Lost Mines of the Tamar

The Mineral Arch at Albert Hall

Albert Hall and its Mineral Arch entrance were built for the 1891 Tasmanian International Exhibition in Launceston. There was already a Mineral Court planned for the Exhibition, and many companies in this book sent samples to it, but a further demonstration of Tasmania's mineral wealth was desired. The Arch was the solution, and local bricks with blocks of limestone, bluestone and other local minerals were incorporated. Sadly, the Mineral Arch was dismantled after the show. Image courtesy of the Launceston Library.

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Nigel Burch

First Edition

The author welcomes corrections and new information:
send to nigelburch7@gmail.com

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Also by the same author:
An Iron Will
Brandy Creek
Ephemeral Lisle
The Piper's Call

Measurement Conversions:
3 feet (ft) = 1 yard = 0.9 metres
100 links = 22 yards = 1 chain = 20 metres
1 mile = 8 furlongs = 1600 metres
160 perches = 4 roods = 1 acre (ac) = 0.4 hectare
240 pennies = 20 shillings = 1 pound (£) = $2

Front Cover: Party searching for coal at West Arm in 1897. See chapter 7 for details. Image courtesy of TAHO and the Beaconsfield Mine & Heritage Centre.

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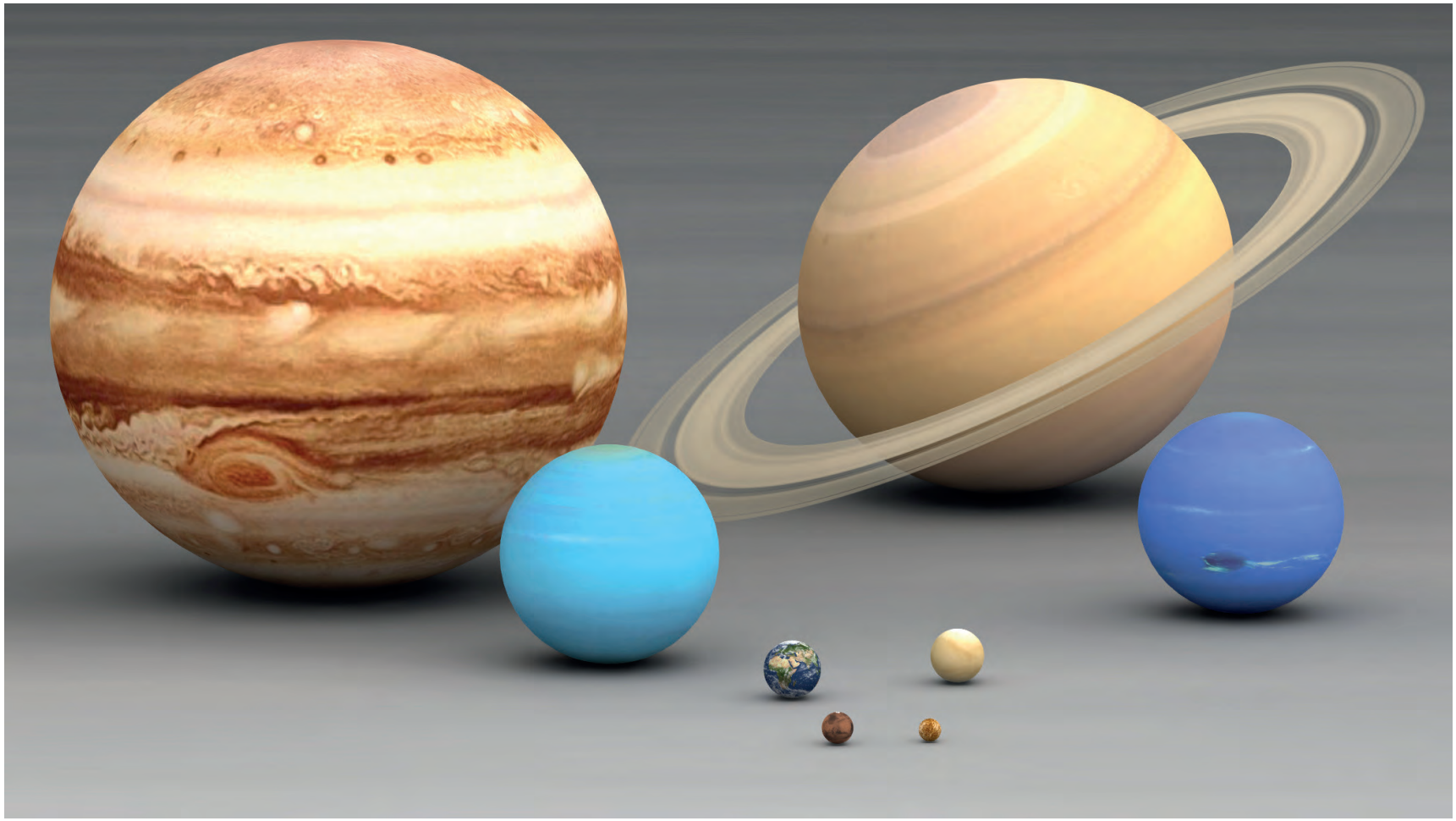
Contents

"When we build, let it be such a work as our descendants will thank us for,
And let us think, as we lay stone upon stone, that a time is to come
When these stones will be held sacred because our hands have touched them,
And men will say as they look upon them: 'See! This our fathers did for us.'"

John Ruskin (1819-1900)



The relative sizes of the planets. Earth is the largest of the four small rocky planets, and is still molten inside. This allows internal currents that move the continents around on the surface – a process called tectonics. Tectonic and volcanic activity is in turn largely responsible for Tasmania's mineral deposits. Public domain image from Wikipedia.

Introduction

How Tasmania Began

The physical history of Tasmania is just as fascinating as the human history, and it channelled and moulded the later human occupation and industrialisation.

You've probably heard of the land called Gondwana that existed ages ago. Australia, India, Africa, Antarctica and South America were all part of this supercontinent.

Gondwana was created before and during the Cambrian period, between five and six hundred million years ago. This time was perhaps the most important in creating the mineral resources of the Tamar Valley and Tasmania generally.

Early in the process of Gondwana's formation, Tasmania was a separate micro-continent all on its own, an island located in the Paleo (paleo just means old) Pacific Ocean. We'd been attached to Antarctica well before the Cambrian, along with North America, but when North America broke away, we were pulled away as well. Now we were moving slowly northwest.

Our little micro-continent, like all the big ones, was made of comparatively light rocks. Because they are lighter, continents float on the hot, dense rocks of the mantle below. The mantle is so hot that it is semi-molten, and has slow currents created by heat rising up from the Earth's core.

Why is the Earth's core so hot?

You might think that the heat is all left over from Earth's formation four and a half billion years ago. Earth is large for a rocky planet – bigger than Venus, Mars and Mercury all put together – and it takes a long time for such a massive body to cool. Four and a half billion years is a long time though, and so at least equally as important as the heat of formation, is the fact that we have radioactive elements at our core. We may even have a giant nuclear reactor way down below us!

The Earth's core is mainly iron, but it also has a lot of nickel. These are the most abundant of the heavier elements and they sank to the bottom during Earth's formation. There are, however, many

other elements down there, including traces of radioactive elements such as uranium, thorium and potassium. Though their percentage is small, these radioactive metals make up to an enormous amount in total. It's their nuclear decay that produces at least half of the Earth's internal heat.

We can measure the Earth's internal radioactivity when lava comes up to the surface in volcanic events and cools to form volcanic rocks. Rocks formed from magma and lava, such as basalt, dolerite and granite, are all radioactive, but not dangerously so. You can handle them quite safely. In fact there is considerable evidence that a little radioactivity is good for you. Just as germs and vaccines stimulate our immune system, so a little radioactivity seems to stimulate our cellular repair systems.

The Earth's crust is the cool skin that formed on the surface of our hot planet. It formed largely from the lighter elements and minerals that floated to the surface, and is nearly half oxygen. The iron that we find in places such as Beaconsfield and Savage River comes from volcanic and tectonic activity that brought heavy material up from the deeps. Having so much oxygen and other light elements like aluminium is why the continents, as part of crustal plates, float on the semi-molten rocks below. Because they are floating, the continents then move around in whatever direction the currents below them are going, and at different times they might be bumping into each other, or spreading apart, or sliding past and so on. This is called tectonics. Like corks, the continents move with their plates, and they can't sink unless something pushes them down.

As the Cambrian period (Cambrian can rhyme with "cam" or "came" by the way – your choice) began 541 million years ago, Tasmania had drifted close to the equator. Antarctica was southwest of us, and Australia was in the northern hemisphere to our northwest. They had merged as part of massive continental collisions that were forming Gondwana.

We were smaller then, without our eastern third, and were an island microcontinent embedded in the Paleo Pacific plate.

In those days, our east coast was at today's Anderson's Creek, west of Beaconsfield. The northeast of Tasmania didn't exist, and our east coast beaches extended down to Sorell, east of Hobart. West of Anderson's Creek and Sorell was land, and east was the ocean.

As we've said, tectonic plates sometimes slide past each other, like the Pacific and North American plates do today. The San Andreas Fault you've heard of, in California, is where the Pacific and North American plates slide past each other.

At other times, the plates do not slide relatively peacefully past each other. They crash together in titanic collisions, like India is colliding with Asia today, creating the Himalaya. The Himalaya region is still rising, as the crust crumples and is pushed up by India's relentless move north. Mount Everest is still being thrust up, and is getting higher every year. India and Australia are on the same plate, so we are moving north together at about the same rate as fingernails grow.

Plates move around, hit each other and sometimes break up to form new plates. They are constantly changing, and the crustal plates we see today are not the same as in the distant past.

An interesting situation arises when the colliding plates are very different—such as when one is an ocean and the other a huge land mass. Water can get out of the way, but rocks can't. The rock of an ocean floor is heavy, and also a lot thinner than the rock of a continental land mass. In this situation the collision eventually resolves itself with what's called oceanic subduction—the thin and heavy ocean floor slides under the thicker, higher and lighter land. This is happening in Indonesia today. The ocean

The Formation of Gondwana

Around 520 million years ago Australia had merged with East Antarctica and was near the equator, moving south. Tasmania was a microcontinent that had attached to East Antarctica and was going along for the ride. Soon the Mawson Sea would disappear, and we could collide with the continent containing Africa, South America and India to form the supercontinent of Gondwana. At the same time, the Paleo-Pacific Ocean plate was moving west, colliding with and sliding under the Gondwana land masses. The features that look like cold fronts are subduction zones, where the sea floor is sliding under the land. Tasmania was caught up in this subduction, but instead of the sea floor sliding under us as you'd expect, a fragment first slid over the top of us. Public domain image from Wikipedia.

floor to Australia's north, which is part of our Australo-Indian plate, has collided with another plate and is sliding under it. This creates the volcanoes in Indonesia. The volcanoes are bits of the Australian plate that have been pushed down under Indonesia, where they melted and then forced their way back to the surface.

Tasmania Collides With Australia

Going back to the Cambrian period, five hundred million years ago or so, the Paleo-Pacific Ocean plate was being carried west by mantle currents, where it collided with the Australo-East Antarctic plate. Being heavier and thinner rock, the ocean floor subducted, or slid under Australia and East Antarctica.

This subduction process is rarely smooth, perfect and predictable. If you look closely at any line of collision, such as Indonesia today, you will see that local events never conform perfectly to the grand sequence, and it appears that Tasmania was a rather interesting example of this.

Tasmania had been an island, embedded in the Paleo-Pacific plate. As the crustal plate carried us west, we collided with Australia and East Antarctica, which had merged and would soon become part of the Gondwana supercontinent.

At first, the sea floor to our west plunged under Australia and East Antarctica as you'd expect. But when our island got to this subduction zone, being thick and light it would not subduct. It smashed into the Australo-East Antarctic land mass and simply would not slide under it.

Tasmania had suddenly stopped. But the vast ocean floor around us just kept coming. North and south of us the ocean floor plunged under Australia and East Antarctica, but because we were a big island of thicker, lighter material, we'd got stuck against the proto-Gondwana land mass and stopped dead. We were too big and light to go under, and too small to force the proto-Gondwana to move. We were being squeezed.

With millions of square kilometres of ocean floor moving relentlessly westward around us, something had to give – and it did. Suddenly the ocean floor to our east snapped, and a huge block of hot dark rock slid up and over the top of us![1]

This was not the way it was supposed to be! We had hot and heavy ocean floor sitting on top of our cool and lighter continental rock, and the weight of it was pushing us down into the mantle.

The more we were pushed down, the more unstable the situation became, until in another immense fracture, the ocean floor east of us broke again, and we began to rebound upwards, while the sea floor to our east now plunged down under us, as it was supposed to do.

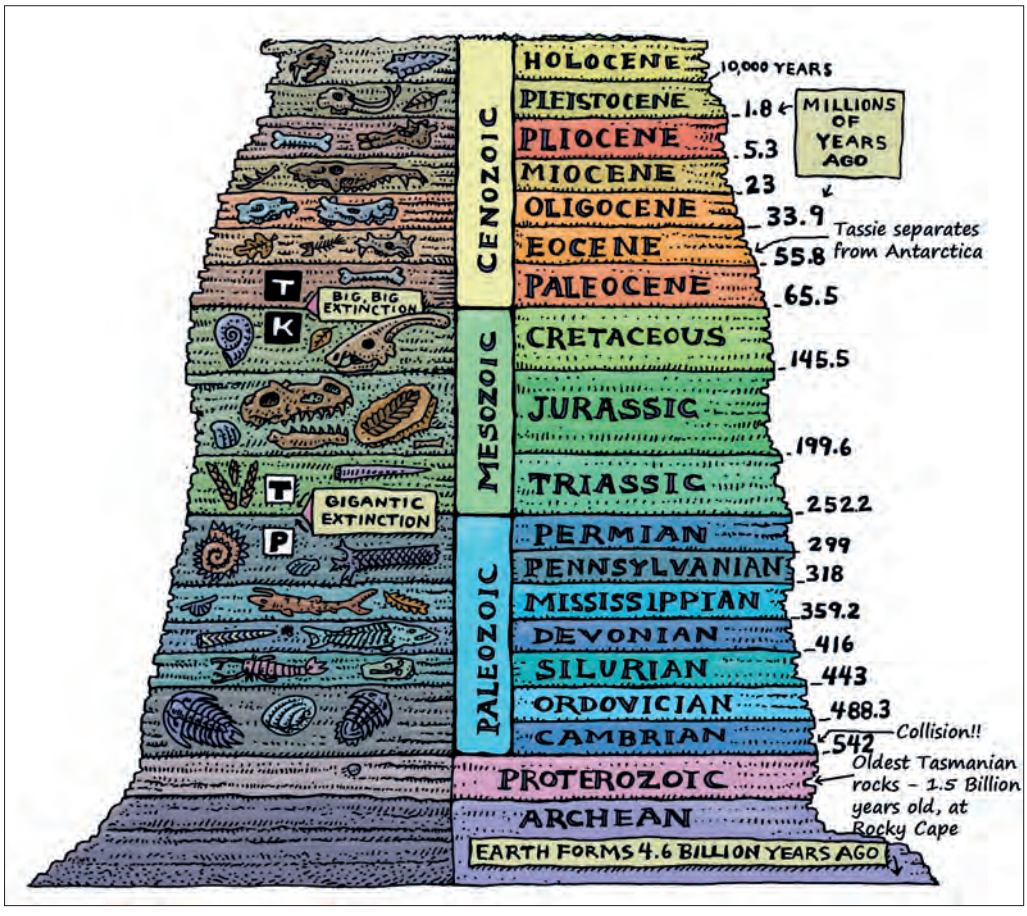
The heavy, dark ocean floor rocks covering Tasmania had now been raised high into the air, exposing them to the warm, wet tropical weather for the first time.

This was one of the critical events in our mineral history. These ocean floor rocks were rich in magnesium and iron. Rocks like this are called "ultramafic", the word being made up of "ultra" (or very high), plus the "ma" from magnesium and the "fic" from "ferric" (which is a form of the Latin word for iron). Thus ultra-ma-fic rock. Seafloor rocks are commonly heavy, dark ultramafics and the seafloor crust is typically only a third as thick as the lighter crust that makes up the continents.

Ultramafic sea floor rocks are not usually exposed, like they were after we got pushed into Australia and East Antarctica. More than that, ultramafic sea floor rocks do not often get stranded "high and dry" near the equator, where Tasmania was at this time. It meant they weren't just high above water and exposed to oxygen, but also exposed to warm, heavy tropical rains – and not as dry as you'd expect.

Under attack by the slightly acid, warm rainwater, the ultramafic rocks began to break down into a new rock called serpentine. The process is called, not surprisingly, serpentinisation.

This weathering caused the rock to heat up – and it swelled too as it absorbed some of the rainwater and became less dense. Eventually, some of the new serpentine weathered further to create iron ore. Where chromium, nickel and cobalt were present in the ultramafic rock, they formed other minerals such as chromite (chromium ore) at the same time as the serpentine and iron ore were being created.



The Major Geological Periods of Planet Earth
Public domain image from Wikipedia.

That all took millions of years though, and in the Cambrian our collision with proto-Gondwana and the thrusting of ocean floor over the top of us, had only just happened.

Pushing and Shoving

It was a time when many forces were acting on Tasmania all at once. The collision with Australia and East Antarctica created compressive forces, causing our land to buckle, creating hills and valleys. The obduction, or overriding of Tasmania by the Paleo-Pacific Ocean, made our crust thicker. Then the light rocks of Tasmania pushed up, their natural buoyancy working against the weight of the overlying ocean floor. At the same time, we were now being pushed south as part of the Australo-East Antarctic plate, and this squeezed us in the north-south direction.

In the middle of all this activity, probably as part of Tasmania's rebound upwards, a long section of our western side seems to have found itself being stretched. This stretching caused the crust to thin and weaken. The land sank, and the sea rushed in. Then the mantle broke through in spots, creating undersea volcanoes and hot springs. These ultimately gave rise to big sulphurous mineral deposits that would be mined half a billion years later for their copper, lead, zinc and other metals. They would become known as the "Mount Read Volcanics".

As we were rebounding upwards, after being overridden by the ocean floor, way off to our west Australia and East Antarctica finally crashed into the huge continent of Africa/India/South America. This was about 510 million years ago, and it meant that the supercontinent of Gondwana had finally been born!

We were now caught between immense collisions on both our eastern and western sides. To our east the Paleo-Pacific Ocean plate kept coming, shoving us into Australia/East Antarctica. As the same time, the collision of Australia and East Antarctica with Africa/India/South America that created Gondwana was transmitting a thrust back at us from the west. We were being squashed between them.

As one of the final acts of the Cambrian, around 505 million years ago, the strait on our west coast that had been caused by earlier stretching, was now closed up by the squeeze. The submerged land was thrust up again, and crumpled or folded into mountains. The volcanoes became part of the new mountain range, no longer underwater in a thin stretched part of the crust, and went extinct. Their underwater volcanic mineral deposits became rich lodes of ore within the mountain range.

And for a time, Tasmania was no longer an island. We were part of the great Gondwana.

After the Cambrian

After all the excitement, things then settled down.

The next geological period, from 488 million years ago, and lasting for about 45 million years, was the Ordovician. It was a quiet time for us in terms of volcanism and plate tectonics, but much was happening to the dark, heavy rocks that had been thrust up from the sea floor and exposed to the weather.

Tasmania was still near the equator, and part of the fully-formed supercontinent of Gondwana. The ultramafic sea-floor rocks, which were high in magnesium and iron and included minerals such as peridotite, pyroxene and olivine (the latter of interest to jewellers because it crystallises into the beautiful green gemstone peridot), were changing in character with their long exposure to the hot wet tropical weather.

In fact, under the relentless tropical rain, all of Tasmania was eroding down. At the same time, the weight of the now much thicker and mountainous Tasmania was causing us to settle into the soft mantle. The settling and erosion soon led to large areas disappearing into a shallow coastal sea, full of life.

Gondwana and Laurasia briefly (for 100 million years or so) formed a single supersized land mass called Pangea. Then they separated back into Gondwana and Laurasia, as is happening in this picture. Subsequently, Gondwana broke up, finally forming continents that are recognisable to us today. Public domain image from Wikipedia.

The eroded material didn't just vanish of course. It washed into the lower ground, where it formed layers of sedimentary rocks. And as the ultramafic rocks above ground were weathering to serpentinites and being eroded and transported to form sedimentary

rocks east of Anderson's Creek, the tropical sea over today's Tamar Valley was full of marine life which, as it died, settled to the bottom to form thick limestone layers such as around today's Flowery Gully, south of Beaconsfield, and both limestone and lime-rich sandstone around Beaconsfield.

Fossils within these limestones show their age as Ordovician, and some parts of the deposits are of high purity, showing that they were formed in a quiet time, with few ocean currents and gentle subsidence of the land.

Gondwana was now fully formed—as big as it would ever be. The Australo-East Antarctic plate, moving south, had collided and fused with Africa/India/South America, which was moving north, to form the supercontinent. This had not just stopped our move south, it reversed our direction. In the Ordovician and Devonian periods, Gondwana as a whole was moving northeast, and carrying us with it.

The reversal of direction put Tasmania in the forefront of Gondwana's collision and overriding of the western side of the Paleo-Pacific plate. It was at this time that we picked up a little arc of islands that would become Tasmania's northeast.

Naturally, we weren't the only island embedded in that Paleo-Pacific plate that collided with Australia and East Antarctica. To our east there were more islands in a little arc, and when we changed direction they began moving closer and closer, until in the early Devonian, around 400 million years ago, that arc finally collided with us and stuck fast, just as we had earlier to Gondwana. Geologists say that they "docked" or "sutured" with Tasmania.

The compression of our part of Gondwana due to the ongoing collision with the Paleo-Pacific plate didn't just lead to us accreting more land in our north-east though, it also led to a major episode of mountain building in the mid-Devonian. It actually affected the whole east coast of Australia, not just us, and most of the goldfields of Australia such as Bathurst and Bendigo can be found in rocks that were deformed and altered at this time.[2]

The rocks around Beaconsfield at the time of this event were sedimentary rocks formed largely as a result of the weathering, erosion and transport of material from the higher country west of Anderson's Creek. There was no Cabbage Tree Hill or Salisbury Hill at this time.

Because Australia was travelling north-east, the shock and compression as we collided with the other plate travelled back through the Beaconsfield rocks in a south-westerly direction. The layers of sediment could not remain bound together in the face of the onslaught, and a large slice of sediment was thrust up, forming Cabbage Tree Hill and Salisbury Hill, with northeast trending "thrust faults" on each side.

And as the slice of rock forming Cabbage Tree Hill was squeezed upwards, it broke across its back in multiple "wrench faults". These formed perpendicular to the thrust faults.

The formation of these faults was critical to the creation of the veins of gold. Deep groundwaters, rich in carbon dioxide (and therefore acidic), super-hot and under enormous pressure, were percolating around the ultramafics deep underground, dissolving silica and trace elements, such as gold. These waters could dissolve anything, due to their extreme temperature and pressure, combined with acidity.

The creation of all the faults enabled the water to escape the enormous pressure, and it was forced up into the cracks in the rocks. As the hot, pressurised water, saturated with minerals, rose, cooled

and lost pressure, the dissolved elements and compounds crystallised out as quartz and various other minerals. This didn't just happen at Beaconsfield – the same thing was happening at Lefroy and in Victoria. And the quartz and gold bearing 'hydrothermal' fluids didn't just fill the faults – the pressure forced the fluids into the more porous of the rocks on each side of the faults.

When we look at the geology of Cabbage Tree and Salisbury Hills today, we see the big thrust faults on either side parallel to the hills, and we see the small wrench faults striking across the hills. The wrench faults and the rocks on either side of them are filled with quartz, and the quartz carries a considerable percentage of elements such as iron, copper, sulphur and gold dissolved from the deep underlying Cambrian ultramafics. No-one really knows why the smaller wrench faults have the gold, rather than the deeper and bigger thrust faults, but the general view is that the mineralised fluids travelled up the big thrust faults quickly. It was only when they got into the smaller wrench faults that they got stuck, cooled and crystallised.

One of the wrench faults on Cabbage Tree Hill carried more than two million ounces of gold, worth over three billion dollars. This was to become known as the fabulous Tasmania Reef, and it held an average of about 12 grams of gold per tonne of quartz.

The Permian and Later

By the Permian period, from 290 to 245 million years ago, Gondwana had merged with the other supercontinent Laurasia to form Pangea. This was the time when all land on earth was part of one vast land mass.

Pangea lasted about 100 million years, then Gondwana and Laurasia separated again, and Gondwana began to move south. A few million years later, Gondwana itself began to break up.

The breakup of Gondwana early in the Jurassic, around 180 million years ago, was accompanied by massive volcanic eruptions. Molten rock welled up under a vast area of the continent, including the western two-thirds of Tasmania. Erosion later exposed these upwellings as mountains that we'd name Mt Wellington, Mt Arthur and Mt Barrow – among others. After breaking away from Pangea, the Gondwana supercontinent split into three – South America, Africa and East Gondwana. We were part of East Gondwana, with Australia, Antarctica and India.

Then East Gondwana began to disintegrate. First, at about 120 million years ago and well into the Cretaceous time, India broke away and began moving north, while Australia, Tasmania and Antarctica continued south.

Then, around 80 million years ago, Australia and Antarctica began to split apart.

Tasmania was nearly dragged away from Australia as it separated from Antarctica. The land between Australia and Tasmania was stretched and sank, forming Bass Strait, and more volcanoes and faults appeared. One of the big faults formed around 65 million years ago, coinciding with the death of the dinosaurs. It became the Tamar Valley, and allowed the Tamar and Esk Rivers to form.

The world had warmed now, and sea levels rose to be much higher than today. It was hot and wet and the ultramafic rocks of the west side of Anderson's Creek were again being rapidly serpentinised – or weathered first to serpentine and magnetite, and later to hematite, ochre, chromite and other

breakdown products including (finally) clay. The magnetite probably formed large sheets that were then eroded away so that smaller, isolated iron ore deposits remained for us to find.

The tropical rains leached out much of the silica, concentrating the nickel, iron, manganese and chromium from the old rock. Ochre was formed in places, and where there was more aluminium in the ultramafic rocks to start with, bauxite was able to form, and it did so at Bell Bay, St Leonards, Cressy and Westbury for example.

Around 30 million years ago a volcano near today's Batman Bridge sent a stream of lava out, damming the Tamar. A huge lake formed, stretching right back to Longford. Sand, mud and gravel swept in by the rivers settled at the bottom of the lake, forming thick deposits that could later be cheaply quarried. This was also when the volcanic outcrops at Brady's Lookout and Hillwood were formed.

It took 10 million years for the Tamar to break through the lava barrier and drain the lake, finally creating the land forms that we recognise today. Then the Earth cooled and again entered a period of ice ages, with the weather much cooler and drier, and the sea level much lower. An ice cap formed on the central highlands, and glaciers scraped out the Forth and Mersey River valleys. There was no glacier in the Tamar though, as it wasn't much of river in those days.

Even without the action of glaciers, the passage of time had eroded down Beaconsfield's Cabbage Tree Hill and Salisbury Hill by perhaps 300 metres, and the eroded material tended to wash east towards the Tamar.

But there were veins of gold in these hills, and as they eroded down, some of the gold, being heavy, stayed put and concentrated in the remaining surface rocks and soil. The rest washed down into the valley. Perhaps 300,000 ounces of gold (at a guess) was transported into the sediments on the east side of Cabbage Tree Hill, where it became alluvial gold, concentrating in the water courses and forming "deep leads" where the watercourse was subsequently buried. There it remained, until men with picks, shovels and pans arrived.

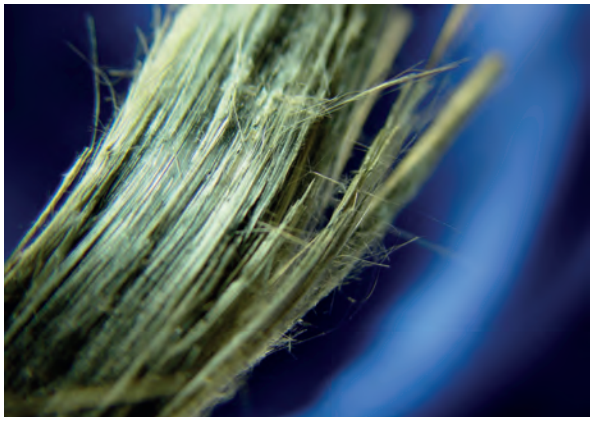
Not knowing the geology, early prospectors panned every watercourse they came across, and the streams around Beaconsfield were no exception. When alluvial specks were found, the prospectors would follow these "shows" upstream until they ceased to find specks in their pans, showing that they had passed the point where the gold entered the stream.

Then they panned the soil above this point, and dug trenches to get below the soil and see and test the underlying rocks. When quartz was found it was "dollied" or crushed in a tin or pipe and then panned.

Sometimes they got lucky. In William Dally's case, he didn't even have to dolly the rock. He found the spot on top of Cabbage Tree Hill where the reef was exposed, and it was so weathered and soft that he could dig it up with a shovel and pick out gold nuggets by hand.

Notes & References

1. In this context "suddenly" still means thousands of years of course.
2. The Great Dividing Range doesn't date from this period though. It was formed in the Carboniferous, around 300 million years ago.



Varieties of Asbestos

There are six commonly agreed forms of asbestos. Chrysotile (top left) is a product of the breakdown of serpentine. The other five are amosite (top right), tremolite, crocidolite, anthophyllite and actinolite. These are called amphiboles. They are different in shape and chemistry from chrysotile and are found in different rocks. Chrysotile is far more common and less of a health concern than the other five. The name asbestos refers to the crystalline shape and chemistry and could be applied to other minerals such as fibreglass.

The Allure of Asbestos

Half a billion years ago, the Pacific Ocean floor was suddenly thrust up and over the top of Tasmania.

In those days the coastline was located along the western side of today's Tamar Valley. Our northeast didn't exist.

Millions of years of weathering changed the ocean floor rocks to green serpentine in a process called, naturally enough, serpentinisation. Further weathering created iron ore and a form of asbestos called chrysotile. The chrysotile fibres formed in cracks in the serpentine, perpendicular to the crack walls.

The name "asbestos" doesn't have an exact meaning and is not something imposed by nature. It's just our name for a group of minerals that are similar in shape and chemical composition. If a mineral is a silicate like quartz, sand and glass, and also has a long, thin, fibrous crystal, then it is called "asbestiform" or asbestos.

We have come to classify six minerals as the "true" asbestoses, but this is really only a matter of convention. These six "true" asbestoses are chrysotile, which comes from serpentine, and five others that are similar in structure and chemistry, but don't come from serpentine. They are lumped together as the amphibole class, and are called crocidolite, amosite, tremolite, anthophyllite and actinolite.

The two classes of asbestos (chrysotile in the serpentine class, and the five others in the amphibole class) differ slightly in their crystal shape and chemistry. These differences lead to chrysotile being far less dangerous than the amphibole asbestoses, and fortunately it is the safer chrysotile that is by far the most common in nature, and in industry.

Crocidolite is commonly known as "blue" asbestos and is associated in our minds with Wittenoom in Western Australia. It is a particularly nasty substance, and shouldn't be handled without protection.

Amosite is known as "brown" asbestos and is also very dangerous. Its name is an acronym of "Asbestos Mines of South Africa".

The other three asbestos varieties (tremolite, anthophyllite and actinolite) are uncommon in nature, but can still be found occasionally in construction and insulation materials. They also have health implications.

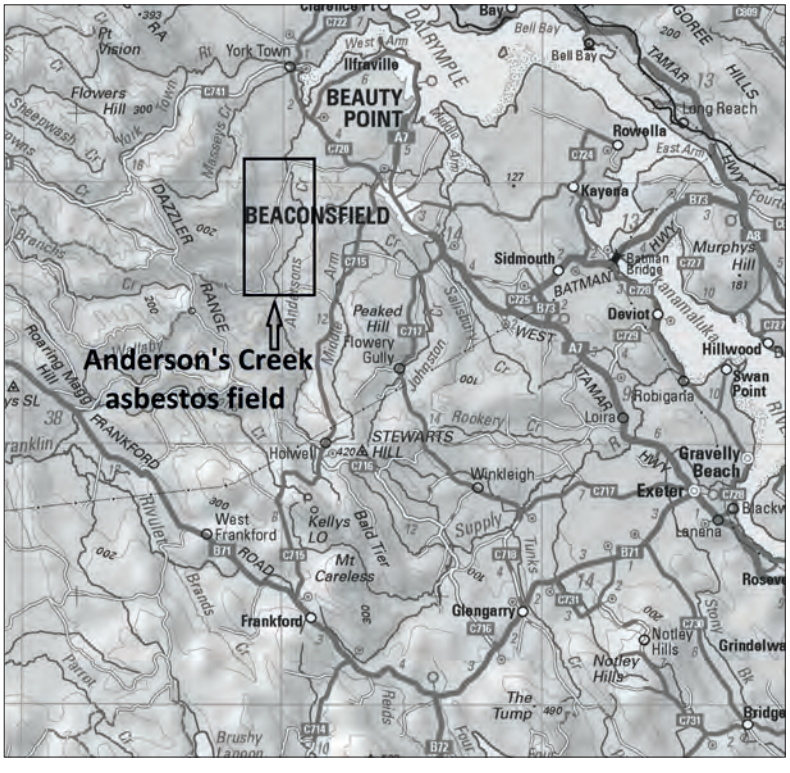
Some other similar minerals, such as richterite, winchite and even fibreglass, are not called asbestos, though they could be, as they are similar in structure and chemistry. They are instead often called "asbestiform". Fibreglass could be said to be a man-made, or synthetic asbestos.

The serpentine class of asbestos at present contains only the mineral chrysotile. It is a magnesium silicate and is partly soluble in acids. While deserving of respect, it is not anywhere near as dangerous as the amphiboles.

Chrysotile differs physically as well as chemically from the other five. While all types of asbestos crystals are long and thin, chrysotile has spiral crystals instead of the brittle, needle-like shape that characterises the amphibole class. Chrysotile crystals are more flexible and can be woven into a cloth. These differences of shape and solubility seem to account for chrysotile's lower health risk.

Chrysotile is ten or twenty times as common in nature than all the others put together, and is the most likely to be seen in building materials such as asbestos sheet, and in industrial uses such as brake linings and pipe insulation. While far less common, however, the other, dangerous forms of asbestos turn up in the most unexpected places, such as in talcum powder and children's crayons.

Chrysotile is the form of asbestos found in the serpentine rocks at Anderson's Creek, near Beaconsfield, and in many other locations around Tasmania, such as Ulverstone and Zeehan, as well as in many of our mines.[1] Exposure to chrysotile is a normal part of life wherever you live, and not just in Tasmania. Every human adult has millions of chrysotile asbestos fibres in their lungs.[2] Some come from the natural environment, and others from exposure to man-made products such as talcum powder.



Anderson's Creek is located south of York Town. The asbestos field is west of Beaconsfield and accessed via Tattersall's Road (formerly Leonardsburgh Road).

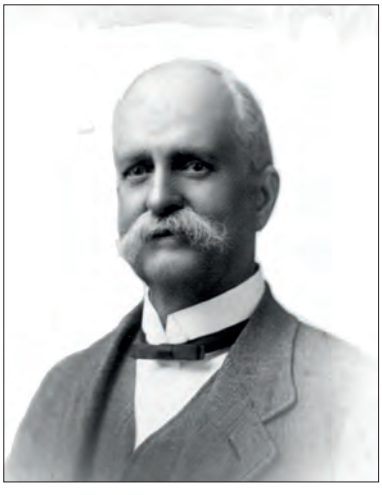
Even slightly elevated levels of amphibole asbestos seem to be hazardous, but interestingly, even with hugely elevated exposure, the health risks of chrysotile are debatable. The West Tamar Historical Society, which at the time it formed was in a position to interview former Anderson's Creek asbestos workers and did so, found no evidence of asbestos-related disease. Historian Richard Hooper AM interviewed one 90 year-old asbestos miner, then

living at Winkleigh, who recalled no asbestos related illness. This was despite he and other workers coming home from the mines as white as ghosts, covered in asbestos dust.

While the Anderson's Creek deposits are well-known and nearly all chrysotile, there is one deposit, discovered by Mr Paul Charriol in 1915, that is an amphibole asbestos. It is away from the other resources, out in the bush, and was last visited by Government Geologist Paul Taylor in 1949, after which it was forgotten and lost. It was relocated for this book.

The First Discovery

The Anderson's Creek serpentine deposits, with their contained chrysotile asbestos, were discovered by Lt Governor William Paterson in spring 1805.



Government Geologist William Twelvetrees (1848-1919). Image c1895 and courtesy QVMAG.

It was the first discovery of these minerals in Australia, and Paterson recorded the find in a letter to Governor King dated October 10th 1805: "*I have sent you some specimens of Asbestos combined with a mineral, if W. Humphrey is with you he will be able to tell you what it is. There are hills in the neighbourhood chiefly composed of that substance.*"

The arrival of the specimens in Sydney was recorded by the *Sydney Gazette* on November 24th. "*A variety of rare and apparently valuable minerals have been received, among which is the pure asbestos, combined with a ponderous ore, which is found in great abundance.*" The "ponderous ore" was, of course, the serpentine in which chrysotile forms.

The serpentine that hosts the asbestos at Anderson's Creek is a beautiful stone, often called green marble. It was noticed by many early explorers and commented upon many times. In 1872 the Tasmanian Charcoal Iron Company, which was mining iron and bringing up serpentine as a by-product, took samples to carvers, who made crosses, ear drops and charms. The Government Geologist Alexander Montgomery noted in 1891: "*Beside the (true) marbles there is another stone in the Beaconsfield district that would be very useful for ornamental work, namely, the Serpentine that occurs abundantly in Anderson's Creek. This is found of great variety and beauty of colouring, and could be made into a great number of highly ornamental articles. Various shades of green and very pretty mottled serpentine are quite common.*"[3]

The next Government Geologist William Twelvetrees noted in 1899: *"Some of the serpentine in the Anderson's Creek field takes a handsome polish, and is easily worked. It would be suitable for small ornaments. I saw a pretty polished paper-weight made from it at the residence of Mr Joseph Davies, General Manager of the Tasmania mine, Beaconsfield. Suitable blocks of large size do not appear to be common. I have no doubt that small articles de luxe of this ornamental stone would find a ready sale in the Colony."*[4]

Serpentine occurs as a product of the weathering over millions of years of the mineral pyroxenite and can often be seen in huge beds. Unfortunately, faulting of the deposit at Anderson's Creek broke it up, and it is difficult to find flawless pieces large enough for anything other than small ornaments and jewellery. Within the broken serpentine are veins of chrysotile up to 10cm thick, though usually they are under 3.5cm. Veins and fibres up to 25cm were reported, but their appearance was misleading.

On close inspection the fibres within the veins can be seen to be 2.5cm or less. Often too, what was thought to be a vein of chrysotile asbestos turned out to be brucite – the mineral form of magnesium hydroxide, the harmless antacid also known as milk of magnesia.

In 1876 T C Just took out a patent on the production of firebricks made at Leonardsburgh (the iron mining town that then existed at Anderson's Creek) from local clay mixed with local asbestos, but despite tests being uniformly encouraging he only ever produced samples. The first serious attempt to mine either the serpentine or the asbestos didn't come until the 1880s.

Captain Audley Coote MHA advocated telegraph communications by undersea cable among colonies and nations of the Pacific. He claimed to have been offered the French Legion of Honour twice, but refused it for diplomatic reasons. This was not true. He was, however, the diplomatic representative of Hawaii in Australia until the US-instigated coup of 1893 and had an excellent relationship with the Hawaiian king. He gained particular notoriety by promising, if elected, to build a beer pipeline from Launceston to his constituents in George Town and Beaconsfield. Sadly, it didn't eventuate. Image c1879 courtesy Allport Library and TAHO.

Tasmanian Asbestos Prospecting Association

At the beginning of 1882 a former jockey turned gold miner, Mr John Ritchie, who lived at the old iron town of Swift's Jetty on Middle Arm, became interested in the asbestos potential of Anderson's Creek. The mineral had been known to exist in this locality since its discovery by Lt Governor William Paterson in 1805, but its market value and potential demand for it was not known. Ritchie and his sons prospected for four or five months, then secured three 40-acre sections as mining leases and approached a local politician named Audley Coote for assistance.

Audley Coote, a merchant sea captain, had moved from Sydney to Hobart in 1867. He quickly became well known in Tasmania as the driving force behind the construction of a rail line between Hobart and Launceston. He persuaded the government, apparently by exaggerating his connections, to fund him to travel to London to find investors. He then formed a private company under his own management – the Tasmanian Main Line Railway Company Ltd. The company negotiated with the government over specifications for the railway and who would own it. While the company's preferred option was for a standard gauge line, the government preferred the cheaper option of narrow gauge. The railway opened in 1874.

At the time he was approached by John Ritchie in 1882, Captain Coote was the MHA for Georgetown. He later became MLC for Tamar. He was always looking for a good business opportunity, particularly as parliamentary service was voluntary at that time. As the local member, Coote already knew of the asbestos deposits along Anderson's Creek. They were within his electorate, and of course the Asbestos Range from Badger Head to Beaconsfield was marked on all the maps.

Captain Coote and the Ritchies soon formed a company including many influential Hobart gentlemen. In July 1882 Coote told parliament that asbestos was an economic opportunity for the colony and that he'd sent a sample to England. To further publicise their venture, Ritchie took a piece of the ore to the September meeting of the Royal Society in Hobart. Then Captain Coote took the Government Geologist Gustav Thureau to look at the deposits, and communicated with the Australian Asbestos Manufacturing Co Ltd in Melbourne, asking whether they would be interested in buying the product if a mine was set up.

The first meeting of shareholders in Coote and Ritchie's Tasmanian Asbestos Prospecting Association was called for September 26th 1882 in Hobart to authorise the necessary steps for commencing operations to mine, but as there was not a sufficient attendance of shareholders present, the meeting was adjourned. The company's secretary and legal adviser, Mr W R Harvey, was meanwhile instructed to obtain the correspondence that had occurred with an English firm, respecting the value of the product.[5]

The adjourned meeting was held in Hobart on October 30th at the offices of Harvey & Co, solicitors, attended by Captain Coote, W R Harvey, C H Grant, William Crosby Jnr, R Snowden, Dr E L Crowther (an MHA and son of the former Premier), William Murdoch and others. The secretary read two letters from a Mr N Burnet of the Australian Asbestos Manufacturing Co., requesting that samples be forwarded to him. Captain Coote said that there appeared to be "vast quantities of the mineral" on the three 40-acre sections, and he had put on two men to open up the lode. It was decided that a committee consisting of Coote, Crosby and the Harvey would forward samples of the asbestos to Melbourne and England and other parts, to find the real marketable value of the raw material.[6]

A few days later a report was received from Mr Burnet. "*I have submitted your samples of Tasmanian asbestos to various tests, and report as follows:-The whole parcel may be taken as medium asbestos; that which is enclosed is the only marketable product, the major portion of the rest is too rocky and hard for manufacturing purposes, whilst some is too small in the veins for wearing purposes. Of the white and powdery variety there is sufficient in various parts of Australia to supply all demands. My impression is you will get better asbestos as you develop your mine. The Company here are about to erect machinery for the manufacture of engine packing, and a large demand for the enclosed variety will be created. There is a great number of foreign minerals present in your asbestos specimens, all of which will have to be treated by mechanical and chemical means in order to render the mineral useful.*"[7]

It was fortunate that the report was mildly encouraging, as mining was already well underway, but it was clear they would have considerable sorting of the product to do. A trench had already been dug on the east side of Anderson's Creek for a distance of 38 feet, with a six foot face at its end showing small seams of asbestos in various sizes. As predicted by Mr Burnet, the fibre from the seams was improving in quality and length as they got further into the hill, and some was reported as three inches long.[8]

In Melbourne, the Australian Asbestos Manufacturing Company was preparing to significantly expand its asbestos paint production, in addition to the engine packing plant Mr Burnet foreshadowed. The demand for asbestos fibre seemed likely to increase, even for the poor quality product that had been found so far at Anderson's Creek.[9]

By the end of November 1882 the trench was at 56 feet and they were preparing to broaden the face. By mid-December a tram line had been laid for 84ft and all looked very promising, judging by the mine manager's reports.[10]

Over Christmas and January the open drive was further extended, but the ground was very hard and tough going. The work seemed to paying off though, with the manager reporting that he'd taken out a fibre of eight inches in length! This would have considerable value for weaving. He purchased laths (timber boards) and sleepers and soon the trench was timbered on its sides. Mine managers from the Beaconsfield gold producers came up to see the workings.[11]

February and March 1883 saw the drive extended further, but the digging was still slow in the hard ground. The manager was forced to go into Beaconsfield to have tools sharpened, and also had to

rig a water pump and repair the forge. More laths were split and spars purchased and carried to the claim to make everything secure. Then the reports stopped. Without explanation, the Association had suddenly failed.[12]

The unexplained failure of the first asbestos venture, however, didn't dent enthusiasm for the product, nor for the potential of the Anderson's Creek field. And the Association had done much good work in exposing the resource for future prospectors.

Nor had the Hobart solicitors who'd had backed the Tasmanian Asbestos Prospecting Association, Harvey & Co, gone away empty-handed. They'd acquired knowledge and expertise, together with an exclusive agency agreement with Mr Burnet's Australian Asbestos Manufacturing Co Ltd in Melbourne. Asbestos paint was very much in the news, and Mr Burnet's asbestos paint production was now well underway.

In August 1884, Harvey & Co staged a demonstration of the remarkable qualities of asbestos paint on the Queen's Domain in Hobart. It was attended by a crowd, including members of the Fire Brigade Board and nearly all the local insurance agents.

Two wooden boxes were prepared. One had been painted with two coats of asbestos paint, and both were covered in wood chips and shavings. They were set alight and in a couple of minutes both were enveloped in flames. After half an hour the box without the asbestos paint was completely destroyed and the fires extinguished. The painted box was blackened, but only where the paint had flaked off. It was quite obvious to all that a better application of the paint would have made it entirely impervious to the heat.[13]

Everyone was completely convinced of the qualities of asbestos paint, and Harvey & Co had cemented their role as its suppliers. However the demonstration did nothing to revive interest in mining. The Anderson's Creek deposit largely disappeared from the public mind.

"Asbestic" and the Australasian Asbestos Company NL

Even at Beaconsfield, it was years before anyone again took a serious look at the possibilities of a local asbestos mining industry.

Of course the Anderson's Creek field hadn't been entirely forgotten, and was mentioned in passing from time to time. In 1886 the *Daily Telegraph* recalled that the largest deposits were on the West Tamar. They noted how useful the product was, and said that in ancient times it was used for wrapping the dead before cremation so as to preserve the ashes, and asbestos napkins could be cleaned simply by putting them in the fire.

In 1889 the Chromate, Asbestos, Paint and Gold Mining Co took a lease over the asbestos at Anderson's Creek (No. 2128-87M for 40 acres), but never did anything with it. (Their other activities are recorded in Chapter 4 herein.) That same year someone put a sample of the asbestos into the Paris International Exhibition, and it was admired by the jury, but rejected for a prize by the judges.[14]

It wasn't until 1897, 14 years after the demise of the Tasmanian Asbestos Prospecting Association, that serious interest became apparent. Surveyors appeared at Anderson's Creek, marking out sections on behalf of a new company.[15]


AUSTRALASIAN ASBESTOS COMPANY NO LIABILITY

Australasian · Asbestos · Company, · No · Liability,

BEACONSFIELD, TASMANIA.

No. 633 REGISTERED UNDER PART II. OF THE "COMPANIES ACT 1890."

CAPITAL: £100,000 in 100,000 Shares of £1 each.

Of which 50,000 Shares Nos. 1 to 50,000 are issued as Fully Paid-up.

This is to Certify that C. Tindall of Beaconsfield

of Launceston (subject to the Rules and Regulations of the Company)

the Registered Proprietor of One Hundred (100) Shares in the

above-named Company, numbered 19401 to 19500

Given under the Common Seal of the Company this 21st day

of February 1900

Lloyd Fayle Director. Manager.

This certificate must be given up to the Manager on the Transfer of all or any of the above Shares.
Calls payable on the second Wednesday in the Month.

Registered Office: 120 QUEEN ST. Melbourne.

PAID UP

FORM OF TRANSFER.

I, the undersigned Transferror, being the Registered Proprietor of the within-mentioned Shares, do, for valuable consideration received by me, hereby sell, assign, and transfer to the undersigned Transferree all my right, title, and interest in and to the Shares numbered to ; and I, the said Transferree, do hereby accept such Transfer and Assignment.

Dated this day of

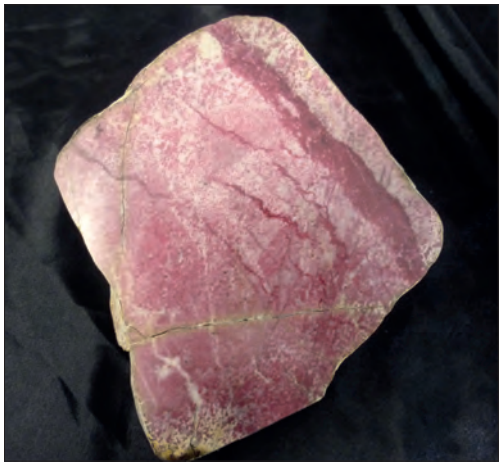
WITNESS. TRANSFERROR.

WITNESS. TRANSFERREE.

One of Charles Tindall's share certificates issued in exchange for vending in the property. Image courtesy Beaconsfield Mine & Heritage Centre.

In mid-1899 a notice appeared in the *Examiner* to the effect that Launceston stockbroker Lewis Ditcham had been appointed Tasmanian agent for the sale of shares in the Australasian Asbestos Company of Beaconsfield, and that prospectuses could be seen and all information obtained at his office.[16]

The new float seemed to have come about through the efforts of two local prospectors, Charles Tindall and Francis Haslam, who'd taken out an 80 acre lease over the part of the asbestos deposit that was on the east side of Anderson's Creek. This was lease number 1772M and was dated 5th May 1897, coinciding with when the surveyors had been seen. Tindall and Haslam formed a partnership called the Tasmanian Prospecting Syndicate and went looking for investors. The advertisement in the *Examiner* in 1899 suggested they'd been successful.



A pink rock was found with serpentine and thought to be rhodonite. Not until modern times was it identified as a rare variety of clinozoisite. Image courtesy of Shane Richardson.

Two months after the prospectus was issued a statutory notice appeared in the *Examiner* in respect of the formation of the Australasian Asbestos Company NL, which was registered at 120 Queen Street, Melbourne, but whose operations would be at Beaconsfield. The notice was dated August 31st 899 and the capital of the company was £100,000 in one pound shares. Of this, the value of the company's property, including claim and machinery, was stated to be a hefty £25,000.

All the shareholders were from Melbourne. Clearly no locals had been tempted by the prospectus, and this wasn't surprising considering that 50,000 fully paid one pound shares were retained by Tindall and Haslam's Tasmanian Prospecting Syndicate. They were certainly valuing their interest highly! Of the remaining 50,000, which were only partly paid, only 13,450 were so far issued.[17]

The legal manager of the company was a Melbourne accountant named James Swift, former manager of the South Melbourne branch of the Commercial Bank. He'd gone spectacularly insolvent a short time before being appointed to run Australasian Asbestos, owing more than £20,000 over his assets. There was no suggestion of impropriety however, and he appears to have been one of the many casualties of the 1890s depression. He avoided bankruptcy and there was no reason to doubt his competence in his new role.

