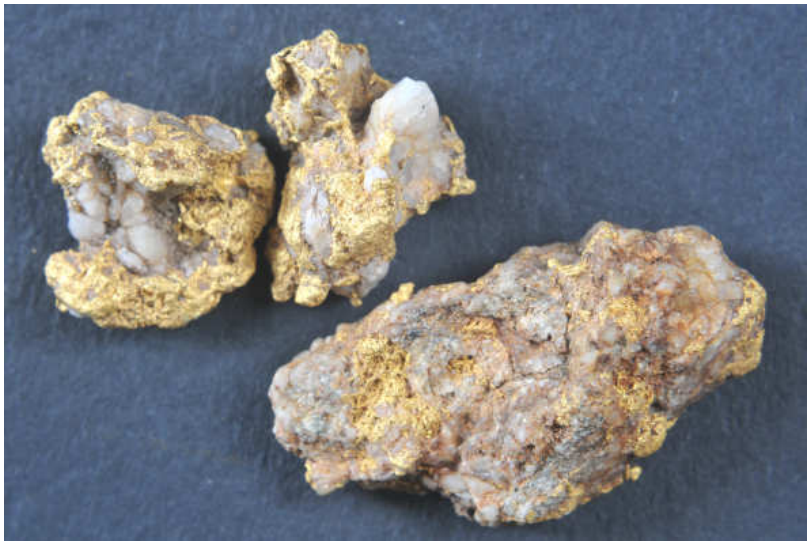
There are different colours and types of gold depending on where it is found. Experienced miners can often tell what region gold has come from. It can appear a less intense gold colour because it contains other metal. Gold almost always contains silver and, sometimes, trace amounts of copper. Gold with more that 30 percent of silver is called electrum.

In Central Otago, gold is found in schist rock, the bedrock of the landscape. Schist is a metamorphic rock (a rock that has been changed from one type to another). About 200 million years ago, in the Jurassic period, the rock was buried some 15km below the surface, heated to about 400 degC, then compressed and folded. About 125 million years ago that rock was lifted to the surface again — the schist rock today.

Gold is deposited in two forms: lode gold occurs when veins of quartz are mixed with mineral-rich schist. The minerals were dissolved in extremely hot water and, as the water cooled while flowing through the cracks in the schist, it solidified. These gold bearing veins produced about five percent of the gold found in Otago.

The other form is alluvial — about 95 percent of the gold found. It occurred when glaciers and rivers wore down the schist, extracting its gold. This gold was carried down Otago's rivers and streams. In some alluvial deposits gold grains can grow and increase in size, possibly as a result of bacterial processes.

Pyrite, also known as fool's gold, is often found associated with gold in veins or alluvial deposits. As its name suggests, the pale yellow colour looks like gold. It is of no value, but has fooled many an inexperienced prospector.



FACTS ABOUT GOLD

Since ancient times gold has been a precious commodity, highly valued by civilisations. The earliest map showing gold sites is 3500 years old and was drawn by the Egyptians who regarded gold as a symbol of power and strength.

Gold is one of the "noble" metals with unique properties. It is one of the most dense; it is heavy but so soft that it can be easily shaped and crafted; its shiny surface does not tarnish. Gold is not only rare, but beautiful, which is why it was one of the first metals used by mankind.

Nitric acid, which dissolves most other metals, will not affect gold. Because of this, gold is often submersed in the acid to get rid of impurities and to determine the value of the sample. This is where the phrase "acid test" originated.

Gold, with other precious metals and gemstones, is measured in Troy ounces. In non-metric countries every-day items such as food are weighed by the avoirdupois ounce. A Troy ounce is about 10 percent heavier, weighing 31.10g, compared to the avoirdupois weight of 28.35gm. (1 kg is equal to 32.1 oz)

The Troy weight originated from the Roman monetary system and was used in early medieval times. The name comes from an important medieval fair held at Troyes in north-eastern France.

One ounce of gold can be beaten out into about 30 square metres of thin sheet.

POSTSCRIPT

After their great discovery, Hartley and Reilly went their separate ways.

Hartley did not make a claim at the pair's Dunstan diggings, instead he went to Australia before returning to New Zealand to spend several months visiting various parts of the country looking for other gold prospects.

He spent several days inspecting quartz reefs at Driving Reef on the Coromandel Peninsula in late January-early February, 1863, where his opinion was highly valued. He thought the prospects were "most favourable" and that it was highly likely there was a reef of gold. (There was – and it is still being mined today.) He was convinced enough to buy into a couple of claims.