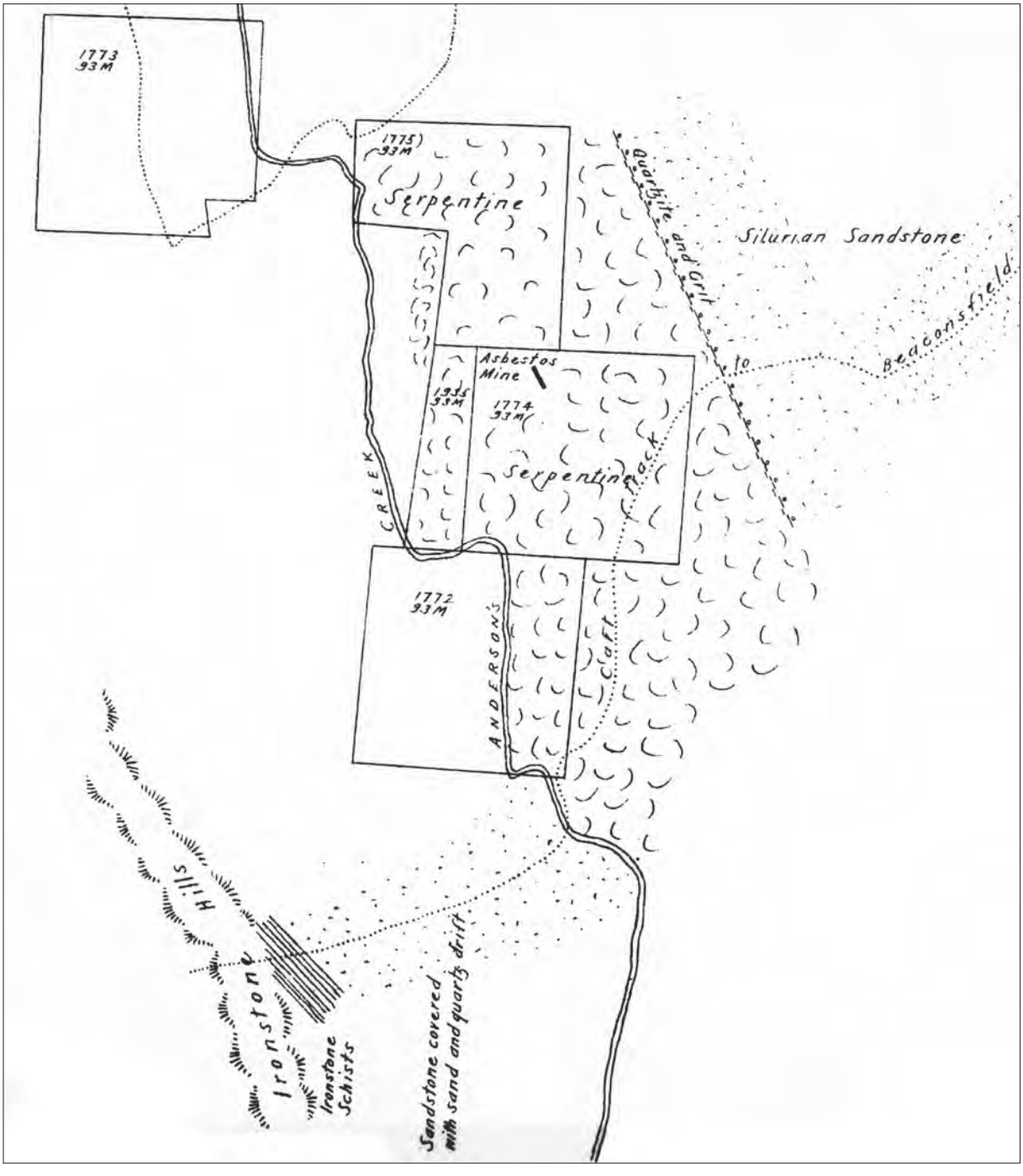
In late 1899 the *Mercury* reported that 25,000 shares had now been sold to the public and 25,000 were held in reserve. The company had £2,500 cash, which was said to be ample as no machinery was required. They held 316 acres on Anderson's Creek, having expanded on the 80 acre lease taken over from Tindall and Haslam, and had already sent a trial shipment of 100 tons to Melbourne. This was expected to realise £1,000. The cost of producing the first 100 tons was only £250, inclusive of building construction and all startup mining costs, which suggested there were considerable profits to be made.[18]

The name of the new company generated much confusion, due to the earlier and similarly named Australian Asbestos Manufacturing Company in Melbourne, from whom Hobart stockbrokers Harvey & Co had an agency agreement for paint.

The Melbourne company was associated with Mr N Burnet, and had survived for some time after his correspondence with Captain Coote. It owned a mine at Gundagai in New South Wales and transported asbestos from there to its Little Collins Street, Melbourne works, where it manufactured paints and pipe coatings. In 1884 the company was winning awards, selling reserve shares and saying that things were going swimmingly. However it disappeared soon after, long before the Australasian Asbestos Company came along.[19]

The float of the new Tasmanian company in 1899 appears to have been made possible by the development in Canada of an asbestos product they called "asbestic".

Asbestic wasn't really an invention. It was a name they gave to the waste from asbestos mining—being mainly fibres that were too short to be woven. Then they used the name for products that contained these short fibres, primarily materials used in the building industry, such as paint and plaster. A Canadian company, Danville Asbestos and Slate, had realised that many products (such as paint and plaster) didn't really need the long and expensive asbestos fibres. They could use short fibres, usually regarded as waste, and still enjoy the benefits. Having created the asbestic range, the company was initially the only supplier. The new products were cheap and effective, and demand was such that the Canadians couldn't keep up.



Mr Twelvetrees' 1899 map of the Australasian Asbestos Co leases on Anderson's Creek. The cart track to Beaconsfield came out at the hospital. The mine can be seen at the top of the 80-acre lease 1774-93M. Image courtesy MRT.

William Twelvetrees, the Government Geologist, visited the Beaconsfield workings in the second week of November 1899.

In his "*Report on the asbestos deposits, Anderson's Creek, near Beaconsfield*", Mr Twelvetrees said that the new company would not mine for the usual form of chrysotile, though they would take it if it

presented, but for "*massive cotton-stone, with matted, interlacing fibres....This variety is what the company call "asbestic", a fibrous matted asbestos, mixed with earthy, partly decomposed, magnesian rock. A few years ago such rock in asbestos quarries was neglected as so much waste, but it is now worked up and largely used for lining and plastering purposes, for which it is extremely useful, setting quickly and hard, needing no hair nor sand, and being incombustible.....It is durable, and, beside being tough, it is elastic, a very valuable quality in a plaster, for it is not liable to crack when walls settle after building. As hair need not be used with it, it is germ-proof. The manufacture of "asbestic" seems to have commenced in 1896... in Canada... and there is now more asbestic sold in the world than asbestos. (Canada is) said to be running out of stock, and it is anticipated that the Tasmanian industry will feel the benefit thereof.*"

Mr Twelvetrees confirmed that the Australasian Asbestos Company had now taken up five leases (sections 1772M to 1775M, and 1935M) over the serpentine deposit in the Anderson's Creek basin, which had now been exposed for three miles in the north-south direction and 1½ miles across. "*About 20 ft below the South brow of the hill a face 12 feet wide has been cut into a seam of natural asbestic for a height of 10 ft. From this bench 100 tons were broken recently, bagged, and shipped to Melbourne. The seam is running N 22°W, and is traceable 150ft further up the hill where it would gain 10ft additional backs. Thirty feet below the floor of this bench a second bench is being cut in asbestic rock, which will give, when advanced into the hill, a face 50 ft high, and ultimately 50 ft wide. When I was there nine men were at work in one shift. A tramway 232 ft long conveys the stone to the tip, the waste forming one side of the embankment and the mining cost, inclusive of dead-work, of the first 100 tons, did not exceed 3s. 6d. a ton. With a face such as that now in preparation, marketable stuff ought to be broken out for not more than 1s. a ton.. 6s. per ton has to be paid for transport to Beauty Point, and thence 9s. 6d. a ton per Union Co.'s steamer via Launceston to Melbourne .(where) I believe the price realised (after final treatment there, will be) £5 or £6.*"

He noted that the chrysotile seams had not previously been economic. "*I have seen a sample with fibres 2½ inches long, but this length is exceptional. Veins ¼" and ½" wide are common; less frequent are those of 1" and 1½" width. They closely resemble some of the chrysotile mined in Canada, and the best of them are of sufficient width for industrial purposes, but the drawback is that they are usually separated by such wide intervals of compact rock as to make their mining an expensive operation.*"

Mr Twelvetrees was fortunate to witness a remarkable discovery: "*In the open cutting being worked on section 1774, a large block of rhodonite, the pink or flesh-coloured silicate of manganese, was broken out of the asbestiform serpentine while I was there.*"

Rhodonite is a popular and quite valuable ornamental stone that is also used in jewellery, and is found in Broken Hill and Tamworth, NSW. It was a significant find. However Ralph Bottrill, Tasmania's senior mineralogist, has recently shown that Twelvetrees was in error. The stone is not rhodonite, but a rare mineral previously known only from the USA and Scandinavia. It is thulite, which is a variety of clinozoisite and does not contain manganese at all. It is a metamorphic mineral, and its appearance in the serpentine is unexpected and may be related to granite in the area. While the visible deposit at Anderson's Creek has been mined out and only a few specimens are now known to exist, there remains the possibility that more would be found in the quarry with excavation.

By the end of November 1899, Australasian Asbestos had a cartage contractor taking the product to Beauty Point, and their quarry face was 30ft high and 25ft wide. Production continued steadily and appeared to be very profitable.[20]

In mid-December the mine manager at Anderson's Creek reported that he'd pulled down 50 tons of asbestic and was bagging it prior to carting to Beauty Point. He said that the face of the quarry was looking very good, with clean asbestos rock. By late February 1900, 200 tons had been taken from an open face 30ft wide by 30ft high, and sent to Melbourne. The face had been carried forward for 70ft.[21]

In March 1900 Scientific American magazine came out with an article saying that asbestic production would be a new industry for Australia. The *Daily Telegraph* said that the supply at Beaconsfield was "almost inexhaustible" and praised asbestic products fulsomely: "*It is the king of wall plasters and is used extensively in North America and Britain and in fact in New York and other major US cities its use in building is compulsory for safety reasons. It covers more area than ordinary plaster and is lighter, easier and cleaner to use. A layer half an inch thick is trowelled on the wall and it needs no hair or sand and is absolutely incombustible. It is also vermin proof, impervious to water and creates a barrier to sound. It can also be easily moulded into artistic shapes and is a perfect surface for painting.*"[22]

March also saw the company's directors conduct an experiment at Balaclava (Melbourne), with a view to proving for themselves the fire resisting properties of asbestic plaster made from the company's raw material.

A sentry box constructed of oregon studs and covered and roofed with American laths (flat boards), was covered with two coats of asbestic plaster. The building was then saturated with kerosene and fired. It burned with great intensity for three-quarters of an hour. Notwithstanding that intense heat was being concentrated on both sides of the box at the same time, the asbestic plaster came out of the ordeal successfully, and on removing it the studs and laths were found to be uninjured. The experiment was to be repeated publicly.[23]

The experiment was referred to at the first half-yearly meeting of shareholders, held at 120 Queen Street Melbourne on April 30th 1900. Lloyd Tayler presided and noted that they had incorporated on September 9, 1899 and that the titles to their five leases were being consolidated into one lease by the Tasmanian Mining Department.

Mr Tayler said that the first consignment of asbestic from Beaconsfield was landed in Melbourne early the previous November, and a private test of asbestic plaster had been made by the directors, who were convinced of its superiority over ordinary plaster. He said that another test would be held as soon as two buildings could be constructed identically, with one bare and one coated in the company's plaster.

The mining manager's report stated that 250 tons of asbestic had been shipped to Melbourne and that 200 tons were in the paddock ready for bagging. Expenditure for the half year had been £1,673. The Chairman said there were many uses for their product, but it would be necessary to make two calls of 3d each, and the directors would receive £40 for the following half year.[24]

The necessity for calls is puzzling, even if mining costs were higher and sales prices lower than anticipated. The company claimed to have £2,500 at the outset, and had only spent £1,673. Plus it had the proceeds of sales, which must have been in the hundreds of pounds. Yet there was no suggestion from the board that there was a problem, and they encouraged the belief that the company's outlook was rosy.

Others were taking note of Australasian Asbestos's apparent success. The *Daily Telegraph* reported that asbestos/nickel shows were being tested at Trial Harbour on the Tasmanian west coast.[25]

By July 1900 the company had sent some 300 tons to Melbourne from their 316 acres of leases. Then, on Saturday June 30th, the promised public demonstration took place in a paddock in Balaclava. The *Building, Engineering and Mining Journal* recorded the event.

"Two huts of Oregon studs and American laths were constructed, 5ft by 5ft and 7ft high, with ceiling and roof under precisely equal conditions. One was covered with asbestic plaster and the other with ordinary lime, sand and hair plaster. Both 7/8in thick. Firewood was piled up inside and out and saturated with kerosene, and extra wood and kerosene for the asbestic hut. They were fired simultaneously, producing intense heat. In 10 minutes the plaster was falling off the ordinary hut and in 30 minutes it was a charred wreck. Not so the asbestic hut. Here the blaze was extinguished after half an hour, and on removing the asbestic plaster, the wooden laths and timbers were untouched. The large gathering of government officials, architects and builders was most impressed and spontaneous applause broke out."[26]

Things seemed to be going well, and at Anderson's Creek a prospecting tunnel was being driven into the hill from the face of the quarry. Early in 1901 the directors, with the assistance of the local MHA Tom Walduck, persuaded the Department of Public Works to turn the company's cart track to Beauty Point into a road, at a cost to the public purse of £98. The work was done by Blackaby and Duffy.[27]

Appearances were misleading, however. Despite the new road, at the fourth half yearly meeting in Melbourne on October 31st 1901, the Chairman admitted that demand for asbestic plaster had not been strong, due to considerations of price carrying more weight in the market than considerations of safety. The company could only compete on price if new automatic machinery was installed at the mine, and it was not in a financial position to do so, though negotiations were proceeding in respect of finance. He noted that more than 12,000 shares had been forfeited for non-payment of calls, and there were 5,400 shares available to be sold if anyone was prepared to buy them. The directors had not taken any fees for the period, and would continue to work gratis. The board recommended that the leased area be reduced to the core 120 acres containing the asbestos resource, and the meeting authorised them to dispose of the forfeited shares at their discretion.[28]

Unfortunately the forfeited shares were unable to be sold, and nothing more was heard from the company. Asbestos exploration in Australia shifted to Gundagai in NSW, and Tasmanian users of asbestos such as the huge Tasmania gold mine at Beaconsfield, imported the mineral from America.

Asbestos Before the War

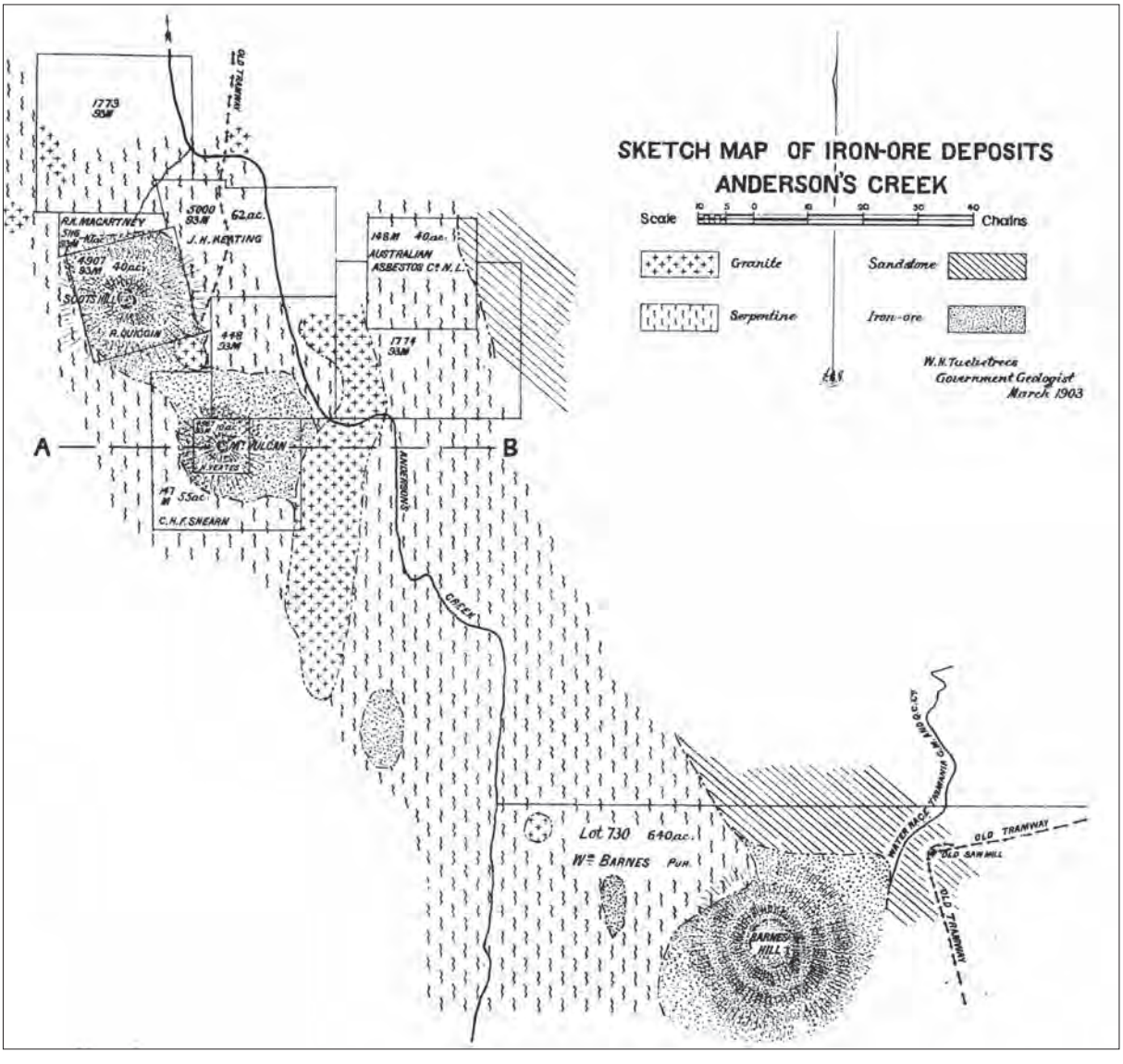
Mines Department records from 1903 show that in total the Australasian Asbestos Company shipped 374 tonnes of asbestos worth £521 to Melbourne. This should have been profitable, but the company had long since collapsed and the leases were abandoned.

The following year the Chief Engineer from the Tasmania mine, Mr Abbott, became interested in the ground. According to the *Examiner*, he made "*a thorough examination of the deposit, the extent of which is about 180 acres, concluded that it was a valuable one, and he expressed great surprise that it had been allowed to remain idle so long. He broke out samples and put them to the test, with the result that he obtained some of the best asbestic for boiler covering that he had ever used. The chrysotile in it was also found to be very beautiful, it being finer than silk. This is worth £150 per ton, and the weavers can use it when it is over half an inch in length. That at Beaconsfield is from half an inch to over two inches in length.*"[29]

Mr Abbott had the material analysed and found it largely free of impurities. He made an asbestic coating for a boiler and in the presence of a representative of the *Examiner* he tested it alongside an American product already being used at the Beaconsfield gold mine. *"It was apparent at a glance that the Tasmanian was very much superior."* The chrysotile was also found to be as good as that obtained from the famous asbestos mines in Canada.

After conferring with local business people, Mr Abbott communicated with friends in Sydney, as a consequence of which he immediately travelled there with samples. It was said that the Sydney investors and the experts they consulted were so pleased "*that the task of forming a liability company was ...now practically an accomplished fact.*"[30]

A trial shipment of five tons was sent to Sydney, made into asbestic plaster and tested as a boiler covering. It performed well and was said to be worth £22 per ton in that market and able to be sold at



Twelvetrees' map of the Anderson Creek iron ore deposits shows the extent of the serpentine beds that host the asbestos, and the leases extant in 1903. Courtesy MRT.

half the price of the equivalent American article. It was shown to the Hercules Refrigerating Company in Sydney, who were said to be very well pleased and intending to use it not just for their boilers, but also replacing charcoal as insulation for their cool rooms.

Mr Abbott told the *Examiner* that "*the face of the deposit at present exposed is 60ft by 40ft, and only a very small amount of work has been done*." He said that no heavy mining was required and no expensive plant needed. "*With a crusher and roller Tasmania could be supplied, and there would be a large quantity available for export. In mixing for boiler covering about half asbestic and half water is required. One of the reasons given why the deposit was not worked previously is that samples were sent to Victoria and used for plastering walls of houses, but builders would not take it up, and so the matter of opening up the deposit fell through. As far as is known, no attempt was made at that time to put it on the market as a boiler composition.*"

Mr Abbott formed a syndicate with Sydney investors and began to develop the property over the following months. They secured 160 acres in leases and were opening out on some of the outcrops around the property. They had three grades of product and all were available in quantity. The long chrysotile fibres were set aside for weaving and were the most valuable, while the asbestic rock was pulverised for covering boilers, pipes, plastering walls and so on. A disastrous fire in Chicago had recently drawn attention to the need for fireproofing with asbestos woven materials, such as in theatres, and the investors were exploring markets before further development or machinery purchase.[31]

Sadly, it seems that Mr Abbott had considerably overestimated the value of the product. He should perhaps have taken more note of the experience of the Australasian Asbestos Company. The markets did not eventuate, and the project was abandoned late in 1904.

In 1906 it was reported that the latest craze in San Francisco was wearing waistcoats and jackets of asbestos, which were cleaned by a firm who simply heated them to white-hot.[32]

In 1911 there were rumours that another interstate syndicate was interested in the Anderson's Creek deposits. The old leases had been surrendered by this time and new leases 5509M, 5479M and 5597M were held in the names of Messrs Desborough, Odd and Buxton.

The rumours proved unfounded, or at least the interstate parties did not come to the party, for at the beginning of 1913 there was an application from a Mr E H Ritchie for the leases to be forfeited for lack of work. Appearing as a witness for the applicant, Tom Williams, an orchardist residing at Anderson's Creek, said he had been constantly on the leases since November 1911 and no mining of any description had been done on the sections. Work on the leases could not have been accomplished without his knowledge. Charles Tindall, an engineer who had formerly owned the leases with Francis Haslam, deposed that he had frequently been on them, on average twice a week. He looked for mining work, but had never seen any signs of mining operations being carried on.

There was no appearance by the lessees to answer the complaint and the Warden said he would recommend to the Mining Board that the sections be forfeited.

In mid-1914 someone sent a sample to the German firm Becker and Haag, of Berlin. The Mines Secretary reported their reply: "*We thank you for your favour and for the sample of asbestos you sent. We regret, however, that this material is unsuitable and cannot be worked. The main point of asbestos is that the fibre should all be strong enough to be treated and easily divided like cotton fibre*." The company had enclosed a sample of the sort of asbestos they could take, and said that it would be worth £40 to £60 per ton to them. Twelvetrees commented on the German sample, saying: "*the sample received has a*

fibre comparable to some of the Chrysotile asbestos found near Beaconsfield, but these veins are generally narrow and separated from one another by too great an interval of 'dead' rock to admit of their being worked."[33]

In November 1914 there was an attempt to open up an asbestos mine at Macquarie Harbour, but that came to nothing either.

The Tasmanian Greenstone Company Ltd

Prior to the Tasmania gold mine closing in 1914, the activities of gold miners had denuded most of the district of trees. Cabbage Tree Hill was quite bare, and so too was the whole Anderson's Creek basin. This made exploration much easier.

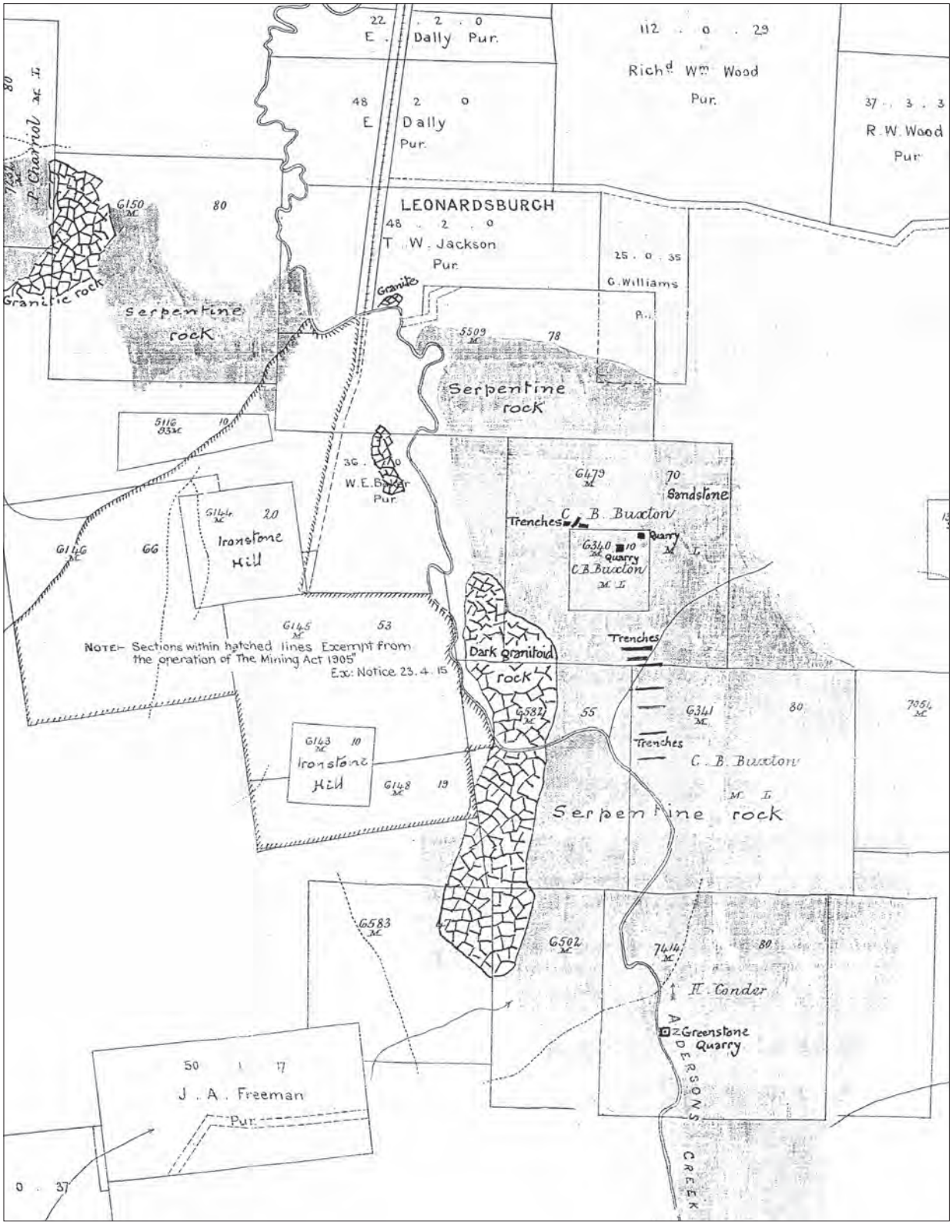
Nor had the negative view of the Anderson's Creek asbestos deposits expressed by the Government Geologist William Twelvetrees and the German manufacturer led to a loss of interest in the field. A new company called the Tasmanian Greenstone Company Limited was incorporated at 31 Queen St in Melbourne in October 1913. Their intention was to mine serpentine for its own sake, rather than for the asbestos it contained. The assessment given years before by Mr Twelvetrees, that the serpentine beds were too faulted to be useful for anything other than a cottage industry, did not discourage them. Like the asbestos miners, their optimism outweighed any official report.

The new company gave formal notice of operating in Tasmania and intention to mine on January 21st 1914 and gave its Tasmanian address as The Grove, Cimitiere St, George Town. The Grove was the home of their manager Joseph Davies FGS (London), who had known of the existence of the exquisite ornamental serpentine at Anderson's Creek for many years. This was the same Mr Davies who'd recently been the general manager of the Tasmania gold mine, and kept a polished serpentine paperweight on his desk at home. He would represent the company and provide engineering services, as well as act as the legal manager in Tasmania.

The new business leased 200 acres at Anderson's Creek. They could only peg the southern part of the deposit, as the northern part was taken up in asbestos leases. Sample slabs were sent to Melbourne, where they were "much admired" and judged to have considerable value for "general architectural decorations and building purposes." Leading Victorian architects expressed a high opinion of the stone, and a representative of the Footscray and Malmsbury Stone Cutting and Quarrying Company visited the property and spoke well of the samples of rock opened up. Active operations on a large scale were about to be started, and shipments of stone to Victoria would be made shortly.[34]

A tender was soon advertised to cart 50 tons of large blocks from the quarry to Beauty Point. Applications were to go to the foreman, Mr C Charleston of Beaconsfield. There seemed to be some problems with lifting the large blocks of stone onto ships, and the State government came to the party, erecting a small hoist at the end of the jetty.

Despite the war, the first Annual General Meeting of the company was held in Melbourne in March 1915. The company advised shareholders that a fault in the ground had caused them to suspend operations in the original "Davies" pit at 23 feet depth, and they had opened up another quarry to replace it as the source of stone for the future. They expected the new quarry to cost about £300 to open up with a 50 foot working face, after which they intended to go to 100ft depth. However funds had been exhausted, and if these plans were to be fulfilled they needed to make an issue of shares from their reserve stock. This would be offered first to existing shareholders.[35]



Mr Twelvetree's map of the Anderson's Creek asbestos field in 1916. Lease 6479M may be erroneously identified, as it was always referred to locally as 5479M. The Tasmanian Greenstone Co quarry from 1914 can be seen next to the creek near the bottom of the map. Map courtesy of MRT.

The *Argus* of May 10th 1915 carried a strong letter of complaint from one of the Melbourne shareholders, which was picked up by the *Examiner* in Launceston and reprinted. The editor of the *Argus* noted that shareholders were too often disappointed by the failure of companies to meet expectations raised by their prospectuses.

The letterwriter noted that the Tasmanian Greenstone prospectus dated October 10th 1913 recorded that the company was acquiring 200 acres "rich with deposits" of "precious serpentine." The authorised capital was £7,500 in 1500 shares of £5 each, of which 900 were offered for subscription, and 600 fully paid together with £700 in cash would go to the vendors in return for the leases. It was estimated that £2,000 would be all the funds needed, as a company was standing by to purchase the product.

The company accounts to 17th February showed that 467 shares at £5 each had been subscribed, providing more than the £2,000 said to be sufficient in the prospectus. However after paying the promoters the £700 in cash that the prospectus entitled them to, and then paying the £357 costs of the float, the remaining cash in the company was far less than that stated to be necessary to begin operations. It was obvious on the prospectus's own statements, and must have been clear to the directors, that the funds available were insufficient to carry out the intentions stated. On top of that it was now clear that the costs estimate was very much understated. Then there were directors' fees of £125 and a secretary's salary of £182.

The letterwriter went on to point out that the accounts did not show any product on the asset side, or any receipts by way of sales. The only mention of the serpentine mined was that some blocks had gone to Melbourne and been "condemned by architects". The books as presented showed plant valued at £80 and cash amounting to £10. It could not come as a surprise that the directors said that further operations depended on new financial arrangements.

The correspondent and the *Argus* both suggested that there was a pressing need for company legislation to protect investors from the floating of companies that never had any chance of succeeding.

The company was unable to sell any more shares and was wound up. This must have been a considerable embarrassment to Joseph Davies, whose good name and reputation had been used by the promoters.

In July 1916 the Beaconsfield Council asked the Marine Board to remove the structure they'd built for the lifting of the greenstone blocks at Beauty Point jetty. This was rather strange, as it must surely have been a useful asset for them to keep.

Around the same time as the removal of the jetty hoist, the Government Geologist William Twelvetrees visited Anderson's Creek to report on the asbestos. While there he looked at the Tasmanian Greenstone Co quarry at the south end of the field on the creek's eastern bank. The quarry had a face opened to about 20ft deep and a derrick for lifting stone was still there. Some blocks of sawn stone were lying around ready for shipment, measuring 3-4ft by 2ft by 1ft 6in thick. He noted that the stone was a beautiful mottled dark green, but it had "*innumerable parallel partings only an inch or two apart, which, while enhancing the beauty of the prepared stone, will inevitably cause the rock to break away when sawn into thin slabs, and it is possible that the same tendency will develop in the solid blocks if left exposed to the weather.*"[36]

It seems that Mr Twelvetree's earlier misgivings about the stone had proven to be correct, and the company was floated on a fantasy – or a con.

Paul Charriol group/Frenchman's Quarry

Mr Twelvetrees' visit to the field was prompted by the fact that two parties were now working on the asbestos, and they were both clearly genuine.

After the Great War broke out in 1914, the supply of asbestos from North America became increasingly problematic. Prices rose, and asbestos cement roofing slates with 20% asbestos, for example, that had been selling at £14 a ton or £20 a thousand, were now £20 a ton or £28 a thousand. In the year to June 1915, demand in Australia had necessitated the import of £35,500 worth of asbestos goods, mainly boiler coverings and packings. A big opportunity existed for Australian miners.[37]

The scarcity, price rises and 20% duty on asbestos goods led to much interest in the previously uneconomic asbestos deposits. Early in 1916 another attempt was made to mine asbestos at Macquarie Harbour, by Melbourne engineers McDougall and Lincoln.[38]

It was far easier though, to look again at the conveniently located Anderson's Creek field. In the first week of June 1916 a Melbourne mining agent named Paul Francois Louis Charriol came down for a week and took a two-ton bulk sample of stone back to Melbourne for tests. He seemed well pleased with the deposit, as well he might, apparently having some fibres 3ft long! This may have been exaggerated, but he was on a new area well to the northwest of all previous workings. The fibres were of a yellowish colour, but when treated with acids this colouring disappeared. He was surprised that such an opportunity was available.[39]

The following week the former Tasmanian Government Mining Engineer Hartwell Conder, now a consulting engineer in Melbourne, visited to commence operations on 160 acres previously owned by C B Buxton. He placed Beaconsfield man Mr H Masters in charge with an initial objective of ascertaining the extent of the formation.

A few days later Mr Conder returned. It was now apparent that he represented a large Sydney firm called Wunderlich Ltd, which produced asbestos products under the brand name Durasbestos. He was satisfied that there was a considerable quantity of fibre in the rock.[40]

And so it was that in September 1916, when William Twelvetrees visited for the purpose of writing a report on the asbestos deposit, there were two groups at work.

On the west side of Anderson's Creek, beyond the old town of Leonardsburgh and opposite Dally's farm, was the Collins St, Melbourne-based group led by Paul Charriol. They were working an 80 acre section (7232M) and had opened up a quarry almost exactly one kilometre west of where today's Tattersalls Road (then Leonardsburgh Rd) took a right-angled turn south.

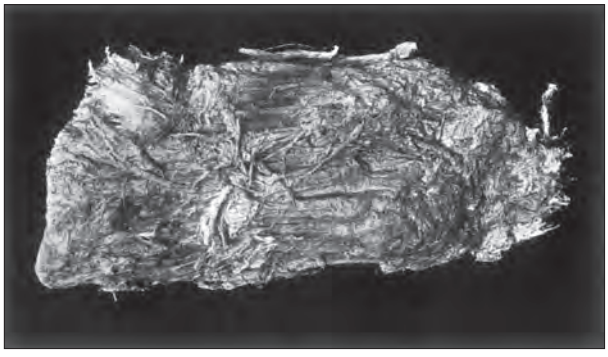
Twelvetrees found that Mr Charriol had excavated a quarry in fissured serpentine rock to a depth of 25 feet. The fissures in the decayed rock were filled with an asbestiform fibre from 6 to 10 inches long. Two or three tons of fibre and fibrous rock had been broken out, but it was very wet and discoloured. The quarry had filled with water over winter. When dried the fibres turned a "pure dead white".

The material was easily separated with the fingers and didn't feel greasy like the chrysotile on the former Buxton leases, now owned by Wunderlich.

Mr Twelvetrees sent the fibre to the Mining Museum in Sydney, and was told that it was very much like the amphibole variety from Gundagai. An analysis at the Tasmanian Government Assay Office

confirmed that it contained calcium and was an amphibole, not chrysotile.

The presence of an amphibole asbestos is surprising, and its similarity to the material coming out of Gundagai suggests that it was actinolite, though tremolite is also possible. These asbestoses do not usually occur in serpentine, though the presence of granite nearby (meaning that the rock was subjected to heat) is suggestive. If the mineral is an amphibole asbestos, then we must regard the Charriol deposit as a hazardous site.



Actinolite from Charriol's quarry. Image from Reid's "Asbestos in the Beaconsfield District" MRT 1919. Compare this with the tremolite photo at the beginning of this chapter. It is similar.

Twelvetrees reported that Mr Charriol was at an early stage of development and needed to establish that there was a market for his fibre before undertaking further work.

When the next Government Geologist A McIntosh Reid visited in 1919 he found that the quarry was now 100 feet long, 40 feet wide and 30 feet deep at the end. "*It is actually an open-cut driven on the course of the asbestos veins into a small hill. In the centre of the cut a prospecting shaft has been sunk about 15 feet below the floor. Work was discontinued here owing to the heavy influx of water. There are indications of improvement in the quality of the fibre as the workings are carried below the decomposed rock into firm serpentine. The total output of this quarry amounts to 20 tons of high-grade asbestos. With this were recovered considerable quantities of splintery white picrolite of no present value*." Reid confirmed that it was an amphibole asbestos and advised further exploration, but it seems that Mr Charriol was unsuccessful in finding a market for the product and had probably already discontinued the operation.[41]

The last person to locate this quarry was the Government Geologist Paul Taylor, who went there in 1949 and wrote the definitive account of asbestos in Tasmania in 1955. By that time Paul Charriol's name had been forgotten, and it was just remembered as the "Frenchman's Quarry". Mr Taylor took a sample from the face of the quarry and found that it was midway between tremolite and actinolite. In places it had become talc. He found a Beaconsfield local who'd worked there 30 years earlier, and was told that there was better material in the floor of the excavation, now under water.

The location of this quarry was forgotten in modern times, but can now be located at S41 10 52.186 E146 45 9.298. There are a number of trenches on the high side of quarry, and a tailings dump nearby at S41 10 52.019 E146 45 11.733. Note that few insurance policies will cover visiting this site and provision of the GPS coordinates is not an invitation to visit.

Wunderlich Ltd (Durasbestos)

The other party that started work in 1916, a mile southeast of Paul Charriol, was the Sydney firm Wunderlich Ltd. While they, like Mr Charriol, were motivated to reconsider the poorer quality Anderson's Creek field by the increase in prices due to the war, for them it was more because supply disruptions had limited their production.

Their leases were initially held in the name C B Buxton. He'd earlier held them with two friends, Messrs Desborough and Odd, but forfeited them in 1913 for lack of work. When war broke out and the man who'd plainted them gave up the leases, he repegged them in his name alone.

Wunderlich initially took options over the leases—numbers 6479M for 70 acres, 6340M for 10 acres, and 6341M for 70 acres, all held in Buxton's name and comprising the centre part of the large area previously taken up by the Australasian Asbestos Company in 1899. The property was accessed by a very difficult track that ran (and still runs) south off Tattersalls Rd about 1.2km from the York Town Rd.

Wunderlich Ltd was registered in NSW and had recently spent £50,000 to build a tile factory at Rosehill and an asbestos cement sheet factory at Cabarita – both in Sydney. They already had a mine at Barraba, 100km north of Tamworth NSW, but were very interested in additional sources.

The firm was known nationally and had been set up as a pressed-metal ceiling manufacturer by Ernest and Alfred Wunderlich in 1887. They were incorporated as the Wunderlich Patent Ceiling & Roofing Co Ltd in 1893. In the early 1900s they were joined by another brother, Frederick (commonly known as Otto) and in 1908 merged with W H Rocke & Co to become Wunderlich Ltd. They opened branches in all states, and in Wellington, New Zealand. Heavy advertising was a feature of the firm's expansion, and large newspaper ads and colourful catalogues were produced by artists including William Dobell.

Wunderlich's red roofing tiles and fibro sheets became a feature of the Australian suburban landscape. In 1964 James Hardie Ltd took over the Wunderlich Homes Asbestos unit, and in 1969 the parent company Wunderlich Ltd was taken over by the Colonial Sugar Refining Co (CSR).

Wunderlich produced asbestos cement sheeting under the brand names Durasbestos and Durawall, and their interest in Anderson's Creek was particularly in its potential to supply the raw material for Durasbestos cement sheet.

The Durasbestos brand was nationally recognised and the historic record often confuses the brand name with the company that owned it.[42] The company apparently contributed to the confusion here by taking over Mr Buxton's leases in the Durasbestos name, then transferring them to Wunderlich.

The General Manager of the Durasbestos unit of Wunderlich, Mr F L Hall, inspected the Anderson's Creek deposits in the company of a consultant, Mr Hartwell Conder (the recently retired State Mining Engineer for Tasmania) in April 1916. Mr Hall seemed to be impressed by what he saw. He said he would consider putting men on to prospect, and had done so by the time of Mr Twelvetrees's visit in September the same year.[43]

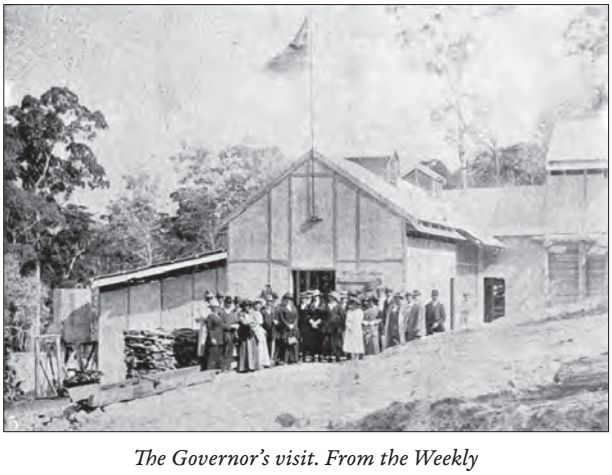
An advertisement that Wunderlich Ltd placed in mainland newspapers for its Durasbestos products that once came from Beaconsfield.

Mr Twelvetrees produced an interim report in October and a final report the following year. He described what he saw in considerable detail.

The main excavation he described as "Tyndal's quarry", which had been opened up nearly 20 years earlier by Charles Tindall. It had been: "*worked into the hill northwards for a distance of 75 feet by 44 feet in its widest part and with a face 15 feet in height. The rock is greenish, somewhat decayed, serpentine with rotten slickensided partings intersecting it at steep angles. When the option holders came here, the quarry face was*

practically barren, except for a width of about 10 feet in the NW corner. A prospecting shaft 6' x 3' in the clear has been sunk at the quarry face to a depth of 27 ft from the floor. From 17 ft down to the bottom of shaft good fibre was obtained from the east side, but the ground is poor again at the bottom. The fibre here is good cross vein chrysotile with a length ranging from a ¼ to a ½ inch and occasionally up to 1¼ inch. A little NE of the above in the NE corner of the 10 acre section, is an old quarry cut out by the Australasian Asbestos Co in 1899 for 100 feet into the hill with a face 25 feet high and a short drive. It is in decayed serpentine from which the old Company shipped a good deal of fibrous rock containing long slip fibre and picrolitic material. A mineralogical feature of this quarry was the occurrence of a vein of scapolite a foot wide associated with pink rhodonite. A few boulders of the scapolite are still lying about the approach. Some trenches have been opened up outside the NW corner of the 10 acre section, just over the northern brow of the hill, showing narrow repeated ribbon veins of good quality chrysotile, often only one tenth or one twelfth inch wide In the flat country south of the hill quarries a series of trenches have been opened, exposing patches and belts of chrysotile-bearing rock. A silky cross vein fibre comes from these trenches, generally between ¼ and ½ inch in length, but sometimes accompanied by long slip fibre of superb quality 6 or 7 inches long The trials have not yet progressed sufficiently to allow it to be said that it will pay to raise and ship the stone in bulk to Sydney for mill treatment the erection of crushing and fiberising plant is premature before the leases are prospected throughout, and a better idea gained of their capacity to supply the demands of a mill."[44]

Above and below: views of the asbestos works in 1918 taken for the Weekly Courier. These originals are courtesy of QVMAG.



The Governor's visit. From the Weekly Courier 28/3/1918 courtesy TAHO.

Hartwell Conder had himself taken up a lease (7414M of 80 acres, reduced to 7498M of 20 acres in 1918) adjacent and to the south of the Buxton leases. Conder's lease contained the old Tasmanian Greenstone quarry, which was primarily a serpentine resource and of no immediate interest to Wunderlich. However there was the possibility that the asbestos belt on the Buxton leases taken up by Wunderlich extended south.

The Governor at the asbestos mine. Weekly Courier 28/3/1918 courtesy TAHO.

Waste pile below the works. From the Weekly Courier 11/4/1918 courtesy TAHO.

Another view of the plant. From Reid's "Asbestos in the Beaconsfield District" MRT 1919.

Shortly afterwards, Wunderlich decided to proceed. They exercised the option over the leases and Mr Conder joined the company. Road access was their biggest problem and they asked Beaconsfield council for help. Initially Council refused. This may not have been a surprise, given that both the State government and the Marine Board had assisted Australasian Asbestos back in 1901, only to see the company promptly collapse. However Wunderlich was a far more substantial firm, and Council was strongly criticised for not taking advantage of a pound for pound road building grant then available from the State government. They soon capitulated.

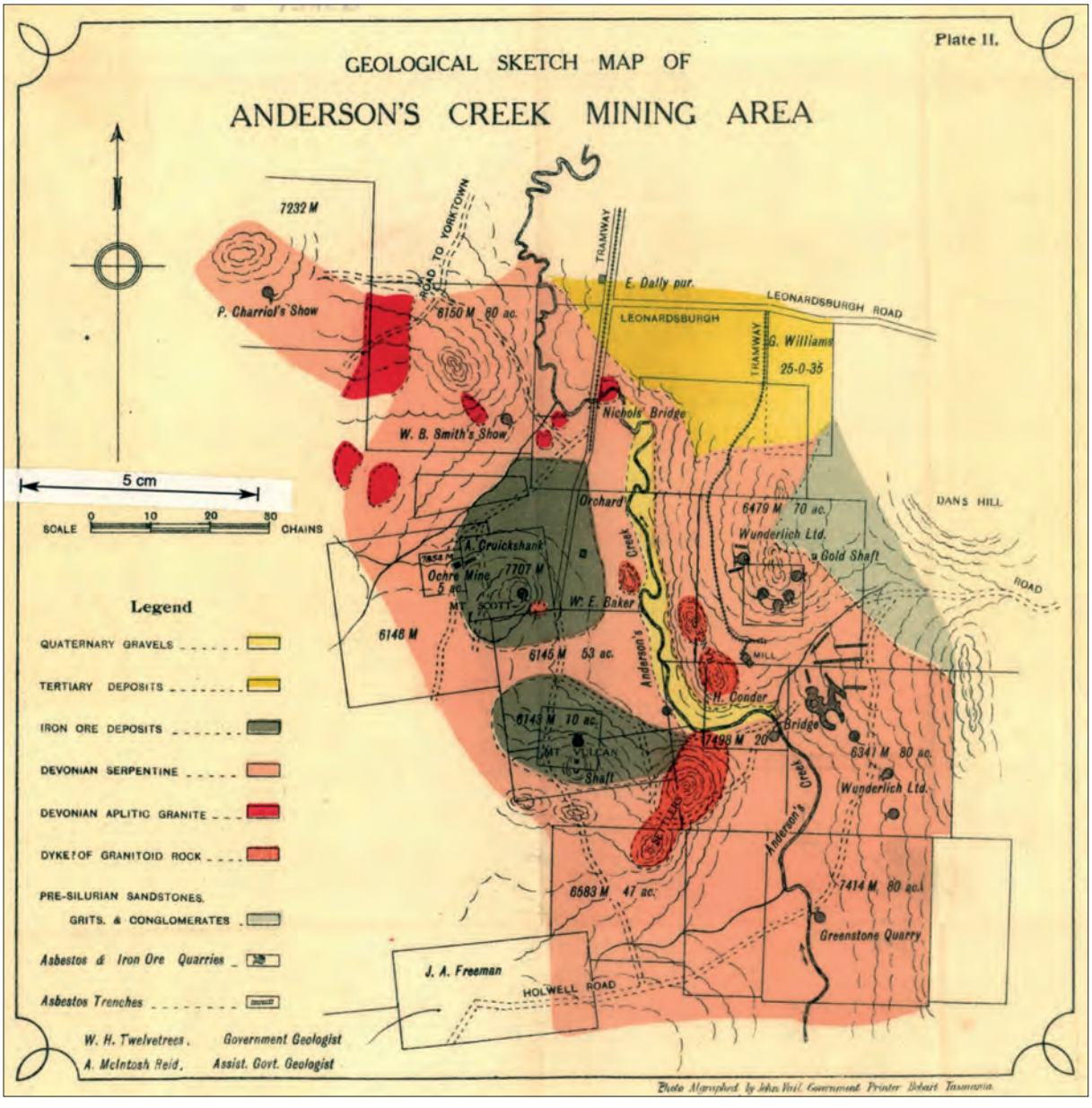
Wunderlich needed to build a crushing plant at the mine, but found that the war that had interrupted asbestos supplies, also made machinery imports difficult. They found themselves unable, for example, to source a cyclone fiberiser, but showed considerable ingenuity in installing a wattle-bark disintegrator instead, and found that it worked perfectly.[45]

In July 1917, at a press conference in Hobart, the Secretary of Mines exhibited a specimen of asbestos tile that was to be manufactured from the Anderson's Creek ore. He said that the company had taken up 160 acres (the three Buxton leases) and was working it under the supervision of Mr Hartwell Condor. The company was putting up plant and appliances and hoped to work on an extensive scale in producing fibrous sheets and tiles from asbestos cement, which would be fire and water proof. He said the asbestos field had never been worked before, but that was of course incorrect. Finally, he noted that the company's output of asbestos during their prospecting phase over the previous 12 months had already been £137 worth.[46]

The new plant was built over winter 1917 on the hillside about 250m from the quarry. The builder was the company's Mr Gurman from the main works in Sydney, who had experience in asbestos milling in Canada. He laid down a tramline from the mine to the mill at the same time.[47]

The processing plant opened in October 1917. To begin with, six men were employed on a single 8-hour shift, processing 20 tons of ore each day, with power supplied by a 35hp portable engine. The total cost of the plant and buildings was under £2,000.

The 1917 Launceston Show saw a very fine exhibit by Wunderlich at their prominent stand. Next to their stand they erected a Swiss chalet for Nestle, built entirely of Durasbestos cement sheet and roofed with Durasbestos shingles. The firm also manufactured pressed-metal ceilings and had recently completed the New Majestic Picture Palace and the National Theatre in Launceston, and the new State High School.[48]



The excellent map in Reid's "Asbestos in the Beaconsfield District" of 1919 (MRT report) shows the location of the Wunderlich mill and tramway back to Leonardsburgh (now Tattersall's) Road, on the east side of the creek. It also shows the quarries opened up by Paul Charriol and Councillor W B Smith in the northwest of the field.

Hartwell Conder described the operations in an article in the *Australian Industrial and Mining Standard*. *"The Durasbestos mill buildings are a startling white and the trees and ground around are white as well. The workers are protected by fans and respirators but the dust covers everything. The shorter fibres had no value until the introduction of asbestos cement. The quarry started high up the hillside to be well above the water but the quality here turned out to be poorer than on the flats. Two benches have been pushed in and about 4000 tons of material removed. Much of this was waste, but is now being used to build roads. One light horse takes 1¾ tons in two trucks up the slight grade and the trucks run back by gravity. A draught horse takes two tons. The mill is made of Durasbestos sheet from Sydney in 9ft by 4ft panels. The ore passes through a crusher and roller to become the size of kidney beans. It then goes to a disintegrator that fluffs up the asbestos to the appearance of cotton. Mr H Masters runs the mine and Mr G Gurman the mill."*[49]

In a paragraph that is ironic to us today, he described the asbestos as non-hazardous. "*The most troublesome feature is the dust, but fortunately it is not of a cutting nature, so that neither to the men nor the machinery does it carry the danger that quartz or other gritty dust is bound to.*"

The Governor Sir Francis Newdegate, Premier Lee and other dignitaries made an official visit to the Beaconsfield Show in March 1918, and a trip to the asbestos and paint operations at Anderson's Creek was a major part of their itinerary.

The press entourage that accompanied the official party provided another detailed description of the operations at that time. Mr Masters the mine manager, his daughter, and Mr H Gurman the mill operator received the visitors. "*From the top of the hill overlooking the mine a striking view is to be had, and the picture, with the valley gaily decorated with bunting, was most picturesque...A most enjoyable morning tea was dispensed by Miss Masters in a specially erected marquee, so arranged and decorated with flags and ferns as to represent a veritable fairy bower.*" Mr Masters explained that operations 18 months ago were confined to work by two men. Fifty were now employed on the property, quarrying and crushing the stone and separating the fibre, which was shipped to the company's works in New South Wales for final treatment and manufacture.

The Premier, Mr Lee, said it was particularly gratifying to him because of the fact that both the new paint works they'd just visited and the new asbestos works were in the district he represented in Parliament. He said that he felt "*impelled to take his hat off to those pioneers who were opening up the country and exploiting its untold possibilities*."[50]

All were impressed with the extent of the workings, and it was said to be the first plant established in Australia to concentrate asbestos fibre from its ore. In the past, asbestos had been imported from Canada. The ore was being crushed just enough to produce a fluffy product, which could then be separated from the sand and graded. The longer fibre was of good tensile strength and went to weaving mills, where it was made into yarns and cloth. The shorter fibre, which was of little value a few years previously, was now mixed with cement, and under pressure made into flat sheets for roofing and panelling.

It was noted that while the serpentine belt was three miles long and half a mile wide, the asbestos did not occur uniformly through it. It was found mainly at the northern end, on the steep slopes of a hill and on the river flats of Anderson's Creek. The fibre was seldom long. One inch fibre was exceptional, and one eighth inch satisfactory for their uses. In opening up the property, workings were started high up on the hillside on some exposures there, and also near the river flats, where the ground was only about 30ft above the water level. They'd hoped that the higher quarries would develop best, since the conditions of working and delivery of ore would be easier there, but were disappointed. In contrast,

the lower quarry proved better than anticipated. Quarrying had gone on with two benches. The mill was placed on the hillside, central to the known occurrences. A horse tram, about one-third of a mile long, with a grade of 1:20, carried the ore to it from the lower quarry. The tracks ran back by gravity, and the horse came back alone by a short cut of steeper grade.

At the mill the ore passed through a primary crusher, and then through rollers until it was reduced to about the size of kidney beans. It was then: "*fed to a disintegrator, with revolving dish and beaters. This machine breaks up the brittle portion of the rock to fine sand but fluffs up the asbestos till it has the appearance of crude cotton. The product is delivered to a shaking screen, through which the sands pass, while the fluff passes down to the lower end. A narrow spout connected to a suction fan there extends right across the screen, with mouth close down to it. The fluff is at once caught up by the suction, and is delivered to a settling chamber. There are two chambers, and as one is filling, the ore is being bagged up for shipment in the other.*"[51]

Around 2,000 bags of fibre had already been shipped to the factory in Sydney, but it was proving expensive to transport via Launceston and the company hoped that a loading facility would be installed at Beauty Point. So far the venture had proven profitable, and they were hoping this would continue and they would better understand the deposit as they mined further.

Wunderlich had a large Durasbestos display at the 1918 Beaconsfield Show generating considerable interest. It illustrated the various processes and development, from the crude ore to the finished article, and was visited by the Governor. It was noted that the development of the deposit would not have occurred but for a very positive report done by Beaconsfield's William Smith in 1910. Smith still owned a lease on the west side of Nichol's Bridge (6150M of 80 acres), formerly owned by W C Inglis, which abutted the east side of Charriol's lease. He'd been prospecting on the serpentine and on an asbestos occurrence that was apparently within it.[52]

With the prestige of the vice-regal visit fresh in everyone's mind, Messrs Conder and Masters approached Council to upgrade the road near their workings. Council had spent £60 on the road already, but it still couldn't be used in winter. The company proposed building a tram from the mine to Leonardsburgh (now Tattersall's) Road and as this road was the main outlet for the paint works as well as their asbestos, they felt that assistance to get it in order was warranted. Council decided to appeal to the government for a grant.[53]

William Boyes Smith as a Beaconsfield Councillor in 1914. Image courtesy West Tamar Council.

The Annual Reports of the Mines Department show that Wunderlich produced 271 tons of asbestos worth £1 per ton in 1917, then a substantial 2,854 tons for a return of £5,008 in 1918, employing 48 men that year and clearly producing at up to 10 tons per day. The plant was still operational in 1919, as the Mines Department records 51 tons produced at an extraordinary value of £1,275. However the demand in Australia that produced this high price was driven by the loss of the cheaper Canadian supply during the war, and in 1919 the Canadian imports resumed.

In February 1919 the Commonwealth Auditor General and his wife paid a visit to the works, and were met and shown around by Mr Masters. All seemed to be going well. Shortly after, however, Mr Conder came down again.

As soon as he arrived on site, Mr Conder summarily dismissed ten men who were on prospecting work. Then, in a major shock to the district, he ordered that the mine and plant be closed at the end of March. The resumption of Canadian imports, combined with a decline in the quality of their ore (primarily less fibre per ton of rock), had made the operation unviable. The plant was dismantled and shipped to New South Wales.[54]

A later Government Geologist, Mr Taylor, said in 1955 that: "*It has been found impossible to form any accurate estimate of the amount of fibre available or of the average effective grade, but the production figures of Wunderlich Limited who worked the main pit for 18 months may be taken as a guide. From 48,854 tons of rock quarried, 4,414 tons were selected for milling from which 441 tons of fibre valued at approximately £10,000 (in 1918) were extracted. In other words, the effective grade of the rock in the pit was 1 per cent which was concentrated by hand-selection to effective grade 10 per cent for milling.*"[55]

Wunderlich works just before closing in March 1919. Second from the right is either Mr Masters or Mr Gurman. From the Weekly Courier 4/9/1919 p22 and courtesy TAHO.

Only a few weeks prior to the shutdown, Councillor William Smith had commenced extraction of chrysotile from an outcrop in the south-east corner of his lease. He had excavated two small open cuts, and from the upper cut two men took out a 6¼ ton bulk sample over an eight day period, which was of excellent material. Fibres were up to ¾ inch, and the Government Geologist Mr Reid thought that the prospect could be developed for very little cost. However this does not appear to have occurred. It was unfortunate that Mr Smith hadn't begun work earlier, as his discovery seems to have come only just too late to save the Wunderlich mine.

Jackson's Prospect

Government Geologist A McIntosh Reid in his 1919 report recorded that 300m north-east of the summit of Mt Vulcan, on the west bank of Anderson's Creek, "*a few shots have been put into an outcrop showing very good fibre contained in a dark green serpentine*." He called this Jackson's Prospect, and said that the chrysotile also showed up in the bed of the creek immediately to the north-east of the holes.

Who Mr Jackson was he didn't say, though it was likely a Beaconsfield resident named Tom Jackson, who worked at the gold mine until it closed in 1914. He bought 48 acres at Leonardsburgh at a Sale of Crown Land in 1905, and may well have been prospecting in the area after he lost his job at the mine. There was never any further information about his prospect.

In 1922 a proposal was raised by locals for the government to set up a plant at Anderson's Creek to mill material produced by local miners. In the proposal it was envisaged that two grades of asbestos would be produced.

The miners estimated that an output of approximately 15 tons of selected ore could be maintained daily by a work party, and that the average grade of the material mined would contain 2% of recoverable asbestos using a plant capable of separating out one grade. How they could achieve this was not explained, though they may have been looking at the Smith and Jackson prospects to supplement the Wunderlich resource.

Reports were commissioned by the government from the Government Geologist Dr Loftus Hills and Government Assayer W Reid, but did not favour the idea. They noted the Wunderlich Ltd experience, which produced one grade only of asbestos and discarded material of very short fibre. They also noted that Wunderlich would have commenced work on the most promising outcrops and removed 48,000 tons of rock for under 1% usable material, and said that by working the known surface outcrops and operating the faces which had already been opened up by Wunderlich Ltd, the desired output could probably be maintained only for a few months. The mill proposed would comprise a crushing and a drying section, and a crushing, screening and suction unit, and cost some £5,900.[56]

The government, probably wisely, passed on the opportunity. Without public money the proposal went no further.

Tasmanian Green Marble Company NL

With the withdrawal of Wunderlich Ltd in 1919, the way lay open for yet another company to take up the leases. Again, as with Tasmanian Greenstone before the war, it was for serpentine production rather than attempting to make money from the scattered veins of chrysotile within it.

Like the apparently fraudulent Tasmanian Greenstone Co from 1913, the new company was based in Melbourne. In what cannot be a coincidence, the manager of the new company was the son of the manager of the previous one.

The new company called itself Tasmanian Green Marble Co NL, and in August 1923 the Melbourne *Argus* carried a notice of its registration. The notice was signed by William Davies, son of Joseph Davies the former manager of both Tasmanian Green Marble and the Beaconsfield gold mine. William had himself worked at the gold mine, having been secretary of the operation and assistant to his father.

Another son of Joseph, Fred Davies, was one of the five promoters, along with Joseph's cousin, Horace Walduck. Given that Joseph Davies was undeniably an honest man, it may be that his sons and cousin felt a need to prove that serpentine mining at Anderson's Creek was possible, and that Joseph, who had recently died, had not been duped by the rogues who floated the earlier company.

The value of the new company's property including leases was stated as £16,750, with 100,000 shares of five shillings each authorised, of which 67,000 were subscribed.[57] The number subscribed corresponds with the value of the property, so clearly no shares had been sold to the public so far. The company would have access to the whole field, rather than just the southern part, and any infrastructure that was on it.

Joseph Davies, former manager of the Tasmania mine at Beaconsfield. From the Weekly Courier 1922.

While Wunderlich had taken away the plant at Anderson's Creek, their buildings remained, and one of these was taken over for the production of terrazzo ornaments. Shipments of rock to Melbourne were also being arranged, where another terrazzo works would be built. By the New Year machinery had started to arrive at Beaconsfield for the factory, and it was said that "*what has been a forsaken spot in the town will soon become busy with the establishment of a new industry*."[58]

With one of the large shareholders being an Adelaide identity (Harry Horsfall of Unley Park), the press there maintained an interest in the project. The *Advertiser* reported on the first shareholders' meeting of the company in August 1924. Preliminary construction work had commenced in Tasmania in January and a depot established in South Melbourne. A tile manufacturing plant had been purchased in South Australia, and the first shipment of tiles was ready for sale. Negotiations were proceeding for a London agent. The first year had seen a loss of £571. The company had assets including plant and machinery of £1,220, money on deposit £2,044, manufactured articles £30, sundry debtors £28 and had £174 in the bank.

A total of 80,000 shares had now been issued, showing that 16,000 had been taken up by investors. Provided calls were met, this gave the company access to a substantial capital of £4,000.[59]

The *Mercury* reported that the Tasmanian Green Marble Company held 400 acres on Anderson's Creek which included ground formerly owned by Wunderlich. These leases appear to have been five 80-acre mineral leases 8964M, 8965M, 8966M, 8968M and 9078M, taken up by William Davies prior to the formation of the company the previous year. Davies returned to Beaconsfield to manage the operation and built an experimental plant in a building of 40' by 25' for crushing serpentine and also making tiles and ornaments.

A 7hp engine drove the crusher and there was a lathe for turning the mouldings. The serpentine was crushed and mixed with cement and pigments, and then moulded to produce the ornaments and tiles which were then dried and polished to a high sheen. The tiles were said to be becoming very popular on the mainland. By either crushing the stone or producing only tiles, the limitations of the rock pointed out by the Government Geologist had been overcome.

The best quality rock was shipped to the mainland for working, but it was hoped they would soon do all the work at the mine. Recently 100 tons of serpentine had been sent to the mainland.

In late 1924 the Advertiser recorded the first shipments of terrazzo ornaments arriving in Melbourne. One of the ornaments was a model of the Eddystone lighthouse five feet high, in red, green and black versions.[60]

It was not long, however, before the Tasmanian Green Marble Co NL, like all the others before it, was in trouble.

Future operations were discussed at a special meeting in Melbourne in mid-February 1926. Chairman Fred Davies presided and reviewed the position of the company, noting that the company could not continue and needed to be refinanced. This was not possible under the then Corporations Law and the best course was to form a new company. The directors were authorised to grant an option for 12 months to sell the plant, assets, and 60 acres of serpentine in return for an issue of 40,000 shares, fully paid to £1, to a company to be known as the Australian Terrazzo Manufacturing Co – to be formed with a capital of £100,000 in shares of £1 each. The board was further authorised to raise a mortgage of £500, to be taken over by the new company. They intended that the new company would extend the existing works, and open London offices.[61]

However the new company was not formed and the Tasmanian Green Marble Co appears to have been liquidated. Their idea for terrazzo and mouldings had merit, as it got around the problem of faulting in the serpentine beds, and why it didn't work is unknown.

Tasmanian Asbestos Mining Company NL

As soon as the leases became available again, they were taken up by a new speculator. This time it was a Mr Robert Blyth.

In 1929 the State Mining Engineer, J B Scott, visited the area to select sites for diamond drilling of the iron ore deposits and made a brief examination of Blyth's lease. He reported that the workings were full of water and he was not impressed with the asbestos content of the remaining stone. He thought that drilling to find better stone was necessary, but unwise because its probability of success was low. "*The area at present is held by R. T. Blyth under an extended prospecting claim of 321 acres dated to 30th April, 1929. It is understood that Mr Blyth is negotiating with firms interested in asbestos production with the view of having the areas he holds thoroughly prospected.*"[62]

It seems that people read what they want to read in reports, and Mr Scott's report contained sufficient possibility for Blyth to convince William Davies and Horace Walduck, two of the men behind the failed Tasmanian Green Marble Co, to have another go – this time with a view to asbestos production.

In January 1932 the *Examiner* recorded the formation of the Tasmanian Asbestos Mining Co NL, to be registered at 48a Queen Street, Melbourne, the same office as the former green marble company. The value of the company's property, including leased ground, was now £25,000. This must have looked odd to those who remembered that only nine years earlier the property had been stated by the same men as being worth only £16,750 – and that company failed. The number of shares authorised was 60,000 of £1 each, and the number subscribed for was 50,000. Mr Frederick Davies (William's brother) of Beaconsfield was appointed mine manager.[63]

As they always seem to do, the newspapers trumpeted about the emergence of a new industry. The *Advocate* reported in February 1932 that the company had commenced operations and hoped to shortly erect a modern plant at the mine. Completely ignoring Wunderlich and others, the paper said that very little asbestos had been produced in Australia, and hitherto all the requirements of the Commonwealth had been imported from Canada at a cost of £116,000 annually. They said, more reasonably, that the latest tariff regulations made it possible to manufacture asbestos in Australia at a profit, and manufacturing plants were being erected in New South Wales and Western Australia.

They did not, however, consider the poor quality of the Anderson's Creek ore, even though it had been reported upon by successive Tasmanian Government Geologists. They simply passed on that the proposal was to send the crude asbestos from Tasmania to the mainland for manufacture, and said the Beaconsfield asbestos had been analysed and reported on very favourably by leading experts and ex-government officials. They said it had been proven equal in quality to that imported from Canada. This was absolute rubbish.[64]

The *Examiner* had a better memory than the *Advocate*, recalling that asbestos had created considerable interest earlier and several mining attempts had been made from time to time. However they said that these ventures had been "*in the days when only pure and long-fibre asbestos would find a sale and that the manufacture of "asbestic" does not date back such a long time. Considering the many and important uses for which even within only the last few years asbestos has been found to be adopted, there can be little doubt*

as to the importance of the enterprise." Their memory clearly did not go back 13 years, to the failure of Wunderlich's asbestic operation on the same site, or to the Australasian Asbestos Company's attempts to manufacture asbestic at the site at the turn of the century. "*The uses of asbestos are numerous and are increasing yearly. It is used for steam packing, boiler covering, theatre curtains, knitting yarn, fire escape ropes, filtering cloth in chlorination works, brattice cloth in coal mines, paint, roofing, plaster paper, millboard, etc.*"[65]

The directors of the new company came down from Melbourne to visit the works in July 1932, including the Chairman William Davies. They told the local press that under the manager Frederick Davies, the developmental work done over the last six months had proven "most satisfactory". "*Up to the present*," William Davies said to a representative of the *Mercury*, "*the operations of the company have been confined to the development of asbestos and serpentine rocks.....The prospects of the field are so encouraging, however, that the directors of the company have decided immediately to erect the first unit of a treatment plant at Beaconsfield.*" He said that the local asbestos compared favourably with the Canadian, and that recently a manufacturing plant had been erected in West Australia. Mr Davies said experts had declared Anderson's Creek serpentine to be as valuable as any Italian stone, and the value was enhanced by its variety of beautiful colours, and they proposed to export their products to London.[66]

The *Examiner* reported on the visit by the board as well, and recalled that around 1929 an officer on one of the fruit boats loading at Beauty Point took samples of the serpentine with him back to England, with the result that Mr J Harris, a mining engineer, was sent out specially to make an inspection. Accompanied by Mr A Brewer, a Launceston surveyor, he examined the deposits and was impressed with the quality, though he believed that the asbestos fibres were too short to be useful. However, said the *Examiner*, with the machinery now available this was no deterrent, but was instead an asset. How low quality could possibly be an asset was not explained.[67]

The directors revealed that through the American Consul in Melbourne, they'd received enquiries about their ability to supply asbestos to the United States, and said they were now, as a result of their visit, satisfied as to the quality and their ability to fulfil export orders. They were hopeful of creating a substantial industry providing considerable employment.

The *Examiner* then repeated the fiction that previous attempts at making the Anderson's Creek deposits payable had been in the days when only pure and long fibres could be used, and that asbestic was a new development. A look at their own files would have revealed this wasn't true. It would also have revealed that their statements about many fibres being over two inches long were optimistic. They noted that the consumption of asbestos was increasing, and imports of asbestos products now totalled some £135,000 a year, of which £70,000 was for brake linings, and £52,000 for packings and insulations.[68]

The following month the company formally registered in Tasmania, with Frank Tyson of Launceston as their local agent. Shortly afterwards, the construction of a crushing and screening plant for dressing chrysotile fibres according to fibre length was commenced.[69]

By November 1932, after some delays the construction of a petrol-driven treatment plant was well underway. Stripping of the deposit overburden was largely completed and serpentine was being quarried, carted and stockpiled at the mill site ready for crushing. Good stone was being separated, and it was expected that exports from Beauty Point would begin soon.[70]

In December 1932 all was going swimmingly, with the plant operating two shifts, crushing stone and testing extraction methods. Both asbestos and serpentine were being shipped out to the mainland and

the board was considering adding a second mill at the quarry.[71]

Horace and Katie Matilda Walduck in Beaconsfield c1908. Horace was a director of Tasmanian Green Marble and Tasmanian Asbestos Mining. Photo courtesy Jim Walduck.

It was soon reported that sales were going very well and 50 parcels of serpentine for terrazzo had been sent to London. The company added 80 acres to their leases, doubling the quantity of asbestos serpentine available to them. They were completing arrangements in London to base the company there.[72]

The following year (1934) a new Chairman, Theophilus Clarke, reported that orders had now been received in London and the company would immediately install another treatment plant at Anderson's Creek. Several consignments had been shipped to Sydney to a good reception there and at the annual general meeting in Melbourne shareholders were told that a Mr A F Kent had investigated the British market and found that terrazzo flooring had become very popular there and in Europe. Mr Kent had taken sample orders from both of the two biggest importers there, and recommended that the company prepare for large future orders. He said that terrazzo was being used not only for floors, but for table tops, shelves, sinks, pillars, columns, and steps.[73]

In May 1934 it was reported by the manager that 20 tons of terrazzo stone had been shipped, but not stated where. The directors were again considering additional plant installation. A few months later an order was received from Melbourne for 50 tons of terrazzo and the directors were negotiating to place 10,000 reserve shares to fund the additional crushing plant.[74]

However after all this optimism, no further reports were published concerning the company from this date. No mention of terrazzo. No mention of asbestos. We can only assume that the reserve share placement failed, which is a little odd, as this was the year that asbestos, serpentine and their products were granted sales tax exemption. What happened to the company is a mystery.[75]

Tom Adkins (1911-1984) in 1932. He was an accomplished prize fighter, who could wrestle and box, and became Warden of Beaconsfield. Image courtesy of Barry Adkins.

Tasmanian Tyre Service Syndicate
West Tamar Asbestos Syndicate

Once again, as soon as one company collapsed another appeared to take its place.

This time it was a syndicate led by Thomas Sinclair Adkins, an enterprising 26 year-old young man who owned the Tasmanian Tyre Service.

Tom Adkins began his working life in the old coal mining town of Korumburra in rural Victoria. His first job was in the local Post Office, and in a manner akin to how the operators used to listen in on phone conversations, Tom used to read the overseas magazines, journals and newspapers that came through the mail. Adkins family tradition says that this is where he got the idea to go into the tyre business.

Tom started up a garage and tyre repair service in Korumburra, perhaps with his father, but in a small town in a depression it didn't do well. At the beginning of 1933 he cashed up and moved to Launceston, where he opened the Tasmanian Tyre Service at 66 Charles St with his friend A D (Gus) Gay. He appears to have been helped by selling the Korumburra business to his father, and had a small insurance payout from a burglary at the garage the previous November. He and Gus Gay each put in £150 to get started in Launceston.[75]

At the Tasmanian Tyre Service he was introduced to the asbestos mines. Asbestos was a vital component of vehicle brakes, so it is perhaps not surprising that someone involved in tyres would become interested in the commodity.

One of the Dally family had done some work on a claim at Anderson's Creek, and sold it to the Tasmanian Tyre Service Syndicate in mid-1937.

The lease was about 50 acres and Mr B Dally had taken the face in the old workings down to a depth of about 60ft, "*revealing in the serpentine numerous veins or strings of the fibre, running at regular intervals. The bands vary from an inch in width to about 18in., and having a bright, silvery lustre, look very attractive. Some of the fibres ran to 14in. in length.*"

Knowing the history of the site, we can suspect that these apparent 14 inch fibres were in reality an intertwined string of short fibres, and this would be easily seen on magnification. However the Tasmanian Tyre Service syndicate land was on the west side of Anderson's Creek in an area they called the Chorval Hills, rather than the eastern side of the creek where most of the previous activity had occurred. It is possible that the fibre length there was better. The name "Chorval Hills" may have been their own invention, or perhaps a corruption of Charriol Hill being a reference to the earlier operator near their site.[77]

Some mining men from Launceston visited the site in late May 1937 and were told by the Syndicate's foreman, Mr D Hartherin, that it was intended, in order to increase the output, to drive a tunnel 12ft by 12ft into the serpentine face where the deposits were going strong underfoot. The asbestos was being extracted from the serpentine by pick, and then shipped as it was without treatment. The only thing in the mine, apart from the tram line and trucks, was an oil engine for pumping water from the bottom of the face. They had a shipment of a ton nearly all bagged to go to Sydney in a few days and hoped for much more.[78]

The trial shipment of 12 bags, weighing a ton, was sent to Sydney two weeks later, while another consignment was prepared. Storage sheds had been built and a drying kiln added. The quarry face was at 30 to 35ft, and the fibre seemed to be maintaining its quality. Mining was still by hand, with the compact fibre being extracted by pick from the crevices in the serpentine and loaded on trucks. A tramline ran from the face through a cutting to the packing shed, so there was very little handling. They still claimed to be raising fibres up to 14in in length, though most were shorter. It was said that should the trial shipments prove satisfactory a large industry could be opened up, as the deposits were very extensive. The biggest problem was again the road, the last part to the mine being exceptionally rough through the bush. "*A motor-lorry after difficulties managed to make the trip for the first consignment, but*

during the week-end a motor-car, returning from the deposits become bogged."[79]

By August 1937 work had to be suspended: "*due to the impossible state of the bush track to the mine. A trial shipment of 12 bags totalling a ton was sent to Minerals Ltd in Sydney to fulfil a private order. The Syndicate has been told that the fibre is of good colour and should be suitable for lagging hot water services and steam boilers etc. Tests for other uses are being conducted. Minerals Ltd is investigating markets.*"[80]

The Beauty Point jetty in the early days. Note the hoist at the end of the jetty.

In late summer work was able to resume, with the road and mine site dry, and the worst of the potholes repaired. An order had been received for five tons at £16 10s a ton. A shortage of chrysotile had developed and it was hoped that more orders would come.

Work was being carried out on a face that was now about 50ft across, the approach being through the cutting in which the tramline had been laid. The veins of asbestos fibre were running at regular intervals and from one to eighteen inches or more in width, with a bright silver lustre and said to be very beautiful. Mining was still being done by hand. It seemed that they really did have a better deposit than any previously found.[81]

The following month, April 1938, Tom Adkins's partner at the tyre service Gus Gay was in charge of operations, and an output of a ton a week of the crude fibre was being achieved in order to fulfil the five ton order to Sydney. Preparations were being made to mine on a much larger scale and two extra skips had already been put in. The face of the quarry was then about 60ft.[82]

Gus Gay stripped the soil off about a further 200 yards of the deposit during April and May, revealing asbestos veins at regular intervals. He estimated the exposed veins to carry about 100 tons of product. The fibre length was still said to be up to 14 inches, with some even longer.[83]

Unfortunately, just as things seemed to be going well, it was winter and the weather again intervened. With the lower workings underwater work had to be suspended, and could not be resumed until October. The road was again in a terrible state (as it is today) and the price for fibre had fallen.[84]

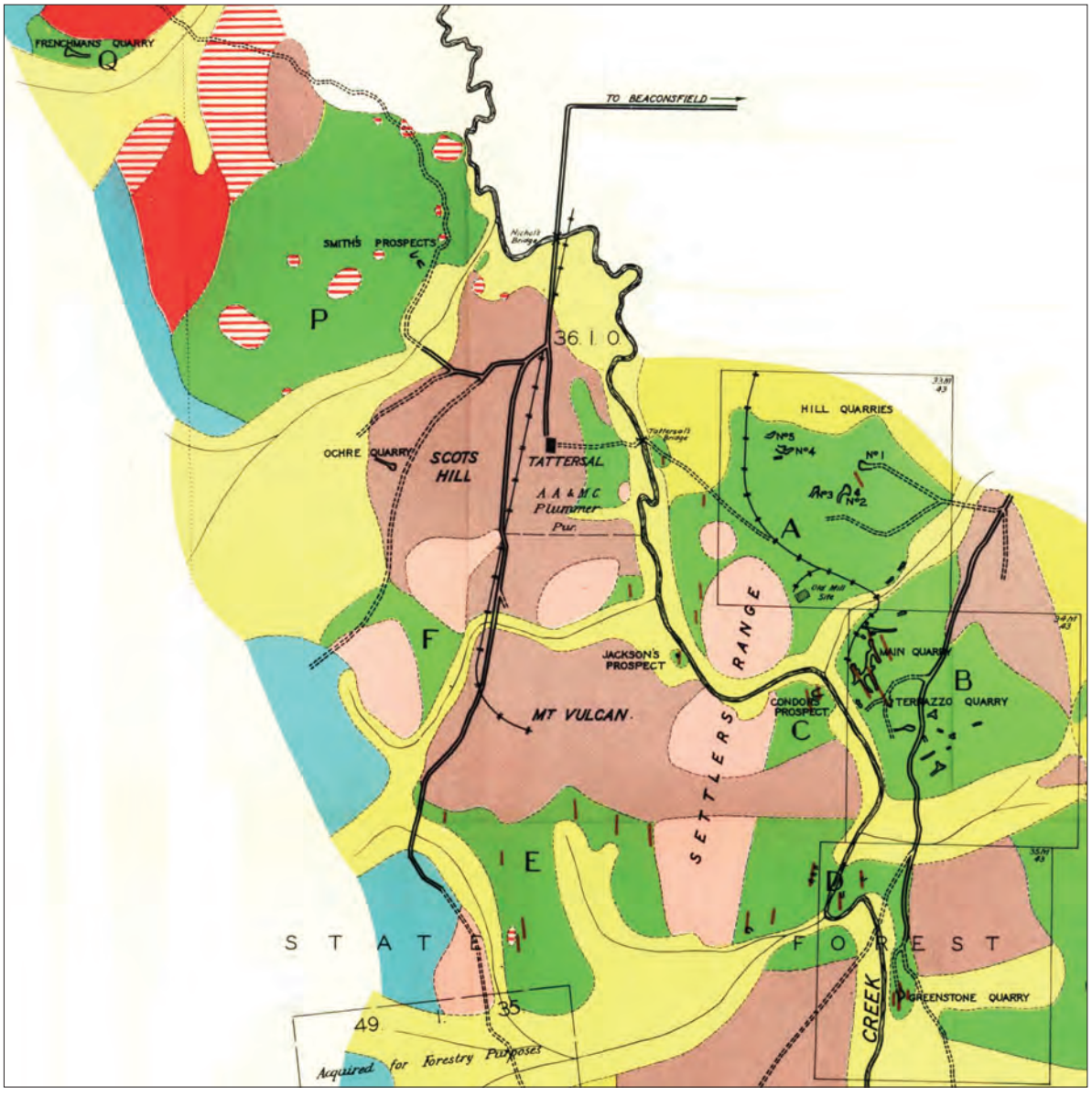
Mr Adkins said that numerous enquiries were coming from Sydney and Melbourne for the crude asbestos, and there was a ready market for manufacturing asbestos products and heating insulation. He said that the fibre "*had been tested in Melbourne for the purpose of manufacturing mill board, with favourable results, but so far nothing had been determined with regard to the production of this line.*" He said that if the price increased Beaconsfield would see an extensive operation begin.

Tasmanian Terrazzo Pty Ltd

At the same time as Mr Adkins's syndicate was waiting for the price to rise, an application was made by a Mr J C Heerey for a special prospecting licence, covering an area of 2,000 acres to investigate the asbestos deposits. This area did not include the "Chorval Hills" deposit belonging to the tyre syndicate. Mr Heerey told journalists in November 1938 that it was intended to make a thorough examination

of the deposits to "*ascertain the quality and probable quantity of the fibre available. If the result was satisfactory, treatment plants would be erected.*"[85]

A few months later Mr Heerey formed a private company, Tasmanian Terrazzo Pty Ltd, to exploit the "green marble" and completed the construction of a crushing and grading plant, said to be on the site of the old iron mines. The first shipment of 100 tons of marble chips for the manufacture of terrazzo was expected to leave Beauty Point for Melbourne within a few days. Joseph Clarke, who was said to be "connected with the company which worked the property for asbestos" (but which company was not stated), had been appointed general manager at the mine, and Mr R C Heerey of Melbourne, the sales manager.



Tasmanian Government Geologist B L Taylor's 1949 map of the Anderson Creek asbestos deposits. Courtesy MRT.

The mill would treat 12 tons in eight hours and it was proposed to extend the hydro-electric power line from Beaconsfield to power the crushing plant. Further machinery would be installed to cut the serpentine into slabs for interior decorative work.

Mr Heerey said he had six distinct shades of serpentine, and trial shipments were going to England, and later to East Asia. The low freight rates available from Beauty Point, and the high quality of the product, was expected to lead to early success. The process would involve crushing the serpentine into small chips, and mixing it with cement to form a surface which would take a high polish. Samples were said to have proven equal or better than the imported terrazzo.[86]

At Mr Adkins's tyre syndicate nearby, now being called the West Tamar Asbestos Syndicate, things were looking better despite the winter of 1939 setting in. Gus Gay had left the tyre partnership and opened his own store in Devonport, called Gay's Tyre Service, but the price of crude asbestos was rising, and Minerals Ltd in Sydney asked if the Syndicate could supply 10 tons. Unfortunately, with the quarry on their 50 acre lease flooded and the track to it impassable, Mr Adkins was unable to satisfy the order. He was hopeful though, that as the weather improved he would again be able access the workings.[87]

In the meantime the uses for asbestos were broadening and the needs of the defence industry becoming urgent. There were asbestos suits for pilots, for airport firemen and air raid wardens in addition to the usual domestic and commercial asbestos rugs, carpets, curtains, blankets, and fabrics for upholstery. It was used in boilers, steam pipes, cooking stoves and many other appliances, in insulation for electrical cable, theatre curtains and car brake linings. The short fibres were used in asbestos cement.

Just before the war broke out the Mines Minister, Major T H Davies (yet another son of Joseph Davies), visited Beaconsfield and Tasmanian Terrazzo was on his itinerary. J C Heerey, the Managing Director, had just returned from a visit to the mainland, "*where he completed arrangements with a Sydney firm with agencies in each state and New Zealand to distribute the green marble chips now being produced at the Leonardsburgh mill.*" Heerey accompanied the Minister on a tour of the works, where 12 men were employed mining and dressing the stone ready for export. A shipment of 50 tons was to go to Sydney the following week. It was expected that this would be followed by the first shipment of green marble chips direct to England early in September. The Minister was sufficiently impressed to approve road repairs to the mine at a cost of £75.[88]

The manufacturing plant to make terrazzo tiles from serpentine was completed that same month and several tons were ready to go to England by the next steamer from Beauty Point. The plant included a jaw crusher to take the large boulders, and a vibrator to separate the stone into sizes required for the manufacture of terrazzo. The chips were mixed with cement, and pigments added to the required shade. The product was polished by electric machines. Mr Heerey said that plans were being prepared for an industrial plant to cut the large stones or slabs needed for interior decorations.[89]

Unfortunately the outbreak of war in September 1939 scuttled the Tasmanian Terrazzo Company, and their name disappears from the records. There is no obvious record of their shipment to England, and later companies with similar names, such as the Tasmanian Terrazzo Flooring Co in Hobart in 1949 and the Australian Terrazzo and Concrete Co in Melbourne in 1956, appear to have no relationship to the Beaconsfield firm.

There is an oral history in Beaconsfield of Anderson's Creek terrazzo being used as the exterior veneer of a bank in Sydney, though this is not verifiable. It is also believed that serpentine slabs or terrazzo were used for shower bases, but this can't be verified either.

While the war was bad for terrazzo, it was good for asbestos.

In 1941 Tom Adkins said that while poor prices had led to the failure to restart mining on the West Tamar Asbestos Mining Syndicate's ground, there was now an uptrend in the market with increased demand. He said that a Melbourne company had undertaken to reopen the mine and to carry on operations for two months. If the mining proved satisfactory work would then be carried out on a much larger scale. He did not name the Melbourne company.[90]

A month later arrangements were still being "finalised" and no mining had taken place. It was revealed that the Melbourne company was Minerals (Vic) Pty Ltd, which was probably a subsidiary of Minerals Ltd, the former customer of Mr Adkins. The leases at Anderson's Creek were still held by Adkins's syndicate, and he and Minerals (Vic) Pty Ltd also extensively tested an asbestos deposit at Macquarie Harbour with "highly satisfactory" results. Some 100 tons in bulk samples were sent from there to Melbourne, and while the fibres were just as short as at Beaconsfield, the deposit was said to be inexhaustible. Other deposits in Tasmania were also being investigated.[91]

Nothing further was heard, however, from the West Tamar Asbestos Mining Syndicate, or from Minerals (Vic) Pty Ltd.

In the first half of 1943 Colonial Sugar Refineries Ltd (CSR) established an asbestos mine and processing plant at Zeehan that was quite successful for a time, but it only lasted as long as the war maintained the price and demand. It closed in 1946, forcing CSR to write off £19,000.[92]

In 1955 B L Taylor, reporting on the field for the government, said of all the previous operators: *"It is the present writer's opinion that the Beaconsfield deposits need never have been abandoned. Only slight modification of the working methods – modification which should not have been necessary had the work been properly planned – would have converted a small working loss to a working profit."*[93]

Newmont – Allstate Exploration NL

There was little further interest in Anderson's Creek asbestos until 1971-72, when Newmont and Allstate Exploration NL (the latter being the owner of the defunct Tasmania gold mine at Beaconsfield) undertook a comprehensive evaluation of the deposits. They drilled 13 diamond drill holes totalling 2000m together with several thousand metres of trenching. Holes were up to 250m deep and showed extensive and discrete zones of slip fibre and cross fibre chrysotile, with slip fibre predominating and fibre length mostly under ¼ inch.

Drill core samples were sent to the Quebec Department of Mines laboratories in Canada for milling and evaluation. Their response was not encouraging, and as all the history had suggested would happen, B L Taylor's 1955 report notwithstanding, the mapping, trenching and drilling failed to locate an orebody of sufficient size or grade to be economically viable. They drilled in and around most of the old workings, but found that the fibre content was as variable at depth as it was on the surface, and the project was abandoned.

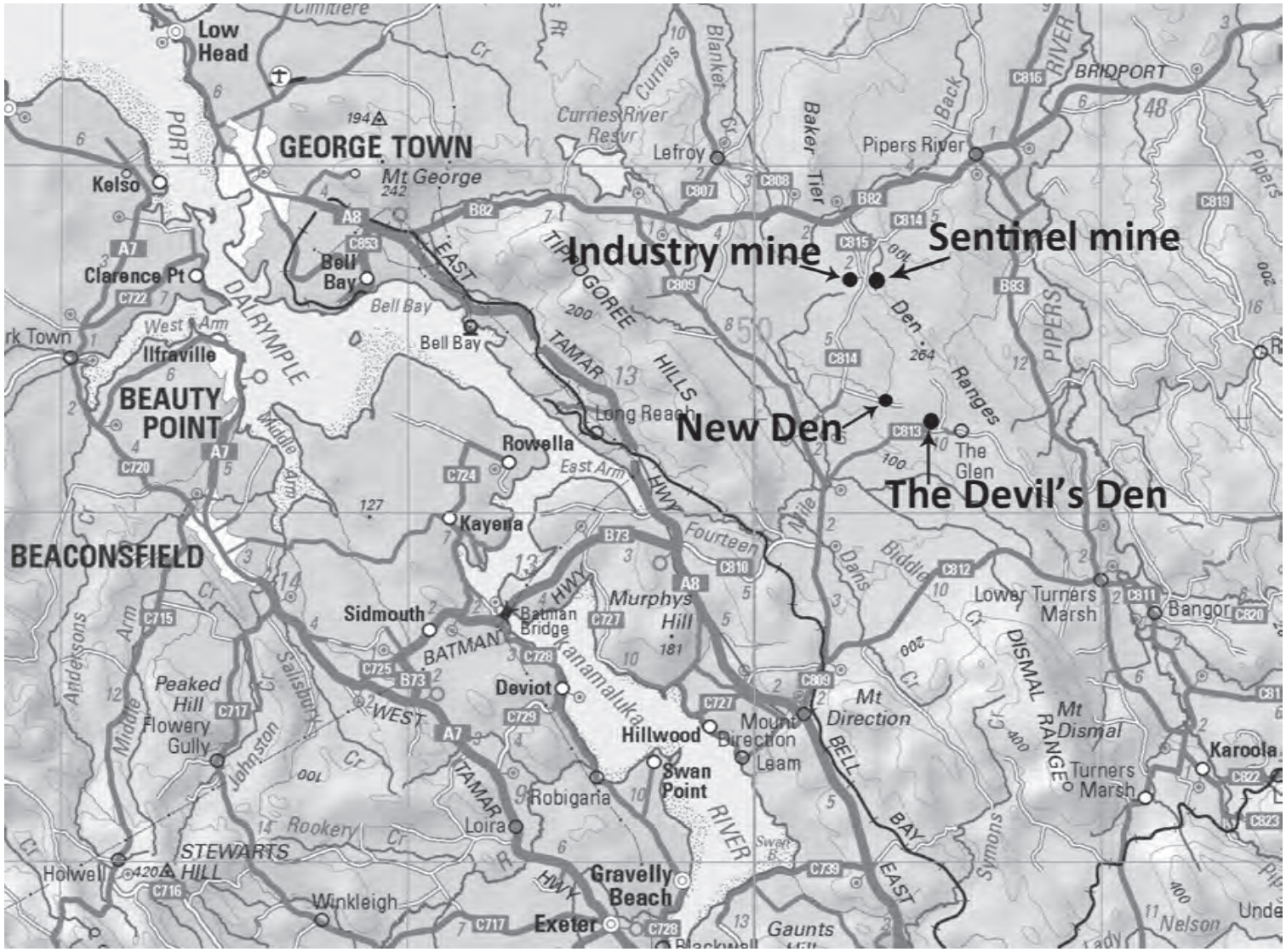
Interestingly, as their lease was east of Tattersall's Road they did not test the old Smith or Charriol workings on the west side of the road. Nor did they drill on Jackson's prospect, which was within their lease. It therefore seems that they missed all the areas where the better fibre was found.

Notes & References

1. In 2011 the owner of the Avebury nickel mine in NW Tasmania told the Advocate that: "*Asbestos, arsenic and silica (are) very typical of nickel-bearing ore bodies. Most nickel mines, particularly those in WA, contain asbestos.*" Advocate 13/10/2011
2. See, for example, *Analysis of tissue mineral fiber content;* Roggli VL, Pratt PC, Brody AR in *Pathology of Asbestos-Associated Diseases. Boston, MA: Little Brown; 1992 p299-345*.
3. *Report on the Geological Structure of the Beaconsfield Gold Field*. Montgomery 1891
4. *Report on the asbestos deposits, Anderson's Creek, near Beaconsfield*. Twelvetrees 1899 p1
5. Examiner 28/9/1882
6. Mercury 31/10/1882 & 7/11/1882
7. Examiner 14/11/1882 p3
8. Examiner 15/11/1882 p2
9. Examiner 30/11/1882 p3
10. Examiner 30/11/1882 p3 & 15/12/1881 p2
11. Examiner 20/12/1882 p2 & 1/2/1883 p2
12. Examiner 14/3/1883 p2 & 22/3/1883 p3
13. Mercury 16/8/1884 p2
14. Daily Telegraph 26/8/1889 p3
15. Daily Telegraph 26/5/1897 p3
16. Examiner 4/7/1899
17. Examiner 4/9/1899 p8
18. Mercury 15/11/1899
19. Argus 6/7/1883
20. Daily Telegraph 28/11/1899 p4 & 5/2/1900 p4
21. Examiner 20/12/1899 p2 & 23/2/1900 p2
22. Daily Telegraph 27/3/1900 p2
23. Examiner 24/3/1900 p6
24. Argus 4/5/1900 p3
25. Daily Telegraph 24/4/1900 p4
26. Daily Telegraph 25/7/1900 p6
27. Daily Telegraph 4/9/1900 p4, Mercury 26/11/1900
28. Argus 1/11/1901 p8, Zeehan and Dundas Herald 8/11/1901 p2
29. Examiner 30/7/1904
30. Examiner 30/7/1904
31. Daily Telegraph 8/10/1904 p8
32. Daily Telegraph 31/3/1906 p12. William Boyes Smith (b.1866) came to Beaconsfield from England and Russia in 1904 to become Head Draughtsman at the Tasmania gold mine. He ran the Ophir Hotel in Beaconsfield, then bought the Club Hotel in 1914 when the mine closed. As well as being a Councillor, he was a warden of the Launceston Marine Board and enthusiastic about mining. He died suddenly at the Club in 1939.
33. Examiner 8/7/1914
34. Examiner 6/1/1914 p4
35. South Australia Advertiser 25/3/1915
36. *Asbestos at Anderson's Creek*. Twelvetrees MRT 1917
37. Daily Telegraph 8/9/1916 p2
38. Daily Telegraph 26/1/1916 p6
39. Daily Telegraph 7/6/1916 p2
40. Daily Telegraph 17/6/1916 p4 & 20/7/1916 p2
41. *Asbestos in the Beaconsfield District*. A McIntosh Reid 1919
42. In the decade after the Second World War 28% of all Australian homes were built of asbestos-cement sheet. In NSW it was 51%!
43. Examiner 22/4/1916
44. *Asbestos at Anderson's Creek*. Twelvetrees MRT 1917
45. Examiner 16/6/1917 p3
46. Daily Telegraph 29/11/1917 p7
47. Daily Telegraph 1/8/1917 p4
48. Daily Telegraph 11/10/1917 p9
49. Daily Telegraph 11/12/1917 p2
50. Examiner 23/3/1918 p3
51. Examiner 23/3/1918 p3
52. Examiner 23/3/1918 p3
53. Examiner 30/3/1918 p5
54. Examiner 17/2/1919 p6, Daily Telegraph 1/3/1919 p6, *Asbestos in the Beaconsfield District* A M Reid 1919
55. *Asbestos in Tasmania*. B L Taylor 1955
56. Examiner 21/6/1922
57. Argus 22/8/1923
58. Examiner 17/1/1924
59. Advertiser 30/8/1924
60. Mercury 22/7/1924. The 5ft high models of the Eddystone lighthouse should still exist somewhere, probably as lamp stands. Hopefully one will turn up one day.
61. Mercury 23/2/1926 p6
62. Examiner 15/3/1929
63. Examiner 19/1/1932
64. Advocate 19/2/1932
65. Examiner 20/2/1932 p4
66. Mercury 23/7/1932
67. Examiner 23/7/1932
68. Examiner 23/7/1932
69. Examiner 2/8/1932 & 23/8/1932
70. Mercury 14/11/1932 p4, Examiner 17/11/1932
71. Examiner 19/12/1932 p4
72. Mercury 5/4/1933 p5
73. Advocate 25/1/1934 & 1/2/1934
74. Argus 16/5/1934, Examiner 2/10/1934
75. Advocate 25/7/1934 p5
76. Letter to his sister Evelyn. Provided to author by Barry Adkins.
77. Examiner 1/6/1937 p4
78. Examiner 1/6/1937 p4
79. Mercury 22/6/1937 p4
80. Examiner 23/8/1937
81. Examiner 16/3/1938 p6
82. Mercury 15/4/1938 p2. The size of this excavation is surprising and is difficult to reconcile with the report that they were on the west side of Anderson's Creek.
83. Examiner 20/5/1938 p4
84. Mercury 3/10/1938 p4
85. Mercury 18/11/1938 p4
86. Mercury 15/4/1939 p4
87. Mercury 25/7/1939 p5
88. Examiner 5/8/1939 p6 & 19/8/1939 p6
89. Mercury 15/8/1939
90. Mercury 30/4/1941 p9
91. Examiner 11/6/1941 p4, Mercury 30/4/1941 p9
92. Mercury 17/2/1943 p7 & 21/6/1946 p14
93. *Asbestos in Tasmania*. B L Taylor 1955 p12

Tasmanian Asbestos Production
From the Mines Department 1922

	Tons	£
1899	200	363
1900	128	113
1901	47	45
1902-15	0	0
1916	15	30
1917	271	271
1918	2,854	5,008
1919	51	1,275
1920-22	0	0



The Devil's Den is today known as The Glen. No reference to Devil's Den or Den Ranges seems to exist prior to the 1863 gold discovery, and no reference to The Glen prior to a road tender advertised in 1887. It therefore seems that the name morphed over time from Devil's Den to Den to The Glen. Gold was first found in a little valley on the west side of Den Hill, and on the flats below. While some diggers remained on the spot for some time and later returned to it, many moved out west and north, the latter discovering the Lefroy goldfield. Nearly two kilometres to the west was the New Den at Den Creek, where gold was also found, and following the gold up Den Creek took the prospectors to the Perseverance Reef at the top of the hill. This reef and its associated veins were the basis for the Industry and Sentinel mines.

2

The Devil's Den

To miners coming from Western Australia, the forgotten gold fields of Tasmania are a remarkable thing.

It is almost inconceivable to a sandgroper that old sites of significant gold discoveries could be overlooked and never followed up with analysis and drilling in modern times.

Many major mines of recent times are redevelopments of old workings. This is true in Tasmania as well as Western Australia.

Take the Tasmania mine at Beaconsfield for example. This was one of the richest mines ever found in Australia, and a million ounces of gold were taken out from its discovery in 1879 to its closure in 1914.

In the 1990s it reopened. The company didn't go off looking in barren hills and valleys on spec. They went to where they already knew gold existed. And so, in the period 1998-2012, they took out another million ounces!

In Western Australia, every sign of early workings is followed up. Why spend a heap of money on greenfield exploration if there is an old shaft in front of you? Check out the old diggings first! Are there records of production from that shaft? Can you see any gold in your pan if you take a sample and wash it? If the shaft is flooded, can you find anomalous gold by analysing the water? Is the geology around it favourable to gold?

The old-timers didn't go to all the effort of digging unless they found something interesting. If they dug a hole it was because something was there. If you could bet on a horse half way through the race, when it was already leading, you would jump at the chance. So it is with minerals. If you explore where minerals have already been found by the old timers, you are already ahead in the game and your chance of finding a mine is very much increased.

Yet in Tasmania today there are still many areas of substantial old workings that have been forgotten, and never followed up in modern times.

The Den Range is one of those places, and it got its name from the Devil's Den gold rush.

It was only a little rush, but it was one of the first in Tasmania, and it led to other discoveries such as the big and successful Lefroy goldfield. Yet the Den Range, with the Devil's Den and New Den alluvial, and the Industry and Sentinel reefs, has never seen a single drill hole. The Den Range is prime gold country, but no-one can even tell you where the Devil's Den and Sentinel mine are now. They were completely forgotten. The Industry mine is only vaguely remembered because the name Industry Road still survives on the map.

The Beginning

The Devil's Den was one of the first gold discoveries, and it started in the early days with an ex-convict named John Barrett.

John was a good man, though you mightn't think it of a man with a life sentence for highway robbery.

His crime wasn't what it seemed though. The truth was, he was just a child of 14 years who was larking about with some other lads. They pushed a lady over and took her umbrella. Hardly a hanging offence, you'd think. But it was.

You see, their youthful skylarking took place on a public street, and a public street is by definition a highway. Pinching something from someone on a highway is by definition highway robbery, and highway robbery carried a mandatory death sentence.

The magistrate's hands were tied. He had to give a sentence of death. Fortunately though, he still had the power to take John's age into account, and this enabled him to commute the death sentence to transportation for life.

This image is believed to be "Honest John" Barrett c1857. Courtesy Denise Stephenson.

Transportation wasn't just an escape from the gallows, it was a great opportunity for those who took it, and the lad didn't falter. After a few years John earned a conditional pardon and could work for himself. He could even pretend he was a free and native born man, or at least allow people to assume he was, which he did within the bounds of the law.

After years working on farms and cutting timber, first as a convict and then on his ticket of leave, John became a timber merchant. His timing was perfect. This was just before the enormous boom in demand caused by the Victorian gold rush in 1851. With hard work, good business sense and a reputation for straight dealing, he rode the wave of demand for timber and was soon a man of property. The ex-convict became known as "Honest John" Barrett.

John was interested in gold too, naturally enough. Everyone was in those days, and he'd made his money out of the gold rush boom. He'd been out prospecting himself and was in

Bennell's party when they found some colour at Lefroy in the early 1860s, but most of the time he couldn't spare the time to be digging personally, so employed parties of men to go out exploring on his behalf.

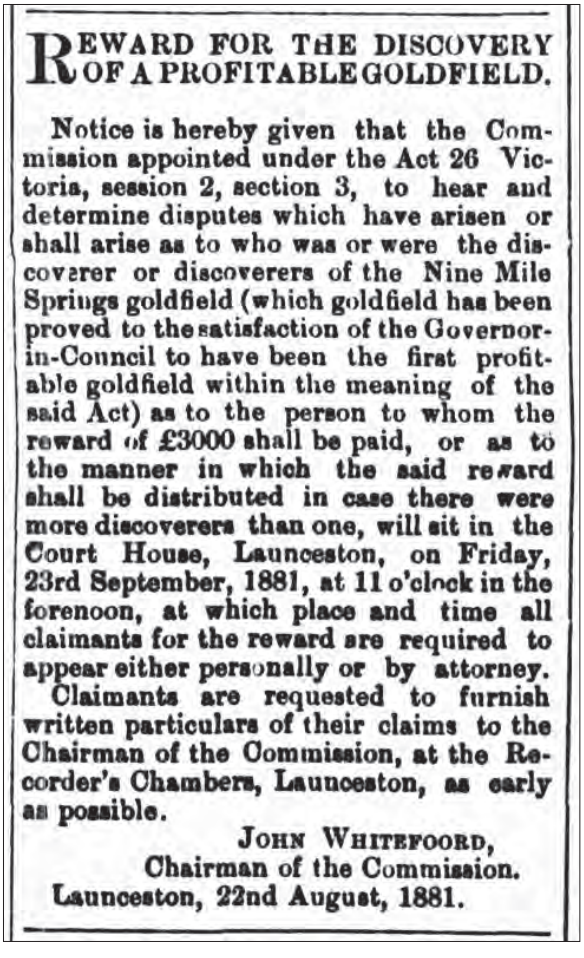
Mr Barrett had a large agricultural property called Redmire, on the Piper's River at Turner's Marsh, and so had a particular interest in that area. He'd been taking timber out of the Piper's River valley for years, and specks of gold had been found in the river and its tributaries such as the Third River many times. He directed his men to look first along Piper's River, because he could easily keep them supplied from his Redmire farm.

In early March 1863 his men had been out for a while, panning and scratching around the district. You could get colour in your dish over a wide area in and around the Piper's River and Lefroy, but they wanted more than just a colour. They reported an encouraging find 10km north of Mount Direction, west of Piper's River, at a place that we call The Glen today, but was originally known as the Devil's Den because of the number of devils and tigers that abounded there.

Mr Barrett went out to see, taking his Redmire farm overseer William Thrasher. Also in tow was a tenant from one of his Turner's Marsh properties named William Cox, who'd been to the Den before and knew the way. They looked at the spot the men had found, then at several points along two creeks, both tributaries of Fourteen Mile Creek that drained the whole Devil's Den area. After stripping off the top gravel they laid bare a deposit of white and red clay. At every spot they took a sample, on washing it roughly in a pan they found good gold. There had to be a source somewhere nearby, and it could be rich!

Now this happened to be the exact time that the Goldfields Reward Act was passed by parliament. It promised a reward of between £1000 and £5000 to anyone who found a goldfield that produced more than a 100oz a week for a year. On returning to town to get cradles and other equipment, and finding that the Act had been passed, Mr Barrett thought he should get his find noted in some official way just in case it turned into something big.

The Act hadn't been promulgated yet, so he couldn't make a formal claim, but he could certainly get some official acknowledgement of the find and his interest. He shot off a letter to Hobart, and in doing so became the first claimant to the reward. No-one could get in earlier as the Act didn't recognise discoveries made before it was passed. His find was a long way from being a payable goldfield, but if a



REWARD FOR THE DISCOVERY OF A PROFITABLE GOLDFIELD.

Notice is hereby given that the Commission appointed under the Act 26 Victoria, session 2, section 3, to hear and determine disputes which have arisen or shall arise as to who was or were the discoverer or discoverers of the Nine Mile Springs goldfield (which goldfield has been proved to the satisfaction of the Governor-in-Council to have been the first profitable goldfield within the meaning of the said Act) as to the person to whom the reward of £3000 shall be paid, or as to the manner in which the said reward shall be distributed in case there were more discoverers than one, will sit in the Court House, Launceston, on Friday, 23rd September, 1881, at 11 o'clock in the forenoon, at which place and time all claimants for the reward are required to appear either personally or by attorney.

Claimants are requested to furnish written particulars of their claims to the Chairman of the Commission, at the Recorder's Chambers, Launceston, as early as possible.

JOHN WHITEFOORD,
Chairman of the Commission.
Launceston, 22nd August, 1881.

Though approved by parliament in 1863, the reward was not paid until 1881, when Sam Richards got £3000 for discovering the Lefroy goldfield in 1869. Memories were playing tricks by then, and in consequence many people felt dudded by the decision. From the Examiner 7/9/1881.

stupendous cash reward was in the offing, it made sense to have a ticket in the sweep, just in case the find turned into something big.[1]

In registering the find like this, he unavoidably made it public, and there was much interest. He told the papers that after having a week to find the best spot for pegging a claim, he would happily show the location to anyone who cared to visit.

The party had already decided that the junction of two small creeks appeared to be the best spot. Mr Barrett's overseer Mr Thrasher, usually a very steady, cautious man, resigned his position, for which he had a salary of £55 a year, and commenced digging on his own account. He was convinced it was good. William Cox, who was an experienced prospector, didn't need to resign anything as he was Mr Barrett's tenant. He decided to stay there as well. He was sure that just by using a cradle, he could make £1 a day! This was a lot of money when an agricultural labourer made only ten shillings a week plus board. He sent for his son James to join him.