On his way back to Otago, the steamer stopped at Napier and, in spite of the pleas of locals, he declined to stay to inspect the province for signs of gold but thought he might stay longer another time.

By March, Hartley was in Queenstown for a prospecting trek to the West Coast by way of the Dart River. He got as far as the Awarua River when low supplies forced him to return. His journey was described as "a feat of foot which few men could do".

In May, he completed an exploration of Southland, prospecting the Takitimu Mountains and the Waiau River as far as Lake Te Anau. He believed there was "no gold-bearing country in Southland".

Later that same month he was reported by the *Nelson Examiner* to be at the new "rush" on the Wakamarina River, near Nelson, but nothing further is heard about him except an enigmatic report the following month by the *Daily Southern Cross* Otago correspondent:

He wrote that Hartley told him he was going to buy a "smart craft" and visit the "islands in the Indian Archipelago". Presumably he meant the islands near Indonesia and Malaysia because the correspondent went on to write that Hartley was going to arm the vessel with "two or three brass cannon, and with a picked crew trade to the group which Rajah Brooke has made so celebrated". (Brooke, an Englishman, was made Rajah of Sarawak after he helped the Sultan of Brunei peacefully resolve a rebellion).

The correspondent finishes his report with "Good luck to him, say I, and to all such adventurous spirits."

No record has been found of where Hartley's adventurous spirits took him, but it is known he returned to the United States and, in or about 1869, married Mary Ann Griffin.

Born in Vermont in 1828, Mary Ann was one of about 50 or 60 "ladies from fine families" who, in the 1860s, sailed from New England on the east coast, around the Cape of Good Horn and up the west coast to Washington as possible brides for settlers there.

The couple settled in Olympia, Washington's capital. He obviously did not forget Otago because in December, 1893, he wrote to the *Otago Daily Times* requesting a subscription for the *Otago Witness*.

In the letter he wrote: "I was in New Zealand about 30 years ago. You may remember Hartley and Reilly, prospectors, who made quite a stir in Dunedin for a few weeks.
Yours, H. Hartley."

Hartley owned a considerable amount of property in Olympia, including a large ranch and became known as something of an eccentric. He was in failing health for some time and died on January 21, 1903. He is buried in the Odd Fellows Memorial Park in Thurston County near Olympia.

His will, made six years before, hit the headlines because he gave the bulk of his estate ($US25-30,000) to the Olympia School district and just $US2000, plus $US600 a year to his wife, so long as she did not remarry.

Mary Ann contested the will and, in what was described as "the most notable will contests in the legal history of this country", it was revoked on the grounds that Hartley was incompetent (his wife called him insane) at the time he made it.

Odd Fellows Memorial Park, Washington State.
(Elaine Schrock)

Mary Ann died on February 6, 1915, and is buried alongside him. They had no children.

Much less is known about Hartley's partner, Reilly.

Dublin-born, Reilly is said to have attended Dublin University but adventure beckoned and he set sail for America, landing up in the Californian goldfields. He appears to have maintained a claim in the Dunstan but gave it up in October-November, 1862, when he led an expedition of 18 men and two lifeboats to prove the Clutha River was "nature's highway to the Dunstan" as part of a proposal to establish a port at the mouth of Clutha. Like his former partner, Reilly's feat received wide praise, described as "not less meritorious than that of his discovery of the field".

He later admitted the expedition proved that the Clutha was "wholly unnavigable". The venture cost him £615 and he asked the Provincial Council for compensation because he had given up a "large rich claim" to lead the expedition. By the time a decision was made by a committee not to recommend any compensation, Reilly had left New Zealand for Australia. He was reported in Tasmania in January, 1863, turning down an offer by the government to find a payable gold field.

A decade later, on January 31, 1873, Reilly was reported by *The Colonist,* to be back in Dunedin, "after having done" American and Australia, and considered that "New Zealand is a far better country for an enterprising colonist than any part of the world he has visited".

Reilly had evidently travelled extensively in America and had visited nearly all the gold mining districts of Australia. He thought there were still rich goldfields yet to be discovered in New Zealand, and was thinking of starting on a "prospecting tour".

Whether he did or not is not known. Nothing more is heard of him, although he is said to have died in Dublin in 1887.

Hartley and Reilly left a lasting legacy in Central Otago. Their discovery in the Cromwell gorge not only led to the discovery of many more gold fields, it also lifted Dunedin out of the doldrums and set it on the road to a prosperous future. The gold find was responsible for the introduction and development of new mining technology and brought permanent settlers into Otago's interior earlier than would have otherwise happened.