Early in the second week of April 1863, Mr Charles Adams, who owned the 400 acre Idlewild farm at Lower Piper's River, was coming into town and decided to stop on the way to look at the diggings.

He watched as Mr Barrett's men washed gold out of dirt from a pit they'd dug in the creek bed. They soon handed him a little parcel of gold to take to their boss in town. It was about a quarter ounce and very bright, and in sharp flakes that clearly hadn't travelled. When gold moves a long way from its source, it tends to show the effects by being smoothed, so the sharp flakes suggested a gold reef was nearby.[2]

The quarter-ounce parcel was washed (or panned) from just three and a half buckets of dirt they'd taken out of a six foot deep hole. Getting that much from just a few bucket loads was a bonanza return – equal to perhaps four ounces a ton! Most mines today are lucky to get 5 grams (a sixth of an ounce) a ton, so though the parcel was small, it excited much interest.

Ronald Campbell Gunn 1808-1881 was private secretary to Sir John Franklin, then became an MLC in 1855. Image courtesy TAHO.

At this time there were no mines in Tasmania, and we were feeling rather disadvantaged. Our men were going to Victoria to make their fortunes, and we very much needed a discovery here. Gold was coming out of quartz reefs at Fingal, but it was still a long way from the government's 100oz a week that was defined as a payable goldfield under the Goldfields Reward Act 1863.

John Barrett's missive about the discovery, and news of the parcel brought to town by Charles Adams, prompted the government to instruct Ronald Campbell Gunn, the respected explorer and botanist, to visit and report on the diggings. Mr Gunn was familiar with the area, as he was the one who sold Redmire farm at Turner's Marsh to Mr Barrett.[3]

Mr Gunn found 11 men working on the site, of whom six were in Mr Barrett's employ. Three others were from Launceston and two from Victoria. Mr Barrett's ex-supervisor, Mr Thrasher, had given up working on his own

account and was back on the Barrett team. They'd sunk several holes within a circle of about a kilometre diameter and found gold almost everywhere, but not yet in payable quantities. They were now digging near the bed of one of the small streams, and were sinking pits from 5 to 12ft, but the water coming in slowed them down. They believed, with good reason, that if they could reach a solid bottom they'd find payable gold. Gold is heavy, so you expect to find it concentrated in places where it cannot fall further. Mr Gunn saw several dishes washed while he was there, most with a dozen or two visible specks, but very small. He expected that rain would stop their work until spring.

He was right about the rain, and nothing was heard from the diggings for many months. It was a wet winter that year, and the area was flat and prone to flooding. At the beginning of 1864, the Goldfields Reward Act came into effect.

In July 1864 the government's Geological Surveyor Charles Gould (son of John Gould the bird lover) visited the site and found men working in a 75ft deep shaft on top of the adjacent hill. They'd obviously been there some time, and still hadn't reached the bottom. Several shafts and workings were in the gullies and paddocks, but nothing payable had yet been found. Then the winter overcame them again, and everyone left.[4]

Charles Gould, Geological Surveyor for Tasmania 1859-69. He was sacked after a long campaign against him by the Mercury, which didn't understand his role. Image courtesy of Dr Max Banks.

On his return to Launceston Mr Gould spoke at the Royal Society of Tasmania, saying that Devil's Den showed much promise. He felt though, that the prospectors had been injudicious in their selection of spots to dig, and so the field had not been properly explored.[5]

The Gold Prospecting Committee

Meanwhile, Tasmanian businessmen had become frustrated and angry at the government's perceived lack of action in finding them a goldfield. Expecting the government to find gold seems silly, but they were desperate to stem the exodus of people and capital to Victoria and weren't thinking rationally.

Many people, especially John Davies, the owner of the *Mercury*, thought that the office of Government Geologist should be abolished and Charles Gould sacked. They completely misunderstood Mr Gould's role and thought he should be out finding gold, rather than surveying geology, producing maps and reports, giving advice and developing policy. Gould was pressured for the whole term of his tenure to prospect, rather than study geological formations and advise others. Yet when he tried to meet the public demand to prospect he was not adequately funded, and had to blaze new trails through thick bush himself, looking after his own personal needs and managing the expedition. He had no time to do any geology, let alone prospecting.

By the end of 1863 he was exhausted and ready to resign. The public weren't sympathetic. When Gould couldn't deliver, they demanded that the government contract the famous gold-discoverer

Edward Hargraves to come to Tasmania as their saviour and find them a goldfield. Why he should do this for others rather than for himself, if he was capable of such a feat, seemed not to occur to them.

A letter signed by 126 Launceston businessmen was presented to the government, demanding that Hargraves be brought down and his extraordinary fee of £500 paid for a six month contract to search.

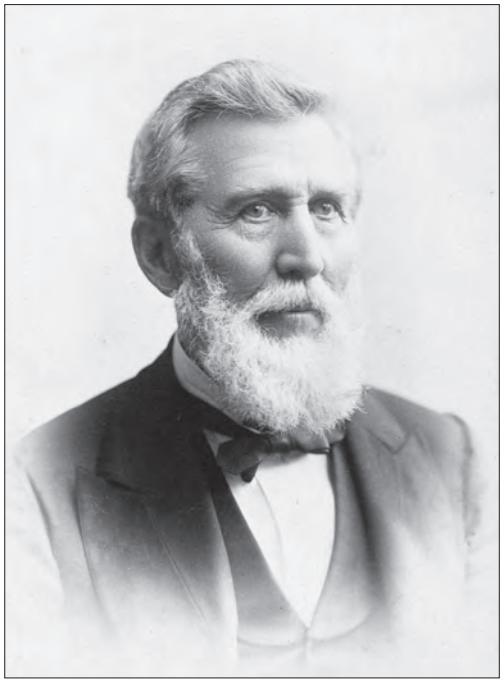
The Government quite reasonably responded that an Act had just been promulgated offering a reward up to £5,000 for the first payable gold field discovered, so why shouldn't Hargraves simply claim this when he succeeded? But the public was in no mood for logic.

Meetings in Launceston and Hobart followed, and with the support of some politicians (including Adye

Douglas, who was usually a paragon of rationality) £500 was raised by public subscription and a Gold Prospecting Committee formed to handle the money.

Another £1,000 for expedition expenses was extracted from the government by Darcy Murray MHA and the other MPs involved. Unsurprisingly, Hargraves seized the opportunity for some quick money and arrived in Launceston in November 1864, to be met at the wharf at 10pm by a cheering crowd and a band. Then they formed a parade to bear him to the Launceston Hotel for a midnight reception.

Hargraves had long ago declared himself the discoverer of gold in Australia, and made a profession out of milking the New South Wales and Victorian governments for rewards. He achieved this aim without ever having to actually mine, and was later paid a king's ransom of £10,000 and an annual pension for life of £250 by NSW. He conned another £2,381 from Victoria before the tap was turned off.



Adye Douglas MHA (1815-1906). He was twice Premier and twice Mayor of Launceston. From TAHO, date unknown.

Yet the truth was that he hadn't discovered gold at all, but merely taught the true discoverers at Bathurst, John Lister and the brothers Will, Jim and Henry Tom, how to pan for gold and work a cradle. When they found gold he publicised their discovery as his own. He was a con man and a fraud.

Not surprisingly he failed to find gold in Tasmania, just as he'd failed in Western Australia and South Australia prior to coming to Launceston. When his lack of success led to a wane in public enthusiasm, people finally noticed that he seemed to look for gold without ever dismounting from his horse! The money raised was lost without any result whatsoever. The committee, including the MPs, then didn't account for the expenditure of the £1,000 of public money, and refused to return the unspent portion!

Hargraves was a charlatan, and departed the colony on May Day 1865 without bands and parades, having added considerably to his pocket, but nothing to what we already knew. A correspondent from Table Cape described his efforts as "sickening". He hadn't made any effort, stayed

only in comfortable accommodation, and refused to go into the bush. Unless gold was lying by the roadside, he was not going to find it.

Years later James Cox recalled taking Hargraves to the Devil's Den. They'd intended to go further, to the New Den and Lefroy area, but Hargraves had had enough and refused to go on. Cox showed him a sample of quartz at Devil's Den, but Hargraves threw it away. "A Chinaman would do very well here!" he said contemptuously.[6]

Return to the Den

D'Arcy Wentworth Murray MHA in 1862. From TAHO.

In the summer of 1864, as Hargraves was enjoying the best of our hospitality while he stole our money, a party of Victorian miners led by a John Stuart and his brother-in-law Robert Rawson were hard at work prospecting at Mount Arthur, testing the creeks and alluvial flats without much success. They did find some shotty gold in a pipe lead running into a hill, but it wasn't payable. They must have come close to discovering the Lisle goldfield, but may have been on the wrong side of the mountain and so missed it.

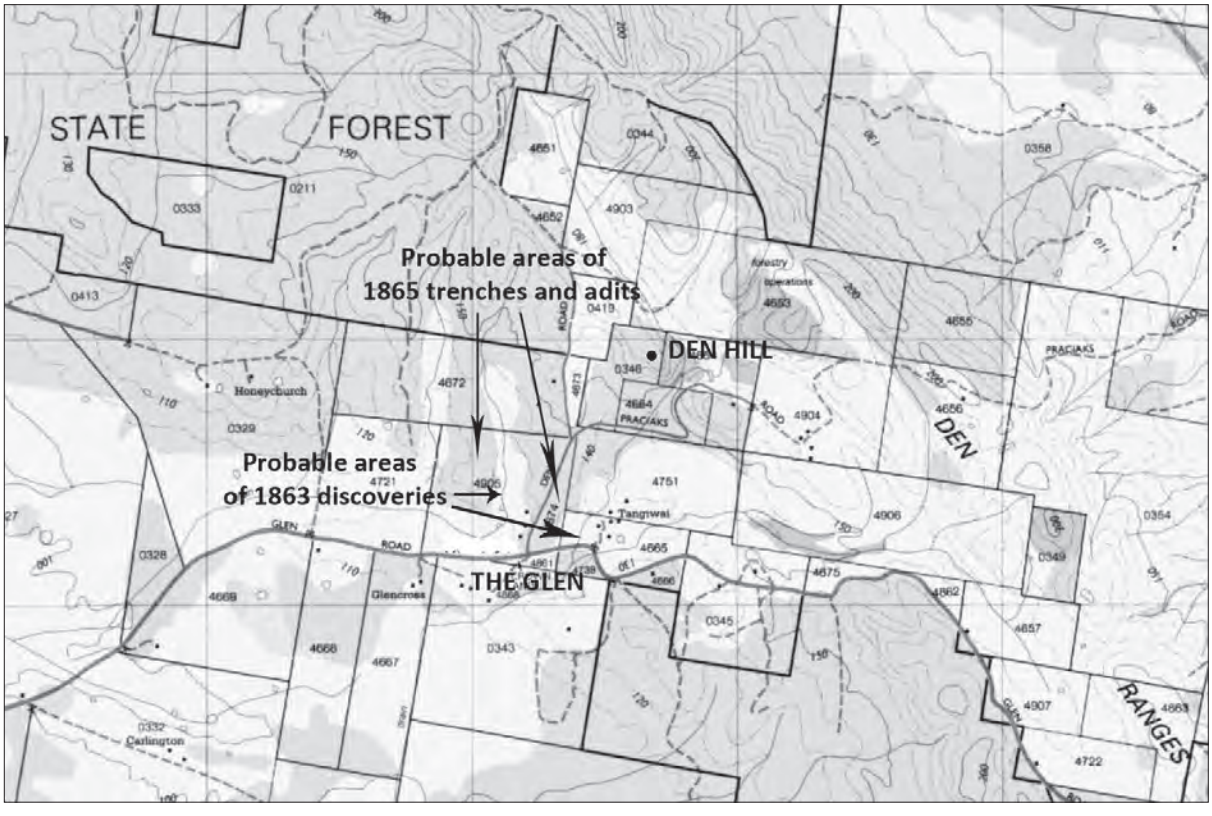
The two partners moved to the Piper's River near Turner's Marsh, where they found encouraging prospects and persevered for several weeks, finding good colours around the watercourses. For a while they got some semi-payable shotty gold in leads near Bangor, particularly in the Third River. By autumn 1865, however, they hadn't found a mine and were ready to give up.

William Cox was now back at Turner's Marsh. He and his son James stayed on at the Den for a while after the discovery two years before, but it didn't turned out as well as hoped and they eventually returned to the farm. Cox urged Stuart and Rawson to go and look at the Devil's Den before giving up their search, and offered to show them the way. He could even tell them which parts of the workings had turned out best, and where else they might try. Cox later claimed that he only showed them the spot on the condition they gave him a share in anything good they found, but there is no evidence of any such arrangement.[7]

Stuart and Rawson prospected around the Den for a few days and found much to encourage them, so Stuart returned to town at the beginning of May 1865 to get supplies and make preparations for an extended stay.

On arrival in town, Stuart found that the charlatan Edward Hargraves had just left. The Launceston Gold Prospecting Committee had funds left over, and still wanted to find a goldfield, so he decided to apply to them for assistance. At first the Committeemen thought it was a hoax and the gold was from Victoria, such as occurred at Lefroy a few years earlier. Stuart assured them it wasn't, telling them to come out and see for themselves. They agreed to do so. Stuart then returned to the diggings with new chums William and George Cartledge and an unnamed young sailor to assist in the work. On their arrival, Robert Rawson went back to town for a while to look after their families.

The Gold Committee sent out Mr R T Edwards and George Babington to examine the find. They were impressed, and agreed to supply equipment, together with rations for 10 additional men for a short



time in order to better test the locality. The Committee engaged John Barrett, who was one of their members, to take up stores from Redmire farm using his teams.[8]

After pitching their tents on May 17th 1865, Stuart's party washed their first gold on the 22nd. Winter had set in, but they persevered until 24th June, when they decided to give up washing the creek bed muds and gravels and have a go at driving into the east flank of the hill. They trenched from west to east, striking four quartz gravel leads all yielding what appeared to be reef gold. An old shaft from two years earlier was well located for the best lead, and so they tunnelled from its base into the hill about 17ft.[9]

The leads were quartz gravel resting on a bed of sandstone. On June 26th they began washing gold from dirt out of the lead in the drive (tunnel). On the 29th they washed half an ounce from 16 buckets. In another two days they had 1½ ounces of rough nuggetty gold and the size of the nuggets was increasing as they went in.

Their improving fortunes triggered a major falling out in the group. The Cartledge brothers and the young sailor wanted a share of the find. Stuart and Rawson said they were employees and not entitled to a share. The men said that they only accepted the measly five shillings a week on the promise of becoming partners, and they hadn't received a farthing of their five shillings yet! Unfortunately for them there was nothing to prove their claim – no piece of paper and no witness to the arrangement. The 5s a week seemed very low, but then why would Stuart and Rawson pay anything at all if they were partners? The party dissolved in acrimony and all returned to town.[10]

Robert Rawson showed a half-ounce sample of their gold to the Attorney-General in Launceston. It consisted of small nuggets up to a little over a gram in weight. The Minister suggested they put in a

claim for the government's gold reward, and agreed to allow them a prospectors' claim of 500 yards squared (about 20 hectares) to protect their interest. This claim was on what was locally called Flaggy Creek, though the name seems to have been forgotten, and Rawson registered it in his and Stuart's names.[11]

Mr Rawson told the *Hobart Town Advertiser* that all creeks in the area had gold, obviously coming out of the hills. He said that he was happy to show people where the Devil's Den was, as they wouldn't find it without a guide, and they needed to know that there was no grass for horses. He said that it should be possible for diggers to take out an ounce and a half a week, which was very good money indeed.[12]

In a letter to the *Examiner*, Stuart said: "*Sir, For the information of those going to the Den Diggings, we wish to state that the heavy gold is found in quartz gravel leads running into the hills, either on a rotten slate bottom or soft sandstone. The system of working the leads is by driving a level along the lead from the creek into the hill, and laying a tramway, with a truck to carry the washstuff to the creek, where a long tom and cradle must be placed, which would require two men. And as the leads lie only a few feet apart, four leads could be worked together with great advantage – requiring seven men. The cost of tools, trucks and materials for one lead would be about £15, and for four leads with seven men about £28, besides tents and cooking utensils. Provisions can be obtained on the diggings at Launceston prices. The best road is by Mount Direction on the George Town Road, then to the Piper's River Road, follow for about three miles, where a finger board on the left directs to the bush track leading to the diggings.*"[13]

The dispute with the three workers had ensured that the find became very public, earlier than Stuart and Rawson intended, and generated considerable excitement. Prospecting parties were rapidly organised in Launceston to go and try their luck. Mr Rawson bought 40 copies of the *Examiner* containing the report of the find and sent them to miners he knew in Victoria. A delegation from the Launceston Gold Committee, comprising Messrs William Tyson Snr, R T Edwards and John Barrett also went up to see what was happening.[14]

In the second week of July 1865 a party of three men from town went up for the day, and washed gold out of every dish of dirt they took. What was most impressive was that they didn't have time to mine, and took their dirt from the piles thrown away by Stuart's party. By the end of the week 30 men had formed parties and headed off, some on foot and others by coach.[15]

The group from the Gold Committee came back, saying that the Government Geologist Mr Gould and miners from Victoria had arrived. William Tyson Snr and John Barrett reported that there were now 40 men working there. Mr Tyson himself washed out some nice nuggetty gold from dirt obtained by Mr Stuart's party. He'd purchased the gold brought to town by Stuart and Rawson, as well as a nugget of about 4 grams brought in by a man discharged from Stuart's party. The sacked man was about to join another party and return.[16]

A party led by Tom Moore had gone to work in earnest and were already bottoming a hole. Mr Gould agreed that a reef must be close to the find. The very next day a party led by a Mr Baxter proved Mr Gould correct, finding what appeared to be the cap of a reef. They traced it through to Stuart and Rawson's ground. Mr Rawson immediately set off for town to get more men. He got five and wanted seven more. While he was gone his party found Baxter's reef on their claim.

The grant of a 20 hectare prospectors' claim to Stuart and Rawson as discoverers had created a considerable amount of angst. The diggers felt it was far too large for two men and wrote to the Colonial Secretary (i.e. Premier). A number of diggers were camped on the field expecting that the

claim would be overturned and they'd be able to grab a piece of Stuart and Rawson's ground. The fact was, however, that the 20 hectares was only ever a temporary protected area, while the discoverers decided which was the best ground. They then had to formally apply for a much smaller reward claim. And as Stuart and Rawson pointed out, there was plenty of good land around them anyway. The discovery by Baxter's party showed that he was right.[17]

Mr Stuart sent another letter to the *Examiner*: "*Sir, we have many fresh arrivals, but many do not know how to work efficiently. We are seeking to intersect the reef Baxter found, and strenuously pushing on in our No 1 and No 2 drives leading from the creek into the hill. The yield of gold continues to increase as we get closer. The reef is apparently N 65°W. There is plenty of water for washing and should be all summer. (At present only horses can get through, but) a good cart road is being made the two miles from the George Town Road direct to here.*"[18]

A letter also appeared in the *Mercury* on July 17th from a Mr R Forbes, reporting that he had been on the site for about a fortnight and washed out fully two ounces. Some were doing better, he said, and others not so good, but the average was about an ounce per week per man and involved around one to two metres deep digging to get to the good dirt.

With gold worth £4 an ounce and the average wage around £1 a week, it can be readily seen that miners were making good money. It wasn't a walk in the park though. Until the cart road was finished, access would be dreadful. William Cox and his son, on commission from Mr Barrett, had blazed trees to mark a track in from Fourteen Mile Creek bridge on George Town Road, but it passed mainly over a swamp with ankle-deep water and slush. In fact, after passing Watson's Inn at Dilston, the road would not take vehicles. People who found the trip longer than expected, could, fortunately, get accommodation at Mr Bacon's home at Mount Direction. Sadly he didn't have a liquor licence, as the passing trade had never justified the cost. Most people going to George Town took a river steamer.[19]

In the third week of July 1865 there were 50 men on the diggings. The Colonial Secretary had instructed Mr Gould to reduce the size of Stuart and Rawson's claim, and stationed a policeman there to preserve order. A visitor, Mr M Tankard, said that the supposed reef was only a mass of conglomerate with quartz and ironstone.[20]

A journalist from the *Chronicle* visited the diggings and ran into William Cox, who said he was the original discoverer of the rich lead and had been "done out of it" by Mr Rawson. He said Rawson had never stuck a pick in the ground since the diggings began, and added that he'd now found a rich reef two miles away and would be making a claim there. There is no evidence he did though.

The reporter then located Mr Stuart, who was very civil, and they examined his workings. Stuart's shaft was some 20ft deep and 6ft in diameter, from the bottom of which, in northerly, easterly and westerly directions, excavations had been made penetrating into the hill about 25ft. The hole had much water in it, which was bailed out with buckets with the help on onlookers such as old Mr William Hoyle and his son from the Cataract, so that the journalist could get down.

After an hour they were able to enter the drives, carrying a candle, and take out two buckets of dirt. The stuff from the lead was surrounded by yellow clay and dipped down. It consisted of every description of stony and earthy substances of all colours, from beautiful milk white quartz in lumps up to a stone weight, to black, grey, yellow and green. There was also a layer of a black slatey substance, greasy and soft like black lead. After washing in the "washing tub" (a cask cut in two) there remained as beautiful a sample of coarse gold as you'd ever wish to see.

The reporter felt it was a pity that the hundreds of diggers who clearly could be working on the field were prevented from doing so by the protected area. However there was no reason to think that the gold was solely on Stuart's land, and he thought those complaining should perhaps try looking elsewhere, which they were apparently disinclined to do. Many men seemed to expect nuggets rolling about the ground, only requiring the effort of stooping to pick them up.[21]

The attitude of local men contrasted with the experienced Victorian diggers, who instead of grumbling at Stuart and Rawson's good fortune, were prospecting nearby in promising looking places. Chief District Constable Propsting went up and saw for himself the gold being found. He washed nearly a gram out himself from just three buckets. Mr Stuart had ceased allowing people to wash the dirt, as a nugget had been stolen by a visitor, but he made an exception for the Chief District Constable.

Charles Gould had just been appointed Gold Commissioner for the Devil's Den Diggings and returned to measure claims and settle disputes. Despite heavy rain, there were about 60 diggers on the ground, though only Stuart's party had more than a few colours. This seemed strange in view of earlier claims such as the letter to the *Mercury* from Mr Forbes. Mr Gould reduced Stuart and Rawson's allotment to just ¾ acre and he was investigating William Cox's dubious claim of finding a reef two miles away. After initially believing they had Baxter's reef, Stuart and Rawson found that they didn't.[22]

Holes, tents and bark shelters were now scattered around the flats and rises and the diggings had caused quite a stir, not only in Launceston but in country districts and Hobart Town. Devil's Den gold was on display at Smart and Co's dispensary in Liverpool St, Hobart.[23]

Mr Gould returned to town saying that Mr Baxter was mistaken about his reef, but he (Mr Gould) was still sure that one existed nearby. He had himself picked a coarse 1½ dwt (two gram) nugget out of the dirt. The wet conditions were retarding prospectors and men were returning critical of the field without having given it a fair trial. However well-equipped parties had taken up claims next to Stuart, and good news could come.

As men left, others took their places. Most were sinking holes on the flats rather than trenching the hills as recommended by Stuart and Rawson. The latter were about to lay a tramway to the creek, so that wash dirt could be run off in trucks direct from the leads to their long-tom at the water's edge. Their gold continued to improve. A young man from Gaunt's party was out kangarooing and prospecting and found a spot in a gully about six miles from the Den, where he sank a hole to 7ft and found reef gold. He owned one of the Albert cars in town, and was now selling it to go full-time digging.[24]

A long tom, such as was used by Stuart and Rawson at the Devil's Den. This photo is not from the Den though. Image courtesy State Library Victoria.

Another letter appeared in the *Mercury* from Mr R Forbes, saying that he'd been next to Stuart and had moved on. Now he'd made a rich strike about six miles northeast of the Den. Mr Stuart and other men at the diggings were scratching their heads, and told the *Chronicle* that it was

strange they'd never heard of Forbes, if he was right next to them! It now seemed likely he was a hoaxer.[25]

There was good news from Cartledge and McDowell though, who really were next to Stuart. They'd found a lead similar to his, and it had gold. Mr Propsting and Mr F D Stephens, manager of the Fingal Quartz Crushing Co, returned to town much pleased. They said that the field only needed to be worked systematically to extract gold in large quantities. Whilst there were only 21 men on the ground now, they were the real miners.[26]

J W Simmons at the Brisbane Hotel had ¾ oz of gold that he was showing around. It was the product of three days' work on the Stuart and Rawson claim. The largest piece was a 2dwt (two pennyweight – or 3½ gram) nugget.[27]

The Gold Prospecting Committee announced it would immediately open a store on the diggings for the convenience of prospectors. Prices would be the same as in town. A tent would be put up first, but sawyers had already been engaged to cut timber for a hut, to be erected by Mr Freeman, who would then manage the store.[28] It would also be possible to get accommodation and rough stabling. Mr Freeman was empowered by the Committee to purchase gold at full value or trade it for goods. Messrs Tyson, Norwood and Thomas of the Committee said they would again visit the diggings.

Early in August Mr Gould returned with another ¾ oz from Stuart and Rawson, and confirmed that Cartledge had gold of identical nature in his claim. Mr Rawson had purchased some trucks. A well-equipped party took up a claim adjoining Stuart but opposite Cartledge and around 35 men were at work. Mr Moore's party had returned to town but would go out again immediately with fresh provisions. The wet weather was holding back everyone working there.[29]

In the second week of August 1865 an official report from Mr Gould was tabled in parliament. "*No very stirring discovery has been made, but the prospectors continue finding gold of the same superior quality as that previously obtained*." They had only obtained an ounce in the last week. The number of men remained about the same, as new arrivals constantly fill the places of those who left. The newcomers were better prepared, and with improving weather Mr Gould still anticipated that a reef would soon be found. Accommodation was needed, and the best spot for it was on the George Town Road at Fourteen Mile Bridge.[30]

The Gold Committee's store was quickly established in a large tent, thanks solely to the efforts of John Barrett. What had happened to Mr Freeman wasn't said, and it seems that Mr Norwood of the Gold Committee ended up managing it. There were grumbles, however, that if the Gold Committee were selling goods at Launceston prices, then Launceston must be the most expensive place to live in all the colonies. Cheese, soap and tobacco were all of inferior quality and exorbitantly priced.

Nevertheless, the Devil's Den was making great strides. The wretched temporary shelters had given way to substantial huts. Several parties were slabbing their holes, some of them down nearly 30ft. Mr T C Archer was there with the Gold Commissioner.

Two employees of Stuart's party left work without permission and appeared to have robbed a visitor on the road back to Launceston. Mr Peter Cole Rasmussen of Victoria thought he'd lost his purse on the way to the Devils' Den diggings. It contained a compass, five sovereigns, a Victorian £5 note, two Victorian miner's rights, two certificates of discharge from ships and other papers. While reporting the loss to the police, he recalled that on the way he and his companion met two men from Stuart's party. He described them minutely, and a warrant was issued for their apprehension.

One of the men, named William Wilson, alias James Wilson, alias Thomas Wilson, was traced to the brig *Janet Stewart* and information was sent on a fast boat to Torquay, outside Melbourne, where he was apprehended and the lost documents found. He was returned to Tasmania later in the month and remanded in custody, initially charged with being absent from service.[31]

As the weather improved, so did the number of men. The spread of prospectors had broadened out across the hillsides and flats, and a number of the diggers had shifted to a locality about half a mile away. Late that month there were some 45 men on the field again, and Wise and Hortle's party from Longford announced a quartz reef in their claim adjoining Stuart, on the opposite side of him from Cartledge.

Commissioner Gould examined Wise and Hortle's find and agreed that it was a reef and trended towards Stuart's property. Wise's party then had to decide which way to measure off their allowable claim to best take advantage. Another party was working a night shift, but not much gold was being found. Mr Gould told the Colonial Secretary that little gold was being won because the diggers were engaged on proving new ground. Even Stuart's party had suspended while they prospected further in an effort to find Wise's reef, which was now known to be about 3ft thick where it was struck.[32]

The permanent store being built to replace the tent by Mr Barrett, for the Launceston Gold Committee, was nearly complete, but the initiative had already proven to be a great disappointment and there were many complaints. Nevertheless, a correspondent to the *Chronicle* was able to write: "*We begin to have something like civilisation among us now, for a man brought up his wife and two nice little girls about a fortnight since, and last Monday we were quite surprised to see Rawson arrive with Mrs Stuart and four little children to dwell within the precincts*".[33]

Then Stuart's party announced they had a reef, and it carried visible gold! Their drives had fallen in, but they didn't care, as they were convinced that Wise's reef was the one producing their gold, as it was in the right direction and had the same red cement attached to the stone. Unfortunately they were then driven out of their holes by water.

McDowell and party had a reef half a mile further on. A mile beyond that Moore and party had a reef six feet wide. Mr Stuart believed it was all the same reef. All made application for claims, as did a man named Harper, hitherto employed by Stuart and Rawson. Barrett's party made a claim on the other side of the hill, next to Baxter, in the belief that the reef on his ground ran through theirs and through the hill, though what was thought to be a reef on Baxter's ground had been pronounced by the Commissioner to be a conglomerate. A number of men were looking at alluvial working on the flats when the weather permitted.[34]

Commissioner Gould returned from the diggings on September 2nd 1865 with encouraging news. Two parties totalling eight men had moved to another gully about a mile to the north-west and had gold in small quantities. (This was probably Den Creek and the area would become known as the New Den.) They'd adopted a different method, stripping the flat into paddocks and sluicing. They got several pennyweight in the first two days until the rain stopped them.

Wise and Hortle sank a new shaft and struck the reef again about 45 feet away, where water wouldn't interfere. They were taking stone out for testing. Stuart's party abandoned their original claim, which would probably be taken up by others for the alluvial – any reef would come under Wise's ⅓ acre quartz reef claim. Stuart and Rawson were concentrating on exploration of their reef, but the water had forced them to dig a tail race to drain the land.[35]

Mr Gould wrote to the government and his letter was tabled in parliament. He confirmed that a little gold had been found in a gully a mile distant, by two parties of four men each. Sluicing apparatus had been put up and from several days' trial it appeared that they would obtain about half an ounce per man per week. If this was proven it would support a number of men on the new field.

Back at the original workings, Wise and Hortle were sinking their second shaft at some distance from the first and would have stone for a fair test in a few days. Cartledge's party were working their reef and it seemed more extensive than at first. Overall, however, men were feeling that the returns were not sufficient for the effort, and many were leaving.[36]

This giving up was rather strange. For a while only Stuart's party had gold, and now they were all finding it. Surely this would give encouragement, but they seemed to expect to hit upon the best ground immediately. Many had exhausted their funds too. Wise's party sent a reef sample to town for testing and intended to send a larger sample to Fingal or Melbourne. Stuart's tail race was 150 yards long now and several feet deep. They were approaching the reef. They appeared to have the same reef as Wise and were also sending a sample to Melbourne.[37]

The whole district was opening up. Tracks were being cut through the scrub for prospecting far beyond the Den. No-one was prepared to take the risk of deep sinking though, and all were looking for the bonanza of a reef near the surface.

Despite finding their golden reef, Stuart's party, who'd started the rush, finally exhausted their means, and in October 1865 gave up their nine-month hunt. They'd done a great service to the colony by drawing attention to the Devil's Den as an auriferous district, and its potential would not be forgotten. The whole area between their find and George Town was now being investigated, thanks to them, and this would have ramifications.

Wise and Hortle had sunk their shaft through their reef to around 40ft and given up too. Their assays must not have been good enough. Many thought it a pity that Hargraves was received with a parade and paid "*a princely salary for condescending to enjoy the hospitality of our settlers*", while earnest parties working in good faith had to rely primarily on their own resources.[38]

Late in October several men from the Gold Committee went up to inspect Stuart's reef. They returned disappointed, being unable to find it. They went out again to find John Barrett's reef. This time they were assisted by Mr Hoyle, who was still prospecting there, and found he had a reef in the bed of a creek. It was quartz in a slate formation running NNW to SSE. It appeared that Wise and Hortle's reef was a leader of this one. Formation of a company to work it was talked about, and Stuart came back for a while with an assistant to sink a shaft on it, but then all went quiet.[39]

In December William Cox, still calling himself the discoverer of the Devil's Den, brought quartz specimens in to town from reefs near the Den Range and in the bed of Piper's River. They had visible gold. He must have been back on John Barrett's payroll, as he handed the samples to him. Mr Barrett gave them to Mr Morrison, the chemist, to test and confirm them as pure gold.[40]

Six months later a letterwriter asked the *Examiner* what was happening at the Devil's Den. It was deserted, he was told, and the Gold Committee had been dissolved.[41]

A New Mini-Rush

The diggings may have been deserted, but they were not forgotten. Two years passed.

In the summer of 1868 two or three parties were back prospecting, and again gold was being found, including several nice little nuggets. Smith and Poole, the big drapery store in Brisbane St, purchased a sample from one of the parties that included an impressive nugget of nearly 1½ oz.[42]

The prospectors continued working on and off, and a year later their perseverance was finally rewarded.

News came into town late in January 1869. A party of five, who had for the past three weeks been tunnelling under one of the quartz reefs at the Den diggings, had obtained 5oz so far. The party was later identified as being led by Mr John Gaunt, and their five ounces included a nugget of 1¼oz.[43]

The *Mercury* then reported that a local resident had taken over some of the abandoned ground and secured about 2oz in two or three days from about 5ft depth. He was separate from John Gaunt's party. A number of settlers from West Tamar were crossing the river to try their luck.[44]

A few weeks later the *Examiner* identified another party as being Mr Hannibal Fencker and mate. They'd shown the newspaper a 3oz parcel of gold that seemed to justify expectations. Mr Fencker said he and his mate took out 6oz in a fortnight. They'd been prospecting for some time at various spots on the field and after hitting the lucky spot were only two weeks in getting it. The gold was angular and sharp. Several persons were at work, and a new party set out on Tuesday. The gold was in the vicinity of a quartz reef, which they came upon while driving into a hill. A party of two Victorians and two Launcestonians were going up for a three week trial.[45]

Mr Fencker then provided a parcel of around 5oz to the government together with a letter to register as a claimant for the gold reward. The gold was exhibited at the Hobart museum. Parties were being organised in Melbourne to come over and thoroughly test the ground. Mr Fencker's letter to the government said:

"*Sir, I have the honor to forward to you a sample of gold obtained in the Den diggings, to the north of Mount Direction, which I believe to be the largest gold yet discovered in the colony, that there may be no doubt about it in yours or the public mind as to the validity of the discovery. I believe Mr Gould, the former geologist of the colony, has in his possession a sample of gold found in the same locality, and by comparing the two, I hope to remove your doubt. As Mr Strauss and I were the first prospectors in the field after the rewards for discovery of gold-fields were proclaimed, we beg to claim the reward if a payable gold-field should be discovered. If you think proper, place the sample in the Museum in Hobart Town until my return to town, that the public may be induced to form parties for exploring the country, and any party calling at my camp at the Den, I shall be most happy to give any information in my power. I beg to remain, Your obedient servant, Hannibal V Fencker.*"[46]

Mr Fencker's belief that his find and sample were the best in the colony so far was not correct, as some substantial parcels had come out of Fingal. Nevertheless, it was a significant and exciting find. The interest prompted transport operator Mr W Job Harris to schedule an immediate coach to the Devil's Den for those wishing to see the find for themselves.

Separately, a party consisting of the Reverend Mr John Fereday, Dr Richardson and Chief District Constable Lambert visited and saw and sketched a nugget just obtained by Mr Fencker that was about the size of a walnut and weighed 1¾ oz. It was expected to yield 1½ oz of pure gold. There still weren't

This is Edward Hargraves in a typically heroic pose. Though often said to be the first discoverer of gold in Australia, he was a conman and a fraud. Image courtesy SLNSW and the Mitchell Library.

Before moving to Waterhouse, Hannibal Fencker put in a claim for the gold reward, just in case the Devil's Den field qualified. It didn't, and he ended up a farmer near Wagga. Image c1867 and courtesy of the Fencker family.

many people there, which was surprising, though another visitor told the *Examiner* that they'd been up and saw a party of ten men hard at work in addition to Fencker and mate. More were setting out.[47]

A party of four rode up at the end of February and brought back the big nugget, and it was put on display at Mr Allen's watchmaking and jewellery store in Brisbane Street. The nugget was found at 10ft depth from a hole only opened the previous day. The locality seemed to be the site of an ancient watercourse – a "deep lead" in mining parlance.

The *Mercury* declared there was little doubt that rich finds had been made at both the Devil's Den and Fingal, yet people were not going there. They were too comfortable at home, the editor said, and it needed Victorians to come over and work the finds properly. Even so, there were now 16 men in seven parties at the Den.[48]

Nothing further of significance was found, unfortunately, and the parties began drifting away. A prospector at Waterhouse, east of Bridport, had a rich looking reef and asked Fencker and Strauss to come and help him, they being the most experienced miners he knew of in Tasmania. Though the gold at Waterhouse was of poorer quality than the very pure nuggets at the Den, it seemed likely there was a lot more of it, and Fencker and Strauss left.

The Melbourne *Argus* was scathing about the "apathy" of Tasmanians and said it was unlikely we would ever develop a goldfield. They noted that a Victorian party at the Den had exhausted its resources and couldn't find a backer to continue, so had to quit.

Shortly afterwards, the prospectivity of the northeast of Tasmania was dramatically confirmed with a report in the *Argus* that a ton of quartz from the Waterhouse field, crushed in Victoria, had yielded a remarkable 29oz! It created a sensation in Hobart. The government immediately appointed Mr Gould as Gold Commissioner for Waterhouse to go up and report on and regulate the rush there. He quickly wrote back that Waterhouse was yielding around 4oz per ton from the quartz, plus some silver. There was also alluvial. Claims were changing hands at fabulous sums, with Victorians the main buyers.[49]

The excitement at Waterhouse initially detracted from interest at Devil's Den, but when the new field saturated with claims, interest returned. Late in August 1869 four claims were pegged – two by locals and two by men from Hobart. It was noted they had reefs that had only been abandoned when the owners ran out of capital.[50]

The surveyor Mr Brown went up in September to mark out claims, with 13 applications already waiting. Charles Adams, the farmer from Lower Piper's River nearby, brought several fine nuggets to town that he'd found while working his farm, but with the excitement elsewhere, no interest greeted such announcements.

Despite the lack of reports, around 13 men were at the Den and thought to be making money. Messrs E Bartley, W H Tregurtha, Brooks, Hartland, King and Fraser had bared a large part of their reef and were about to sink in the bed of the creek where reef gold had been found several times. They wanted to take the reef from below, and were said to be keeping their results quiet. Several other parties were busy and believed to be making money. Applications for extra land were rolling in.[51]

A Victorian mine manager named James T Dowlin wrote to the *Chronicle* to say that the Den must eventually be payable. The people of Launceston were surprisingly apathetic, he said, and he'd seen sufficient there to satisfy the most sceptical. Waterhouse and Fingal had their attractions, "*but that such a promising locality as the Den should lay in a manner almost undisturbed seems surprising to me*."[52]

A man named Stewart, presumably not J L Stuart from earlier years, had formed The Den Mining Company. He had good gold in a reef, and prior to Christmas 1869 was in town buying a forge, tools and provisions for a six month campaign. It was reported that another party was also on a reef and doing well.[53]

Applications for leases came thick and fast. James Bellton applied for a ten-acre quartz lease north-east of McKenzie's claim and put on two men sinking shafts. Leases were taken up by Lavington Roope, Alfred Huybers and Isabel Garrett. Then Mr R Home took up 24 acres and David Lewis 3 acres.[54]

James Major, later to be well-known as an iron entrepreneur, took up a lease of 25 acres, and Mr Stewart reported that his Den Company was down 25ft in their shaft with leaders in black slate, one being gold bearing.[55]

Soon the Den Company was down to 44ft with 12ft more to get to the reef. Their shaft was close to the old alluvial workings of 1865-69, and four men had been working it since January 7th. They needed more hands and were advertising for six miners and labourers, with rations provided. Seven new shareholders had subscribed about £350, which would cover their extended operations.[56]

By March 1870 they were working 24 hours a day with 12 men and their shaft was down 50ft. Mr Stewart said they intended to go to 64ft and then drive east to reach the reef. On Mr Douglas's reef adjoining them an alluvial deposit had been found that gave colour in every dish. Gold was now being found all over the northeast – at Waterhouse, Mangana, Fingal, West Tamar, Nine Mile Springs (Lefroy), Back Creek and Piper's River – and Bernard Shaw, cousin of the famous playwright, was appointed Gold Commissioner for the entire East Tamar region.[57]

Late in March the Den Company shareholders met at the Brisbane Hotel. They now had 10 men on two shifts and were nearing the planned bottom of their hole. Prospecting holes had been sunk on the boundary of No 1 claim, in No 2 claim and about 175 yards from the SW angle of No 2 on government land upon which miner's rights had been pegged. All these were on the line of reef as ascertained

from first sinkings upon Mr L Roope's claim adjoining. The hole on the boundary of No 1 had come upon washdirt at 11ft and every dish showed specks. The plant was in good order and stores, provisions and wages paid up. Fresh meat was being supplied as wanted. Shareholders were invited to inspect the workings.[58]

Early in April they were driving from the 57ft level, leaving 6ft at the bottom of the 63ft hole for a sump. The drive began 6ft by 6ft in an easterly direction and after putting in support sets for the first platform they continued 6ft high by 4ft wide. The working was easier with every blast and they had much quartz in the slate. From a prospecting hole in Horne's claim 7ft deep, a visitor washed several dishes yielding a very pretty sample of gold.[59]

The Den Gold Mining Co then went back to 24 hour operation, with three eight-hour shifts and 250 gallons of water an hour being lifted out of the sump as their drive passed 16ft. Mr L Roope, adjoining, had very good alluvial prospects.[60]

Gold Commissioner Bernard Shaw. He was also a magistrate, and an able and diligent civil servant. Image courtesy TAHO.

Nine-Mile Springs (Lefroy)

By this time the Nine-Mile Springs (later renamed Lefroy) goldfield was becoming established by miners who'd begun at the Den. It was still true to say that more work had been done at the Den than at Lefroy and Back Creek, but this was rapidly changing.

Gold had actually been found at Lefroy in 1857. It was tested by Henry Reid in town, and then by Reverend Fereday, but the Police Magistrate Mr William Gunn would not allow it to be worked. He said it would distract the convicts, and sent two constables to guard the find. Ned Dally from Beauty Point said the find had been made by him and he should get the reward. He'd told John Barrett about it, and its existence was confirmed by Constable William Jones, Chief District Constable Kidd and Reverend Fereday. They went out shortly afterwards and washed a parcel of small shotty nuggets. Ned was probably telling the truth, but his discovery couldn't qualify for the reward, as the 1863 Act wasn't retrospective.

Sam Richards later told the Goldfields Reward Commissioners that on the advice of Henry Turner in town, he started prospecting around the Devil's Den in 1869, where he was joined by William Bain, S Anderson and William Richards Snr. They prospected around shafts that were already years old, but the field was crowded and they couldn't get good ground. They left and discovered Specimen Hill at Lefroy only four miles away in October 1869. They sold it to William Ritchie's Specimen Hill Company and James T Dowlin was appointed manager.[61]

Another of the later claimants for the reward was James Byrne, who told the Commissioners that he had been working at the Den with James Ward for some time from 1868, before going to Lefroy in January 1870. He put on eight men prospecting for the next three months at Lefroy and discovered the Excelsior reef in April 1870.

People at the George Town and Lefroy knew that he'd made an important discovery, but not where. James Ward, who lived at Lefroy after leaving the Den, was constantly followed. He had to dodge

and evade, and was frequently obliged to make a circuit of miles in order to elude his watchers. One Sunday, however, Sam Richards traced him to the locality. A rush ensued, and 200 acres were taken up immediately.[62]

James Byrne and James Ward's discovery of the Excelsior reef at Lefroy soon eclipsed the Den and made the new field pre-eminent in Tasmania, but it was Stuart and Rawson and the Devil's Den that had started it all.

Over the following month there was much excitement at Waterhouse and Back Creek too. A crush of 158 tons at Waterhouse returned an ounce a ton out of the mercury amalgam alone, without counting the recovery from the blankets. Then the Back Creek Company got 28oz from just five days puddling.

There was too much going on elsewhere for the Den to get much attention, but miners still there remained optimistic and there was talk of the Den Company floating off a new company to work another part of their claim. Messrs Major, Willett, Simmons and Robb visited the company's mine and said they would reach the reef shortly. They brought a quantity of quartz to town for testing.

Excitement at the Industry Reef

Though the focus at the Den was near the original discoveries, men had been scouring the whole district for some time, which was how Lefroy was found.

William Thrasher's party, employed by John Barrett, was one of the groups that found gold in Den Creek, about a mile west of the Devil's Den and later called the New Den. They began following the creek north, up into the range above. Another group, led by Tom Moore and called the Perseverance Gold Prospecting Company, did the same. The men in Moore's group were all trades and small businessmen, working as partners.

At the end of winter 1870, Moore's party found what appeared to be a reef, 5ft from the surface, near the top of the hill at the head of Den Creek, about three miles from Devil's Den. They pegged out a 30 acre claim. They sank two shafts on the reef, 150 yards apart, and found fine gold in both, similar in appearance to the Excelsior at Lefroy. Then the reef was found in the adjoining claim.[63]

There was then a lull in news, as flooding spread across the region. The roads from town to Nine-Mile Springs and Back Creek were impassable. Lower Piper's River and Waterhouse were cut off. Bullock drays could not safely cross the Fourteen Mile Bridge and were advised to go to the Den flat and ford the creek where the bottom was firm. The flat itself was knee deep in water and no work could be done.

The floods didn't affect Moore's party, working on the Perseverance Reef at the top of the range, but it did affect their getting supplies in, and news out. Claim No 1 south of Perseverance was taken up by a George Town prospecting company, and Nos 1 and 2 west were taken up by Launceston prospectors who had amalgamated.

In mid-September James T Dowlin, manager of the Specimen Hill mine at Lefroy, had the submerged Fourteen Mile Creek bridge moved and re-fixed at a better location, enabling the George Town Road to reopen. Specimens from the new find by the Perseverance Co could now get through and arrived in town at the *Examiner's* office.

The Perseverance claim had been renamed the Industry, and while initially the gold was only seen after crushing and washing, it was now visible in the stone. One of their shafts was at 25ft and all the

way down gold was visible in the reef and leaders. A visitor believed it to be the richest ever seen in Tasmania and better than anything at Lefroy. They'd struck another leader 100 yards away and it was better still. The specimens, all of nuggets in quartz, were put on view at Mr Atkinson's Elephant and Castle Hotel in Wellington Street.[64]

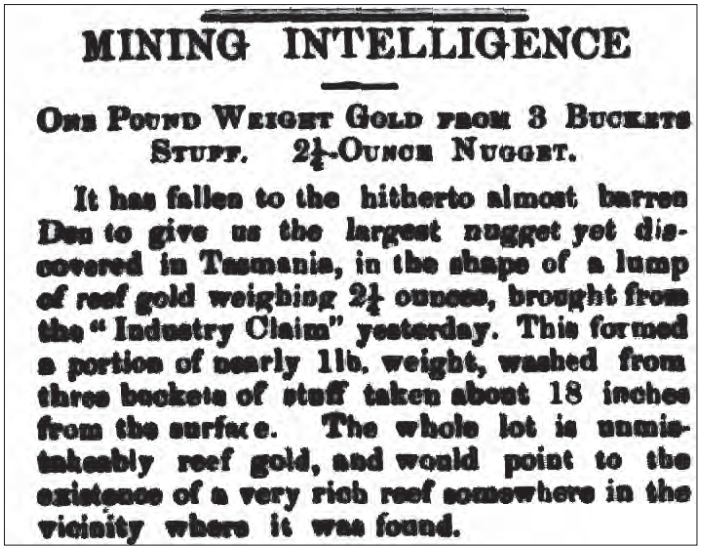
The hotelier, Mr Atkinson, was a shareholder and he and another shareholder visited their Industry mine late in September, where they saw that one shaft was down 25ft and two others 12ft and 8ft. Numerous trenches had been dug across the claim. They returned with several small bags of quartz from the main shaft. The gold was well diffused through the quartz and showed pretty little nuggets on various portions of each piece. A nice nuggetty sample was washed from some of the debris in the quartz leader where the specimens were taken. The appearance of all was like the Excelsior and Shamrock reefs at Lefroy.

Adjoining the Industry was Brooks, Savage and party's claim. They had a shaft down 20ft, with a good prospect. Their reef was 5ft thick on the cap and as it adjoined the Industry it was believed to be valuable.

A Stunning Result

In mid-October 1870 Mr Atkinson received a letter from Mr Moore: "*I have found another face on the claim richer than anything ever found in Tasmania and equal to most of the best in Victoria. I have only time to say that out of one bucket of stuff I got three ounces of gold and amongst it one piece an ounce in weight and the circumference of an irregularly shaped half-crown. You must tell all who own shares not to sell. If you will meet me at the Mount on Friday, I'll be there with the gold.*" This was the sort of letter that mine owners dream of![65]

The following day the *Examiner* reported a stunning result with a headline in capitals: "*ONE POUND WEIGHT GOLD FROM 3 BUCKETS STUFF. 2¼ OUNCE NUGGET.*" *"It has fallen to the hitherto almost barren Den to give us the largest nugget yet discovered in Tasmania, in the shape of a lump of reef gold weighing 2¼ ounces, brought from the 'Industry Claim' yesterday. This formed a portion of nearly 1lb weight, washed from three buckets of stuff taken about 18 inches from the surface. The whole lot is unmistakeably reef gold, and would point to the existence of a very rich reef somewhere in the vicinity where it was found..... the claim remains in the hands of the original proprietors, who intend forming a company amongst themselves to work the property."*[66]



MINING INTELLIGENCE

ONE POUND WEIGHT GOLD FROM 3 BUCKETS STUFF. 2¼-OUNCE NUGGET.

It has fallen to the hitherto almost barren Den to give us the largest nugget yet discovered in Tasmania, in the shape of a lump of reef gold weighing 2¼ ounces, brought from the "Industry Claim" yesterday. This formed a portion of nearly 1lb. weight, washed from three buckets of stuff taken about 18 inches from the surface. The whole lot is unmistakeably reef gold, and would point to the existence of a very rich reef somewhere in the vicinity where it was found.

The Examiner from 22 October 1870.

Two of the party, Messrs Tom Moore and R Bennell Jnr, then came into town, bringing more samples from the Industry, together with 50kg of stone for crushing. This was all casing stone taken from around the reef in the same small hole as the first lot. It appeared to be a rich conglomerate.

As each had to carry a bag in front of his saddle, they couldn't carry more than 25kg apiece. There were numerous nuggets in the samples, mingled with quartz and slate, and the samples were as rich as before. A miner from Lefroy said that the hole they took the 50kg from was only the size of a post hole. A piece of quartz from the sample was crushed after arrival and yielded nearly an ounce of gold!

About 50 miners from Lefroy and Back Creek had been present when the samples were taken out and pegged out around in a flash. As the richest specimens were a conglomerate of slate, quartz and gold, it would be necessary to crush the ore. After the sample arrived at the Elephant and Castle Hotel, Messrs T Moore, R Bennell, E Atkinson and several assistants, pounded up about 30kg from the two bags of quartz and debris and obtained 8oz, which, with 10oz from the previous sample (plus the nuggets), meant about 21oz already from this amazing hole! The gold was to be smelted into an ingot by Mr Gabriel.

The following day the *Examiner* reported that the 30kg had been crushed in an iron mortar, and the return from this little posthole repaid all expenses to date of the prospectors. It was intended to bring a large quantity in as soon as possible for testing.[67]

Mr Atkinson's Elephant and Castle Hotel, at the corner of Wellington and Frederick Streets. It opened around 1833 and he owned it from 1862 until his death in 1890, when his widow Mary took over for a while. The name was changed several times. It became the Orient Hotel in 1902 and looks much the same today, though it's now called the Pizza Pub. This image is from 1914 and is courtesy of the Launceston Library.

The *Chronicle* gave a wrap-up of the Industry discovery: "*Industry was discovered by Mr Moore, and a proprietary of ten was formed by Messrs W Atkinson, W Silver, Craw, Bennell &c to prospect it properly. The reef has been traced for 300 yards and the last attempt at cross cutting it has turned out the richest parcel of stuff we have yet seen in the colony. The 2¼ oz nugget is as large as a five shilling piece and flat. Last Saturday, in a room at the rear of the Elephant and Castle, Mr Moore and Mr E Atkinson pounded 8lbs of quartz and washed 2oz of beautiful gold from it. At the spot where the gold was picked up the reef runs from a foot to 18in thick. Mr Moore and Mr Robert Bennell left town to return to the reef for another lot of stuff from the crown of the reef and Mr Silver is to drive down to the Mount today to bring them back. The owners will form a small company and work the claim themselves. Offers have been made of £100 for a half share in the claim and refused. They are all Launceston men who trust each other and will fund the purchase of a mining plant themselves.*"[68]

Through November 1870 stone was being stacked at the claim. The reef was 4ft wide near the top and the stone near where the pocket of gold was discovered was burnt brown showing gold, and with gold diffused through it. Mr Atkinson had a 10kg sample of this at the hotel which he would roast and crush. Mr Kenworthy of their party was prospecting another section of the reef where the stone was lighter.

Fourteen Mile Creek bridge had washed away again. The *Examiner* commented that God made the country, man the town, and the Devil the road from Mount Direction to the goldfields. However the flooding made no difference to the men at the Industry way up on the hill. Two of the party were sent to Victoria to look for a 5-head crushing battery. The rest were sinking the main shaft, intending to go to 100ft. They had a foot wide leader in the shaft, with gold.[69]

In January 1871 The Industry Gold Mining Company was formally registered by Mr J R Kemp. It had capital of £2600 in 520 shares of £5 and would use Mr Kemp's office in Charles St. The shareholders were William Silver, William Atkinson, Tom Moore, Robert Bennell, Nicholas Pescodd, George Anderson, Henry Latham, Sam Sutton, Joseph Kennedy, William Beveridge (all with 40 shares); Edward Atkinson (30 shares), William Bryant, William Ling (both with 20 shares), Frederick Button, Robert Kidd, Robert Kenworthy, Joseph Kemp (all with 10 shares), William Gurr and James Bellton (each with 5 shares).[70]

Almost immediately a call on the shares of 6s 8d was due. The calls would come rapidly in order to develop the mine and buy equipment, particularly the crusher and a steam engine to drive it.

The Industry Mine Opens

In April 1871 they were ready to begin operations. Sadly, two week before the official opening of the works, Reverend John Fereday was killed. He was thrown from a gig on the road back to George Town from Lefroy.

The claim had been reduced to two ten acre sections with the surrendering of a few acres of unprospective ground. Then, on Wednesday 26th, they formally opened the works.

They now had a portable 8hp engine and 5-head battery made in Ballarat, with amalgamating barrel etc, all enclosed in a substantial hardwood building. The building work had all been done by their own shareholder Henry Latham. Tom Moore turned on the steam and Mrs Traill from Lefroy named the crushing plant "The Clara" by dashing a bottle of champagne against the fly-wheel of the engine as it made its first rotation. The name was in honour of Miss Clara Atkinson, a daughter of shareholder and hotelier Mr Atkinson. The party then visited the dam, where a large body of water was stored, and inspected 150 tons of quartz in the paddock before refreshments. Most of the party returned to town afterwards, arriving at 9pm.[71]

Early in May the first crush had been put through and cleaned up. Only 7½oz was recovered from the 30 tons of ore, but this was just from the amalgam and the blankets and barrels had not yet been cleaned out. It was confidently expected that their contents would increase the yield from the next crush.

A week later, however, the second washup yielded only 6½ oz from 15 tons! This was a shock. The rich appearance of the ore suggested much more, and their small and high cost operation needed more to be profitable. On this yield they would need a larger crusher to make it pay. Were they perhaps losing gold in the tailings?

At the end of May the third crush saw 30 tons put through for the recovery of 21oz of gold. This was better and showed an improving trend in recoveries. Hopefully the trend would continue.[72]

Meanwhile, the No 1 claim north of Industry, called the Struggle, had found specimens suggesting they had another Industry. They sent a telegram into town warning their shareholders not to sell. Then the Industry's fourth washup yielded 19oz from 32 tons. The proprietors claimed to be very satisfied, though this seems unlikely.[73]

Strangely, the fifth washup, due mid-June, was not reported in the papers. The next news from the company was that an extraordinary meeting would be held at the Mechanic's Institute in August to increase the capital or otherwise decided the future of the company. This suggested that the fifth crushing was far from satisfactory.

The Industry shareholders' meeting was told that the returns from the small crusher were insufficient to pay, and they needed to put in more money or sell up. They decided to sell up, but with the idea that a new company could be recreated from the old.

The New Industry Gold Mining Co NL

Tenders were immediately called for the Industry Co claim, machinery, plant, stores and so on, and discussions entered into about creating a New Industry Gold Mining Co with a capital of £1000 in 4000 shares of 5s. The matter was soon put into effect and a number of shares in the new company were taken up by the original proprietors. The new capital base was surprisingly small. It was far less than the old company, and seemed unlikely to solve their problems.[74]

Prior to Christmas an ad was placed for a mining manager and a Mr James Carnegie was appointed. He was from Ballarat and came to Tasmania to run the Union mine at Fingal. He soon had a new 15in leader with good specimens, and the claim next door to them was also finding gold.

The New Industry Company restarted the crusher and on May 25th 1872 announced they had recovered 25oz from a crush of 42 tons. This would be considered an acceptable result in normal circumstances, but as nothing had really changed from the company's previous incarnation, it seemed likely that the same shortage of funds would soon affect them. They hadn't purchased a bigger crushing plant – and nor had they done any tests to check on their gold recovery. There was also a suggestion that water was increasing in the workings, and they probably lacked sufficient funds to purchase pumping equipment.[75]

Sure enough, in July 1872 the Gazette showed the company's assets as £486 13s 3d and liabilities of £168. This looked fine, except that the assets included the crushing plant. They were clearly short of actual cash. This became evident the following month, when the claim was abruptly advertised for tribute for 12 months. (Tribute is where someone takes over the mine in return for paying a percentage of the gold won. It was a system often used by Chinese miners who found it difficult to get good claims themselves, and took over old claims on tribute. They then worked so hard that they made a good living from claims that had been regarded as unprofitable.)[76]

Sadly there was no interest from tributors, and the Legal Manager Mr Kemp offered the claim and equipment for sale in September. It wasn't sold and so all the equipment was auctioned in January 1873. Advertised were the 8hp portable engine, 5-head revolving battery with 3cwt stampers by Davey and Sons of Ballarat, surface pump, amalgamating barrel, tables etc. Also mining implements including buckets, ropes, iron tanks, picks, shovel etc.[77]

The Native Industry Gold Mining Co NL

A claim with such rich specimens and known reefs was not going to be neglected long, and in June 1874 a new company was registered. It seems that although the equipment had been auctioned off, the claim was still with the original owners, and like last time, they were behind the new float.[78]

Native Industry director Robert Kenworthy in 1891. He was the manager of Page's Coach Service and a handy choir bass. Image courtesy of TAHO.

This time they called their venture the Native Industry Gold Mining Company NL. Mr J R Kemp was again secretary and legal manager.

The new company was again poorly capitalised, with just £1200 in 120 promoters' shares of ten pounds. The directors were William Atkinson, Robert Kenworthy, W S Coulson, Robert Bennell and Thomas Webb. The promoters reminded the public that the claim had produced the richest specimens ever obtained in Tasmania.

The claim was now 18 acres, with a permanent shaft of 86ft depth and a drive of 25ft off it. There were also three other shafts from 24ft to 50ft. The reef was showing well, with visible gold, and payable quartz could be immediately obtained. The proprietors were offering 60 shares to the public, with 25% of the money on application and the balance over 4 months. The whole £600 would go to the company. The remaining 60 fully paid shares stayed with the previous New Industry shareholders. The capital was expected to be sufficient to sink to at least 200ft and then open out thoroughly at that depth.

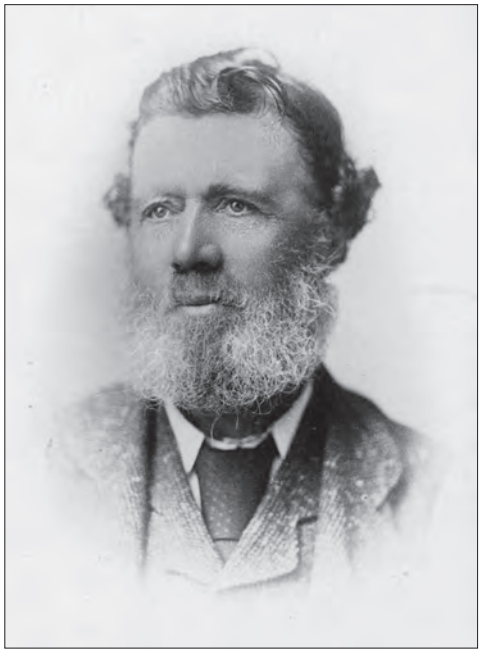
As there was no longer a crushing plant on the property, the proposal was essentially a prospecting operation. If they found sufficient ore to justify purchasing a new crushing plant, they would go back to the market. There wasn't enough money for pumping machinery, but so far water hadn't been a problem. The whole exercise was a way for the old shareholders, who still had faith that the mine was a rich one, to get some value back for their interest.

The investing public thought the offer reasonable, which it was. It didn't value the claim extravagantly and gave no cash to the promoters. The money was raised and the Native Industry Gold Mining Company commenced operations almost immediately under a mining manager named H C Nankervis.

Shortly after, they reported that their new main shaft was already down 70ft and slabbed (timbered), and a prospecting shaft down 33ft with a 26ft drive. The reef here was 10in wide with visible gold. The prospecting shaft was about 100 yards to the east of the permanent workings, and the vein was believed to be the same worked in the 50ft and 86ft shafts.

A month later the main shaft was down 120ft, but water was rushing in and they couldn't go lower. They commenced a south drive to cut the No 1 vein. At the 112ft level they were driving west and were soon in 42ft with the vein improving. Gold could be washed from both the quartz and the casing. In the 33ft prospecting shaft the last drive was in 12ft with the vein carrying good gold. A west drive was in 5ft with the vein 18in and good results from washing. Gold could also be seen in the quartz.[79]

In October 1874 a crosscut at the 112ft level cut a new vein at 30ft in, which was 18in above and 2ft thick under foot. Gold could be seen in the stone and washed. The west or No 1 drive was in 72ft with well-defined vein and good gold.[80]



Native Industry director Harry Conway in 1886, when he was elected the MHA for George Town. He was born in Leicestershire in 1829. Image courtesy of TAHO.

It was clear that the prospecting venture was a success, and it was time to look at buying a new crushing plant to replace the little one sold off two years before.

An extraordinary meeting was called for the beginning of November to authorise an increase of capital. Forty shareholders attended and 15 more by proxy. As the Chairman George Glenwright was off sick, Harry Conway took the chair. He was an architect as well as a director and had drawn up a large plan of the workings to pin on the wall. He'd prepared this very useful aid to discussion at his own expense.

The mine manager, Mr Nankervis, believed the property was valuable and warranted a battery, but of the original £600 only £12 was left. A large quantity of payable reef had been demonstrated, with thousands of tons of ore in sight. The reef was proven for over 300ft in length by 120ft in depth and would provide crusher feed for months. The reef appeared to traverse the whole claim. The authorised capital needed to be raised to £3200 so that 200 new shares of ten pounds could be issued on the basis of one pound paid on application with monthly payments of a pound. A 10-head stamper could be bought in Victoria and erected for £1000.

Mr T C Just, owner of the *Chronicle*, moved that 50 tons be put through the Golden Point battery first as a test, before committing to the expenditure of buying their own plant. No-one seconded the motion, all believing it to be a waste of time and money, and the capital expansion was approved. In normal circumstances Mr Just's motion would be very prudent, but the shareholders took the view that as the old companies had already done at least six crushings, all of which were successful, the stone was already proven. Mr Just then moved that existing shareholders have first right of refusal on the new shares. This was unanimously approved.[81]

J Kemp and directors Conway, Bennell and Glenwright visited the claim to select a site for the battery. There were two well-defined reefs running EW. The main or eastern shaft where they were now working was down 122ft, 10ft of which was the sump. At 112ft a NS crosscut was in 30ft north and struck the reef and was then driven EW along the reef. The west drive was in 58ft and the east 53ft with the reef promising throughout. A drive from the crosscut south had been commenced and carried to 82ft west along No 1 reef with a fine body of stone. The western shaft was 27ft from the main shaft and was down 83ft with a crosscut that found No 2 reef. In this shaft the reef had also been struck on the upper level, a crosscut having been put at 33ft and an EW drive commenced with splendid prospects. There were 90 tons of ore on the grass awaiting crushing.[82]

By the end of the month the share issue was almost all put away. There was a lot of confidence in the investing public, as well as the shareholders, about this mine. The fact that all the money raised

was going to the company would have contributed to that confidence. Directors Harry Conway and William Atkinson then headed off to Melbourne and Ballarat to look at crushing plants.

The directors took with them a representative sample of quartz and dropped it off at the Ballarat School of Mines for testing, while they looked for a plant. The idea of this was not to do a bulk sample test, as recommended by Tom Just, but to get an expert analysis of the stone to ensure that the plant they purchased was appropriate to the type of gold and stone. It was a very sensible step, especially with the unexpectedly low yield from the earlier crushings.

The School of Mines did six assays on the stone, and announced that the mean of the assays was 3½oz of 22 carat gold per ton of quartz! This was a splendid result indeed. And the gold was free (not chemically bound) and could be obtained by crushing in the ordinary way using fine gratings in the boxes and blankets.

It certainly sounded as though the mine was the goods. The only problem with this sort of test, however, is the difficulty in providing a representative sample of the stone. They said that the stone was from various parts of the mine and not selected – and therefore representative. But this is remarkably difficult to do in practice. The only way you can really ensure you haven't unconsciously selected the best stone, and thus have a truly representative sample, is to take it from the pile of ore at grass while blindfolded! It is highly unlikely they did this, and probably would have felt silly to do so. This was unfortunate. Even so, they clearly had some very rich stone.

Conway and Atkinson soon reported back that second-hand batteries were not suitable and they'd bought a 5-head, 7cwt stamper battery from the Phoenix Foundry in Ballarat. A Manchester engine and boiler, the latter manufactured at the Yarra Boiler Works, had also been ordered. All were expected imminently. There were now 200 tons of ore at grass and they were stoping (digging out upwards and dropping the ore into the tunnel) at the 83ft level. By the time the plant was ready they expected to have 350 tons at grass.[83]

Their first half-yearly meeting at the end of January 1875 gave further information.

The new plant would crush from 30 to 70 tons a week and cost £600 delivered to the Melbourne wharf. The battery had already arrived and the rest would arrive within a week. All would be ready in April. Net assets after £1146 expenditure and £80 creditors were £1124, and there would be ample working capital at the time the battery commenced operation. As Sam Sutton had resigned as a director, Tom Wadham was elected in his place.

By April 1875 the new plant was installed and operational. Steam was got up, the water drained, and preparations made for an official opening.[84]

Official Opening of the Native Industry Plant

The directors of the Native Industry Gold Mining Co NL assembled at Mr Atkinson's Elephant and Castle Hotel early on the morning of Thursday April 15th 1875.

It was a dark and miserable morning. The directors' party, with guests totalling some 15 persons, left in several vehicles at 5am in almost continuous rain.

They stopped for an hour at George Coward's Travellers' Rest Hotel at Mount Direction (Mr Bacon's old home) and took refreshments. Then it was nine miles to the mine, where the horses were seen to and an inspection made.

The company was still only some 9 months old and had two shafts of 122ft and 83ft with extensive drives.

The NE drive at the 112ft level cut a lode at 27ft SSW. The drive NE extended 51ft along the lode with a rise for stoping out going up at 14ft from the head of the crosscut. SW the drive extended 68ft along the lode with a rise for stoping out at 31ft from the crosscut. At the head of this crosscut, iron plates with points etc were laid down for the tramway, which extended along the drives and upon which trollies with buckets were conveying the quartz to the shaft. It was intended shortly to put in a cage and trucks.

A crosscut on the NE of the shaft cut another lode at 14ft and a drive was taken along the lode about 81ft. The lode averaged 18in with an underlay of two in six. A substantial whim had been erected over the shaft and was at present engaged raising stone, about 150 tons of which was paddocked from this shaft. About a 100 yards south of the main shaft was the prospecting shaft to 83ft depth. Drives had been made ESE 70ft and NNW 58ft, and while the reef averaged only 6in, it appeared to be rich. There was at present grassed from this shaft about 250 tons for which the company had been offered £1000 exclusive of crushing. Midway between the two shafts was the main shaft of the old Industry Company. It was the intention of Mr R Evans, the present mining manager, to erect a poppet head over this old shaft to enable stone to be raised there as well.

The battery was in a gully about 300 yards to the south of the main shaft and housed in a substantial timber building 50ft by 36ft. Powering it was a Cornish flue boiler 18ft long and 5ft 6in diameter, with a 15hp horizontal steam engine. At the head of the battery was a commodious flat for stowage of quartz. The stone went through 5 heads of stampers of 7 ½ cwt, with 6 copper plates each 12 by 9, ripples and 21ft of blanketing. The battery had double delivery so that it crushed as much as many ten headers. It also had more amalgamating area. After crushing, the stone went through double gratings with 144 holes to the square inch.

Attached to the crushing gear was a plunger pump to raise water from the dam to an elevated tank from which the battery and engine were supplied. A few metres below the battery building were the settling pits – shallow, square excavations formed to receive the water after it left the battery so that it could, after passing through a narrow race into a small reservoir and thence by another race into the dam, be recycled. These works ensured a supply of water in a drought.

The main dam was situated about 18 metres east of the settling pits and was 66ft by 50ft with about 160,000 gallons. Mr Evans intended to shortly build a retorting and smelting house at the end of where the engine now stood, with a connecting flue to the boiler stack. He also intended to use the exhausted steam to heat the water before forcing it into the boiler, in order to save fuel.

On the property were also the manager's residence, two or three miners' cottages, blacksmith's shop, stables etc.

The christening of the battery took place shortly after 1pm with about 30 people assembled. Miss Annie Counsel, niece of the Chairman of Directors Mr Glenwright, did the honours. Unusually, a bottle of pure water rather than champagne was dashed against the flywheel, and the whole set in motion amidst loud cheers. The compact and beautiful machinery worked with utmost smoothness

and most present watched it fascinated for some time. The sun came out during the ceremony, which was hopefully a good augury. Afterwards, with the rain returned, the company assembled at the mining manager's residence for an excellent luncheon and toasts.

Mr Glenwright said that there was some scepticism in town that ordinary men could make a go of a mine, and he felt confident that if the leading men of the town had carried on the affairs of the Native Industry Company they would have spent ten times as much for the same result – only caring, as they did, for fixing high salaries. Many inspected the underground workings afterwards. The return commenced at 3pm and most were home around 7pm despite the weather.[85]

Three weeks later came the cleanup after the first crushing campaign. From 220 tons they returned only 18½ oz! Clearly Tom Just's recommendation, that they do a test crush before spending all their money on plant, had been good advice, and clearly the stone given to the Ballarat School of Mines was not representative after all. Even so, this was an unbelievably bad result. Was it theft? Or had most of the gold gone through to tailings?

A second crushing was underway and looked better. The manager still intended putting in a cage and trucks, to be hauled up by the horse whim at present in use, and to elevate the poppet heads 20ft higher, for the purpose of erecting a pass to hold about 20 tons so that there would be no shovelling of the quartz from the time of leaving the pass till it entered the battery. He sounded very competent.[86]

Sadly, the company ran out of money and the second crushing was never finished. It was stopped at 30 tons and only gave about three ounces. An extraordinary meeting of shareholders was called for June 15th to either expand the capital or wind up the company.

Landon Fairthorne JP (1823-1890), pharmacist and director of New Native Industry and other companies. He was Mayor of Launceston in 1884, as was his son Frederick in 1900-02. Landon was much respected and was President of the Pharmaceutical Society of Australasia and a director of Mount Bischoff Tin. Image from 1884 and courtesy of Launceston City Council.

In the event there was a good attendance, with 32 shareholders in person and another 27 by proxy. The meeting was told that after the first crushing, the company was over £450 in debt. Mr Evans said that the company would have to go 200ft deeper. The late mining manager Mr Nankervis and the present manager Mr Evans discussed the working of the battery.

Mr Nankervis said that the battery was not suited to the stone and there was not sufficient space left in the boxes, whilst Mr Evans maintained that there was plenty of space in the boxes and the plant could not be surpassed in all the colonies. Mr Evans said that when he took over the mine from Nankervis he could not see the stone alleged to be there. Mr Just said that nothing would be gained by arguing, but took the opportunity to remind the meeting that he had recommended a trial crushing before spending all their money on plant.[87]

It is impossible today to determine their problem. The narrowness of their veins meant that they needed at least ⅔oz a ton to cover costs. Mr Evans thought that the battery got all the gold in the stone, but this sounds unlikely. Mr Nankervis said the stamper box was too shallow. Mr

Kenworthy said that 1½ inches from the lip of the grating to the top of the false bottoms was not enough, and that the stone had been rushed through the battery, with excessive water used, washing the gold out of the box. He couldn't understand the result, given that many shareholders went to the claim and took out stone themselves, in places of their own choosing, and crushed and washed it themselves, obtaining gold. Then there was the result from the Ballarat School of Mines of over 3oz to the ton. Where had the gold gone?

Mr Just said that there was nothing so delusive as the opinions of directors, and instanced the rich prospects at Leura compared to the results achieved. He said that every mining manager had a different theory about batteries and no doubt the manufacturer of the crushing plant knew more than anyone. The mining manager said that nearly all the mercury had been returned, so no theft of amalgam had occurred. Mr Kenworthy objected to winding up when there was stone in the paddock that could be crushed at the New Native Youth battery. That would test whether the crushing was done correctly. It was a sensible suggestion, but fell on deaf ears.

J R Kemp said that the tailings had been tested in town by the chemist Mr Fairthorne and found to have no gold. Mr Just suggested offering the mine on tribute for a few months before deciding to liquidate the company, but the shareholders had had enough and voted to wind up the company. Only Mr Kenworthy voted against.[88]

Late in the year a man writing a tourist guide went past. He said that the works could be seen from the road, silent and deserted.

In May 1876 the plant, machinery, housing etc were sold to the City of Launceston Gold Mining Company for £425. This repaid the debts without any call on the shareholders. The plant was not moved immediately, as the City of Launceston mine was having its ore treated by a neighbour.[89]

The New Native Industry and Other Proposals

Devil's Den was deserted, and now the Industry was too.

Yet the high-grade quartz obtained on the Industry claims showed that they did have something up on Industry Hill. The 2oz nugget and other nuggets and specimens were not alluvial and not a mirage! There were rich, albeit narrow, reefs there.

The plant had been sold, but so far the claim had not. Then, in October 1876, it was announced that the claim would be sold for just ten pounds.

This galvanised the shareholders. They had no debt and did not need to sell the property. Another extraordinary meeting was called and decided to form yet another company – the New Native Industry Gold Mining Company – with a capital of £6000 in 6000 shares of a pound. Of these shares 3200 paid to 5s would purchase the property from the present proprietors and 2800 shares with 1s paid on application and the balance over 16 months would fund a new venture.

It was proposed they sink on the 122ft shaft another 100 or 200ft to give the claim a fair trial. Some of the best specimens ever found in Tasmania were from there. Messrs William Hart, John Glenwright, B P Farrelly, T H Urquhart, H Conway, E W Atkinson, J R Kemp and T Wadham were formed as a committee to further the company formation.[90]

In March 1877 they all came together again in a large meeting with Landon Fairthorne (the well-known chemist and later Mayor of Launceston) in the chair. The proposal was now somewhat grander than agreed at the earlier meeting. It was unanimously resolved to re-form the company as the New Native Industry with the original shareholders retaining their shares, and the capital increased to £12,000 by the issue of 8,800 new shares paid up to ten shillings, leaving 10s to call. This would immediately raise £4,400 to systematically rework the claim. J R Kemp resumed as legal manager.[91]

It was all very well to agree to this much larger company, but quite another to persuade the public to take up the shares, and it seems that they did not.

Nevertheless some were sold, and a limited operation recommenced under a Mr James Hunkin as mining manager.

The company was all over the news a month later, but not for a gold strike. An old man they'd employed, named Smith, had disappeared.

Old Mr Smith went into the bush one Monday morning in April to look at some snares he'd set, and didn't return. Mr Hunkin went to look for him that evening without success and again the next day. On Wednesday a small party with the constable searched, and on Thursday a very large party, including some 100 people from Lefroy, searched again without success.

Smith returned to the Industry claim of his own accord on Saturday, having been lost for four days without food. He'd set the snares a distance from his hut and missed his way somehow. He'd almost given up when he came upon the Gillespie home at Lower Piper and was returned by them.[92]

Another extraordinary meeting was held in May, at which Mr Hunkin advocated sinking a shaft 200ft to test the claim and the purchase of a small portable engine and double winding gear. The capital of 320 ten pound shares was changed to 3200 one pound shares and it was resolved again to increase to 12,000 one pound shares as per the last meeting. W C Dawson, Josiah Powell and B P Farrelly were confirmed as directors.[93]

A new company had just been formed in the area, independently of the Industry. This was the Northern Tasmania Gold Mining Co, formed to work two 10-acre sections. One section was near New Native Industry and the other nearer the Den. It had £2500 capital, of which £400 went to the promoters.[94]

At the half-yearly of the New Native Industry, it was clear that the public had not taken up the opportunity to buy shares. Their assets were listed as nil, and liabilities as £115. They'd spent £105 on further prospecting as authorised at last meeting. It was stated that the reef had been struck in the shaft, but the miners had been flooded out before they could raise any stone.[95]

At Christmas 1878 an offer from Landon Fairthorne to buy the company's assets for £150 was accepted. This paid out the debts. Mr Fairthorne put the property into a vehicle he called the Golden Bar company.[96]

Golden Bar commenced work as soon as the holiday season concluded, and made a small call on their shareholders for working capital. Their mining manager John Bennett reported to legal manager Mr J Steer Jnr that he'd inspected the mine and they should sink to 400ft to test the ground east of the present workings and drive on the lode from there. He said he did like the property.[97]

It was one thing to like the property and have proposals, and another to have money. Golden Bar did not have money and soon all work ceased.

The Calder Gold Mining Company NL

Two years later Mr Robert Scott, late of the British and Tasmanian Charcoal Iron Co, took over and went to Melbourne to float a new company to work the property.

He told investors that the 122ft shaft had been abandoned when a large influx of water came in just as they discovered a large body of stone believed to be a reef. The companies hitherto had all been too small to successfully work the claim.

By this time the Tasmania mine at Beaconsfield was the darling of the Australian gold industry, and he had a good reception in Melbourne. A prospectus was issued in September 1881 for the Calder Gold Mining Company in 20,000 one pound shares. They would erect pumping machinery and sink to 300ft and put a tunnel through the hill in the hope of cutting reefs. Mr Scott said that the last crushing was by tributors, who got 2oz to the ton. If that was true, and it probably was as he was a reputable man, there is no obvious record of it, and it makes the poor earlier crushings all the more mysterious.[98]

The company still had 20 acres in two 10 acre blocks. The western block (No 870) had a considerable amount of work done. There were three shafts, one being the original Industry main shaft, now 95ft deep, and two from Native Industry, being 83ft and 122ft. The 122ft shaft was divided and timbered top to bottom and in perfect order. There were also about 200ft of drives on the course of various leaders. An inspection for Calder by their intended mining manager John Edwards found gold in every sample taken from the 50ft level and a 30kg sample taken and crushed found a good prospect. The former mine manager Mr Nankervis had reported striking stone with good gold at 112ft, 14ft south of the shaft, which he followed for 82ft with it varying from 3in to a foot in width and well defined. He also reported a good body of stone, 18in thick and highly auriferous, north of the shaft. Mr Nankervis added that he'd found a strong leader 9in wide with good gold on the western portion of the ground.

These reports seem verified by the appearance of the workings, which were suspended on account of the influx of water and lack of capital at a time when mining was depressed. On the higher ground to the east excellent prospects had also been found, and a tunnel through the hill was warranted. On the property was a hut for the men, with a four-stall stable, and adjoining was a machinery site of three acres on which stood a battery of 5 heads of stampers! Clearly the City of Launceston Company never took the plant they bought! It was of good construction and in good order, in fact new, with battery house, water reservoir, dams, house for the men and all conveniences. The value of the entire works was estimated by Mr Edwards at £1000.

Calder now offered 13,000 shares to the public paid up to 10s. Of the initial proceeds £800 would go to the company and £500 to the promoters. The agent for the issue was T C Just, who knew Mr Scott well, having been his partner in the iron smelting ventures at and around Beauty Point. The float must have been successful, for work began in October.

A curious situation arose at the beginning of 1882, when rumours flew around town of a strong reef with good gold found on the Calder Co ground. It soon became apparent that the finder was Tom Moore, one of the original discoverers of the Industry reef, when he brought some rich specimens of quartz to town and told the Calder directors that for a consideration he would show them a 2ft 6in reef of this stone on their ground. Terms were agreed, but the find never seems to have been followed up.

The first half-yearly meeting of Calder Gold was held in the second week of March 1882. John Edwards had been appointed mine manager on 26th September. In their eastern section an adit (tunnel) of 200ft had been driven on contract at 8s 6d a foot, but did not cut the reef. A whim was erected to get the water out of the main shaft and three horses were working around the clock. An attempt was made to sink the main shaft another 100ft but there was too much water and they could only open out at 170ft. Good gold bearing leaders were met in the different works and nice specimens sent to town. Mr Edwards had expected soon to come upon the junction of the two reefs in his present workings, except that he resigned to go to Hobart. Thomas Hickson was appointed the new mine manager. Mr Kemp continued to do the books on half salary until finances improved.[99]

In April Mr J T Smith, owner of the Mowbray Hotel, paid a visit to Calder. He went down the shaft to the 170ft level and saw the reef from 8ft to 50ft from the shaft. It was the northern reef and showed 18in of fine chocolate coloured stone carrying good gold. It was well defined and showed a good deal of pyrite. He saw excellent prospects washed from it. He also went through the old workings at the 100ft level and they were in excellent order. The manager said they only had to drive 20ft to cut the southern reef.[100]

A problem had arisen, however, with the contributing shareholders, and the directors took the unusual step of taking their concerns into the public forum.

Proprietors and promoters usually took fully paid shares in return for vending their property into a new company. The public were then offered contributing shares, with a payment up front and the balance called upon later by the company. Speculators were very ready to take a chance on a few shares, but when calls were made, they either refused and had to be sued, or couldn't be located or were found to have purchased the shares in a false name. The company had to cease work for lack of funds, when its property may well be valuable and only need a little more development.

It seems this is what happened to the Calder Company. At their August annual meeting in Hobart shareholders were told that they could wind up the company, or accept a recommendation from Mr Scott that pumping and winding machinery be erected, and find a way to pay for it. They decided that the paid-up shareholders would contribute 3d a share on each call, though having no legal requirement to do so, on condition that the contribs pay 6d. Reverend R Harris, Captain Stanley and R Lucas were elected to the board.[101]

It did no good though, and in November 1882 the Calder claim, whim, horse and tools were offered for sale at auction. They had had a trial crush now, and it returned well over half an ounce to the ton (about 17 grams in fact), which was in keeping with earlier results.[102]

In 1884 the company was wound up by the court after failing to pay a bill.

The New Industry Prospecting Association

Down at Devil's Den, people were still trying their luck from time to time, aided by an official report on the field produced by Government Geologist Gustav Thureau back in 1882.

Mr Thureau said that gold had been found in the alluvium from 6ft to 20ft with reportedly a good yield. The field ran about a mile along the creek and in its bed, and he thought the whole valley could be hydraulicked profitably except that it would be too expensive to bring in the water at a sufficient elevation to get the required pressure. The gold was coarse, and near where the ranges came closer

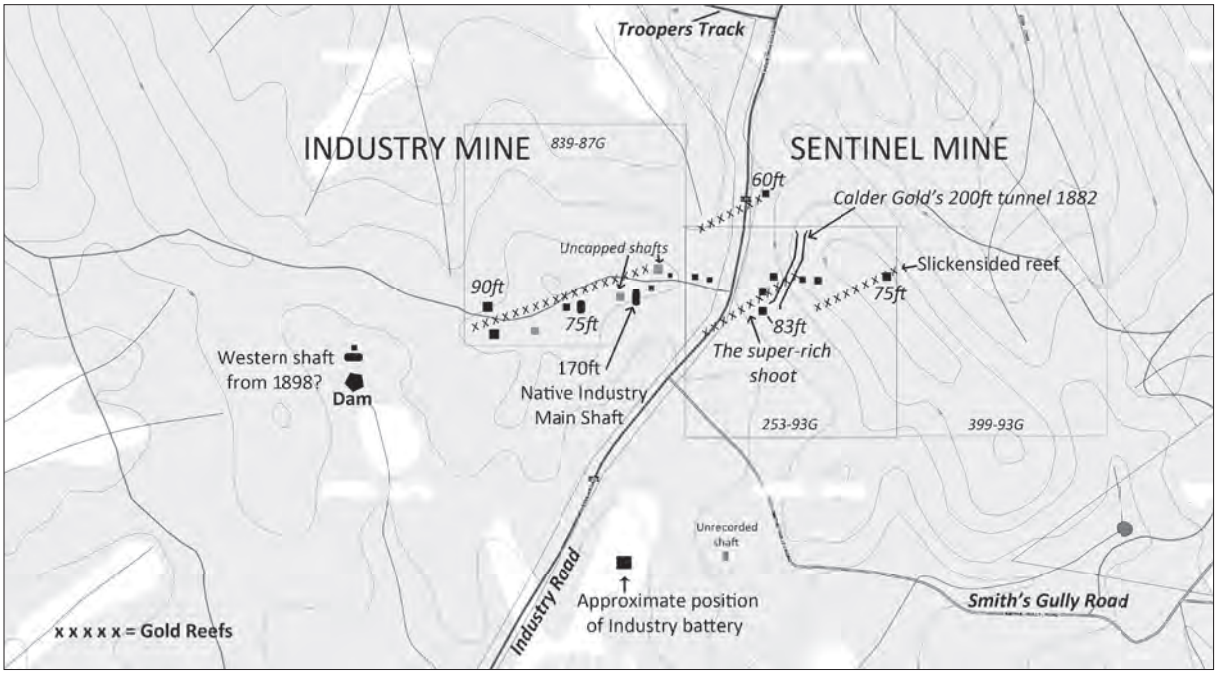
together was attached to quartz. A gravel or wash lead had been followed up the sides of a low hill until an outcrop of auriferous quartz was discovered.

At the time of Mr Thureau's visit in 1882 a cooperative prospecting company had been sinking a shaft 20ft west of an old reef to test the stone at a lower level and got to at least 50ft depth. They had increasing leaders, with arsenates and sulphates, though no gold, and expected meet the reef in ten or fifteen feet. They were encountering much water from the leaders and probably were overcome by it, as nothing more was heard from them.

In 1888 Tom Hughes, for the Success Prospecting Association, sank a shaft to 28ft and then drove north 20ft and south with leaders in the face. He had good specimens from several places on the field, and tried three more shallow shafts, but was driven out by water. A meeting of the partners in June decided to form a private company, and Messrs A E Burrows, A Beck, H J Harvey and John Hargreaves became directors. By January 1889, however, they'd spent their subscription monies and couldn't raise any more. [103]

In 1894 a Mr Tom Miller came in to town with samples from the Industry claim. Gold was visible in the stone, and was also found after crushing and washing where it could not be seen. A trial crush was to be arranged. Part of the stone was from the 50ft level of the main shaft and the balance from an 80ft shaft on the same line.

It seems that Mr Miller had taken over the Industry back in 1892, but had not so far been able to overcome the water. He brought the project to Launceston, and in August 1894 a syndicate formed the New Industry Prospecting Association and issued a prospectus. Half the shares were sold in the first few days. The shaft was said to be 200ft deep (it was more likely 170ft), with the reef at the bottom 20in wide with gold. There was also a 50ft prospecting shaft from which a quantity of stone yielding



The author's field examination of the Industry and Sentinel sites revealed a rabbit warren of holes, shafts and an adit. Most, but not all, have been capped with concrete lids by Mineral Resources Tasmania and cannot be accessed.

nearly half an ounce per ton was obtained. A steam engine had been rented and put on the claim and had already lowered the water 115ft, working 12 hours a day.[104]

The New Industry Prospecting Association had a 10 acre section (839-87G) in the name of Thomas Miller. The prospectus offered 225 one pound shares to the public, with another 75 held back for the promoters, together with £55 to be paid to them for tools and plant now on the claim.[105]

The Association met on Monday evening the 1st October 1894 at the Criterion with a large attendance and W H Knight in the chair. They decided to form a company and commence operations immediately. Messrs F E Howes, T Boyd, W J Southerwood, Thomas Miller and W H Knight were appointed directors with A Edgar Foote legal manager and secretary. The company would immediately advertise for a mining manager.[106]

The New Industry main shaft was apparently still in splendid order and timbered top to bottom. At the 120ft level was a lode 6in wide in one of the drives with very fair gold and another parallel lode at the 170ft level. There was only 5ft of water in the 170ft shaft. The new manager Mr J Jensen was cleaning up the drives and would take out 10 or 15 tons for crushing in Lefroy. If the trial crush went well, a five head battery would be placed on the claim.[107]

Mr Jensen soon had the south crosscut cleaned up and a trolley way put down and the crosscut extended to 79ft from the shaft. Unfortunately, just as with the Calder Company, the non-payment of calls then forced him to cease work.[108]

The Sentinel Mine Rush

The renewed activity at the Industry reef had generated quite a lot of interest, and as they announced finding a new lode, a party called the Brooks Prospecting Association had already sunk an 18ft shaft next door.[109]

Another group had taken up two 10-acre sections on the New Industry's east side (sections 253-93G and 399-93G), and they held a meeting in Hobart in February 1895 to form a company.

This new venture would be called the Sentinel Gold Mining Company NL and would have 32,000 shares of 1s. James Bradley, R C Lewis, W H Cheverton, S P Crisp and J Crawford were appointed directors, with Arthur Lord as Legal Manager. Their office and all their shareholders were in Hobart.[110]

A mine manager named Davidson was appointed immediately after the meeting and took charge on February 28th. Within a week he had fixed up the camp, marked out and cleared the site for a shaft and sunk it 7ft. Why he sank the shaft in the spot chosen is unknown, and seems a little precipitous.

He was evidently an energetic man, Mr Davidson, and a week later he had the shaft logged up, a windlass fixed, the shaft itself down 16ft and was starting a No 2 shaft. Again, there seemed to be no particular reason for siting the No 2 shaft where it was, but there was no denying he was keen! By the end of the month No 1 shaft was at 52ft and No 2 at 10ft. Surveyors were on the ground pegging boundaries.[111]

The New Industry Prospecting Association members seemed to be reinvigorated by the activity and confidence about them, and formed themselves into a small NL company with a capital of £600. Alfred Foote became the Legal Manager, with shareholders George Gardiner, E Jory, W H Knight, T Miller, T Plummer and William Southerwood (the coach proprietor). Tom Miller had the largest shareholding,

A windlass is cheap and easy to build and can be used to raise or lower men, equipment, water and stone. Image courtesy of TAHO and not from the Sentinel claim.

as he'd owned the claim. The number of shares available to the public suggested that once again the company would have insufficient funds.[112]

Sentinel soon came into gold-bearing formations. The No 1 shaft cut a leader with gold at 57ft and decided to open out for the reef. They'd also put a man on trenching a week previously, and he'd made a strike as well. He had what appeared to be a large body of ore with an east-west trend, and would immediately commence a No 3 shaft.[113]

Through May 1895 Sentinel drove off the No 1 shaft for 55ft. The No 2 shaft now had a windlass and was at 35ft, from where they began another drive. A series of prospecting holes cut stone with gold and the line of apparent reef led them to peg another section adjoining to their west. A second formation was found in the trenching that appeared to be a parallel 2ft reef. Their Chairman, James Bradley, went up for an inspection.[114]

Progress slowed over the next month. A No 4 shaft was commenced and another windlass erected and they continued with the drives and a winze (a declining tunnel). In the second week of July, Mr Davidson said he was getting indications of better gold.

Suddenly Hobart and Launceston were electrified by news of a strike. It was just a one line telegram sent by the mining manager from the Lefroy Telegraph Office to the Chairman in Hobart on the

evening of July 18th. "Struck shoot of gold very rich" was all it said, but it was enough. The Chairman alerted the newspapers to the communication.

That very night a new company was formed in Launceston, apparently by people associated with the mine manager, Mr Davidson. It was called the Vidette Prospecting Association, and Dr Joyce, Mr Davidson, Mr White and one of the Barretts were founding shareholders, subscribing £100 to the cause. They already had a section north of Sentinel with a gold-bearing reef.[115]

Within two days spectacular news from Sentinel was racing around the colony and people were flocking to the mine to see. One dish of crushed quartz from the vein produced 7oz! Every dish had splendid gold – it was "marvellous" said the *Examiner*. Dozens of people were already on site watching and pegging. The reef was from 7in to 2ft wide. "We have seen wonderfully rich specimens" said the *Telegraph*. The directors were on their way up from Hobart, and all adjoining ground had been instantly pegged out.[116]

Upon arrival, the Chairman James Bradley telegraphed the legal manager Mr A F Lord: "Lode 8in between walls. Broke prospect from face, marvellous return." The *Examiner* revealed that the discovery was only 4ft from the surface, on the cap of a lode, showing wonderfully rich stone. Henry Turner in Launceston advertised a prospectus for the "West Sentinel Gold Mining Co."[117]

Again, the directors of New Industry were re-energised and announced that they would re-organise their company on a better footing, but they'd said this before.

The *Telegraph* went up to view "the new rush" and Mr Davidson showed them over before leaving to consult the board. An immense lot of work had been done, they said. "*A little way up the hill ENE a splendid lode was discovered showing the slickenside wall as smooth as glass. We could see specks of gold thickly in the face. We then saw specimens and free gold crushed and washed from the reef yesterday. During the afternoon several more dishes were washed and the gold was thick in every dish!*"[118]

The Sentinel Chairman Mr Bradley went up and reported that a large crowd of people were on the property.

He instructed the mining manager to open up the face of lode, which was done, "*and a dish of stone broken out and washed before all present, the result of which I wired you, and the contents of which I now hand over to you less what was pilfered. With regard to the lode as far as we could see it runs 10 points south of west. The angle of shoot of gold we could not decide on till further opened up. The face of the lode at present is top 2ft under surface of ground, and face cut on to a further depth of 3ft between walls average 7in; the same under foot across trench. After leaving the face open two days we instructed the manager to shut it down, which he did. Our reasons for doing so are as follows: So many visitors were continually arriving that we could not do any work, and this is likely to continue*." Mr Bradley said that when the mine manager returned he would drive for the lode from No 2 shaft.[119]

Through August 1895 Mr Davidson searched for the lode, coming at it from several directions.

He drove north from the west shaft at the 35ft level, and trenched in the east. From the tunnel he drove from the 230ft point and sank another prospecting hole in the west. Everywhere he found fair gold, and proved the rich shoot for 13ft along and 11ft deep. He also picked up what appeared to be the Industry reef.[120]

Next door at the New Industry Prospecting Association they had a new Chairman in John Campbell, and yet another resolution to float a company to work their section 839-87G. It seems they'd had someone there prospecting lately, as a Mr John McKinnon sued them for unpaid work done. The defendants were Thomas Boyd, William H Knight and Frederick E Howes, who were presumably now directors. The amount was only £3 3s 9d and it was immediately paid. They announced a 5s call on their shares to resolve the cash difficulties, but as nothing was heard after that, it is likely the calls were not met by the shareholders.[121]

The following month Sentinel still had their rich shoot. It was now twin veins 18in apart, trending west, both showing gold and with fair gold between them. But they were not widening out. Mr Davidson had built a new hut for the main shaft. He then resigned and handed over to a new manager Mr J Champion. This was a little strange, as one would expect the discoverer to want to stay with his discovery. There was an expectation that all the thin veins and small lodes would join at depth into a major ore body.[122]

October 1895 saw the new manager take the south shaft to 32ft and erect windlasses to No 3 and No 5 shafts. The lode originally found continued to be remarkably rich but still too narrow to be payable.[123]

As summer began, the south shaft was down 83ft, centred and timbered, with ladders and whip, and opened out at 74ft. There was extensive crosscutting across the shafts, with the crosscut north extending to 110ft and south 63ft, but water was becoming a problem.[124]

Late in January 1896 Sentinel found their lode again 23ft south of their shaft. It was on a NNW course and 8in wide. Initially the gold was not visible in the stone, but was fair on crushing and washing. Then they came upon stone in the same formation that had splendid visible gold, but it did not last. It seemed that when the reef widened to 2ft it lost most of its gold.[125]

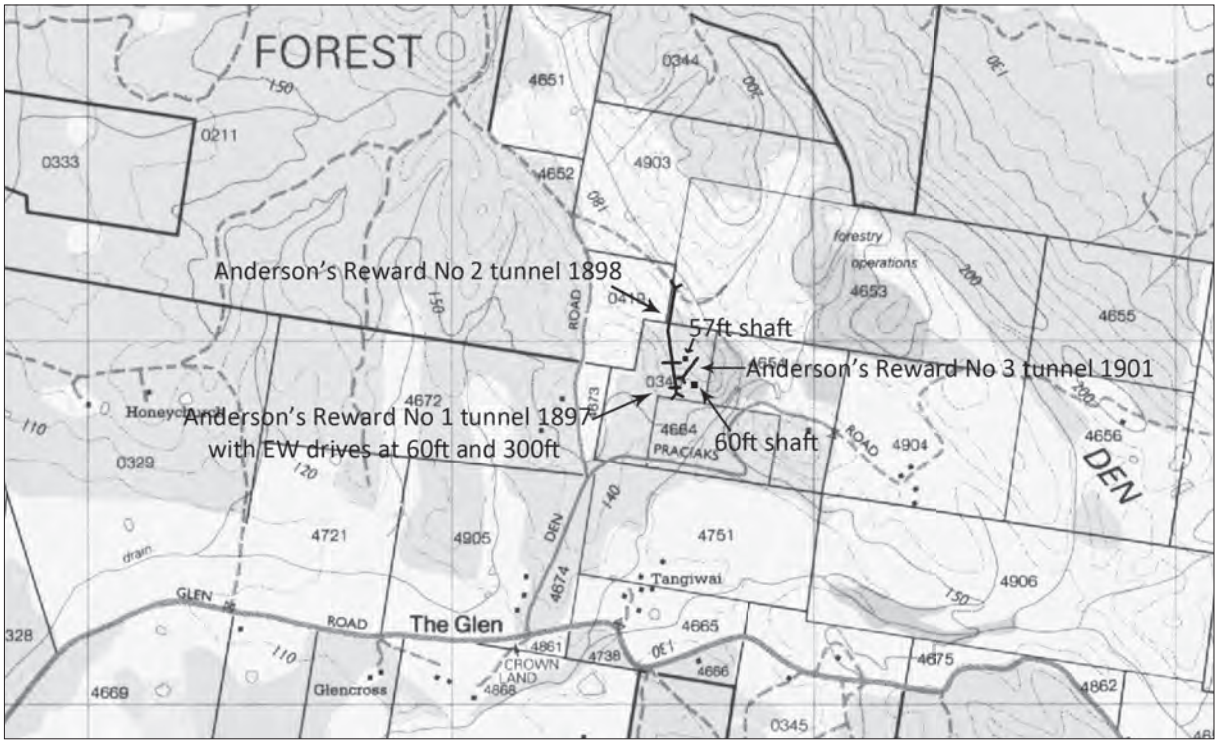
Work continued, and in March 1896 Mr J P Champion resigned as mine manager and was replaced by Mr W Galvin. The underlay shaft on the main reef was sunk to 57ft but found to be in the wrong place and didn't strike the gold. Mr Galvin recommended sinking another 100ft, but it seems his suggestion was not accepted.[126]

That winter work in the shafts and drives was suspended and they filled with water. The company went back to prospecting and found gold in a gully north of the claim, which they traced back into their ground. They also found an EW trending reef on their northern boundary while trenching, and this gave gold in the dish and from crushing. The excitement had died, however, and the company quietly disappeared.[127]

Anderson's Reward

Sentinel's suspension was rather a pity, as they'd just been visited by the Government Geologist Alexander Montgomery as part of a detailed report on the whole Lefroy district. He was very positive about both Sentinel and Industry.

His report was much delayed, however, and did not come out until March 1897, six months or more after Sentinel had closed. This was also after Mr Montgomery had taken "an offer too good to refuse" and moved to New Zealand in November 1896.



Approximate location of the Anderson's Reward Gold Mining Co workings on Den Hill, from the author's field trip with the assistance of current property owner Mr Warren Jensen. Note that No 1 and No 2 tunnels do not actually join, as they are separated by 40ft in depth.

As part of the detailed report Mr Montgomery inspected the Den goldfield, and in particular Den Hill, where a genial and indefatigable local farmer Mr John Anderson had been prospecting, looking for the source of the alluvial gold in the flats below. He'd followed the gold up from the old alluvial diggings for about half a mile to the side of Den Hill.

Mr Anderson was absolutely convinced that a significant reef must exist inside Den Hill, as it was really the only place that the Devil's Den gold could have come from. Unfortunately, he'd been misled as to how much gold came out of those diggings. He'd been told, for example, that one party took out 400oz. Believing such stories it was natural for him to think that a significant reef must exist. It was the best explanation for such quantities being shed during the millennia of weathering.

Mr Montgomery agreed with Anderson that such significant returns, if true, indicated a reef in the hill, and recommended a tunnel through the hill to thoroughly prospect it. This was beyond Anderson's means to do, and so early in February 1897, just before Mr Montgomery's much delayed report was finally released, Mr Anderson went to the market for capital. A prospectus for the Anderson's Reward Gold Mining Co NL appeared in the *Examiner* on February 2nd.

The prospectus was successful and the company was formed to prospect the two 10-acre reward claims Mr Anderson had been granted for his discovery of gold on the land. The company's capital was 100 shares of ten pounds each, with 50 retained by the promoter. Mr Anderson noted that he had been prospecting for the past six years on the land and had spent over £1000 in actual cash, not including his own labour.

Two east-west trending quartz lodes had been discovered by Mr Anderson, each giving colour, and also a large north-south trending schist lode with pyrite and a little gold. He'd trenched the highest part of the hill, above where the Devil's Den alluvial was discovered, and since Mr Montgomery's visit found another NW-SE trending schist lode with arsenical pyrite and traces of fine gold on the surface. This structure could be traced for miles along the range and gold got out of all the gullies. It seemed likely to go through the Industry and on to Back Creek.

The Government Geologist had recommended a tunnel right through Den Hill to cut all the lodes, and this would need to be 500ft long and would have about 150ft of backs (or ground above the tunnel). It would cost around £500. If it cost more, Mr Anderson undertook to complete it at his own cost. He was a clearly a fair man. It was not possible to take the cheaper option of drilling the hill, as the lodes were nearly vertical.

Mr Anderson noted that Messrs C Tregurtha and party had been doing the prospecting for him over the past few months. Two shifts per day would be put on, including them.

With the success of the prospectus, work began the same month.

When Mr Montgomery's detailed Lefroy report came out shortly after, the prospectus had already closed and work commenced. The report confirmed that Anderson had accurately passed on the Government Geologist's recommendation to tunnel through the hill. "*The reefs are found on Crown Land to the west of John Anderson's and John Shepherd's purchased properties, and have been prospected mostly by Mr Anderson... Very little, if any, gold has been seen in either lode, but some gold has been got about the surface, and as the reefs have the normal Lefroy strike, and are in good sandstone and slate country, they are worth testing more thoroughly than it has hitherto been practicable for the prospector to accomplish unaided*."[128]

Six months later Anderson had cut a 40ft approach and was already in 312ft with the tunnel. He'd gone through interesting formations at 60ft, 120ft and 300ft, and seen gold, but nothing significant.

By Christmas 1897 he was at 465ft and timbered, and in the new year over 500ft. In the face now, he had an interesting band of sulphide mineralisation that assayed at 6.8% Cu and 2oz Ag. This sounded good, but it was only worth anything if there was a large tonnage available.[129]

In April 1898 he was at 545ft, and suffering increasing water overhead. He consulted with shareholders about suspending and starting a second tunnel from the opposite side of the hill, to meet the original tunnel from the other direction.

His shareholders were agreeable and he immediately started No 2 tunnel in from the northeast side of the hill, which was expected to meet No 1 in about 275ft. Starting No 2 tunnel didn't just avoid the water, it meant less travel taking out the waste. Mr Anderson said he had "*great faith in our property being of value*" and "*It is past any doubt now that this hill contains both gold, silver and copper*."

The wisdom of starting the second tunnel was soon proven, with it being completely dry. The ground was hard on this side of the hill though, and work was very slow. Late in 1898 he was still only in 178ft. Here, however, he came across what appeared to be a commercial deposit of aluminium silicate. He declared this to be the first large discovery of this mineral in Tasmania, and that he would apply for a reward claim.[130]

Early in 1899 the signs of copper encouraged the men to go to three shifts and 24 hour operation, with work resuming in No 1 tunnel as well as continuing in No 2. Remarkably, six of the men were volunteers! No 1 tunnel had a 3in vein of 7% Cu with a little silver. No 2 was still dry but the rock was very hard.[131]

Late in 1899 the tunnels were 900ft in total. A little fine native copper had been seen. Then in mid-1900 funds ran out and work was suspended, with the tunnels over 1000ft in total. Mr Anderson wasn't ready to give up though, and asked the new government Geological Surveyor Mr Twelvetrees to come up for an inspection and make recommendations with a view to establishing a larger company.

Mr Twelvetrees had his hands full at the time, and a well-known mine manager named Henry Sands was persuaded to inspect and give his opinion.[132]

Mr Sands was impressed with the amount of work done for the money. He noted that No 2 tunnel was about 400ft and went through a large body of aluminium silicate and ended in a large quartz formation. No 1 tunnel was over 600ft, about 40ft deeper than No 2 and for over 100ft gave good assays of gold, silver and copper in a flat banded formation between schist layers. He thought it needed a rise from this tunnel and a shaft from the top to explore the bands between the tunnel and the surface, and there could be a copper sulphide deposit at depth. At 300ft from the No 1 adit entrance there was a splendid 6ft wide quartz lode with well-defined walls, from which good gold was obtained on the surface but only a trace in the tunnel. This needed to be driven on east to investigate. Mr Anderson advised he now had four assays on the narrow ore bands. They were: Cu 7%, and Ag 2oz; Cu 0.4%, Ag 2⅓oz and Au 2.3g; Cu 3.7%, Ag 2oz and Au 1.5g; and the fourth assay (for copper only) 14%. He had other assays, but considered them so high in copper as to be misleading.