REWRITING HISTORY?

In 2011, noted Central Otago artist and author, Grahame Sydney, stumbled across two small articles buried in the pages of the *Otago Daily Times* and *The Otago Witness.*

Two years earlier, he had written *Promised Land,* telling the story of Dunedin and the Otago goldfields, and is well informed about the discovery of the Dunstan gold field.

The first article in the *Otago Witness* in December, 1861, contained a report from a Mr A.G. Reyman to his employer, the famed whaler from Waikouaiti, Johnny Jones. Reyman, hired by Jones to prospect for gold, said that he and his companions headed to the Dunstan Mountains and found gold in a large gully running into Dunstan Creek. He told the newspaper he intended to return to the gully as soon as he had bought proper equipment and provisions.

The story, on its own, was not earth-shattering but Sydney was stunned to read in a second report in the *Otago Daily Times* in August, 1862, (seven days before Hartley and Reilly's discovery was made public) that a mounted police constable had come across a party of men at Dunstan Creek, four miles from the Manuherikia River at the base of the Dunstan Mountains.

The group had been digging there for nine months and had built themselves a "comfortable mud hut". Their tools and equipment had been supplied by Messrs Jones and Co, of Dunedin.

There appears to be no doubt that this mining group was the men Reyman had led to the Dunstan Mountains nine months earlier … and there is convincing evidence that the gully was the later township of Cambrian, near St Bathans.

The miners kept their discovery a secret, but had they not, would this goldfield, rather than The Dunstan, have been Central Otago's first goldfield?

View across the Earnscleugh tailings to the Old Man Range. (Lex McLean)

A group of pioneers at the Jubilee celebrations (1912) of the discovery of gold.
(Clyde Historical Museum)

Photographs taken of "miners staking their claims" during Centenary celebrations at Hartley's Beach in 1962. (Rex Stevens)

Promote Dunstan

Promote Dunstan is a small group of volunteers promoting the area from Earnscleugh and Clyde to the Manuherikia. It is a community-focused, non-profit organisation which celebrates culture, people, places and the environment of our area.

Its aim is to develop and encourage various activities and events which promote the area for the benefit of residents, businesses and visitors. Details are contained in Promote Dunstan's five-year strategic plan as well as its annual action plan and budget.

The group is involved in the identification and preservation of heritage sites and works alongside other agencies to achieve this by promotion, fund-raising, purchase and management before these sites are lost to future generations.

Promote Dunstan publishes three brochures in the "Walk Around" series — Clyde, St Bathans and Ophir — and has installed bronze plaques in pavements around Clyde's historic precinct. The group has also published a brochure on the Manuherikia and Ida Valley and a Self-Drive Guide listing significant historical sites that can be visited in the Ida Valley, Clyde, Manuherikia, and Earnscleugh areas.

The annual Clyde Wine and Food Harvest Festival which the group organises every year is its major fundraiser. Promote Dunstan is also responsible for running the New Year's Eve street party in the historic precinct of Clyde.

Other projects include a "Record-In-Time" kiosk featuring photographs and stories from present and past residents installed at Clyde Historical Museum as well as signage for the town.

It has formed partnerships with the Stationary Steam Museum and the Central Otago District Council to restore Clyde's historic railway station, one of only two surviving in Central Otago, and, with the Alexandra Bridge Club, to restore a mid-nineteenth century stone building in Clyde.

Visit the Promote Dunstan web site:
www.promotedunstan.org.nz

and the Clyde township website : www.clyde.co.nz

THE AUTHOR

Louise Joyce started her career as a reporter with the *Otago Daily Times* and then worked in television as a journalist and producer.

She is the co-author, with her husband, Ric Oram, of *An Autumn Journey,* and is secretary of Promote Dunstan.

ACKNOWLEDGEMENTS

I am grateful to the following who helped me source material and with this publication.

Rory Butler, Clair Higginson, Sue Edwards, Helena Heydelaar, Bill Hinchy, Derek Hume, Lex McLean, Norma Richardson, Rex Stevens, Shani Redmile, Mike Rooney, Donna Falconer, Donald Lamont, Kauko Launonen and Inkeri Syrjanen (Lapland), Elaine Schrock (Olympia, Washington State, USA), Alexandra's Central Stories Museum, Clyde Historical Museum, Daily Southern Cross.

Tribute must be paid to Professor John McCraw for his detailed series of books on the Dunstan gold rush and Alexandra. His diligent and comprehensive research provides a wealth of material which is of immense value now and to future historians.