On the strength of this report a new company was formed – Anderson's Reward Mining Co NL, with 100 shares of £16. The company was registered, with a board of directors and John Anderson as manager. Forty fully paid shares were retained by Mr Anderson, and the balance issued to 38 small Launceston investors paid to £11, so that £5 a share could be called to fund further work. On Jan 19th 1900 about 4kg of ore from the tunnel was assayed and returned 1.5g Au, 1oz Ag and 4% Cu. Another small sample was sent to England to see if it could be processed by the Elmore copper process.[133]

The new company now had the funds, so long as members paid their calls, to resume work. A drive east on the lode at 300ft in No 1 tunnel was immediately commenced. At 24ft the lode had widened to 12ft with a nice slickenside (smooth fault) wall, but soon after the formation broke up and was abandoned. A drive west was commenced, together with a third tunnel opened near the top of the hill on the southwest side nearly over No 1 tunnel. It would be about 200ft long with about 40ft of backs.

At 125ft and digging in a northeast direction they came upon a large north-south formation that was described as a "true fissure lode" but without gold. Then heavy rain drove them out.

The west drive in No 1 was now getting gold in the dish and improving. Early in 1902 a shaft was sunk 60ft from a point 40ft west of where the gold was found in the tunnel but struck heavy water and had to open out at 50ft. They'd just come across another interesting auriferous and pyritic formation 8ft in from the shaft when the windlass couldn't cope any longer and water drove them out.[134]

In winter 1902 one of the directors, William Huxtable, visited. He agreed that the property should not be given up yet, and an experienced miner named Thomas Higgs was engaged to assist. Water was got out of the shaft and the men got below and resumed work in No 2 tunnel to bring it under an old shaft where arsenical pyrite was discovered years earlier. Shortly after, with funds short, they learned that

the new Government Geologist Mr Twelvetrees was able to visit and they decided to suspend until they had his advice.[135]

William Twelvetrees came up on the 4th of September 1902.

Mr Anderson told him about the party on the alluvial that got 400oz, but it wasn't enough to impress. Mr Twelvetrees said that Mr Anderson may have got gold out of the quartz around the mouth of tunnel No 1, but he couldn't find any. Most of the quartz was a barren white. The lack of gold on top of the hill suggested that either the alluvial won below was less than suggested, or the lodes were concealed.

He sampled the red clay and found it was not bauxite, but only clay. He agreed that the tunnelling had been justified and was in fact what any inspection of the ground would have suggested. However it had now been prospected and to do anything more would be very speculative.

Anderson's Reward Mining Co Ltd could not survive such a negative summation and was wound up. Yet Mr Twelvetrees was not negative about the district and said that the New Den in particular deserved more work. "*It is the height of absurdity to believe that the gold-bearing reefs in this (Lefroy to Den) belt have been worked out*".

The Industry Mine's Last Hurrah

While John Anderson was investigating Den Hill, a new group had been encouraged by former Government Geologist Montgomery's positive report in 1897 about the ground at the head of Den Creek. In early 1898 they took over the old Industry claim and began some serious prospecting.

They took stone out of one of the existing shafts. As they took it out, they sent it to the New Pinafore battery at Lefroy for crushing. In all, three trial crushes were done, and yielded a very impressive 70oz from 68 tons of stone before they were driven out by water. This was a result more in keeping with the appearance of the stone, and raises further questions about the crushes done by the Native Industry Co in 1875.[136]

A new shaft was sunk west of the old workings and cut the reef at 80ft depth, where it was about 2ft wide with gold in both stone and casing. This seems to have proven the reef as auriferous for 300ft along course and to 80ft depth – unless they were on a new reef, which was not clear from their statements. They had no water in their new shaft and were taking out and stowing stone in a crossdrive until hauling power was available to lift it up the shaft.

The legal manager, Mr C H F Shearn, said that arrangements had been made for machinery and to raise capital. The new lode could be worked from the 170ft shaft sunk by a previous company, which was still in good order and had a 20ft well. A drive would be put in to cut the lode at 170ft and work would continue in the 75ft level. Recent samples without visible gold still returned splendid results on crushing and could be seen in Mr Shearn's office.[137]

An issue of 30 shares at £10 was quickly taken up and machinery was purchased from the old California mine and taken to the Industry. The cake of gold from the trial crushes was put on display first at Mr J Barclay's, and then at Frederick Fairthorne's pharmacy. Eight of the new shareholders were taken up to see the mine in one of existing shareholder Mr Southerwood's drags.[138]

The new company, under the original name of The Industry Gold Mining Company NL, was registered early in May 1898 with 60,000 one shilling shares, of which half were kept by the promoters and half

sold to the public. Larger shareholders included James Ah Catt, Charles Sandberg, A E Burrows, James Barclay, Alexander Evans, F K Fairthorne, A Kenworthy, Dr W G Maddox, J T McDonald, G P Milsom, James Pagan, R S Scott, George Paton, S Sicklemore, William Sidebottom, R N Smith and M A Shearn. It was a good spread of well-known Launceston investors.[139]

With the company and new issue bedded down, they got on with the mine development and continued bringing up stone. Soon another 10 tons was in the paddock and they were connecting the shafts with a drive.

Baling with 80 gallons buckets, they finally got water out of the 120ft level in the old shaft and were able to inspect it. The old workings were well timbered, and the extensive drives, chambers, winzes and crosscuts accounted for the amount of water they'd had to remove. The shaft opened into a big chamber 8ft wide extending north and south, out of which the north crosscut had been driven 32ft from the shaft and cut a reef from 1ft to 15in wide. This reef had been driven on 65ft west and 47ft east of crosscut. Another chamber had been cut out south of the west drive 12ft by 8ft. From the shaft chamber a crosscut had also been driven south about 10ft and cut the old Industry reef which had been driven on west over 80ft. This drive being barricaded up, they couldn't examine it.

By late June 1898 they had 26 tons paddocked and called tenders for cartage to the New Pinafore at Lefroy for another crush. They were rising from the No 2 level at 120ft on 18in of payable stone overhead. The western face looked good with walls about 2ft 6in apart and about 6in of carrying stone on each wall and improving. In both the No 1 and No 2 levels the stone showed gold very freely.[140]

A Hobart company began working east of Industry on the NW portion of the Sentinel ground, with fairly good prospects. A Mr Watson was their mine manager.

The fourth crush was encouraging, with 47 tons yielding 30oz of gold. This yield corresponded with that gained by their namesake, the original Industry Company. More stone was being raised, and the 30oz cake was put on view at Mr Barclay's.[141]

Wet weather was causing water problems, but they were now in a position to erect a poppet head and pumping gear. This was done through August 1898 while they continued to raise stone.

By the end of September they had enough for another crush, and carted 15 tons to the New Pinafore. The newly formed company in the section adjoining east was working close to the Industry boundary.

In a major shock, the crush of the 15 tons returned only 4¼oz of gold. It was uncannily like the earlier company's experience.[142]

The mine manager battled on for a few weeks. He examined the old shaft 200ft north of the main shaft and found that a crosscut had been driven south 80ft and only need 50ft to connect the shafts and test the country between. Sadly though, the shareholders had lost confidence. The latest call was not met and the company was forced to suspend operations.[143]

Imperfect Memory

Years later, when the depression hit in 1930, men were looking for means of earning a living. At the same time the government was prepared to stake men interested in going out to prospect.

In July 1930 the *Examiner* announced that an old shaft at the Devil's Den would be reopened by a syndicate.

It was said that around 1890, a Mr E J Kimberley and three others sunk a 60ft shaft at the Den. They opened out and cut a lode of quartz and pyrite. They had only got out a few pieces of stone, showing gold freely, when the shaft, which wasn't timbered, caved in. A horse, working at hauling up the bucket, had to quickly lower the bucket to bring the men out. One of the men had his clothes torn off, but all escaped. As they had no more capital, they had to abandon the site, but were convinced that the gold was there in a large formation. Now some miners had decided to cooperate and reopen the workings, and apparently one of them was Mr Kimberley.[144]

This story may be true, but there is no obvious record of it. Nevertheless, early in 1932 it was reported that a party of four including Mr M Flaherty, a well-known prospector, was clearing out and re-timbering the shaft to 60ft, where gold was allegedly showing when abandoned 40 years earlier.

By March the shaft had been dewatered and cleaned out. A leader passed through by earlier miners at 45ft was met and assayed and showed gold freely. They were nearing 60ft. It was now said that in recent years two prospectors named Laird and Merritt sank a shaft in the old workings and got 16oz, but again there is no obvious record to confirm it.[145]

The men got to the 60ft level, but soon found that the fabled lode was just a sulphide formation with little or no gold. The Great Depression was still on, however, and perhaps because of this the party was determined to continue, and sank a shaft on the side of a hill overlooking the alluvial workings to test a formation there.

It probably helped their confidence that Mr Flaherty was emphatic that in the old days one party at the Devil's Den had won 400oz of alluvial, and another took out 200oz. This was not true, but it seemed to have become an established fact.[146]

By the end of 1931 Flaherty's party had given up and abandoned the ground. Others came in though, and helped by rumours of finds, people were fossicking around on and off right up until the beginning of the war.[147]

While these later prospectors went away empty-handed, the Den Range remains prime gold country and it is difficult to understand why it has seen nothing but a bit of soil and stream sampling in modern times. It has been forgotten by modern miners. Yet the Devil's Den alluvial was payable for Stuart's party for a while, and both the Industry and Sentinel mines had rich quartz reefs. It seems they couldn't find them of sufficient width to make a mine payable, and they had some unexplained problem with recoveries. The Sentinel no longer even appears in official databases, but at the time their 2oz nugget was the second largest ever found in Tasmania.

In those days prospecting was a hit or miss affair. The old-timers had no idea of geological controls, poor extraction techniques and no ability to drill before jumping in with a full-on shaft. That they found the reefs they did was surprising, and who knows what else is there waiting to be found.

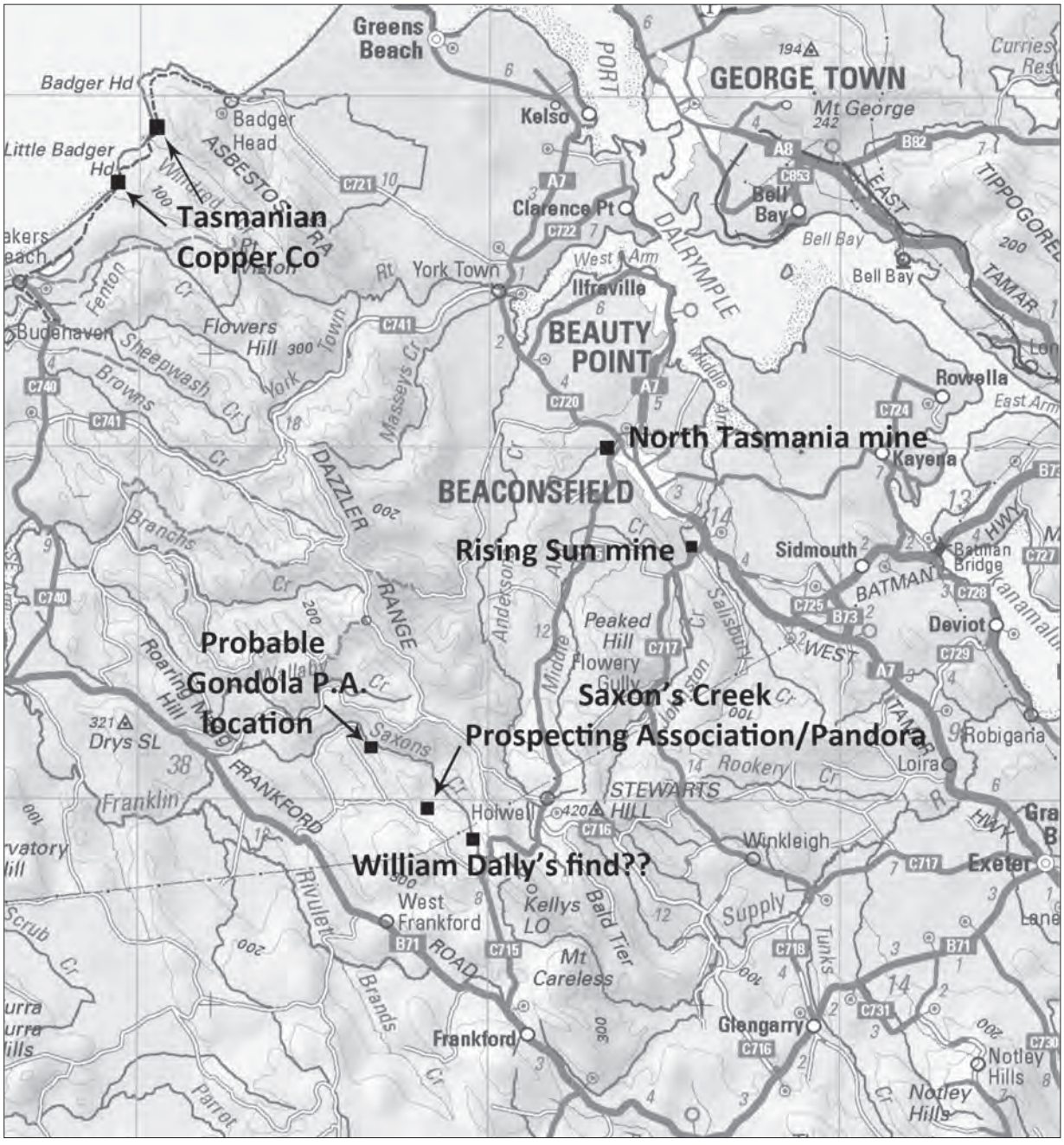
As the Government Geologist Alexander Montgomery said: Sentinel and Industry "*will doubtless attract prospectors at all times, as there are reefs with the normal strike, and occasionally gold is to be found in them, and very probably some better discovery will in time be made.*"

Notes & References

1. Cornwall Chronicle 14/3/1863 p4. William Cox very angrily lodged a claim after John Barrett. He said he'd found the Devil's Den earlier by himself, and showed Barrett where it was. His fury was misdirected, as the Act was not retrospective and his earlier find therefore could not qualify. He returned as part of Barrett's party, and they found better gold at a different spot. Only the new find, perhaps made on the very day the Act passed, could qualify for the reward.
2. Examiner 9/4/1863 p4
3. Cornwall Chronicle 22/4/1863 p3
4. Cornwall Chronicle 30/7/1864 p3
5. Examiner 23/8/1864 p3
6. Examiner 18/1/1896 p9
7. Examiner 29/9/81 p3, Cornwall Chronicle 15/7/1865 p5. As Cox had earlier claimed that "Honest John" Barrett dudded him, his credibility as a witness was not great. Turner's Marsh, by the way, in those days included what we now call Karoola.
8. Examiner 23/5/1865 p3. "Teams" could be oxen or horses.
9. Examiner 4/7/1865 p5
10. William Cartledge weakened his case later by saying that only he was a partner from the outset and the others were to be given the option of partnership or wages after the first month.
11. Examiner 8/7/1865 p5 & 15/7/1865 p5 & 18/1/1896 p9.
12. Cornwall Chronicle 8/7/1865 p4. Gold was £4 an ounce, so Rawson was saying that a digger could make £6 a week. Compare this with John Barrett's farm overseer's salary of £1 a week, and you see that it was enough to create a rush.
13. Examiner 6/7/1865 p4. Stuart's statement that provisions were available at town prices sounds exaggerated. Who was providing them?
14. Examiner 8/7/1865 p5. Rawson (1825-1898) and Stuart (1824-1905) came to Victoria around 1857 for the gold rush and so knew many miners there. Stuart was a well-known mineral surveyor in Victoria, and had married Rawson's sister Mary in South Yorkshire in 1856 just before they both families came over. Stuart died in Launceston.
15. Examiner 11/7/1865 p4, Cornwall Chronicle 15/7/1865 p5
16. Cornwall Chronicle 15/7/1865 p5
17. Examiner 15/7/1865 p5
18. Examiner 15/7/1865 p5
19. Examiner 18/7/1865 p5
20. Mercury 19/7/1865 p3
21. Cornwall Chronicle 19/7/1865 p5
22. Examiner 20/7/1865 p5
23. Examiner 22/7/1865 p3, Mercury 22/7/1865 p4
24. Examiner 25/7/1865 p5 & 27/7/1865 p5 The Albert Car was invented in Melbourne around 1851 and named after Queen Victoria's husband. It was a single axle, single horse conveyance with back to back seats, luggage room between, and iron reinforced shafts. Its springing meant greater comfort, and its surprising capacity for passengers and luggage made it ubiquitous in Australia in the 1860s and 70s.
25. Mercury 28/7/1865 p2
26. Cornwall Chronicle 29/7/1865 p4, Examiner 29/7/1865 p5
27. Examiner 1/8/1865 p5
28. There was a Mr John Freeman at Lower Turner's Marsh in later years, and it may have been him.
29. Examiner 5/8/1865 p4 & 8/8/1865 p5
30. Mercury 12/8/1865 p3
31. Cornwall Chronicle 19/8/1865 p5. Peter Rasmussen came back to Launceston shortly after and became a well-known miner, freemason, mine manager and company director at Beaconsfield and Lefroy. His descendants believe he jumped ship when he came to Australia, but the discharge papers he was carrying show this wasn't the case.
32. Examiner 22/8/1865 p2, Mercury 25/8/1865 p2
33. Cornwall Chronicle 23/8/1865 p11
34. Cornwall Chronicle 26/8/1865 p4, Ex 26/8/1865 p5
35. Examiner 5/9/1865 p5
36. Cornwall Chronicle 13/9/1865 p5
37. Examiner 21/9/1865 p4
38. Examiner 7/10/1865 p4 & 10/10/1865
39. Cornwall Chronicle 1/11/1865 p4 & 22/11/1865 p2
40. Cornwall Chronicle 2/12/1865 p4
41. Examiner 30/7/1866 p3
42. Launceston Times 27/1/1868, Examiner 28/1/1868 p4 & 5/3/1868 p4. Smith and Poole were a large drapery, tailoring and millinery establishment opposite the International Hotel. They employed 40 men and women and you could have a suit made to measure in 24 hours. They bought a lot of gold from miners, and had picked up £250 worth in just the past month from Fingal miners.
43. Cornwall Chronicle 30/1/1869 p5, Examiner 27/2/1869 p2
44. Mercury 5/2/1869 p2, Cornwall Chronicle 10/2/1869 p5
45. Examiner 16/2/1869 p2
46. Mercury 17/2/1869 p2
47. Examiner 23/2/1869 p2
48. Examiner 27/2/1869 p5, Mercury 27/2/1869 p2 & 2/3/1869 p2
49. Mercury 30/6/1869 p2, Examiner 14/8/1869 p4 & 24/8/1869 p2
50. Cornwall Chronicle 30/8/1869 p2
51. Cornwall Chronicle 3/12/1869 p1
52. Cornwall Chronicle 11/12/1869 p7. James Dowlin became well-known in Tasmania as a mine manager and hotel owner. He had only recently come down from Ballarat to appear as an expert witness in the Great Tasmania Reef swindle of 1869, and stayed on to assess the Dally brothers' first finds at what later became Beaconsfield.
53. Examiner 21/12/1869 p3, Cornwall Chronicle 24/12/1869 p7
54. Cornwall Chronicle 22/1/1870 p4 & 28/1/1870 p2, Examiner 10/2/1870 p3
55. James Major later partnered with Captain Longden to build the Ilfracombe Iron Works on today's Holwell Road. They built a long tram line to a big pier that they called Longden's Jetty. Today we call it Beauty Point.
56. Examiner 24/2/1870 p2, Cornwall Chronicle 26/2/1870 p9

An 1870s Albert Car in the Melbourne Museum. See note 24.

57. Cornwall Chronicle 9/3/1870 p2 & 21/3/1870 p2
58. Examiner 22/3/1870 p3
59. Examiner 5/4/1870 p5
60. Mercury 20/4/1870 p3
61. Sam Richards was eventually awarded £3000 (equivalent to a couple of million today) for finding the first payable goldfield after the passing of the 1863 Goldfields Reward Act. Examiner 26/9/1881 p3
62. Examiner 21/4/1870 p5
63. Examiner 13/8/1870 p5 & 20/8/1870 p2
64. Examiner 10/9/1870 p5, Cornwall Chronicle 17/9/1870 p11 & 23/9/1870 p2
65. Cornwall Chronicle 21/10/1870 p2. "The Mount" was the Mount Direction hotel.
66. Examiner 22/10/1870 p5. The Examiner was wrong about the nugget – it was not the biggest ever found to that time. A nugget of nearly 8oz was found at Mangana in 1867 by Joseph Robertson and George Hitchcock.
67. Cornwall Chronicle 26/10/1870 p3, Examiner 27/10/1870 p5
68. Cornwall Chronicle 29/10/1870 p6
69. Cornwall Chronicle 12/11/1870 p5 & 28/11/1870 p2, Examiner 3/12/1870 p4
70. Cornwall Chronicle 23/1/1871 p1
71. Cornwall Chronicle 21/4/1871 p2
72. Cornwall Chronicle 8/5/1871 p2 & 17/5/1871 p3 & 5/6/1871 p2
73. Cornwall Chronicle 12/6/1871 p2
74. Cornwall Chronicle 12/6/1871 p2, Examiner 22/8/1871 p1 & 19/9/1871 p3
75. Examiner 28/5/1872 p2
76. Cornwall Chronicle 28/8/1972 p1
77. Cornwall Chronicle 23/9/1872 p3, Examiner 31/12/1872 p6
78. Examiner 25/6/1874 p4
79. Examiner 4/8/1874 p3 & 16/9/1874 p2 & 6/10/1874 p5
80. Cornwall Chronicle 21/10/1874 p3
81. Cornwall Chronicle 4/11/1874 p2 & 6/11/1874 p3
82. Cornwall Chronicle 16/11/1874 p2
83. Cornwall Chronicle 1/1/1875 p2, Mercury 4/1/1875 p2
84. Cornwall Chronicle 22/1/1875 p3, Mercury 10/4/1875 p2
85. Cornwall Chronicle 16/4/1875 p2, Examiner 17/4/1875 p2
86. Cornwall Chronicle 14/5/1875 p3
87. Ironically, Mr Just would suffer a disaster a few years later at the Beaconsfield Gold Mining Co (not to be confused with the Tasmania mine). He built a huge crushing plant based on expert analysis of the ore without doing a trial crush, only to find that the gold did not exist.
88. Cornwall Chronicle 16/6/1875 p2, Examiner 17/6/1875 p2
89. Cornwall Chronicle 22/5/1876 p2, Mercury 31/7/1876 p2
90. Examiner 5/10/1876 p4 & 12/10/1876 p2
91. Mercury 29/3/1877 p3
92. Examiner 21/4/1877 p5
93. Examiner 10/5/1877 p3
94. Examiner 22/5/1877 p2
95. Examiner 27/7/1878 p3
96. Examiner 21/12/1878 p2, Cornwall Chronicle 23/1/1879 p2
97. Mercury 17/3/1879 p2
98. Examiner 31/8/1881 p3 & 7/9/1881 p4
99. Examiner 15/3/1882 p3
100. Examiner 11/4/1882 p3
101. Examiner 15/5/1882 p2 & 11/8/1882 p3
102. Examiner 29/11/1882 p4
103. Examiner 1/5/1888 p3 & 22/5/1888 p3 & 20/6/1888 p3
104. Examiner 28/2/1894 p7, Mercury 20/8/1894 p2
105. Mercury 20/8/1894 p2
106. Daily Telegraph 3/10/1894 p3
107. Mercury 23/10/1894 p4, Examiner 6/11/1894 p6
108. Examiner 20/11/1894 p6 & 5/12/1894 p7
109. Daily Telegraph 7/11/1894 p3
110. Mercury 23/2/1895 p4
111. Mercury 6/3/1895 p3, Daily Telegraph 13/3/1895 p3
112. Examiner 1/4/1895 p6
113. Daily Telegraph 11/4/1895 p3, Examiner 20/4/1895 p6
114. Daily Telegraph 2/5/1895 p3, Examiner 30/5/1895 p6
115. Daily Telegraph 20/7/1895 p8
116. Examiner 20/7/1895 p7
117. Daily Telegraph 24/7/1895 p3, Examiner 25/7/1895 p3
118. Daily Telegraph 27/7/1895 p8
119. Examiner 29/7/1895 p6
120. Mercury 7/8/1895 p3, Mercury 14/8/1895 p3, Examiner 23/8/1895 p7
121. Daily Telegraph 7/8/1895 p1, Examiner 2/9/1895 p6
122. Daily Telegraph 30/8/1895 p3, Mercury 25/9/1895 p3
123. Examiner 3/10/1895 p7, Mercury 23/10/1895 p4
124. Examiner 16/1/1896 p7 & 21/11/1895 p3
125. Daily Telegraph 20/1/1896 p3 & 24/1/1896 p3
126. Mercury 12/3/1896 p3, Examiner 26/3/1896 p3
127. Daily Tele 16/7/1896 p4
128. *Lefroy Gold Field, Tasmania*. Montgomery 9/3/1897 MRT
129. Examiner 22/1/1898 p6 & 18/3/98
130. Examiner 14/9/1898 p3 & 8/11/1898 p2
131. Examiner 18/3/1899 & 28/3/1899 p3
132. Examiner 28/6/1900 p7 & 20/10/1900 p6. Henry Sands built the Club Hotel at Beaconsfield in 1881, and ran it for many years. It is still there, though renovations have covered over or replaced most of the old building.
133. Mercury 9/2/1901 p4, Ex 6/3/1901 p2
134. Examiner 5/10/1901 p6 & 14/12/1901 p6 & 5/4/1902 p6
135. Examiner 2/6/1902 p2 & 9/8/1902 p6
136. Examiner 19/4/1898 p3
137. Examiner 14/4/1898 p3 & 19/4/1898 p3
138. Examiner 20/4/1898 p3
139. Examiner 9/5/1898 p8
140. Examiner 10/6/1898 p3 & 25/6/1898 p7
141. Daily Telegraph 30/7/1898 p5
142. Examiner 13/9/1898 p3 & 27/9/1898 p2 & 7/10/1898 p2 & 11/10/1898 p3
143. Examiner 25/10/1898 p3
144. Examiner 14/7/1930 p9 & 30/7/1930 p9
145. Mercury 18/2/1931 p4, Ex 12/3/1931 p10
146. Examiner 24/3/1931 p3
147. Examiner 18/12/1931 p4 & 10/8/1933 p4 & 7/10/1938 p3



Copper Occurrences Around the Tamar

Copper was found at Badger Head, Beaconsfield and Holwell. No occurrence has proven commercial so far and they have been largely forgotten. The location of William Dally's find remains a mystery to this day.

Tamar Copper and the Statue of Liberty

Copper occurrences have been reported throughout the Tamar districts, beginning with Lt-Governor Paterson in 1804 and Count Strzelecki around 1841. Unfortunately, while claims often led to considerable work and expenditure, most turned out to be erroneous or exaggerated.

The first genuine occurrence appears to have been discovered by Alexander Loane, who found copper mineralisation on the beach between Badger Head and Little Badger Head in July 1877. It was in the form of chalcopyrite, and assayed at an impressive 21% copper. Shortly after, he found "peacock" copper ore close by.[1]

The advent of underground gold mining at Beaconsfield led to other significant copper discoveries in the late 1870s and through the 1880s, such as in the Rising Sun mine in the gorge between Salisbury Hill and Cabbage Tree Hill, and the North Tasmania mine on the north side of the town. Rising Sun began as a gold mine, but switched to copper when the gold didn't meet expectations. North Tasmania had high copper values, but was always mined primarily for gold. In later years the big Tasmania mine itself reported copper grades over 1% within auriferous quartz veins at depth.

Government Geologist Gustav Thureau referred to Tamar copper in three reports during the 1880s. In his "Carbonaceous Deposits" report in 1883 he noted occurrences of native (pure) copper in the Moonlight gold mine at Beaconsfield. His "Future Prospects" report of the same year talked about the Rising Sun mine: *"Their lode appears a very strong one, and carries pyrites of copper principally, which on assays gave a fraction over 26 per cent of pure copper per ton."* His 1887 report to parliament said: "*Copper pyrites in remunerative quantities also occur at Saxon's Creek, west of Beaconsfield*." No-one, however, has ever managed to make money out of these occurrences.

The Tasmanian Copper Company

Reports of copper were quick to excite the public imagination because of the wealth that poured into South Australia after its copper discoveries of the 1840s. When copper was found in New South Wales as well, Tasmanian punters were primed to jump onto any copper float that had a good story to tell.

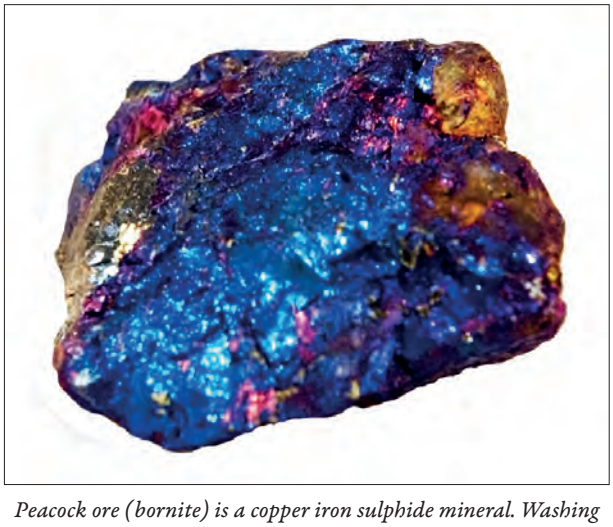
William Leonard, owner of the general store at Ilfracombe (now Beauty Point), was well-placed to hear all the local gossip. He was the first to break the news of a genuine copper discovery in the Tamar region, and had considerable credibility, having been the manager of the first iron smelting company in Tasmania as well as manager of the first two gold mines at Beaconsfield. He even had a town named after him – Leonardsburgh – which then existed on Leonardsburgh Road (now Tattersall's Road), north of Beaconsfield.

In a letter to the *Examiner* on October 29th 1877, Mr Leonard revealed that a rich lode of copper pyrite (i.e. chalcopyrite or copper sulphate) had been found, though he wouldn't say where.

Two weeks later Adye Douglas Junior (a gold-miner, and nephew of the well-known lawyer and politician of the same name) wrote to the *Cornwall Chronicle*, admitting that a discovery had been made back in July by Alexander Loane. He, Loane and Messrs W and H Baker had now applied for an 80 acre lease at Badger Head. They'd found traces of copper at many sites along the beach but were forced to suspend prospecting due to bad weather. Mr Douglas complained that a neighbouring farmer, James Barnett, had jumped the claim and put three men working on the site.

Barnett was soon evicted by a Mines Court, and in December 1877 Mr Loane presented to the *Cornwall Chronicle* an ore specimen he'd found on the claim. It was assayed by Mr Weedgate at 21% copper and from its appearance the *Chronicle* believed that it could have gold and silver as well.

A few days later the *Chronicle* received a box of specimens of yellow pyrite and peacock ore from Badger Head and put them on display at the Criterion Hotel. They were the richest ever found in Tasmania, and one lump weighed 10kg. The lode they came from was 3 feet wide, but located below the high water mark where it was difficult to get at. Loane's party dug a pit to get the samples, but it was quickly flooded and they hoped to pick up the lode again further back from the beach. They'd named their claim the Pioneer.[2]



Peacock ore (bornite) is a copper iron sulphide mineral. Washing in white vinegar and leaving it to air dry brings out the colour.

In February 1878 Loane reported that they'd traced the lode on a NE to SW trend for 20 metres. They sank a shaft from 10 feet above the high water mark down to 15 feet depth, where they picked up the mineralisation. It was dipping on a 1 in 3 grade to the east, and a sample taken by W L Jenkin was assayed at 27.6% copper and 2¼ oz silver. They'd found another lode on the same beach, 90 feet to the west.

Loane's party applied to lease three 80-acre sections, to be held on behalf of the party in the names Edwin Baker, Alex Loane and William Aikenhead. By April 1878 a company, to be known as the Tasmanian Copper Co, was being formed to take over these sections and apply for

Further along the coast was the Penguin Silver Mine. Their beach-side operation was similar to the Tasmanian Copper Company, and this 1871 watercolour is also a good illustration of the operation of a whim for raising stone and water. In the background is the steam paddle tug Tamar.

a fourth, so they would have 320 acres in total under mining lease. Operations had already commenced to create a mine.[3]

The Tasmanian Copper Company held its first meeting on April 16th 1878 at the Mechanics Institute in St John Street, with the Editor of the *Examiner*, William Aikenhead (son on James Aikenhead MLC and later an MHA himself) in the chair. Such was the allure of copper that the company had already floated, despite no prospectus having been issued. A prospectus was later drawn up by William Jenkin, but only after questions were raised about its absence. Of the 20,000 shares of £1 each, 7,550 were issued fully paid to the promoters and 12,450 to the public as partly paid. This placed rather a high value on their discovery, but reflected the public enthusiasm for a genuine copper play.

The first meeting elected a Board of Directors, being Richard Green (Chairman), William Aikenhead (Managing Director), James Aikenhead MLC, William Gellibrand, Edwin Baker, William Hart MHA, George Fisher and Edward Harrop. All were significant shareholders. Other shareholders of note were Alexander Loane, William Jenkin, Joseph Simmons, Robert Johnston, Morton Allport and James Agnew.

The appointed "Mining Captain" was C J (John) Goldsworthy. He'd run the Southern Cobar Copper Mining Company in New South Wales and done well there. It later amalgamated with the Cobar

Tasmanian Copper Co director James Aikenhead MLC (1815-1887). He co-founded the Examiner. Image c1870 and courtesy TAHO.

Copper Co to form the Great Cobar Copper Mining Co and was a major mine. Goldsworthy clearly knew his stuff and was on the job quickly, advertising in the first week of June for "*five Miners accustomed to sinking shafts. None but steady and thoroughly competent men need apply.*"[4]

From the beginning Goldsworthy's reports to the media and shareholders were very optimistic. On June 10th 1878 the shaft had been sunk to 30 feet and he described each blast as throwing out lumps of copper minerals, showing bits of native copper. "We are not far off the ore," he declared.

The optimism was contagious and a Mr Blackall the same month was reported to have taken up two 80 acre leases adjacent and south of the Tasmanian Copper Company. He'd found copper mineralisation that he believed was a continuation of the TCC lode.

In July 1878 an unidentified letterwriter to the *Tribune* declared that he knew John Goldsworthy to be a good man and 14 men were now working at the TCC mine. There was copper ore scattered about the mouth of the shaft and the lode appeared to trace south. The men were clearing space for a "whim" (a horse-driven mechanism for bringing up stone and water) and building three huts, as well as working in the shaft. "*A brilliant future is in store for copper investors at Badger Head*", he said.[5]

The following month water stopped mining activities temporarily, but the erection of the whim sorted this out, and the shaft was being divided and timbered. (Shafts are divided so that raising and lowering operations are separated.) Unexpectedly, Goldsworthy had been sacked and John Pool was the new manager, but blasting was still blowing out good ore specimens and they expected to come onto the lode shortly.

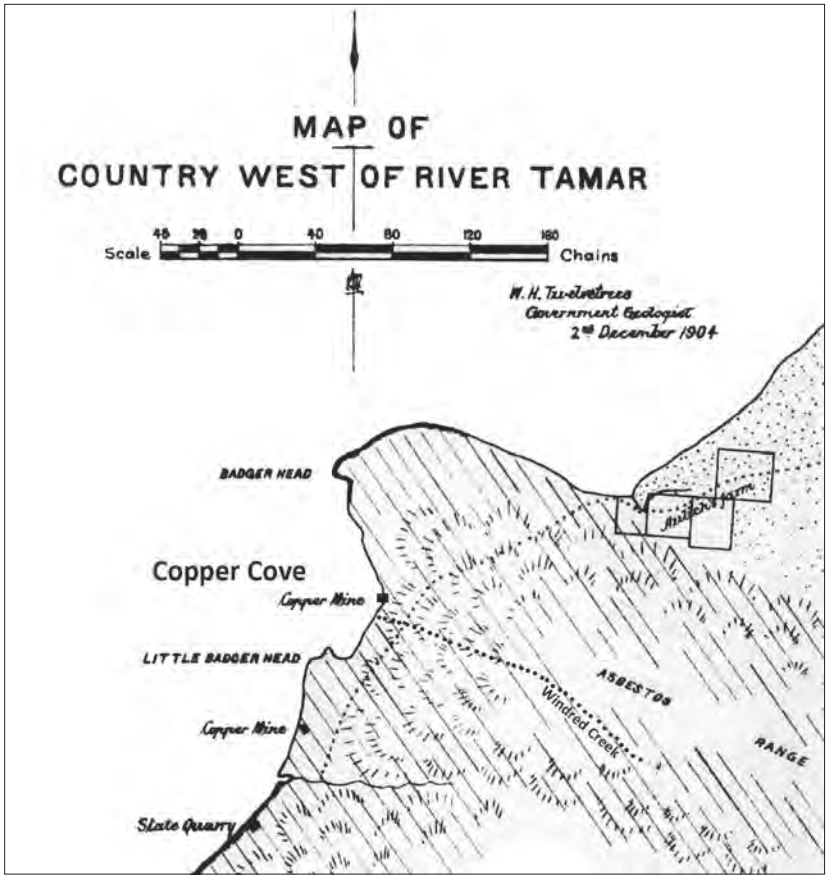
Tasmanian Copper Co Managing Director William Aikenhead. He took over co-ownership of the Examiner from his father in 1869. Image c1895 and from the Cyclopedia of Tasmania 1900.

Goldsworthy's summary dismissal led to him bringing a court action for compensation, which drew considerable interest and was extensively reported upon. He noted that he'd commenced work on March 28th on a handsome salary of £5 a week, with a contract stating that 3 months' notice of termination was required. He claimed £35 in lieu of notice.[6]

The company responded that Goldsworthy had not performed, had attended a board meeting drunk and the following day assaulted Mr William Aikenhead while intoxicated. He'd therefore been dismissed for misconduct and notice was not required. Goldsworthy admitted having had too much to drink.

Despite the admission, the court found in Goldsworthy's favour. The magistrates awarded him £15 plus court costs of 9/6d, but

terminated the contract due to misconduct. This was a very odd thing to do. Having found there was misconduct and cancelling the contract because of it, why did they award compensation? Similarly, as Mr Goldsworthy's solicitor pointed out, having awarded damages and court costs, the court should really have ordered the company to pay Mr Goldsworthy's legal costs as well. This, however, the magistrates refused to do.



Badger Head and Little Badger Head—Narawntapu National Park

The Tasmanian Copper Company's main workings were in Copper Cove at GPS S41° 06.584 E146° 38.881 and are easily found from the present track. They also sank an exploratory shaft in 1879 at the east end of Baker's Beach, on the west side of Little Badger Head. The author was unable to locate this due to the dense scrub. There was an unrelated attempt to quarry slate just behind the Baker's Beach dunes at the foot of Archer's Knob in 1904, which the author was also unable to find. Base image courtesy MRT.

Like his predecessor, the new manager John Pool reported regularly, and always in very positive terms. By the end of August he declared that with the shaft at 57 feet he could "assert it to be a bona fide property", with both copper and iron pyrite showing. However, he said, Mr Goldsworthy had built a hut that was unusable and had erected the stable in the middle of a water course. (It is good practice in mining management to praise the property and damn your predecessor!)

Mr Goldsworthy was now living at the Brunswick Hotel in Hobart, which was a surprising choice for an admitted alcoholic, and he responded hotly to Mr Pool's aspersions. He wrote to the *Mercury* saying that the mine only started after his favourable report, and they found the lode right where he'd predicted. The lode ran for two miles on to James Barnett's 80 acres, and another lode on Messrs W and H Dean's ground was probably a continuation as well.[7]

The news from the company continued very positively, and with the shaft at 68ft they appeared to have found the eastern lode and were bringing up lumps of ore up to 40kg. The *Cornwall Chronicle* predicted "a prosperous future". New companies were being formed, and they were scurrying to take advantage of the excitement.[8]

The British Lion Company

The first of the new floats was the British Lion Company, which came to public attention in September 1878 when a one hundredth share was sold for five guineas in Launceston. Not bad for something that was a pure speculation. A few days later two shares were advertised for sale by William Hartnoll Jnr, a share dealer. After being withdrawn from sale, they were sold a week later for £6 5s each. The company was reported to be on a good prospect in a "direct line" of the TCC lode, but only three weeks after first reporting, they were heard of no more.[9]

Misfortune struck the TCC in September, with the death of their Chairman, the greatly-admired Richard Green. At a board meeting held on October 1st 1878, James Aikenhead MLC was appointed in his place.

A Cornish copper expert, Mr Stephen Richards, had just been appointed manager to replace Mr Pool. This was no reflection on Pool, who'd only been there a few weeks – it was simply that he wasn't an expert, and Richards was.

Mr Richards came to Melbourne from Cornwall at the beginning of the gold rush, where he married a Cornish widow, then moved to New South Wales, where he ran the Currawang Copper Mine south of Goulburn and was appointed a Magistrate. In 1869 he moved to New Zealand to take up a position as manager of the Caledonian Gold Mine. The Tasmanian Copper Co found him there, and successfully negotiated his coming to Tasmania to take over management at Badger Head. He'd been out to the diggings and confirmed it was rich ore, recommending the purchase of steam pumping and winding machinery to upgrade the mining operation. There was no way a horse-operated whim could continue to keep the shaft dry.

The directors instructed Richards to go to Melbourne and purchase the necessary equipment, and he left the next day. Shortly after, the vacant board position left by the death of Mr Green was filled by the appointment of his son, Richard Green Junior.

The TCC steam machinery arrived at Port Sorell on November 11th, but took two weeks to cart to the minesite due to the necessity of repairing the track. It was then necessary to bail the water out of the shaft to enable installation of the pumps. The original small exploratory shaft put in by Loane and Baker was allowing water to percolate through to the new main shaft, but it was to be "puddled", meaning stopped up with clay.

The new mine manager, Mr Richards, was busy through December 1878 and January 1879 with replacing timbers in the shaft, fixing the balance and con rod to the pumps and engine, and getting underway with building an engine house. The shaft was taken down to 91 feet, though they had some trouble with hard ground and had to use dynamite.

The first shareholders' meeting was held on Tuesday, January 28th 1879 with the new Chairman James Aikenhead MLC in the chair. Shareholders were told that a substantial £1860 had already been expended and £630 was owed to the Commercial Bank.[10]

The Mine Manager's intention was to sink the shaft to 180 feet and then drive out east and west. There were two lodes, both between little and big Badger Heads and below the high water mark. Each lode was 7 to 8 feet across and trending onshore, allowing for the main shaft to be positioned about 36 feet east of the eastern lode. The lodes were calcite and quartz with slate, in which was found yellow copper pyrite assaying 18-25% copper. The shaft had cut the eastern lode at 60 feet and found good ore, but

not in sufficient quantity to warrant a drive. Hence the decision to go to 180ft, where it was expected that they would cut the western lode or at least be in a position to drive out to it. The eastern lode could then be regained by a crosscut.

Richards had found a 6 inch quartz vein near Little Badger Head that showed copper, and despatched two men to sink a small shaft, but this had only just begun. He reported that John Goldsworthy had made a track to York Town which was useful for communication, but the track to Kelso was better for pack animals and could be upgraded to a road. Goods were still coming in through Port Sorell and over Mr Baker's "Spring Lawn" property, for which they had a right-of-way. (With the Bakers as co-discoverers and shareholders, getting the right-of-way was not a problem, and the Bakers got a free upgrade of their track from Port Sorell to cart-road condition to boot.)

In February 1879 a contractor was engaged to continue the shaft, and a fan had to be installed to pump in fresh air. By mid-March the shaft was at 117ft and Mr Richards reported they were seeing pyrite in the slate and everything was in "splendid order".

A New Discovery "Near Beaconsfield"

March 1879 also saw a letter to the *Examiner* (which had just become a daily) from William Dally of Beaconsfield. He was the discoverer of the extraordinary Tasmania reef at Beaconsfield and now reported finding a copper lode near Beaconsfield the previous month. The lode was 6 feet in outcrop and graded 7.8% copper within ore that was 26% of the stone. "*I have great faith that this will be found an extensive and rich copper mine,*" he said, and a report from the Government Analyst Mr D Leward as to the grade was annexed. Shortly afterwards an ad appeared in the same paper, noting that Dally and Joseph Jarman had a claim over the property and trespassers who were stealing large quantities of ore would be prosecuted.[11]

A company was to be formed immediately, but it seems this never occurred. Apart from a mention in mid-April in the *Cornwall Chronicle*, no further report from the find seems to exist. Mr Dally's original statement that the find was "near Beaconsfield" was misleading, as it later became apparent that it was at Saxon's Creek, which is at Holwell, some distance away from Beaconsfield. Mr Dally bought 204 acres of land there around the time of his find.

Up at the Tasmanian Copper Company things went quiet for a while, until in June 1879 they reported that Mr Richards had been sacked and John Pool reinstated as manager. The *Examiner* said that the main shaft was now at 160ft and still in slate with a little arsenical copper pyrite. Then the shaft was at 163ft with "indications improving" and water being pumped out at 140 gallons an hour.[12]

The target depth of 180 feet was reached later that month and Mr Pool declared that "appearances indicate proximity to a lode". He said the mineralisation was reminiscent of mines in Cornwall and Chile, and they would now drive out east and west. By the end of July one of the drives was at 7 feet with "indications most encouraging."

The sacking of Stephen Richards had a number of consequences. First was a legal action from Richards's son John for £12, being one month's wages in lieu of notice. This was heard and won, but then appealed by Adye Douglas on behalf of the defendants William Aikenhead and Henry Button, representing the company.

TCC director Henry Button was co-owner of the Examiner. This image is from 1885 when he was Mayor, and is courtesy of Launceston City Council.

The *Chronicle* believed that the action should never have gone to court. That it did was a measure of the animosity between the parties. "*The action, as set forth in the evidence, is a very simple one. John Richards was engaged in January last by the mining manager of the Copper Company (his father), at the works at Badger Head, to act as engine-driver at £3 per week, and he worked in that capacity until Monday, the 26th May. Having worked the mining shift from Sunday night, he was informed in the morning by a new mining manager (who had brought an engine-driver with him from town) that his services were no longer required. No complaint was made against him nor any fault found with him. He then claimed four weeks' wages in lieu of notice, and in accordance with the provisions of the Masters and Servants Act the justices awarded him the full amount claimed. The facts being so simple the justices will not find it difficult to state a case for the consideration of their Honors the Judges*".[13]

To Adye Douglas, not just a solicitor but a member of parliament and soon to become Premier, the matter was not so simple. Putting the company's view, he said that steam-engine drivers were easily procured and were paid a daily rate. They should therefore be able to be sacked on a day-to-day basis. The justices disagreed, finding that while they might be easily procured in Beaconsfield, engine drivers at Badger Head could not be picked up like a cab off a rank, and while their pay was calculated daily, it was paid monthly. Therefore a month's notice was appropriate.[14]

"Not Enough Copper to Make a Kettle"

July 30th 1879 saw the second half-yearly shareholders' meeting at the Mechanics' Institute in St John Street. The members were told that the shaft was finished at 185 feet and they were now driving out east and west. It was explained that Richards had been sacked due to excessive costs and time and John Pool reinstated to get the project back on track.

The specifics of the directors' grievance against Richards centred around his letting of a contract to sink the shaft, rather than employ men on daily wages as had been done previously. He'd let the contract at £48 per fathom (six feet) and insisted upon it, when the board felt (probably rightly) that £30 was the going rate. The board had, after frequent heated discussions with Richards, sent two mine managers from Beaconsfield out to look at the project and report. They both advised that the contract price was excessive, and progress too slow. They made suggestions for doing the job better, which turned out to be almost identical to suggestions made to Mr Richards by the former Mining Manager Mr Pool, which he'd ignored. Thus Richards was sacked and Pool reinstalled.[15]

Mr Pool thought they were close to the western lode and the slate they were bringing up evidenced this, being impregnated with iron and copper pyrite. He noted that they'd had to raise Richards' dam and flue boxes, as they were not high enough. The company had now expended a staggering £5,000 and needed more funds. An Extraordinary General Meeting was required to authorise a call on the shares to provide more capital, and this would be held in two weeks.

The EGM was held on August 15th 1879, amid reports from Mr Pool of "most promising" indications at the mine.

One shareholder, a Mr Joseph Simmons, supported by another named R W Lord, said he believed in the mine and believed that the management of the company was in safe hands. However, he said, Mr Richards had undermined shareholder confidence by his disparaging public and private comments. "*In taverns, in pothouses, and elsewhere, Richards had said there was not enough copper in the mine to make a kettle*". Wouldn't it be sensible, suggested Simmons, to get a copper expert in to make a report on the prospect for the shareholders?[16]

The board disagreed unanimously. They'd put their trust in Richards because of his references and been deceived. The best way to find out what was in the mine was to dig it. An expert report would achieve nothing but extra expense – money that could well bring them to the lode. And what could an expert see without the lode being exposed? Mr Simmons asked if the board had ever visited the mine? They said they'd intended to, but the visit hadn't happened. They said that the mine manager and Mr Jenkin went on their behalf, and director Mr Baker lived nearby and visited the minesite frequently. And hadn't they sent two experts down to report on Mr Richard's work? And so the concerns of the shareholders were set aside and the calls to raise more capital were authorised.

By this time the western drive was at 25 feet, but struck heavy flows of water. Work on that side was discontinued to allow the drive to dry out. They'd struck an ore leader of one foot width at 20 feet and "expected to cut the lode any day". In the meantime they were working the eastern drive.

In September Mr Pool reported "beautiful" leaders in the eastern drive, then at 39ft, and they expected to hit the lode in another 20 to 25 feet. The outlook was "very promising". At 61ft in October, they expected to hit the lode in 10 to 12 feet and the western drive was still too wet to work. In November the eastern drive was at 73ft and prospects had "brightened considerably." Pool said he "never saw better indications for copper" in his career. At 87ft they saw a "mass of copper bearing leaders" and "prospects are good." They hadn't found much copper, but they'd found enough optimism for ten mines![17]

By December, however, the eastern drive had been abandoned at 100 feet. It had "not realised expectations" and they switched to the western drive, which they took to 45 feet before suspending work on December 18th and putting the mine on care and maintenance. An EGM had already been called, with Mr Pool recommending that both drives be continued for another 150 to 200 feet.

At the EGM on December 19th 1879, the day after suspending work, Mr Pool said that he'd blasted out samples from the original Loane and Baker shaft, and found them to be as originally stated and rich in copper. Jenkin had done the prospectus after satisfying himself as to the ore quality and said there were lodes to the east, west, north and south. He was not an expert, but as the Chairman pointed out, the shares were taken up prior to the prospectus being issued, so no-one relied upon it. In fact, pointed out John Scott, it had been the most successful float ever seen in Tasmania!

A Mr W K Thomas had visited the mine in late November and recommended suspension, but he was not an expert either and experts on copper were thin on the ground in Tasmania. The company was £130 in debt, despite two calls of a shilling, but this would be cleared when the outstanding calls were received. Only one shareholder was being sued for recovery. Close questioning from shareholder Joseph Simmons did not suggest or reveal wrong-doing, but there was clearly poor management. He

suggested that a real expert be called down from the mainland to report on the mine to the shareholders, and moved that a call of 6d a share be approved to enable it. This was passed and soon put into effect.

A meeting to consider the expert's report was held at the Mechanics' Institute on Friday, February 27th 1880 and reported in the *Examiner* the next day. Director George Fisher had resigned in the meantime, and Edward Harrop was in the chair.

The company had found a recognised expert in Mr John Warren, but his report was disappointing. He said that if he'd seen the prospect prior to any mining he would have advised against any work from the start. He agreed that there were two veins with traces of copper and 90 feet apart – parallel and dipping to the east. The main shaft sunk 40 feet east of the eastern lode was in a good position and was large and well-constructed down to 180 feet depth. At 60 feet depth a crosscut drove a few feet into a little copper ore that did look like the eastern lode. At 180 feet depth the eastern drive went in 100 feet, but it was a waste of money to continue it. Similarly the western drive at the same level went in some 50 feet and passed through a one foot thick vein at 24 feet that appeared to be the western lode, but it was not worth continuing.

Mr Warren said that the copper ore removed by Loane and Baker was not in fact from the lodes, but from a cross vein between them. He looked at their original pit about 90 feet north of the main shaft and blasted out from a 2½ or 3 foot vein, ore assaying at over 20% copper. If the company decided to continue mining then they could try accessing this crossvein by driving from about 60 feet down the main shaft. It was not likely to succeed but was the best chance and would only cost around £300 because the mine was still in good order. The supposed lode on the south of the property was insignificant, but that could also be tested with a small trial shaft if they wanted.

Mr Simmons noted that the report should have been printed and given to all shareholders. The meeting agreed and it was resolved that consideration of winding up the company would be deferred to another EGM for March 27th 1880. However, and somewhat surprisingly, it was agreed that the company's more marketable equipment would be brought down from Badger Head and offered up for sale in the meantime.