Finally, thanks to Ric who proof-read the text, corrected errors and made useful suggestions.

Louise Joyce

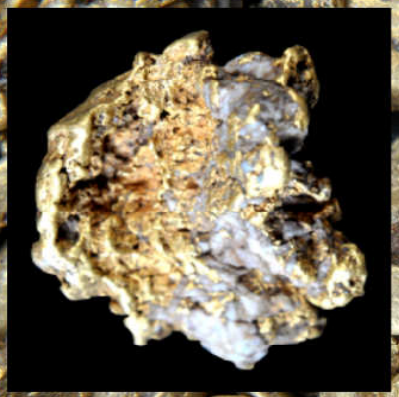
CENTRAL LAKES TRUST
A helping hand

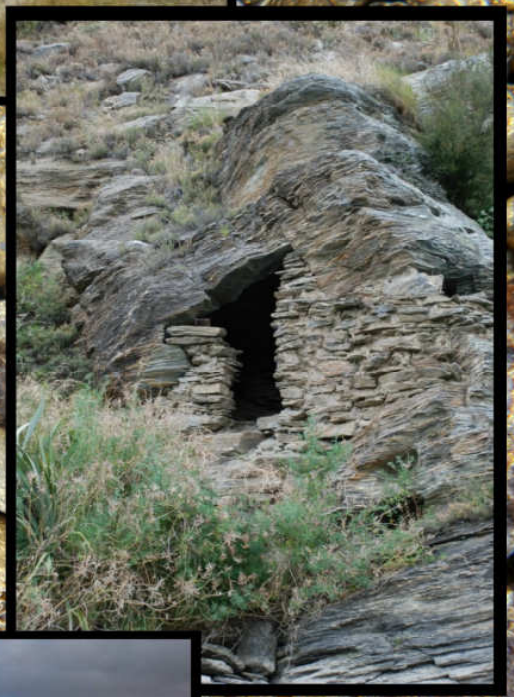
Promote Dunstan is grateful for the assistance of Central Lakes Trust in the production of this publication.

SOURCES

Early Gold Discoveries in Central Otago: Vincent Pyke (1887)
Early Days In Central Otago: Robert Gilkison (Whitcomb & Tombs 1930)
The Dunstan: A History of the Alexandra-Clyde District: C.W.S. Moore (Whitcomb & Tombs 1953)
Clyde On the Dunstan: Isobel Veitch (John McIndoe Ltd 1976, Second edition, Square One Press 2003)
Gold Trails of Otago: John Hall-Jones (Otago Goldfields Heritage Trust 2009)
John Turnbull Thomson – First Surveyor-General of New Zealand: John Hall-Jones. (John McIndoe 1992)
Mountain Water and River Gold: John McCraw (Square One Press 2000)
The Golden Junction: John McCraw (Square One Press 2002)
Gold on the Dunstan: John McCraw (Square One Press 2003)
Early Days on the Dunstan: John McCraw (Square One Press 2007)
A Fruitful Land: John McCraw (Square One Press 2005)
The Gold Baron: John McCraw (Central Stories Museum & Art Gallery 2009)
Promised Land: Grahame Sydney (Penguin 2009)
Central Rocks – A Guide to the geology and landscapes of Central Otago: Daphne Lee & Jane Forsyth. (Geological Society of New Zealand 2009)
Windows On A Chinese Past Vol 2:James Ng (Otago Heritage Books 1993)
National Library of New Zealand Web Site, Papers Past.
Otago Daily Times
Otago Witness
Nelson Examiner
The Colonist
Vincent Pyke, 1827-1894: Daphne Lawless (Kotare 2008, Special issue – Essays in New Zealand Literary Biography Series Two: Early Male Prose Writers, Victoria University of Wellington, 2008)
Horatio Hartley: T.J. Hearn, (Te Ara — the Encyclopedia of New Zealand)
Horatio Hartley: Ronald Jones (Te Ara — the Encyclopedia of New Zealand.)
Charles Wong Gye: Sherwood Young (Te Ara — the Encyclopedia of New Zealand.)
The Colonial Helpmeet Takes a Dram: Women Participants in the Central Otago Goldfields Liquor Industry 1861-1901: Thesis by Sandra Quick for MA in History, Otago University 1997.
Washington State Archives, USA.

Back cover photographs
Serpentine Water wheel and stamper battery (Derek Hume)
Schist rock hut in the Roxburgh Gorge (Rory Butler)
Campbells Diggings, Old Man Range (Louise Joyce)





PROMOTE DUNSTAN

CENTRAL OTAGO