The 10hp engine and machinery arrived in Launceston from Port Sorrell on March 18th 1880 on the ketch *Joan*. It was sold to the Working Miners Company at Beaconsfield, who appeared to be well satisfied with their purchase. Tasmanian Copper was wound up later the same month, having expended around £6,100 for no result, on a prospect that no experienced person would ever have taken up.[18]

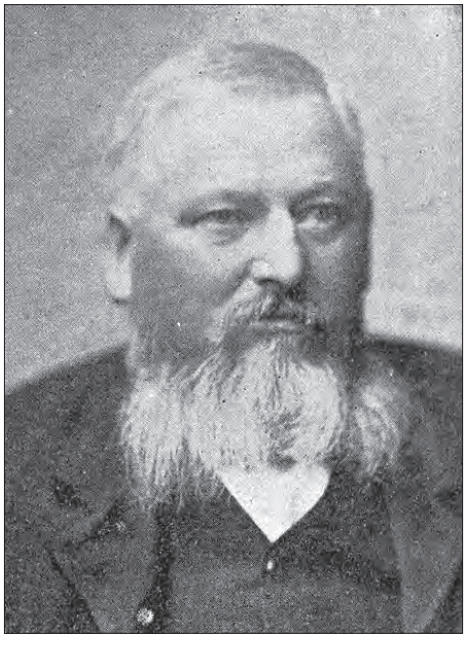
Saxon Creek Prospecting Association

As already noted, the location of William Dally's discovery of green malachite and blue azurite copper ore, mixed with chalcopyrite, on Valentine's Day 1879 was never explicitly disclosed and remains a mystery.

Around this time, apparently, he bought 204 acres of freehold land at the head of Saxon's Creek in Holwell, which suggests this as the location of his discovery. Owning the freehold gave him the rights to the minerals under it without worrying about pegging and leases.

If William Dally's find was on the property he then bought, it was not at the location one would expect. The obvious spot was about two miles away and known to everyone travelling between Westbury and Beaconsfield by the direct track. Right where they forded the stream there was an outcrop of

copper ore, washed clean by the water. Perhaps this obvious lode, which was on a tributary of Saxon's Creek later named Coppermine Creek, was unavailable to Mr Dally due to prior pegging, though clearly nothing had been done with it.[19]



The inestimable William Dally. From the Weekly Courier 9/8/1902.

Mr Dally showed a sample from his find to the government analyst, Mr Lewald, who declared it was one of the best copper samples ever discovered in Tasmania, and Mr Dally said that he had a 6ft wide seam in an outcrop on the surface.[20]

Shortly after announcing the find, Mr Dally's home in Beaconsfield was broken into and flour, sugar and 24 bottles of ale stolen. It seems the criminals took advantage of the news he was out prospecting. His community spirit was not extinguished, fortunately, and he was soon preparing blue and white Beaconsfield marble displays for the Sydney International Exhibition, and sent up specimens of copper ore from his latest discovery as well.[21]

If the obvious outcrop of copper ore at Coppermine Creek was pegged by someone in the late 1870s, they didn't keep the property. In 1880 or 1881 it was taken up by a man, reported to be poor and with a large family, who may have been a local named A Lovell. Whoever it was, he couldn't afford to work it and in winter 1881 persuaded a group of more substantial men in the persons of Robert Carter, John Lyall and James Smith to become partners and fund the development.[22]

The new group called their partnership the Saxon Creek Prospecting Association, with the intention of floating a public company later. They began work in August 1881, first diverting the creek slightly and sinking a shaft on the outcrop in the creek bed. After 26ft they'd found nothing significant and water was causing problems, so they appointed a Mr John Reid of Clunes (Victoria) as manager, with a crew of four men, and instructed him to begin again with an adit (tunnel into a hill) next to the shaft. Before long he'd driven 30ft, finding the ore at 24ft. He handed the partners rich samples, which they showed around, including to Dr Butler of the Education Board, who was visiting Beaconsfield.[23]

A bulk sample of three hundredweight (150kg) was sent to Launceston for testing, while surveyors marked out six sections totalling 480 acres of mineral leases. The partners intended proceeding immediately to a 50,000 share float in Melbourne.[24]

By the end of 1881 another lode had been found a mile below the workings, near the junction of Coppermine and Saxon's Creeks, and the main mine was inspected by Mr Creelman, a mining expert originally from Melbourne. He'd come down in 1879 to erect the King and Eastman battery at Beaconsfield and stayed. *"It is the best show of copper I have seen in Tasmania, and warrants an expenditure of £5,000 in further prospecting",* he declared.[25]

Although the float of the company didn't proceed for some reason, more partners bought in and cashed up the Association. In January 1882 a meeting was held in town with Frederick Grubb in the chair, and it was decided to adopt a suggestion of Mr Creelman's that they tunnel for another 50 or 60 feet.

Work resumed immediately, and soon huts and a blacksmith's shop had been erected, and in mid-February tunnelling recommenced. The copper lode was now reported to be 10ft wide, and the latest

assays gave 21 to 25% copper, together with a third of an ounce of gold. This had potential to be very good indeed if the lode continued.[26]

By April 1882 the adit had been completed as far as they needed for the time being. It was 86ft long, and driven into the hill in a northeasterly direction. It had gone through copper ore from 26ft to 40ft, and the lode seemed to be rising into the hill.

They drove tunnels off the adit at 26ft and 46ft. The first ran for 20ft north and found a quartz reef with metallic oxides and a little malachite – a green copper ore that sometimes looks like striped jade. The second went for 68ft south and found better ore, which they extracted and stacked outside. Some 55 tons was soon piled up. A small winze (descending tunnel) was attempted in the south drive, but as they were at water level in the adit already, only 5ft more depth was possible before they were stopped – but it was all ore.[27]

Most of the ore was not suitable for sending to a smelter immediately, as it had attached waste. Only about 15 tons was cleaned up, yielding 5 tons of clean ore to send to Newcastle for smelting. The rest would be jigged and dressed later. They could have sent the lot out, but the lack of a road was a serious hurdle. If the mine proceeded, they would probably have to build a tramway to Port Sorell.

There was much interest in this first real chance of Tasmania producing copper. In mid-April the Beaconsfield hotels were full of visitors, including the former Mayor of Hobart Mr W P Green, who had come up with a group of southerners to pick up copper ore specimens from Saxon's Creek. They also took marble specimens from William Dally's Beaconsfield quarry and viewed the white and pink clay deposits at the north end of Beaconsfield's Cabbage Tree Hill.

The Minister for Lands and Works, Mr O'Reilly, together with Gold Commissioner Bernard Shaw, rode across from Latrobe a few days later. They took the opportunity to inspect William Dally's copper prospect at Saxon's Creek on the way.[28]

The Mayor of Hobart William Green in 1878. He came to Beaconsfield in 1882 to get samples from Saxon's Creek.

There was some surprise that they didn't stop at the Saxon's Creek Prospecting Company works as well, seeing as they forded Coppermine Creek at the bottom of Jimmy O'Neill's Hill, only 100 yards upstream from the operation! The men working there heard them go past without realising who it was. While tunnelling had largely stopped, they were still hard at work stacking ore, and now had 100 tons on the pad, which they expected to dress to 11 tons.[29]

The Government Geologist, Mr Gustav Thureau, was scheduled to visit Beaconsfield before long, and he agreed to inspect and report on Saxon's Creek while in the area. With this in prospect, and as they were awaiting reports on the samples sent out and had spent £1000 already, it was decided to suspend for the winter.[30]

While only trickles in summer, the local creeks had substantial flows in winter. It seemed clear that if they proceeded they would need to go 200 yards downstream and work back, which would keep the workings dry by natural drainage and give them 130ft of backs by the time they came upon the lode again.

Mr Thureau didn't turn up until late October 1882, but even in advance of this a substantial Melbourne company was said to be in negotiations to buy the property. A specimen of ore sent to Melbourne was 27% copper and nearly half an ounce of gold per ton! Gold was also easily panned in the creek.[31]

Mr Thureau's report finally arrived in May 1883. It was worth waiting for. His remarks on the Saxon's Creek Copper mine were a section of his "Beaconsfield and Salisbury Mining District" and were very encouraging.

He described the mine as "*a very promising deposit, consisting chiefly of copper pyrites embedded in honeycombed quartz. ...As the ores have been intersected only for the height of 10 or 12 feet vertically in a tunnel and a small shaft at its mouth the extent of the deposit cannot be ascertained except from indications. So far as the workings have been carried out they disclose similar deposits of copper ores of good commercial value and there are also good indications for improvement at greater depths where the country becomes more settled than at present. Except in one instance the richer ores do not rise above the tunnel level, and the more solid veins are found in the lowest part of the workings, where the water oozing up from below leaves large ochreous deposits denoting a continuance of similar metalliferous deposits as now disclosed.*"

Mr Thureau also believed that the creek provided an opportunity for utilising water power. Only a few chains upstream the creek exited a valley by a narrow channel that was perfect for damming, and powerful water pressure could be obtained at moderate expenditure. He noted that much of the ore needed little cleaning prior to smelting.[32]

While Mr Thureau's report must have been welcome to the company, work did not resume, and one of the leases (1206M for 80 acres in the name of Thomas Johnson) was allowed to be forfeited for non-payment of fees. Nor was anything more heard about the prospective purchase of the property by a Melbourne company, and the 100 tons of ore stacked near the creek just lay there.

Not until August 1884 did the *Mercury* report that the mine was finally to reopen, and the association was to be reformed as a company.

It seems that the original claim owner, the un-named poor local man, who'd brought in the investors back in 1881, still hadn't given up trying. He had "*little more than his head and hands and a house full of children. He strove to keep going so that work might be done sufficient to reveal what the mountain contained and something shown to induce capitalists, for a share, to put a sum to the mine's credit that would carry it to a payable basis.*"[33]

With the Prospecting Association he'd created now having expended its funds, he wrote to Philosopher Smith and a Mr R Quiggin asking them to look at the mine, and if interested he would give them part of his remaining share in exchange for a free carry. This led to them visiting the site, which they found on the creek at the base of a 300ft hill. About 200ft of tunnelling had been done, exposing yellow ore, and the creek had been diverted to expose a lode in the old bed. Philosopher Smith was impressed with the prospect, but didn't take up the offer.

Nothing more was heard of the revival of the venture, and years later it was said that the Association collapsed for want of capital.

The "Secretan Copper Corner"

The Saxon Creek Prospecting Association's inability to raise money was in part due to the small size of the orebody they'd so far exposed, but also because of the physical difficulties of obtaining it. The mine was in a remote area, with arduous access, and it required considerable work to clean up much of the ore prior to smelting.

In addition, the price of copper was in a long-term decline, due to a combination of circumstances including new finds, better extraction techniques, and declining use. The price halved over the period 1880 to 1900.

The relentless decline in the price of copper, however, saw a brief and spectacular reversal in 1888 that renewed interest in marginal copper deposits everywhere. This was the year of the great "Secretan Copper Corner" swindle.

Though entirely forgotten today, this swindle was even bigger than the great 1978-80 Bunker Hunt silver price manipulation in the United States, and saw a wealthy French industrialist, Monsieur Pierre-Eugene Secretan, attempt to corner the world copper market.[34]

Monsieur Secretan had made his fortune in copper, and his company was the largest consumer of the metal in Europe. He was notable in particular for donating 60,000kg of copper to enable construction of the Statue of Liberty. Ten years later though, greed overtook him when he conceived of a plan to corner the world's supply.

Secretan put together a syndicate of 16 wealthy men, banks and industrial companies, including the largest private bank in France and Parisian members of the Rothschild family. They quietly negotiated and signed contracts with all the major copper mines in the US, Chile and Spain, including Rio Tinto and Anaconda, to take their entire production. As news of the contracts leaked out at the end of 1887, the price of copper jumped from £40 per ton to £80 in just one month, and stayed at that level all through 1888.

Unfortunately for the manipulators, the sustained high price had a number of effects, the magnitude of which they hadn't foreseen.

First, the consumption of copper fell. This they probably anticipated. At the same time, however, there was a dramatic increase in recycling, reduction of inventories, and new and unexpected sources came onto the market. The necessity for the syndicate to buy more metal to maintain the price (including that coming out of Australia) soon led to the collapse of their principal French bank. It's Managing Director committed suicide. In early 1889 copper prices crashed all the way back to their original levels, and ruined the remaining syndicate members.

Monsieur Secretan was prosecuted. He pleaded that he only did it for France – in order to break the British monopoly on copper – but the magistrates were not convinced. He was fined and briefly imprisoned. A clever and determined man is hard to keep down though, and with a brilliant and very modern advertising campaign he successfully sold his extensive art collection at a huge profit and restored his fortunes.

The Pandora Copper Mine

Here in Tasmania, the Launceston mining community was not aware of the machinations surrounding the world copper supply until after the event.[35] All we knew at the time was that the price had skyrocketed, and showed every sign of staying up.

Then we heard that a "French syndicate" had bought the famous Burra Burra copper mine in South Australia. We didn't know it was all part of a price rigging scheme, and it just seemed that the world had gone mad for copper. Even if we'd known that Monsieur Secretan was behind it – wasn't he the philanthropist who enabled the Statue of Liberty to be built recently?

The high copper price led to considerable renewed interest in the deposits around Saxon's Creek. With the major mining centre of Beaconsfield only just up the road, many men were capable of taking advantage of the situation, and they did.

At the beginning of 1888 an assayer named Walter Windred and a miner with copper experience named John Whitford, both from Beaconsfield, went out to Saxon's Creek to look at all the old workings in the area.

They concentrated on prospecting the footwall of the lode identified years before by the Prospecting Association, opening out the face of the tunnel, and soon identified a rich vein about 14ft wide running into the hill. Then they found parallel lodes, one 15ft wide with peacock ore and the other 8ft wide. The Beaconsfield blacksmith John Stable was brought in as an equity partner, and the Miners' Association leader William Lamerton asked to come and assess their find. He had extensive experience at Burra Burra and other South Australian copper mines, as both a worker and director.

Mr Lamerton was very impressed, and assays done by Mr Windred found gold and silver in the ore as well. Samples were sent to Adelaide to confirm the assays, and the results came back with an offer to buy any quantity that they could supply. Two sections were pegged and a syndicate formed. Samples were taken to town to show around, and Mr Lamerton's son Richard became a large equity partner.[36]

It was noted by the local mining fraternity that this was the same resource that the Government Geologist Gustav Thureau had examined and been impressed by six years earlier. The syndicate had seven men working on the mine by the end of March and applied for leases over the Badger Head deposits as well, so that all the known copper occurrences were tied up.[37]

By mid-year the Coppermine Creek mine had been christened the Pandora, and two more parties were in the area prospecting and pegging. One group called their ground the Tower Hill claim, to capitalise on the name of a famous gold mine.

The Gondola Prospecting Association, Registered

With Pandora well underway and much investor interest due to continuing high copper prices, the original prospectors Windred and Whitford, together with John Stable and William Lamerton, decided to take up more ground and put it into another float.

They called the new venture the Gondola Prospecting Association, and pegged a 420 acre prospecting section adjacent to Pandora. Wages men were put to work driving an adit into an outcrop of mineralisation, and met rich copper pyrite ore at just 20ft in. By August they were in 50ft and the board said they were interested in floating on the London stock market.

THE GONDOLA PROSPECTING ASSOCIATION, NO LIABILITY.

John Stable, blacksmith, Beaconsfield	108
William Goninon, miner, Beaconsfield	72
Thomas Gibbs, farmer, Frankford	12
William Cox, farmer, Frankford	36
William Lamerton, pitman, Beaconsfield	36
F. L. Whitford, mining expert, Beaconsfield	108
E. Ride, storeman, Launceston	36
Henry Masters, assayer, South Australia	72
Norman Foote, mining manager, Beaconsfield	42
Josiah Hocking, engineer, Beaconsfield	36
F. H. Reed, gentleman, Evandale	114
A. C. Reed, dentist, Launceston	84
T. H. Walduck, storekeeper, Beaconsfield	42
John Daniel, miner, Beaconsfield	36
A. McSkimming, engineer, Beaconsfield	6
W. H. Walton, clergyman, Launceston	36
J. J. Overell, draper, Launceston	12
W. Guest, labourer, Launceston	12
A. Victory, labourer, Launceston	12
W. Proctor, gentleman, Launceston	12
A. J. Hocking, tobacconist, Beaconsfield	12
Charles Hunter, miner, Beaconsfield	12
Charles Derepas, miner, Beaconsfield	12
Thomas Foley, miner, Beaconsfield	45
John Foley, miner, Beaconsfield	30
William Cowen, gentleman, Penguin	6
Catherine Fawdry, lady, Evandale	6
B. Cecil Hunt, teacher, Hobart	12
George Prosser, storekeeper, Launceston	3
James Ah Catt, merchant, Launceston	6
J. Lutwych, engine-driver, Beaconsfield	18
R. Olden, storekeeper, Beaconsfield	18
F. Casboult, miner, Beaconsfield	12
Chin Kit, merchant, Launceston	12
Thomas Page, wheelwright, Beaconsfield	6
William Tregowina, farmer, Frankford	6
George Griffiths, carpenter, Beaconsfield	6
R. Jones, butcher, Beaconsfield	6
Edward Rosewarne, miner, Beaconsfield	18
Charles Studwell, miner, Beaconsfield	36
Thomas Triptree, carpenter, Beaconsfield	6
David Ward, miner, Beaconsfield	6
Total	1218

NORMAN FOOTE, Manager.

The Gondola shareholder list as published February 1889.

The location of this new venture is unknown, but the old Saxon's Creek Prospecting Association's report of making a strike a mile downstream of their main mine suggests the possibility that this was the site.

A meeting of shareholders of Gondola in October 1888 heard that the adit was in 80ft and impeded by heavy water flows. They'd passed through the vein of good ore 20ft in, and anticipated finding the main lode soon, at which time registration of the company could better be effected. A tramway would be laid down to the face, and they were already building a road into the mine.[38]

A month later the tunnel was 105ft in, and the manager expected that shareholders would soon be well rewarded. The new tram was working well and was a big improvement on the wheelbarrow![39]

The main game though, was Pandora. A ton of ore from the mine was sent to town, consisting mainly of sulphates, with a little blue azurite and green malachite also visible. The partners had gained a very significant backer, in the form of a Mr Frederick Robinson. Mr Robinson's father owned a copper smelter in St Helens, Lancashire, and Fred bought a 1/16th interest in the project for £1,500 cash, and moved to Frankford to become personally involved in the development. He and Walter Windred then headed off to London from Adelaide on September 10th to float a large company, building on Robinson's reputation and contacts in England.[40]

Pandora's ore had improved, and pure samples of a hundredweight (50kg) were being obtained. Adelaide assayers reported the grade as between 18 and 33% copper. Access had also improved since the area was last worked in 1882, with the main road (that later became the Frankford Highway) now of good quality and passing less than two miles away. A cart track had been put in from there to the mine, with a promise from the government to upgrade it to road standard.

A sensation came in December 1888 with a report that Pandora had floated in London and raised £200,000! The mine was said to be "literally a hill of copper ore." Messrs Windred and Robinson had apparently taken a ton of ore plus photos to London, and a smelt at the Robinson works in St Helens had been very satisfactory. The *Examiner* was effusive: "*If the rumour that the Pandora has been floated is correct, a new era is undoubtedly in store for the West Tamar,*

as this comparatively new industry will employ large amounts of labour, and coupled with the Asbestos Paint Works, the present labour market matters in general should speedily improve."[41]

Sadly, the stories of the spectacular float were untrue. Mr Windred returned from England and said that while they had not floated as reported, they had successfully formed a syndicate in London. It guaranteed sufficient money to open up the claim and erect a smelter to treat 100 tons a week. Work would commence immediately with 100 tons sent to Newcastle for treatment to ascertain the nature of the ore and the fluxes required. The bulk assay in England showed yellow ore yielding 25% copper, which was highly payable, especially as the lode was 6ft to 8ft wide. The British had been made aware that there was more than one copper deposit in Tasmania, and there ought to be no difficulty in the future in getting English money for Tasmanian copper, but for development rather than exploration.[42]

While in London, Messrs Windred and Robinson must have heard of the Secretan Copper Corner, but said nothing publically when they returned. At the time they were there, they probably assumed (quite reasonably) that the cornering of the copper market had been successful and would maintain the price indefinitely. London investors, however, were clearly in a more cautious mood.

The Gondola directors proceeded to register their company, making it public and tradable, early in February 1889. They were only just in time, as the market rigging was about to fail.[43]

They floated with 1,218 one pound shares – not a large float by any means, and insufficient to fully explore their claim. The legal manager was a Mr Norman Foote, and large shareholders included Beaconsfield identities John Whitford, John Stable, Henry Masters (formerly of Beaconsfield but now in Adelaide), William Lamerton and William Goninon. A couple of independent non-miners such as Mr F H Reed of Evandale also took large shareholdings.

The Collapse and Resurrection of Pandora

At exactly the same time as the Gondola registration, the large Pandora shareholder Richard Lamerton, William and Mary's son, died of typhoid at only 21 years of age. The large funeral in Beaconsfield was swelled by many members of the Robert Burns Masonic Lodge marching behind his coffin. Richard's large Pandora shareholding was transferred to his father.[44]

Then, in the first week of March, the market manipulation of copper prices failed. Pandora had left their float too late! Not only would they be unable to raise capital, the partners wouldn't be able to sell their stakes.

Adding to their woes, the London syndicate that promised to fund their development for 12 months now reneged. A few months later a creditor of Mr Whitford's named Collins (probably Richard Collins of the Exchange Hotel) seized their two key leases, of 80 acres and 45 acres and covering the mine. The bailiff advertised they would be auctioned at Beaconsfield on January 17th 1890.

Fortunately, the price of copper soon stabilised at the same level as existed prior to the market manipulation. This seems to reassure the partners, and they began to believe that their resource, if proven up, could be profitable.

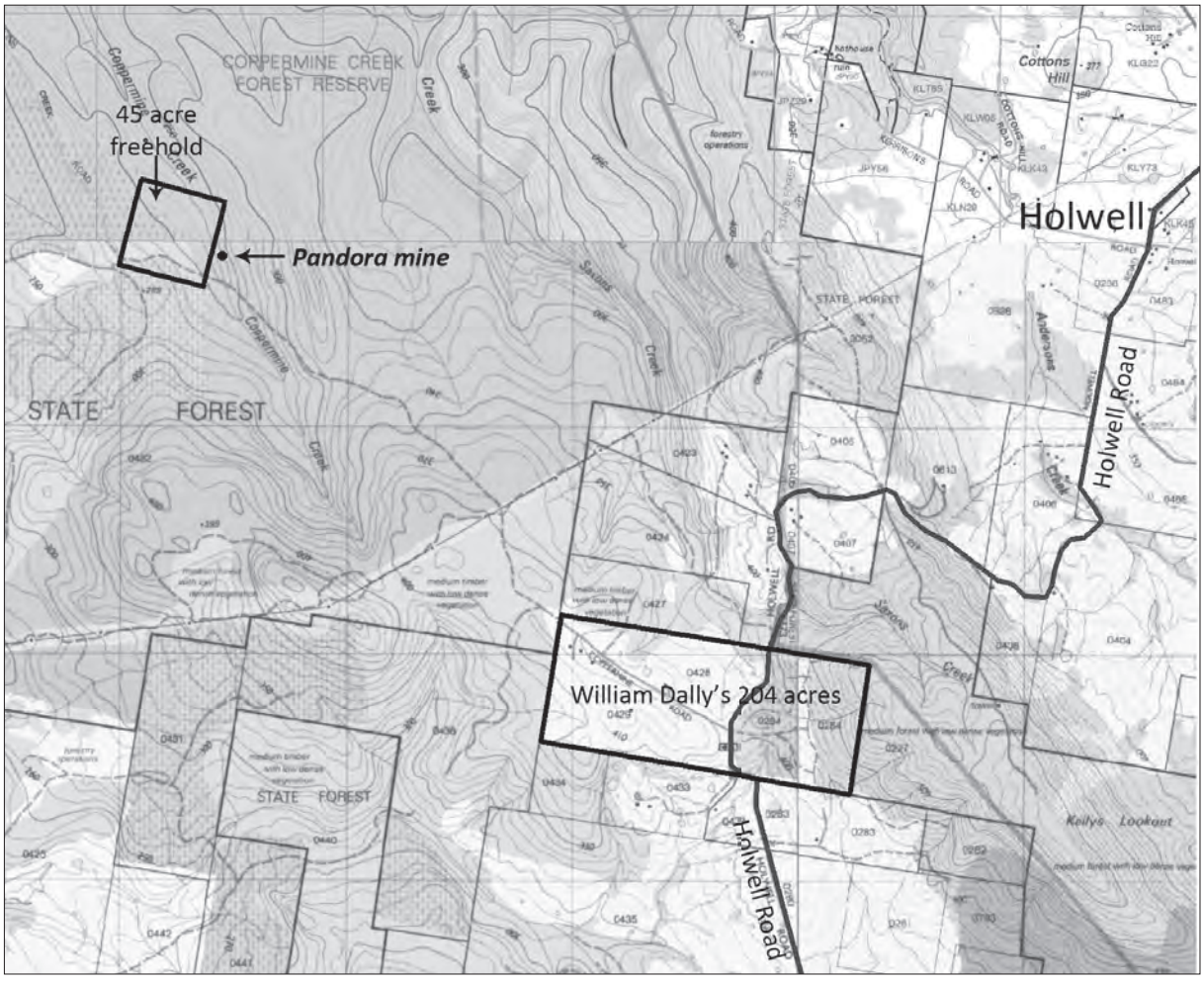
The dispute that led to the seizure of the assets was sorted – made easier as the key players were all local and (usually) friendly. The auction of the leases was withdrawn, and in March 1890 development

of the Pandora mine resumed. A formal opening was announced for the 19th, to be conducted by the local member and former Premier, Reverend Tom Reibey MHA.

With their newly regained optimism, their mine was now seen to have a number of natural advantages to balance its remoteness. It had plentiful timber, a well-grassed paddock of 40 acres adjoining, and a good supply of water which could be dammed in the gorge above the mine to provide power. There were about 40 tons of ore still on the grass ready for treatment, so six tons were bagged ready to ship to Newcastle for a trial smelting. [45]

The partners decided to proceed to a float, with 700 shares of £20. Of these, a hefty 640 would be retained by the proprietors as payment for the mine, on which several thousand pounds had already been expended, while 60 would be offered to the public to raise £1200 for development.

They decided to put the key 80 acre lease into the float, together with a lease over 45 acres of freehold land they'd purchased when it was realised that the mineralisation trended into that property. They would likely sink a main shaft, but would need powerful pumping and winding equipment. The grade



The Saxon's Creek P.A./Pandora mine is on the east bank of Coppermine Creek, approximately 90m north of a washed-out bridge. It was not possible to get a GPS fix as it is in a gorge without satellite or mobile reception. The creek has taken over part of the old workings, with its course now down a shaft and out an adit.

of the ore was calculated as at least 20% copper, which would provide a 100% profit after the 10s a ton cost of transport to Port Sorell, another 10s to Newcastle, and £2 5s a ton for smelting. If an on-site smelter was later warranted, it would save much of the expenses.[46]

The prospectus of Pandora Copper Mining Co was immediately drawn up and published, and showed that the interim directors were Tom Reibey MHA (now Speaker of the House), Henry Rooke MLC, Frederick Robinson, Myles Mahony (Superintendent of Police at Westbury), and Richard Price (from the Tasmania Gold Mine) as Secretary. The company would be registered under the No Liability Act. The promoters were certainly making the board attractive to investors!

The Government Geologist of Victoria, Mr Reg Murray, was persuaded to report on the mine in a private capacity and was very positive. He thought that the ore body would get bigger with depth and would be easy to smelt. He took samples and found an extraordinary 50% copper! Other assays by various independent parties identified the ore as yellow chalcopyrite returning from 18 to 34% copper.

Even the Tasmanian Government Geologist Mr Thureau provided a report, recommending (in his official capacity!) the prospectus to investors. He noted that the proprietors owned leases 1039-87M, 1038-87M and 1035-87M – each of 80 acres. They also owned four other sections and some private land, the whole totalling 640 acres and covering the all the known copper bearing deposits. (He seemed to assume these would all be in the float.) He said that an 8 or 9 mile tram would be a straightforward proposition to get to a deep water shipping point at Port Sorell.[47]

A Grand Opening

Wednesday March 19th 1890 was the date of the grand official opening of the Pandora mine.

There seemed little reason to stage an opening, other than perhaps to support the prospectus with some positive publicity, but the politicians and newspapers were happy to play along, and 30 or 40 people turned up. The attendance would have been much larger if the weather had been less wretched, as 100 had formally accepted.

The Hon. Tom Reibey and Mr E H Sutton, both MHAs, came in from the Westbury side, having to navigate some very difficult flooded areas. Despite leaving at 8am, they didn't arrive until the afternoon. Mr Mahony presented an address of welcome to Mr Reibey, as the local member, together with a key with which to unlock the gate at the mine entrance and declare it open.

Mr Reibey noted that he and the Hon. Mr Rooke MLC were happy to act as provisional directors, as they were great believers in the mining industry and particularly in Pandora's future, and they did so despite having no pecuniary interest in the mine. Mr Reibey said that he wished the proprietors of the silver mines at Zeehan had done as much preliminary work before the government wasted so much money building a railway there to an industry that never developed.

The party then adjourned to a very welcome and substantial meal provided by Mrs Collins of the Exchange Hotel at Beaconsfield. Then came an inspection of the mine, followed by champagne and toasts at the manager Mr Ben Searle's house. Mr Sutton MHA led a toast to Mr Robinson, for his faith in mining shown by both his investment and relocation to Frankford.

At the opening it was said that the ground had been discovered by William Dally. This was clearly incorrect, and perhaps their memory of events of 11 years before had become hazy. They said that the

work done by earlier mining, presumably the Saxon's Creek Prospecting Association, only followed veins, and had never found the lode. This was also doubtful.

They'd now found a lode. It was in the 58ft adit driven from the creek-bank into the hill, and was trending NW/SE within well-defined walls. A 25ft shaft had been sunk from the end of the adit, but was now flooded. The lode had been followed with a 25ft winze (descending tunnel). It was proposed to immediately employ six or eight men to sink a main shaft from the bottom of this winze to perhaps 150ft, and it was expected that the creek would have to be diverted for winter. There were the 40 tons of first-class ore at grass, and another 30 tons of second class outside the adit.[48]

Over the next few months the shaft was slowly sunk, initially hampered by water. An ingenious hand-operated water lift was invented by the manager and proved to overcome this problem. Another rich lode of 3ft width was reported, lying parallel and near to the tunnel.

Carts of ore were taken out to Port Sorell and several tons soon arrived in Newcastle, where it was said to give a "satisfactory" result on smelting, but without giving any details.[49]

Early in August the great pragmatist and sceptic known as Flaneur visited the working. He had considerable experience as a miner, and wrote for any newspaper that would print his column.

Flaneur described the grand opening as "ostentatious" and said that the sumptuous banquet provided led to an impression that the venture was also sumptuously funded. The denizens of Frankford were congratulating themselves on having such a highly remunerative mine in their midst.[50]

Sadly, he found on his visit that work was suspended, and the manager, Mr Searle, was the only person to be found.

Mr Searle told him that 5 tons had gone to Newcastle and returned a very satisfactory 25% copper. The shaft had got to 30ft and struck a large body of ore when work was suddenly stopped. Mr Searle showed him samples. The lode in the winze was between 3 and 4ft wide and also carrying copper throughout.

Mr Searle considered that the mine was now sufficiently developed to warrant the erection of dressing appliances, capable of cleaning at least 100 tons per week, and he was confident that a comparatively small staff of men could keep the dresser constantly employed. This would be a cheap process and there would be no need for a local smelter. He hoped to see the water in Saxon's Creek used to drive an overshot waterwheel to power a pump, which could be done with just 10 chains of head race.

Sadly, there was no further development. The *Examiner* of November 28th 1891 reported that Myles Mahony had taken over as Managing Director and provided a ton of ore for display at the Tasmanian International Exhibition in the Albert Hall. There was no word on what had gone wrong at the mine, but insufficient funds forcing suspension seems likely. It was a pity they hadn't issued more shares to the public at the beginning. The 60 shares out of 700 was miserly, and should have been 200.

Mr Montgomery's Strange Report

Three years after work stopped, the *Daily Telegraph* reported that the new Government Geologist, Alexander Montgomery, would visit Pandora. It was still the only copper mine in Tasmania, although Mt Lyell was about to get underway.

Mr Montgomery visited on the June 27th 1893, and his report came out two weeks later.[51]

He noted that the mine was situated in the north-west angle of mineral section No. 1039-87M, held under lease by Myles Mahony, and that mining rights were also held by the same proprietary over the adjacent 45 acre freehold block to the northwest, belonging to Mr Robinson. Several other mineral leases were formerly held in the vicinity, but had been forfeited. A small stream ran through both the lease and the freehold in a northwesterly direction.

The mine was on the east bank of the creek, with the adit driven in a northeasterly direction. He found it to be 104ft long, with several branches. At 30 feet into the adit there was a 13ft drive following a vein of quartz, but finishing as the vein petered out. At 82 feet in there were two drives, one of 40 feet in a SE direction with a winze (descending tunnel) at its end which itself had a SE trending drive, and the other in an ESE direction but with a crosscut back to meet the other drive at the shaft. A second winze was dug about halfway along the crosscut. Some good ore had been recovered but the veins were "irregular". An exploratory shaft was sunk for 26 feet a chain SE of the adit mouth and struck the quartz vein and ore at its bottom, approximately on the same level as the ore in the mine.

Mr Montgomery said that five tons of the best ore were sent to the E & A Copper Company Ltd in Port Adelaide in May 1890 and returned 7¾% copper. This was very strange, as both the company and Mr Searle, the then manager, had said it was sent to Newcastle and was three times this grade! On balance, it is likely that Mr Montgomery was wrong. The company only ever reported sending bulk samples to Newcastle.

Mr Montgomery himself took a small sample of the best chalcopyrite ore he could find and had it assayed, returning 23.5% copper with trace gold and silver. Although impressed by this assay and interested in the precious metal content, Mr Montgomery still recommended that the mine be abandoned, as it could not supply ore in quantity, and what it did produce was very bound up with quartz. The directors accepted his advice and wound up the company. It seems they had little choice, as the shareholders wouldn't fund further work after reading such a negative assessment.

Saxon Creek Copper director John Clement Macmichael (1843-1907) was a stockbroker and mining agent. Image from 1891 and courtesy TAHO.

Mr Montgomery's final word showed considerable perspicacity and warned any tempted to try again: "*There is certainly a good deal of copper about it, but I am very much afraid that there is only enough to keep people spending money on it without return.*"

The Saxon Creek Copper Mining Co NL

Despite Mr Montgomery's view, or perhaps proving his point, four years later another company floated on the Saxon's Creek resources.

A prospectus was advertised in the *Daily Telegraph* on October 1st 1897 for the Saxon Creek Copper Mining Co NL in 6000 shares of 10s. Half of the shares were offered to the public, with all money raised going to the company after float expenses, which was reasonable. The company had about 300 acres under leases, a prospecting licence and freehold, including section 739-93M in the name of Edward

Gaunt and 740-93M in the name of George Young. Although not stated as such, it appeared to be the initiative of a couple of Launceston stock brokers, Messrs Gaunt and Macmichael.

The float was almost immediately successful, and the company registered later that month. Unusually, the shareholders and their holdings were not disclosed, except for 50 shares each held by a number of Launceston's leading citizens. These comprised J Barclay (ironmonger), G Collins (solicitor), C Dempster (draper), F K Fairthorne (chemist), F E Howes (investor), J C Macmichael (stockbroker), and R H Sleeman (investor).[52]

As soon as the registration was completed, it was said that an English syndicate was to buy the mine! The shares, which had just been issued at 10 shillings, were 12s buyer, with sellers wanting 17/6.[53]

A journalist from the *Examiner* visited the mine late in October 1897, but the manager Mr Young wasn't there and nothing was being done other than preparing a small site for a pumping plant. The following month a Beaconsfield syndicate found gold nearby, returning assays of 4oz, 6oz and 7oz a ton! More samples were sent to Beaconsfield, Lefroy and Launceston for analysis, and 13 more sections were pegged out. It became a bit of a rush, though access was difficult with two or three miles of bush bashing to get to the mine and new sections.[54]

Edward Gaunt (1837-1904) was one of the sons of Dr Gaunt of Windermere. He was a mining agent and prospector. Image from 1891 and courtesy of TAHO.

Work finally commenced a few weeks later, and the water was soon out and they were sinking in the old winze. They were taking 500 gallons of water an hour, but had a 4ft thick lode for their trouble, being a matrix of honeycombed quartz with ore that they expected would improve with depth. Some beautiful samples were sent into Mr Gaunt at his St John Street brokerage.[55]

By Christmas the winze was down another 49ft on the lode and had broken through to the prospecting shaft, providing good air flow. A tramway was laid down and good yellow copper ore was being taken out and stacked from a 5ft wide lode. The main drive had been extended 15ft and a ROM (run of mine) pad excavated to hold the stacked ore. It seemed they were serious about this venture.[56]

In January they had the winze at 87ft, but the lode had 'pinched', or narrowed and disappeared. When they failed to find it again they tried sinking a shaft, and after putting in hoses to get the water out, came upon what appeared to be the cap of a new lode. A windlass was put over the shaft to facilitate haulage.

Some of their men had been trenching around the claim and discovered another lode in the bed of the creek 66 yards south of the mine. They began sinking on this new lode and found it to be 4 or 5ft thick sandstone and quartz with chalcopyrite. Back in the mine they were driving from the winze shaft at the 15ft level and 31ft in came to a vein of ore 2ft 6in wide, but then hit a fault, where the lode dropped vertically 11ft.

In March 1898 they decided that enough prospecting had been done, and it was time to sink a main shaft down to at least 100ft. The lode at 50ft depth was 2ft wide and payable. Bulk samples could be seen at the office in town and assayed at 17% copper, 2oz silver and trace gold. Shareholders were told that the cost of sinking a shaft would not exceed £300 and it would be funded by selling shares held in trust from the float, on a 1 for 4 entitlement to existing shareholders. This was agreed to.[57]

A road was cut in to the site to enable bringing in a steam engine, and site works done for the main shaft. Four men began and soon had a windlass erected and were down to 16ft with the walls of the shaft properly timbered. Here, however, they struck sandstone and had to begin blasting.[58]

They persevered, and by the end of May were still in sandstone and had hit the water table at 63ft depth. A fluming was erected and bailing commenced.

Frederick Kirk Fairthorne JP (1846-1919) was a director of Saxon Creek Copper and served two terms as Mayor of Launceston 1900-02. He and his father Landon were pharmacists in Launceston and Beaconsfield and were investors and directors of many companies, including some in this book. He was Chairman of Mount Bischoff and refused many offers to go into parliament. Image from the Weekly Courier 16/11/1901.

It became apparent that more money would be needed, and the 10 shilling shares were increased to 15 shillings. With the payment of calls in prospect their market value promptly dropped to only 6d. Then no-one wanted to pay calls on shares that were practically worthless. They'd seriously miscalculated the cost of sinking their shaft – and what had happened to the English syndicate supposed to be buying the mine? The leases were forfeited and the company disappeared.[59]

The May Queen Copper Gold Mine Syndicate

Fifteen years passed. Then, in 1913, a climate of rising copper prices induced a Devonport syndicate to look again at Saxon's Creek and the old Pandora mine.

The main Pandora lease was now 6560M of 40 acres, held by a Mr William Stocks, but he was resident in England and hadn't done any work on the property. This was a serious breach of a key condition of all mining leases. Mr William Lewis lodged a formal complaint on behalf of the Devonport syndicate in July 1913, and the lease was awarded to him.[60]

William Lewis had suffered considerable setbacks recently. He'd only just come out of bankruptcy, and two months earlier lost a little boy to poisoning, but he'd also become a Devonport Councillor. Having previously lived in Queenstown, he had a keen interest in copper.

His group formed themselves into the May Queen Copper Gold Mine Syndicate, and a meeting was held in Devonport on October 11th 1913. Shares had already been sold and it was decided to register a company with an authorised capital of 75,000 two shilling shares, totalling £7,500. The founding directors were T J Donnelly, E Keen and H Wood, with W H Lewis as legal manager. Mr Charles Robinson had been appointed mine manager, and began work on the site on September 18th.[61]

The only person in the group with mining experience seems to have been the sole non-Devonport member, Edward Goninon, but the new company could hardly have failed to raise money. The *North West Post* fulsomely endorsed the project, describing the property as "exceptionally rich in copper and gold" and probably a continuation of the Beaconsfield goldfield! Local people were urged to get on to this hot float as quickly as possible. It was very unprofessional for a newspaper, and suggested an undeclared interest.

The new company had already prevailed upon the Mines Department to examine the property and provide an updated report, and the Assistant Government Geologist Mr Loftus Hill visited the mine in the first week of October. His report came out a week later, being only a few days after the company's registration application, and must have been a shock to both the proprietors and the *North West Post*.[62]

A Storm Erupts in Devonport

Mr Loftus Hill confirmed that the new company's lease included the old workings of Pandora and the Saxon's Creek Company. There were three men working there when he visited, clearing up the site, but it was not possible for him to investigate underground. He noted that the old Saxon's Creek Co had installed a small steam pump and dewatered the small shaft mentioned by Montgomery, then put in a drive south for 40ft followed by a winze to 11ft depth, where the best ore was supposed to have been found. About a chain east of the No 1 shaft and about 60ft above it a main shaft 8ft by 4ft was sunk for 75ft and timbered. Why it was sunk there was a mystery to Mr Loftus Hill, and no ore was found.

The dewatering now going on in the main adit, which was thought to be 104ft long, had disclosed that it had collapsed at 45ft from the entrance. A vein of white quartz with copper and iron pyrite could be seen trending EW in the main adit, but had disappeared on driving on it. In the creek bank workings a vein was seen striking north-south but varied in width and was never more than 4ft. The possibility of a large lode was remote, in his opinion. "*I can only reiterate and emphasise the statement made by Mr Montgomery that there is just sufficient copper in this property to keep people investing money, on which there is no hope of getting adequate return.*"[63]

William Lewis could not let such a damming report stand, and Mr Loftus Hill did seem to be rather harsh in his assessment, clearly influenced by Mr Montgomery's earlier (and possibly flawed) report. Lewis wrote to the Mines Minister hotly (copying in all the newspapers), pointing out that while Mr Loftus Hill claimed to have left Launceston on the 1st and returned on the 4th, he was only at the mine two hours, part of which was his lunch time! He was unable to inspect the workings and only saw one section. How could he do more than confirm that a creek was there! And given that the mine was only two hours from town, what did he do all that time? It was a damning and effective reply.

Mr Lewis said further that past operators had not owned the 15 acre section of private land they now had, which hosted the best lodes.[64]

Interestingly, Lewis enclosed a statutory declaration from Devonport miner Mr W Matthews with his letter, which was made without payment and without having any interest in the mine. "*I know*

Pandora ... I was working on the section 12 years ago, and at that time I took out a parcel of copper ore, which gave by assay returns some 30% of copper. Unfortunately we lost the mine through others securing the lease over our head... I am prepared to take the mine on tribute and could make it pay its way straight away if permitted... I know of three rich leads in the old Pandora, now the May Queen Copper Company's leases that will astonish those interested when they are opened out. There is another formation of quartz lower down the creek, carrying a trace of gold, and a very promising looking blow that would be worth doing some work upon. My opinion as a prospector is that it will eventually make into a rich gold lode at depth." There seemed no reason to doubt that Mr Matthews was sincere, and his offer to take the mine on tribute deserved consideration.

Also enclosed with Lewis's letter to the *Daily Telegraph* was a letter from Ben Searle, the old Pandora mine manager from 1890, now living in Beaconsfield. "*I was the mine manager ... some 23 years ago. During my period at the mine I opened up a block of ore, which was never seen before I went there and has not been seen since... I have had a fair experience of copper mines on the West Coast and also on the East Coast, and consider the Pandora Copper Mine as rich as any I have yet seen... I sent 5 tons of ore to Law and Party Smelting Works, Newcastle, which gave a return of 25% copper, and a slight percentage of gold. The copper was of first-class value. I left 60 tons of ore stacked at the mine, estimated to be 12.5%. This was sampled by a man from the Newcastle Smelting Works, who informed me that it contained all the required fluxes for smelting and was an easy ore to treat.*"

A letter from a Mr W J Cornes, now of Devonport, also accompanied Lewis's blast. "*It is now ten years since I held the lease, and it has gone through several hands since... I left Burnie and came to Devonport to reside with the express intention of re-pegging and again endeavouring to obtain the lease... I picked a sample and took it to the Beaconsfield School of Mines...who gave an assay of 93% native copper... we removed a large quantity of very rich stone. We also sunk a winze on a good formation about ¾ of the way in, from which we also got a quantity of good stone, but we had to abandon working as soon as we got below the water level. On the opposite side of the creek there are two or three very promising formations, carrying a good percentage of copper, but as they all seemed to run in the direction of the tunnel lodes we left them for future consideration... The mine was up for flotation on the Melbourne market, but copper being on a falling market we were not successful, mainly because we could neither get the mineral rights nor yet a price put on for the purchase of the block right against the bank of the tunnel. I think it was a 50-acre agricultural block and belonged to a gentleman who worked at Boag's Brewery... the richest lodes were running into this land; we tried every way to buy this, but could not succeed, and had to let the flotation go on that account.*"[65]

Finally, Mr Lewis reported that an assay done by the North Mount Farrell Co two weeks ago on the new lode found by May Queen returned 8% copper, 1oz silver and ¾ gram gold. A similar sample sent to the Secretary of Mines returned 12% copper.

The Chairman of the board, 41 year-old Devonport jeweller and curry manufacturer Mr Edgar Keen, was moved to add his tuppence-worth to the controversy. He described Mr Loftus Hill's report as very damaging and having caused considerable excitement in Devonport. He called the directors together and went out to the mine for an inspection, accompanied by a man who had worked at the mine under a previous owner. He said afterwards that it was clear that like doctors, geologists often disagreed, and the mine was a good prospect.[66]

Late in November 1913 the mine manager, Charles Robinson, began work again after a fortnight's layoff due to the bad report. He'd previously got a new shaft well underway, down to 39ft and timbered. This was 40ft below the collar of the small shaft on the old working and he was bringing

out good samples of yellow chalcopyrite and peacock ore, together with native copper, and they were improving with depth. He was hampered by 4ft of water now in the tunnel, but managed to make a thorough examination and found that the tunnel ran west of north. This meant altering the course of a new tunnel being dug to cut the winze. Everything was in a good state of preservation, as the previous work had been done well.

He soon had things cleaned out, and a week later called the directors to see a new lode he'd exposed in the lower level, now quite dry with the recent fine weather. It was 4ft 6in wide and appeared to be rich in peacock ore and gold. A steam pump would have to be installed by winter.[67]

May Queen Copper and Gold Mining Co NL was registered a few days later. The office was Mr Lewis's jeweller's store in Stewart St Devonport, and 50,000 shares of 2s had been issued out of 75,000 authorised. Mr Lewis was legal manager, and the shareholders included Edgar Keen, Henry McFie, Thomas Burrel, William Crabb, Edward Goninon, John Good and Patrick O'Dea.[68]

Difficult Times for the May Queen

A bulk sample sent by May Queen to the North Mount Farrell Co at Tullah returned 18.4% copper, trace gold, and 1oz of silver. A pump was being purchased, a steam engine leased, and work was expected to resume in a week. The shaft would be sunk a further 30ft to see if gold was in the lode at depth. Samples sent to the Secretary of Mines prior to Christmas returned 28.8% copper from the 34ft level and 16.8% copper from the 22ft level.[69]

The Chairman of May Queen, Edgar Keen (1872-1952) of curry and mustard fame. He resigned to go to war.

From the start the company was hampered by lack of capital, then the outbreak of war led to shareholders not honouring their instalment obligations, making the situation worse. In mid-1915 the price of copper was high, with consumption up and supply down due to the war, and a frustrated Mr Lewis went off to Melbourne and Sydney looking for investors. An offer from West Coast miners to take the mine on tribute was rejected.[70]

Unfortunately the search for money was not successful. Then the Chairman, Mr Keen, resigned from the board to go to war as a private in 1916, though 44 years old by this time and a successful and respected businessman. An exasperated local wrote to the *Northwest Advocate and Emu Bay Times* to ask if the company still existed, and why, with the price of copper so high, the shareholders weren't called upon to inject capital? It was superficially a reasonable question, but the shareholders had been called upon earlier and failed to stump up.[71]

The criticism had an effect though, with the entire board resigning in July in order to give the company a fresh start. Messrs W Innes, A Currie and E H Richmond (Chairman) were then elected and work resumed. Mr Innes was well-known in mining circles as the Chairman of the North Mount Farrell and Round Hill companies. The problem of

lack of funds would be handled by a demand upon delinquent shareholders and sale of the 20,000 shares held in reserve. This would enable purchase or rental of a pump, and sinking the shaft another 50ft in depth.[72]

It was noted that Mr Montgomery's unfavourable report of 1893 could now be re-evaluated in the light of the considerably higher copper prices. He'd calculated that the mine would lose £10 a ton of copper produced, with copper then at £44 a ton. Looking at the present price of £130 per ton of copper, however, his calculation showed that a profit of £80 per ton was now possible, even allowing for a 50% increase in costs, and forward contracts at the current price could be locked in for years ahead.[73]

Despite this, the company was not to have a smooth path to production. A Spreyton labourer and stockbroker (a strange mix) named Francis Hall, a shareholder in the May Queen, filed a complaint of non-work over of the 40-acre May Queen lease. He asked that the lease be forfeited and given to him.

The lease had been granted in 1913 and renewed in 1915. A work exemption was granted in 1914, but was revoked in June 1915. Mr Hall said he'd seen three men working there for 14 weeks at the end of 1913, but none since. A witness, who admitted to being in partnership with Hall, confirmed that work had been done on Fernandez's section, but not on May Queen over the past two years. Another witness, Neils Anderson, claimed to be independent and said that no work had been done and the two shafts there were full of water. He was then forced to admit that he was a third partner of the complainant and not independent at all.

The company said that the former syndicate did a lot of work, then transferred the property to May Queen, who raised £340 and worked from September 1913 until May 1914. The company was reconstructed in August 1916 and a new board appointed and arrangements made to buy machinery and restart. Altogether £618 had now been spent. New director Andrew Currie deposed that he'd recently bought 500 shares and the new cash meant that the company could resume operations. The problem had largely been caused by nine shareholders going to the front, including the former chairman, forcing new shareholders to be found.

Rather surprisingly in the circumstances, the lease was forfeited. Mr Hall was given leave to apply for it himself. The company appealed.[74]

May Queen won the appeal, and in March 1917 new plant went out to the mine, together with a delegation of directors and shareholders keen to view the property. Andrew Currie was engaged to install the machinery, and Mt Lyell was to process the ore.[75]

Suddenly the lease was forfeited again!

It seemed that Mr Hall had again applied to the Warden for forfeiture, and this time lost. He appealed to the Mining Board, but then withdrew his appeal. Notwithstanding that he'd already withdrawn, the Mining Board heard his complaint and declared the lease forfeited. The company, just as it was preparing to resume work, had to shut down.[76]

It was all too much, and the May Queen board gave up the fight. With the war ending, the price of copper was falling. Investors were few and far between, and those interested in mining certainly weren't interested in a company that no longer had a mine. And after destroying the company, it seems that Mr Hall did nothing with the property either.[77]

Since 1917, no-one has gone back to Saxon's Creek, which is a strange thing. Unlike Badger Head, this was a promising copper/gold prospect. Some companies have had the mine within their exploration leases but have done nothing with it. No-one appears to have ever drilled anywhere in the area, which is a surprising oversight.

The Rising Sun Gold Mining Co, Registered

The Government Geologist Mr Gustav Thureau, who'd had such a high opinion of Saxon's Creek copper, also drew attention back in 1883 to the Rising Sun mine at Beaconsfield.

This mine began life as two 20-acre gold sections owned by John Ellis and party, who vended them into a new company called the Rising Sun Gold Mining Company on January 4th 1881.[78]

The new company had an authorised capital of £12,000 in one pound shares paid to 10 shillings. The Rules of Association of the Blyth's Freehold gold mining company next door were adopted with appropriate amendments, and a board comprising Alex Webster, John Ellis, Josiah Powell, Alex Corrie, David Dally and James Dally was appointed.

The two claims were at the southern end of Cabbage Tree Hill, on the north bank of Middle Arm Creek. (The location can be seen on the map at the beginning of Chapter 6). Prospecting by Mr Ellis and his companions began on a two inch wide vein of quartz at the surface. They sank a prospecting shaft and by the time they were 26ft deep, their reef was over 3ft wide. Good gold prospects were obtained from the stone after hand crushing, at which time they decided to form the company.[79]

A few days later, the company's registration was advertised, showing that the 12,000 shares had been fully taken up by a small group including William and Job Dally.[80]

A contract to raise stone was let and completed by the end of the month, after about 28 tons had been stacked. The result of its crushing wasn't published, but must have been reasonably encouraging as they decided to sink the shaft another 20ft and then drive along the now 4ft 6in wide lode, which was very well defined between vertical walls of country stone and heavily impregnated with pyrite (fool's gold). If the stone was payable, they would access it from below by driving a tunnel north into the hill at creek level.[81]

By the end of April 1881 they'd sunk 66ft from the surface, then driven at the 60ft level along a well-defined vein of ore carrying a little gold. At 23ft along the drive the appearance of the stone had become rather peculiar, being very dark in places, with a dark powder in its crevices and glittering specks of pyrite. Samples were sent off to W L Jenkin for analysis.[82]

Mr Jenkin's answer came back at the beginning of June, saying that taking the stone as a whole, it assayed at 3.2% copper. The pyrite was a mix of copper and iron pyrite, which could easily be separated by hand, with the bronze-coloured copper pyrite then returning 20% metal. Samples of the stone were put on view at Mr Fraser Cobham's office in George Street, and Alex Webster's office in Charles Street.[83]

With the drive at the 60ft level now 30ft long, they began angling down in the tunnel in what is known as a winze. This would give information about how the lode changed with depth. A few tons of the ore were taken out to send to Newcastle for treatment. At 21ft in the winze, the lode was still 4ft wide, but tunnelling was difficult in the hard ground.[84]

Specimens of the ore were also sent to the mainland by Mr G Fitzgerald and Tom Just. Mr Ebenezer Cook of the South Australian Copper Co telegrammed back that the yellow ore with quartz from Mr Fitzgerald was worth £10 a ton. The sample sent by Mr Just came back as worth £18 a ton.[85]

The first half-yearly meeting of the company was held at the end of July, with Alex Webster in the chair. They needed to decide whether to expand their activities.

The board recapitulated the work so far, saying that they sank to 66ft on a hunt for gold, then drove on the lode. A remarkable change had been seen in the ore 30ft along the drive, which became composed almost entirely of iron pyrite, then developed increasingly into copper pyrite. A winze had been sunk 27ft on the copper and it appeared to continue. The board believed it was time to drive a tunnel in from the creek to properly open out the mine. Very little had been spent to date, and an adit from creek level would give 300ft of backs (ground above their heads). Their expenditure to date had been only £113, so that they could call nearly £6,000 more from the shareholders. William Ritchie (the lawyer) and William Aikenhead (of the *Examiner*) were elected to the board, which was authorised to proceed as it saw fit.[86]

The well-respected and well-connected new directors would have had the effect of increasing public confidence in the company, and calls on the shareholders for money became easier. William Aikenhead showed a sample of the Rising Sun ore to the Royal Society and then gave it to the Tasmania Museum.

For the time being, the new board continued the present operations. At 100ft depth from the surface they began driving west, with the vein of ore now 6ft wide in the tunnel and improving in quality. Interest in the mine was very strong in Beaconsfield, particularly as many other mines had suspended. An adjoining claim called Lambert's section was formed into a company called the Dalrymple, also with £12,000 capital in 10s shares. Alexander Loane, of the old Tasmanian Copper Company, held an interest and was elected a director.[87]

When Rising Sun reported that the lode in their new western drive had widened to 7ft at 17ft in, another company started up on the strength of the public interest. This was the Royal Oak Company, with three 10-acre sections at the south end of the adjacent Blyth's Freehold Company.

Royal Oak went for £20,000 total capital, in 20,000 shares of which 15,000 would be offered to the public. Their prospectus was issued on September 6th by T C Just, and showed that the three sections were owned by Messrs Heslop, Gurr and Kemp. A report had been done by respected mine manager Mr R Garrick. He said that he expected the Rising Sun lode to became payable as they went into the hill, and as it trended east-west, it would likely enter Royal Oak's property.[88]

No word was published about whether the foreshadowed bulk test had been done in Newcastle for Rising Sun, but five bags of ore, taken from different points within the lode, were given to Mr Jenkin for analysis in September, and he reported them as carrying 7.2% copper and over two ounces of silver per ton. A specimen sent to another assayer returned 26.5% copper. There was also a little lead as well. On the strength of these results, the directors decided to commence the foreshadowed adit into the hill from the creek. This would make mining cheaper and easier than working from a shaft, as water would drain naturally and stone could be wheeled out on a tram.[89]

Contractors were engaged, and they began by clearing the site and making a cutting into the eastern foot of the hill. Discovering a narrow quartz vein in the cutting face, they decided to commence the adit on that and were soon 40ft in. The vein was heading towards the shaft, and they were soon finding gold in it.

By January 1882 the contractors had driven the adit in from the creek over 100ft, and still had the leader (or vein). At 125ft in and 131ft from the surface, they came into the lode that had been found from the shaft.[90]

Little was heard from the company over the following months until suddenly, in November 1882, their leases were advertised for sale! This was news to small shareholders, who hadn't authorised such action. The board's decision seems to have surprised the Government Geologist Mr Thureau too, as he wrote the following year: "*The lode appears a very strong one, and carries pyrites of copper principally, which on assay gave a fraction over 26% of pure copper per ton. Operations have been suspended at a time when greater inducements offered for going on, and of proving the full extent and value of a very promising metalliferous deposit.*" Nevertheless, two months after Mr Thureau's favourable report, the company was wound up.[91]

Local people still liked the ground and many Beaconsfield miners took the opportunity to prospect. In December 1884 one of the Beaconsfield bank robbers, Charlie Ward, was on the claim when he was arrested. His partners continued, however, and over the first eight months of 1885 they extended the 66ft level drive in the original shaft.

They found that the pyrite was now carrying ⅔ oz of gold a ton! The stone it was in also carried respectable values averaging a fifth of an ounce, and so they decided to go back to the 127ft tunnel from the creek, and push it on until they cut the new reef. They went to 217ft before suspending. They'd expected to cut the lode at 198ft and as they didn't, and the work had become very expensive, they went back to surface prospecting to try to find some trace of the lode's location. Finally they gave up.[92]

Day Dawn Prospecting Association

The mine wasn't forgotten though, and late in 1886 a new Prospecting Association called the Day Dawn was formed to take over the ground. They went back into the tunnel and commenced crosscutting towards the shaft. Adjacent claims had also resumed exploration.[93]

The Day Dawn Prospecting Association worked the whole summer, until in autumn they were having serious problems with bad air. They persevered, and by mid-winter 1887 were at the old shaft, though 75ft below its bottom. By late spring they'd dug a rise to connect the levels and air began to flow freely through the workings.[94]

They worked through another summer until a fire destroyed their blacksmith's shop, taking out much equipment. They put on contractors to continue winze sinking and extending drives, then put men on wages for a while. Finally, after 17 months of hard work at their own expense, they took a break. They didn't go back.[95]

At the end of 1888 another group said they had the Rising Sun reef on the south side of the creek. It was carrying gold and galena (lead ore), but while they talked of taking out a bulk sample, it doesn't appear that they ever did.

In 1900 prospectors named Moore and Emmet found a rich shoot of gold that appeared to be an extension of the Rising Sun reef into Blyth's freehold ground to the east. They'd been fossicking over the ground for a number of years off and on, but as they had no money to develop it, the find was never followed up.

Just before the First War, a Rising Sun Prospecting Association managed to con some money out of the Mines Minister to buy the old Florence Nightingale battery. This group was reviving the old Salisbury mine at the south end of Salisbury Hill though, and despite using the name, they were not on the original Rising Sun claim.

Badger Head Gold Mining Syndicate

Prior to the First War a group also returned to the old Tasmanian Copper Co mine at Badger Head.

Pyritic mineralisation had been discovered near the old workings in Copper Cove in 1910, assaying at ¼oz gold and 2oz silver plus 2½% copper, and a Melbourne-based group led by a Major Campbell JP quickly formed themselves into the Badger Head Gold Mining Syndicate and raised £750 in five pound shares to fund exploratory work under Mr Charles Hunt.[96]

Two reward sections of 80 acres each were applied for, and a 40 acre lease secured. A shallow shaft was sunk and an adit dug into the hill, expecting to cut the lode 25ft in. Another vein was discovered 60ft west of the workings. An adit was begun on the new lode, higher up from the beach. They said that the ore looked like some out of the Beaconsfield mine. Then a third discovery was made 200ft east of the original workings.[97]

By March some remarkable assays were coming in. On a sample of stone they got 81 ounces of gold per ton, with 2½oz silver and 2.2% copper! Then on a bulk sample they achieved 5oz gold a ton, plus 16oz silver and 0.6% copper. And the third discovery still not assayed was said to be richer! Several offers for the property were rejected and the £5 shares were bid at £20 with no sellers in sight.[98]

Major Campbell and party came down from Melbourne to Beaconsfield in early March 1911, where they met up with local investor Mr M Hannah and went out to inspect the property. Members of the public were also being freely granted permission to inspect the workings. By April Mr Hunt reported that the reef was 30ft wide in places! The Syndicate said that it was time to begin serious mining. Beaconsfield Council authorised repairs on the road to Badger Head from Kelso.[99]

Surprisingly, the Syndicate then folded! No explanation, they were suddenly just not there. Three years later, after the war began, a report appeared saying that workers had instructions to extend the 75ft tunnel to 300ft, but that didn't happen either.[100]

The mine has not been relocated in recent years, but the adits must be in Copper Cove somewhere near and above the Tasmanian Copper Company shaft that is easily seen on the beach. Remarkably, the gold strike seems to have been simply forgotten during the war and never investigated afterwards. Yet the bulk sample return of 5oz of gold a ton is a bonanza grade, and it had the silver and copper credits as well!

Windred Creek alongside the strike also has gold, and a couple of panners in the 1960s reportedly washed out two ounces quite easily. The fact that the creek has gold suggests another source higher up from the Cove.

This other source may have been discovered by a prospector sometime between the wars, but he died before being able to take anyone to the spot.

The story of this prospector comes from old Charlie Aulich, who lived on a farm at Badger Head all his life. The farm today is owned by his grandson Dominic Piscioneri, who is now elderly himself.

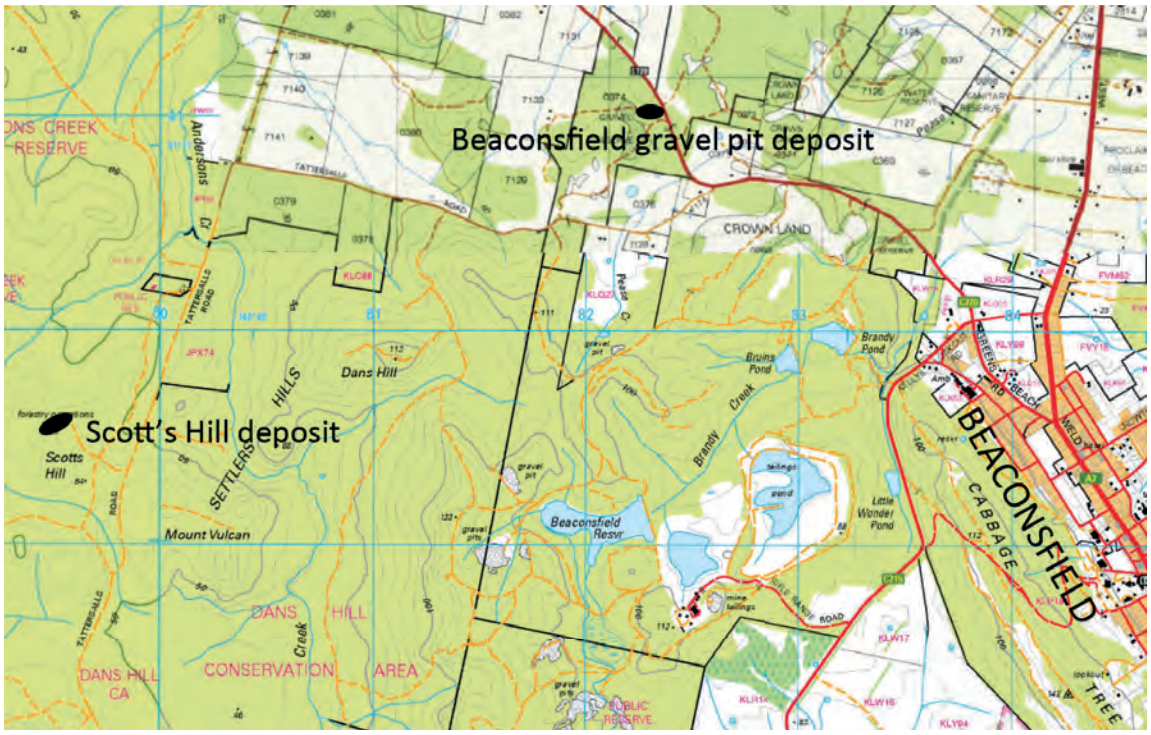
Charlie said that one day a prospector turned up at the farm, quite ill, claiming to have made a significant gold strike on Badger Head. The man was the father-in-law of the Port Sorell constable. He told Charlie to look for a pick he'd left on the spot and sugar bag that he'd hung on a tree. Charlie looked, but Badger Head is a big piece of ground to search for a pick and sugar bag.

No one has ever found them.

Notes & References

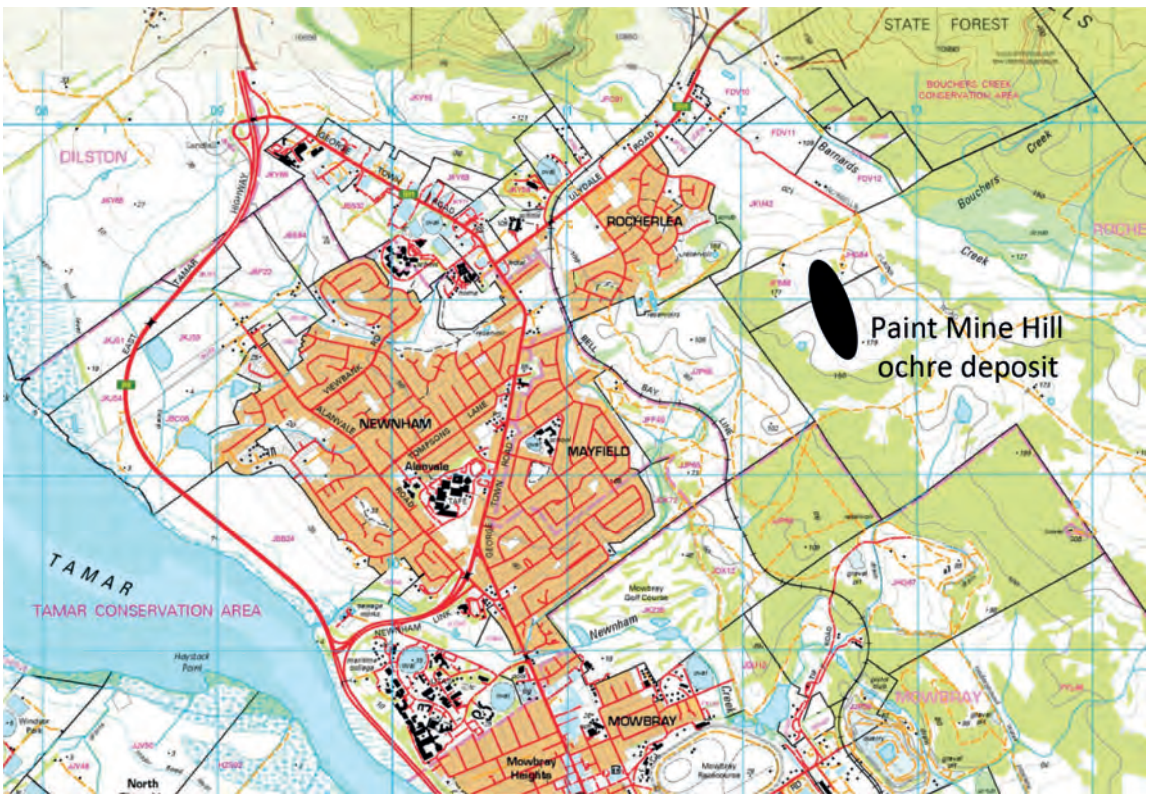
1. Alexander Walpole Loane "Alick" (1844 – 1912 and not to be confused with A W Loone MLC) never married. He was a director of many Beaconsfield mining companies and said to be a brilliant prospector, but a poor or unlucky businessman. A family story says that he bought a large number of young pigs when prices for pork and bacon were high and fattened them. Unfortunately many others had the same idea and the market collapsed just as he was ready to sell. In disgust and pique he shot them all and went off prospecting. He found gold at Mathinna in the early 1880s and turned down an offer of £2000 for it, only to have it peter out and become worthless. He found the Golden Gate at Mathinna in 1897 and remembering his last experience sold it for £3000, only to see it return £355,000 in dividends 1888-1904 and produce 232,225oz. It was second only to the Tasmania reef at Beaconsfield. While at the Golden Gate he is supposed to have known future President Herbert Hoover. He put his Mathinna money largely into gold stocks in Victoria, only to lose it and head to Lefroy for another try at prospecting. His health was declining and he made some money out of doing reports for others. Being out in the bush ended up giving him pneumonia and he died 11/12/1912 at 68 in Sheffield. From *This our fathers did for us* by Derrick Loane 1991.
2. Cornwall Chronicle 24/12/1877 p6. The name "Badger Head" is often assumed to derive from a common name for wombats. There is no evidence of this derivation, however, and it may be in memory of the female pirate Charlotte Badger. Charlotte was a convict at the first settlement at York Town. She and others including Catherine Hagerty seized the colonial supply brig Venus in June 1806 and sailed off into the Pacific. Along the way they are believed to have started a native war in New Zealand, when they kidnapped a Maori princess, then sold her to another tribe to be killed, roasted and eaten.
3. Examiner 13/4/1878 p5
4. Cornwall Chronicle 5/6/1878 p1. "Mining Captain" was a Cornish term that meant "leading hand", where a team of miners elected one of their number to the position. Although the term was used in Tasmania's early mining days, its proper meaning was not understood and it was used when they really meant Mine Manager. Because of the confusion, the term quickly fell into disuse. Goldsworthy was clearly a Mine Manager, not a Captain.
5. Cornwall Chronicle 5/7/1878 p2. The letterwriter may have been Goldsworthy himself.
6. Examiner 10/8/1878 p3
7. Mercury 24/9/1878
8. Cornwall Chronicle 1/10/1878 p3
9. Cornwall Chronicle 9/9/1878 p2 & 23/9/1878 p2, Examiner 20/9/1878 p4 & 1/10/1878 p3
10. Cornwall Chronicle 29/1/1879 p2-3
11. Examiner 10/3/1879 p3 & 14/3/1879 p4
12. Examiner 7/6/1879 p2
13. Cornwall Chronicle 14/7/1879 p2. Three pounds a week was rather good for an engine driver, suggesting a bit of nepotism.
14. Examiner 7/6/1879 p2
15. Examiner 31/7/1879 p2
16. Cornwall Chronicle 18/8/1879 p3
17. Examiner 26/11/1879 p1
18. Examiner 19/3/1880 p2. The Company's biggest mistake may have been to believe their mine managers. A mine manager's continued employment relies on the continued confidence of the board and shareholders in the mine. Mine managers invariably gave optimistic reports – often wildly so.
19. Mercury 23/8/1884 p1. William Dally's block shows up on an official map of Holwell in 1880, so appears to have been bought in 1879.
20. Examiner 10/3/1879 p3. He pegged a claim over it, so didn't own the land when he found the deposit. Did he then purchase it, or was the find on Saxon's Creek adjacent to his purchased property?
21. Examiner 1/5/1879 p3
22. Mercury 23/8/1884 p1. But who was A Lovell? There was a Walter (and Augusta) Lovell at Frankford on a 1280 acre leased property. They'd come up from Jerusalem in 1882, and so were too late to have been the copper mine people. Augusta became the Frankford postmistress in 1890, replacing Mr Durand. Walter had been bankrupted in 1879 and forced off his leased property at Richmond on April Fool's Day 1881. They moved to Augusta's family in Jerusalem for her to have a baby, then to Frankford, where they leased their 1280 acres in partnership with a man named Smith.
23. Examiner 3/10/81, Leader 9/9/1882 p1
24. Mercury 1/10/1881 p3 & 29/10/81 p1
25. Mercury 2/11/1881 p3& 3/12/1881 p2
26. Examiner 18/1/82 p2 & 21/2/1882 p3 & 31/1/1882 p3
27. Mercury 27/2/1882 p3, Leader 9/9/1882 p1
28. Mercury 13/4/82 p3, Examiner 24/4/82 p2. This passing reference in the newspapers confirmed that Dally's find was along Saxon's Creek east of Coppermine Creek, and thus strongly suggests that it was on or adjacent to his private property.
29. Examiner 25/4/1882 p2, Mercury 2/5/1882 p3
30. Mercury 18/1/1883 p3 & 2/5/1882 p1
31. Leader 9/9/1882 p1, Mercury 25/10/1882 p3
32. Mercury 23/8/1884 p1
33. Mercury 23/8/1884 p1
34. *The Late Copper Syndicate* E. Andrews, The Quarterly Journal of Economics Vol 3 No 4 July 1889 pp508-516
35. Examiner 30/3/1889
36. Daily Telegraph 29/2/1888 p3 & 8/3/1888 p2, Examiner 9/3/1888 p3 & 12/3/1888 p3
37. Daily Telegraph 29/3/1888 p3
38. Daily Telegraph 17/10/1888 p3, Examiner 30/10/1888 p3
39. Examiner 22/11/1888 p2
40. Daily Telegraph 24/8/1888 p3

41. Examiner 10/12/1888 p3
42. Mercury 3/1/1889 p3
43. Examiner 5/2/1889 p3
44. Daily Telegraph 9/2/1889 p1
45. The Tasmanian 8/3/1890 p22
46. Examiner 13/3/1890 p3
47. Daily Telegraph 13/3/1890 p4
48. Mercury 21/3/1890 p3, Examiner 21/3/1890 p3, Daily Telegraph 21/3/1890 p3
49. Daily Telegraph 10/4/1890 p3, Examiner 16/5/1890 p3 & 18/6/1890 p3 & 29/7/1890 p3
50. Daily Telegraph 4/8/1890 p4
51. *Report on the Pandora Copper Mine* A Montgomery 1893 MRT.
52. Mercury 18/10/1897 p1
53. Examiner 19/10/1897 p3
54. Examiner 29/10/1897 p3, Tasmanian News 5/11/1897 p4
55. Examiner 24/11/1897 p3 & 26/11/1897 p7
56. Mercury 17/12/1897 p1, Examiner 23/12/1897 p3
57. Examiner 28/3/1898 p8
58. Examiner 7/4/1898 p3
59. Mercury 20/6/1898 p1
60. NW Post 26/7/1913 p5
61. NW Post 28/8/1913 p2 & 13/10/1913 p3
62. Examiner 16/10/1913 p2
63. Examiner 16/10/1913 p2
64. Examiner & Daily Telegraph 20/10/1913 p2
65. NW Post 20/10/1913 p4
66. NW Post 23/10/1913 p3
67. NW Post 12/11/1913 p2, Ex 8/12/1913 p2
68. NW Post 18/12/1913 p4
69. NW Post 14/1/1914 p3
70. NW Post 19/7/1915 p3
71. NW Advocate & Emu Bay Times 3/4/1916 p3 letter
72. Examiner 24/7/1916 p2, NW Advocate & Emu Bay Times 29/8/1916 p3
73. NW Post 2/12/1916 p3
74. Examiner 20/2/1917 p3
75. NW Advocate & Emu Bay Times 28/3/1917 p2
76. NW Advocate and Emu Bay Times 27/7/1917 p2
77. Examiner 8/6/1917 p2
78. Examiner 6/1/1881 p2
79. Mercury 21/6/1881 p3
80. Examiner 12/1/1881 p1
81. Examiner 14/2/1881 p3, Mercury 7/3/1881 p3
82. Examiner 28/4/1881 p3
83. Examiner 13/6/1881 p3 & 28/6/1881 p2
84. Examiner 8/7/1881 p2
85. Examiner 14/7/1881 p3
86. Examiner 29/7/1881 p3
87. Examiner 9/8/1881 p3 & 11/8/1881 p3
88. Examiner 6/9/1881 p2
89. Examiner 13/9/1881 p2
90. Mercury 10/1/1882 p3
91. Examiner 30/11/1882 p3 & 1/10/1883 p2, Daily Telegraph 1/8/1883 p2
92. Examiner 28/8/1885 p3
93. Examiner 19/11/1886 p3
94. Examiner 1/7/1887 p3 & 25/11/1887 p3
95. Examiner 17/2/1888 p3 & 18/5/1888 p3
96. Daily Telegraph 17/9/1910 p4, Examiner 20/9/1910 p2
97. Examiner 25/11/1910 p2, Daily Telegraph 6/12/1910 p2 & 13/2/1911 p2
98. Examiner 10/3/1911 p2
99. Daily Telegraph 4/4/1911 p2
100. Daily Telegraph 17/6/1914 p2



Top: *There are two ochre deposits near Beaconsfield. One is in the gravel pit reserve on Green's Beach Road. The other is at Scott's Hill, where the workings are in the bush, but accessible, and consist of a long narrow open cut approximately 4 m wide by 75 m long, at GPS S41° 11.468' E146° 45.526'.*

Bottom: *The workings on Paint Mine Hill cannot be seen, as they have been filled in and covered over by pasture, but they are under the two radio towers behind Rocherlea. The workings of the Tamar Mineral Paint Association are known to be nearby, but their location is uncertain.*



Aboriginal Ochre and the Golden Serpent

Very superior ochres occur at three sites around the Tamar Valley.

The best deposit is in the form of chromic iron oxide, on Crown land at Scott's Hill, near Beaconsfield, where it occurs in association with iron ore and comes in a variety of shades of yellow, brown, green and red. This is one of the highest quality ochres in Australia.

The two other resources are also of excellent quality, but have less variety in terms of colour. The first is in a gravel reserve immediately north of Beaconsfield on the Greens Beach Road. The other is on a hilltop at Rocherlea. The Rocherlea deposit is the only one on private land, and is located under the two huge radio towers on what used to be called Paint Mine Hill.

Amazingly, no-one has ever associated these deposits with the original Aboriginal inhabitants. It seems that anthropologists interested in the early occupation of the Tamar had little knowledge of mining, and miners looking at mineral deposits had little knowledge of indigenous culture. The original inhabitants themselves were no longer around to pass on their cultural knowledge.

Ochre in Tamar Valley Prehistory

The use of ochre by Aboriginals is well documented. Even Captain Cook noted that Tasmanian Aboriginal men smeared their hair and beards with a paint made of animal grease and red ochre. Red was apparently associated with blood and was the most used colour.

Ochre was quarried by indigenous women, ground into a fine powder and mixed with grease, blood or saliva, depending on the use to which it was to be put. Apart from its primary use as a male hair decoration, it was used to colour skin at times of ceremony, such as when mourning, and also for painting on stone. This latter use was in stencil paintings made by spraying the ochre mixture from

Above left is Commissioner Bigge, who came in 1820 and asked where all the local people had gone. Painting courtesy of the State Library of NSW. Above right is a Tasmanian man as drawn by a French explorer in 1809, also courtesy of the State Library of NSW. Note his use of red ochre as a hair decoration.

Ochre collected at the old Scott's Hill workings in 2014 by the author and Dr Paul Richards. Photo courtesy of Dr Richards.

their mouths over their hands, fingers and forearms. Often the ochre was calcined (roasted) first to intensify the colour and remove impurities.

The importance and limited sources of good ochre suggest that it was highly valued and traded over considerable distances. The supply was controlled by the women, who are thought to be the ones collecting it, though it was primarily used by the men.

The known sources of ochre used by the original inhabitants of Tasmania are few, and it has generally been believed that sites such as Toolumbunner in the Gog Range, about 10km north of Mole Creek, were the most important. However anthropologists and historians are rarely miners, and seem to have been completely unaware of the high-grade ochres available around the Tamar.

It is also a sad fact that the Tamar Aboriginal population, being one of the first exposed to white sealers and convicts, was also among the first to be exposed to the newcomers' diseases. Tragically, they died so rapidly that their oral traditions and cultural knowledge were lost. Only about 15 years after the first British settlement at York Town, Commissioner Bigge, sent to report on the progress of the Tamar settlements, was surprised to see no native people. He asked where they were. He was told that they'd largely disappeared, and no-one knew why, though there were stories of whole extended families dying in the bush out of public sight.

It is fairly certain that the indigenous population collapse began through contact with sealers before settlement, and deadly epidemics were accompanied by infertility due to introduced venereal diseases. Numbers may have been substantially depleted by the time of settlement in 1804. Widespread hostility between the settlers and the remaining locals sealed the native peoples' fate.

There were at least two Aboriginal clans around the Tamar (which they called Ponrabbel), and may have been three or four. Their exact borders are uncertain. One clan of the Leterremairener people (note that the spelling varies with sources) probably occupied the East Tamar from Low Head to Launceston as part of their range, while another clan of the same people occupied the West Tamar, having been separated from the East Tamar group when the last ice age ended and the Tamar rose from a small river to an estuary. The Peeberrangner people lived around the Piper's River, and the Leterremairener seem to have had a good relationship with them, and with the people of the Ben Lomond area.

Virtually nothing is now known of the significant sites of these clans. We can see, however, that because of their location, the Tamar ochre deposits must have been owned by the Leterremairener peoples. And it is reasonable to assume that these were sites of great significance, now forgotten. It is almost inconceivable that what is arguably the best ochre in Tasmania, and easily found outcropping on the surface, would be unknown to landowners who had been walking over the area for up to 40,000 years!

The Leterremairener are thought to have wintered at George Town and Low Head, and to gradually move to Launceston in spring before summering around the Ben Lomond tier. This means that they likely travelled through Dilston and across Russell's Plains at the back of Rocherlea as part of an annual migration. Artefact discoveries tend to confirm this route. Perhaps part of their good relationship with the Ben Lomond people was the provision of ochre to them in return for seasonal use of their land.

We can be quite confident that all the ochre sites were known and extensively utilised by the original peoples. They were too good and too obvious not to have been. The ochre from them would have been collected by the tribal women and traded with surrounding clans. The three sites were surely some of the most significant cultural (as opposed to sacred) places in Tasmania. Unfortunately, any evidence

of this use has been totally destroyed by later quarrying by white miners. Perhaps it is time to mark the sites – particularly as they are the only ones around the Tamar we can now be sure of – and belatedly remember those who visited and worked them for millennia past.

The Chromate, Asbestos, Paint and Gold Mining Company

Just as gold miners are alerted to the presence of gold by finding old workings, it is likely that early prospectors first became aware of the ochre deposits by seeing open pits left by Aboriginal women.

The first deposit worked by white miners was at Scott's Hill, near Anderson's Creek west of Beaconsfield and south of York Town. It was here that the Tasmanian Charcoal Iron Company took out bulk samples for iron smelting and export between 1872 and 1875. They had a substantial iron ore operation on the adjacent Mount Vulcan and were interested in the ochre as an iron resource rather than for use as a pigment. Ochre is iron oxide after all. They didn't record whether their sample came from a pit exposed by Aboriginal quarrying, but it is likely. How else would they have found it in the thick bush?[1]

The Scott's Hill deposit is a multi-coloured ochre with needles of magnetite, and another iron mineral called goethite is also present. The deposit is highly variable in colour, with yellow, red, green and brown layers, partly because of the presence of chromium. It is mostly fine-grained, with only minor grit or pebble material, and is arguably the finest ochre in Tasmania.

Though iron mining and smelting closed down in 1876, the existence of iron ore and ochre at Scott's Hill was not forgotten by gold miners at nearby Beaconsfield.

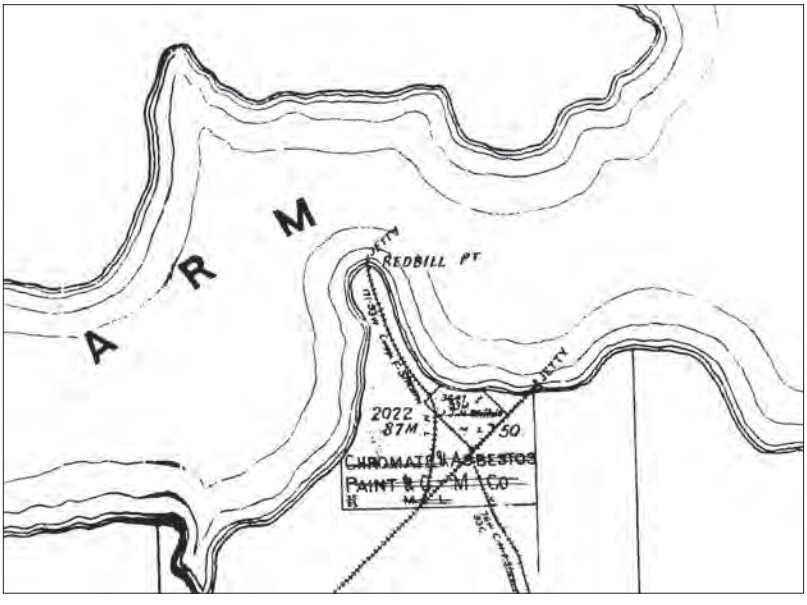
In 1887 a Mr C S M Green, of Sydney, was regularly visiting Beaconsfield on business matters connected with his position as a trustee of the Ophir Deep Lead gold mining syndicate.

This was only five years after the discovery of the fabulous Mount Morgan gold mine in Queensland, and Mr Green was keenly aware of the possibility of iron ore hosting rich veins of gold. On a visit to the Ophir mine he secured the services of Mr Sandy Buchanan, who had worked for the British Tasmania

The huge iron smelting works at Beauty Point had been largely dismantled when the site was taken over by the Chromate, Asbestos, Paint and Gold Mining Co in 1888. Image from the Australasian Sketcher July 1876 courtesy State Library Victoria.

Charcoal Iron Company, to show him the iron resources.[2]

Mr Green noticed that the iron was in a direct line with the Tasmania gold mine reef and took two samples of Scott's Hill ochre totalling about 5kg back to Sydney, but did nothing with them at first. One day, in conversation with an assayer named George Lanarch he mentioned the samples, and Mr Lanarch offered to assay them. The result was ⅔ oz of gold per ton from one, and over one ounce per ton from the other! Negotiations were started to mine the resource, but there were difficulties with extracting the gold from the ore and the venture stalled.[3]



The 50 acre lease at Redbill Point, West Arm, taken up by the Chromate, Asbestos, Paint and Gold Mining Co. The Company renovated the old ironworks jetties and may have rebuilt the railway road and bridges for haulage purposes. From an 1892 Mines Department map of Beaconsfield.

A short time later Green showed the ochre to his friend James Blackman, who owned a paint factory at Newtown in Sydney. Blackman also owned iron mines at Mittagong, from where he sourced ochres for his Newtown factory and produced paint in three colours. On testing the Scott's Hill samples he found the presence of chromium (and fine gold), and stated that the ochre would make splendid paint. He promised to take on the management of making paint if Mr Green decided to form a company.

Mr Green then went to Melbourne and introduced the matter to a syndicate, who, after sending a gentleman to verify the facts, immediately took on the business and formed the Chromate, Asbestos, Paint and Gold Mining Company with a capital of £20,000 in 40,000 shares of 10s. Green had further assays done on new samples, which returned over 4oz of gold per ton, and told that *Examiner* that he had an assay certificate for this. More assays undertaken in Melbourne were said to return spectacular grades up to 17oz of gold per ton![4]

The company found they could produce a remarkable 277 colours from the ochre and decomposed serpentine, and sent samples to the Melbourne Centennial Exhibition in 1888. Their samples of raw ore, pigments and paints caught the attention of some exhibitors from America, who immediately bought the rights to the minerals for marketing in Australia and the USA and wanted 1,000 tons per month. The syndicate took up three mining leases – one over Scott's Hill and Mount Vulcan of perhaps 50 acres, another a mile to the northeast (No. 2128-87M of 40 acres) for its asbestos resource, and a third (2022-87M) for 50 acres over the Crown land at Redbill Point on West Arm, where a large iron smelter had operated and its jetties still stood.

The third lease wasn't for mining, it was for an industrial and shipping site, and was well suited to their needs. The old ironworks railway had run all the way back to Scott's Hill and Mount Vulcan, and though the rails had been removed, the rail road could easily be renovated at the same time as they repaired the jetties, even if they didn't rebuild it as a tram or train line.[5]

The syndicate initially offered half their issued shares to private investors, but then got excited and took many of the offered shares themselves, and the company was floated in Melbourne with Mr T R Donaldson as manager. Mr Blackman was so enthused that he closed his Mittagong mines, sold his Newtown paint factory and migrated to Beaconsfield.

The first work of the company would be to rebuild the iron company's two jetties. The long (200m) jetty into West Arm from the tip of Redbill Point on which the iron company railway had travelled was still in reasonable condition, but the short east-facing jetty into the Tamar at the base of Redbill Point was in very bad repair. The bridges and culverts along the rail line had also been destroyed by bushfires and the rails removed.[6]

Tenders were invited in October 1888 for building sheds at Port Lempriere, the old town at the base of Redbill Point. These would cover the steam engine, and crushing and milling machinery for the ochres and the auriferous magnetite. The works abutted the small jetty and were on the same site as where the great ironworks had stood, but had now been dismantled and sold for scrap. The site was purchased by the government for a quarantine station, but that didn't eventuate and so the new company was able to take over the land as a mining lease.

Two new patent grinding mills that had been on view in the American Court at the Melbourne Exhibition were ordered from the Risdon Iron Company in San Francisco. They would grind 2½ tons per day each, but this was expected to be insufficient to satisfy the US demand, let alone the 100 tons a month asked for by a firm in Queensland. An engine and 12 paint mills were already waiting in Sydney. Iron oxide would be produced as a by-product and there was a big demand for it from gas companies. Port Lempriere would be their headquarters, with paint manufacturing on-site and pigments packed and exported to the mainland and the USA. The company expected to be producing in 4 months, and employing 50-70 men within 12 months.[7]

In December 1888 the manager James Blackman placed a statutory notice in the *Examiner,* as required for a Victorian company operating in Tasmania. He declared that the company's office and his residence were in Beaconsfield, and its head office was No. 55 William Street, Melbourne, in the Colony of Victoria.

A tender was accepted, and the Port Lempriere site cleaned up and building works commenced. Another tender was accepted for carting 2,000 tons of ore from Scott's Hill to the works.[8]

By mid-January 1889 machinery was on the ground, a boiler on the way, and a 25hp engine purchased in Launceston and about to be unloaded from the SS *Indignant*. A large shed for the engine and other machinery had been erected. It was around 150ft long, 30ft wide and 18ft high. At the Scott's Hill deposit a trench had been driven from about creek level to a face some 25ft in depth. Early testing indicated a further 15ft of ore below the floor of the trench. The prospects of the company were said to be bright and the works were looking splendid.[9]

The company operated for the first few months of 1889, but on a more limited scaled than expected. The *Examiner* seemed frustrated, and commented that it was greatly regrettable that the company didn't "*infuse more spirit and energy into its operations. If a thing is worth doing at all, it is worth doing well.*" This attracted a rather facetious response from the company secretary: "*My attention has been directed to the remarks about this Company of your Beaconsfield correspondent in today's issue. They are, perhaps, kindly meant, but it is greatly to be regretted that this correspondent does not learn something of its nature and operations. Were he to do so in this case he would probably come to the conclusion that it*

(this Company) will be still carrying on operations considerably longer than he, and that the scale is not so "limited" as he imagines."[10]

The fact that the paint was a natural product was regarded as a considerable advantage over chemical products. The chromium it contained made the ochre better than most, producing paint of purity, beauty and brilliance. After the product won a first prize at the Melbourne Exhibition, the Commissioners there sent specimens to the following Paris International Exhibition at their own expense. In August 1889 it was announced that the Chromate, Asbestos, Paint and Gold Mining Co had won first class awards for its paints and pigments in Paris as well.

The Secretary of Mines, Mr Belstead, visited the company whilst at Beaconsfield on the 21-22 August 1889 and was very impressed, being only uncertain about the market for their products. The American Bryant roller mill at the Port Lempriere works was capable of turning out 10 tons a day, and already there were close to 100 tons of pigment waiting to be shipped to Melbourne. Unfortunately, the original intention of grinding the ore and making paint had been abandoned because of the Tasmanian import tariff on linseed oil. It was one shilling and threepence per gallon here, whereas in Victoria and NSW it was only sixpence. Despite this "*the company has a great future before it, and shareholders can look soon to see their money returned with splendid interest*", said one newspaper.[11]

Strangely the company then suspended. Speculation through spring 1889 said that they would increase their capital to £100,000 and resume operations on a larger scale, but what the problem was remained unstated. It was confidently reported that a paint expert from England was on his way to take over and resume work.[12]

Defamation – or Explanation?

In January 1890 the company advised it would be in full work again in early February after a corporate reorganisation, and operations would indeed be on a much larger scale. There were several tons of pigment still awaiting shipment. By February 24th 1890, however, all that had happened was that the principal shareholder James Blackman was in court.

Blackman had taken out a slander action against Alfred, Matilda and Edith Prost of Beaconsfield, where he was now living. The Prosts allegedly said that Blackman had a bad reputation in Beaconsfield, and only a couple of businesses would take his cheques, as one had been dishonoured. They also said he'd misappropriated £100 from the company to buy tin shares, and swindled the company by putting gold in the samples that went to Sydney. The defendants denied the complaint, but the matter was proven and they were found guilty. Damages of £10 were awarded to Mr Blackman, but perhaps the ill-feeling surrounding the matter told on him, for he seems to have moved to Invermay at this time.

The defendants' loss, and damages and costs against them, did not mean that they'd lied. Many people tell the truth and still lose in court. They were probably impecunious, and had no way of substantiating their statements irrespective of their veracity. They chose to deny they'd said them, and were shown to be untruthful in that. What they said about Mr Blackman may well have been true, and would cast light on the extraordinary gold assays obtained from the ochre samples. The problem with this hypothesis, however, is that Mr Blackman appears to have only seen the samples after the original testing returned high gold assays.[13]

There was something seriously wrong at the company though. In April 1890 an extraordinary meeting was held in Launceston, and produced a major shock. Chairman Mr L J Park explained that the

Mr Blackman's display at the 1891-2 Launceston International Exhibition. Image courtesy Queen Victoria Museum & Art Gallery.

purpose of the meeting was to appoint liquidators! On a motion of Mr T R Donaldson and Mr J P Carter this was approved. A meeting in Melbourne the following month ratified the motion. No explanation of the turnaround in the company's fortunes was offered. Coincidentally, 1890 was also the year that Mr Green, who floated the company, saw his Ophir Deep Lead Gold Mining Company fail.[14]

A few months later, former director Mr T R Donaldson came down from Melbourne to visit the works. It was reported that they would reopen.[15]

It didn't happen. In late 1891 Mr Blackman set up an exhibit of the ochre and pigments at the Launceston International Exhibition in his own name, with no mention of the Chromate, Asbestos, Paint and Gold Mining Company. The *Examiner* reported that Mr Blackman: "*has taken very great pains with his exhibit of paint pigments, krome, kalsomind, ceres, ambers and siennas, all manufactured by the exhibitor ... This is a similar exhibit to that which took first prize at the Melbourne International Exhibition and at the Paris Exhibition. The samples are arranged in attractive bottles, jars, glass jugs, etc., and placed on shelves. Mr Blackman has also an exhibit of Tasmanian hematite iron.*"[16]

It seemed the assets of the Chromate, Asbestos, Paint and Gold Mining Company had now been acquired by a new entity, called the Tasmanian Iron and Paint Mining Company NL.

The new corporation was legally Tasmanian, rather than Victorian, and had an authorised capital base of £18,000 in 36,000 shares of 10 shillings, though only 7,000 had been issued. While the company was Tasmanian, the six shareholders were all from Melbourne, and the legal manager was a former shopkeeper, now mining agent, Thomas Sedon of Market St. The operations manager was Mr A Buchanan, continuing in the same role as he'd performed in the old company.[17]

Nothing came of the new venture, and in late 1892 an advertisement under the name of Mr Buchanan appeared in the *Examiner*, calling tenders for the purchase of all the plant, machinery and leases belonging to the Tasmanian Iron and Paint Company NL of Beaconsfield. Offers could be delivered to Mr Buchanan at the works and required a deposit of £50.[18]

James Blackman died in October 1893. Shortly after, the Department of Lands and Works advertised the forfeiture of the company's remaining leases for non-payment of rent. The leases were listed as:

131-87G of 10 acres, 132-87G of 10 acres, 133-870 of 10 acres, 134-87G of 10 acres and 86-87G of 5 acres. Three sluice heads of water (permit 7w-87G) were similarly forfeited.[19]

The Launceston Freehold Mineral Paint Association

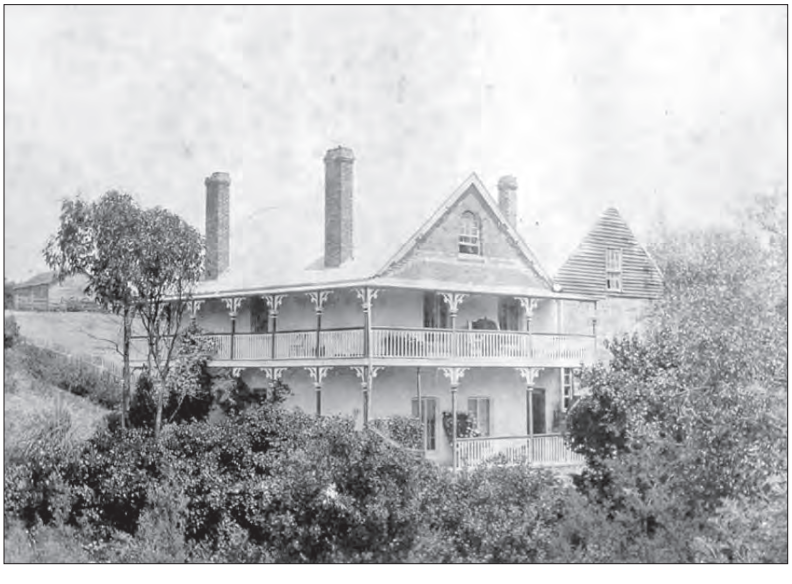
Though a failure, all the activity and publicity around the Scott's Hill ochre deposit and its awards seems to have stimulated others to search for alternative sources of the prized ochre.

Late in 1889, while the Chromate Company was still operating out of Scott's Hill and Port Lempriere (Beauty Point), two prospectors named Henry Turner and Henry Crawford found a high-grade deposit on top of a hill at the back of Rocherlea – then known as Rocher's Lane. As with the Scott's Hill deposit, they found it so easily that it is almost certain it had already been exposed by Aboriginal quarrying.

The land hosting the quarry was a 3500 acre estate called Russell Plains, belonging to an absentee Englishman named Colonel Fawcett, who leased it for grazing purposes to Mr Frank Archer. As it was private land, the prospectors could not peg ground and apply for a lease, and it seems they went to a mining agent for assistance and advice. Coincidentally, he had the same name as one of the prospectors – Henry Turner.[20]

Henry Paget Turner, the St John Street mining agent, promised Henry James Turner and Henry Crawford, the prospectors, that he would float a company free of charge in return for a third of the shares. He must also have assured them that he could sort out a private mining lease as well, as they couldn't proceed without one.

They agreed to call their partnership the Launceston Freehold Mineral Paint Association, the name emphasising that the ochre resource was on private land rather than reliant on a Crown lease. Almost



'Landfall' and Frank Archer MHA. Mr Archer owned the vast Landfall and Burnside estates at Dilston. He was a decent man, a magistrate and a committed lay preacher. It is difficult to believe that the heated disputes over ownership of the Launceston Freehold Mineral Paint Association resulted from any action of his. His image is courtesy of the Allport Library and TAHO and was taken c1893 when he entered parliament at the age of 46. He suffered a massive heart attack and died while walking over Mount Arthur to visit constituents at Lisle in 1902. Those constituents hadn't voted for him, but he looked after them anyway, and won their affection and respect.

immediately, however, the partners fell out, and it seems that Turner the mining agent dudded the prospectors by doing his own deal with Frank Archer, who had a grazing lease over the land from the absentee landlord. This may have been motivated simply by greed, but it is also possible that the prospectors were unrealistic in their expectations and Turner lost patience with them. Either way, the partners fell out badly and Turner went behind their backs.

The prospectors immediately put a notice in the paper warning potential investors that Henry Turner (the mining agent) no longer represented them or the Launceston Freehold Mineral Paint Association. In a tit for tat response, Frank Archer inserted an ad saying that only Henry Turner the mining agent had the right to remove ore from his leasehold property.[21]

The prospectors called a meeting of shareholders to decide how to proceed. It was held on February 12th 1890, with a majority of the 300 shares represented and Mr James Illingworth in the chair.

A resolution was proposed by the prospectors and passed to the effect that: "*as Mr Henry Turner, mining agent, has not carried out his agreement to float the company free of expense, in consideration of one-third of the shares, and refused to give any satisfactory explanation, the Association had lost confidence in him, and that he should therefore cease to be the agent of the company*". A committee was formed to consider the best steps to be taken to float the company. By this time, reports had been prepared by Government Geologist Gustav Thureau and Mr G A Smith of London, who confirmed the quality of the ochre for paint manufacture. A market had been found and two offers made by Victorian interests to buy the property.[22]

Charles Henry Francis Shearn was born in Hobart in 1845. He opened a store at St Leonards at only 18 years of age, and became a director of a large gold mining company at Lefroy at 26. He was a director or manager of many mining companies, including Industry Gold and the Launceston Freehold Mineral Paint Association. From the Cyclopedia of Tasmania 1900.

Following the meeting, Frank Archer and Turner the agent placed an advertisement in the paper cautioning the public and shareholders not to deal in any interest in the company without their consent.[23]

Over the following months it seems that the two prospectors found themselves unable to prevail against both the property leaseholder and an experienced mining agent. They eventually capitulated and accepted a minority interest, and a mining lease was granted by Frank Archer and vended into the company.

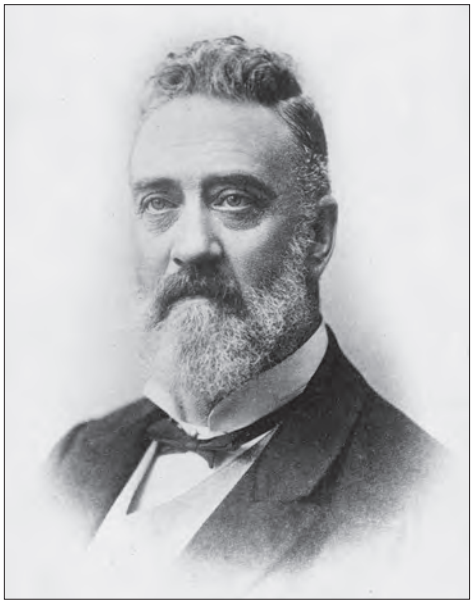
At a subsequent meeting on June 5th 1890, 283 shares out of 300 were represented and Frank Archer presided. It was decided to form into a No Liability company of £1500 in 6000 shares of 5s. This meant that each share in the Association would become 20 shares in the new company. Messrs F Archer, S J Sutton, J Lamont, R Laidlaw and C H F Shearn were elected directors, with Henry Turner as legal manager.

They were now free to open out the mine and prove the resource. Tests from surface samples had shown good quality, and they expected rich chromates might be found at depth.[24] The cost of raising and shipping ore to London had been calculated and would not exceed 20 shillings a ton.[25]

Following the meeting, Association shares were trading on the Launceston Stock Exchange for around £8 10s. With Association shares convertible to 20 company shares, this meant that the 5s company stock was valued by the market at 8s 6d, and reflected the interest, confidence and enthusiasm for the project locally.[26]

By the end of the month the company had floated and registration was advertised. All the shareholders were Launceston-based, and of the 6000 shares Frank Archer had 1200, James Lamont 1200, George Gilmore (solicitor) 860, Elizabeth Turner 500, Henry Turner 340, C H F Shearn (the well-known mining agent and manager) 160, Henry Crawford 120, William and Elizabeth Illingworth (owners of the Main Line Hotel in Lawrence Street) 60, Sam Sutton (Mayor of Launceston and proprietor of the Launceston Coffee Palace) 240, and F Styant Browne (the homeopathic chemist) 200. There were a few others with only a handful each, who were described in the registration document as speculators.[27]

Over the following three months, reassuring noises came from the board that ore was to be raised to export to London, and a formal offer had been made for the company, but nothing actually happened.[28]



Samuel J Sutton was a big, pipe-smoking man and total abstainer from alcohol. He appears many times in this book, as a director of the Industry Gold Mining Co, Launceston Freehold Mineral Paint and other ventures. This photo is courtesy of the Allport Library and TAHO and was taken around 1891 when he became an MHA after being Mayor of Launceston.

An extraordinary meeting was called for September 24th 1890 at the Mechanics' Institute, with Mayor Sutton presiding. There was a large attendance, and it immediately became clear that the company had again descended into chaos and squabbling. It seemed that the prospectors, Henry James Turner and Henry Crawford, had not been happy with being blackmailed over their shareholding, and had found a way to sabotage the company by not signing over their rights. They had been assisted in this by their former adversary, the mining agent Henry Paget Turner. As a result the registration of the company, though advertised, was never completed.

At the same time, the grazier with the parent lease over the 3500 acre property, Frank Archer, now felt that he'd been dudded. It turned out he'd been promised a hundred pounds as well as 20% of the shares. The meeting was very heated, and amongst other threats and abuse, Frank Archer accused co-director Mr Shearn of stopping the shipping of a bulk sample to England and thereby hanging up the company.

Without the company in undisputed ownership of the resource and registered, its shares could not be traded and it could not make a call on its shares to raise working capital. After much discussion and shouting, it was decided that: "*in consideration of Messrs H J Turner and Henry Crawford receiving 50 additional promoters shares, 30 to Crawford and 20 to Turner (40 from Lamont and 10 from Henry Turner) the original promoters be requested to sign the transfers etc with a view of registering the Company and proceeding to the development of the mine*".[29]

This seemed to satisfy the original prospectors, and everyone probably felt that all the acrimony was now resolved, but that belief was short-lived. On October 1st a letter from Frank Archer appeared in

the *Examiner*. He accused Mr Shearn of defrauding the company by charging £20 for prospecting and making boxes in July and August 1889, and £30 for sinking shafts with three men in July and August. The whole of the work was worth only ten pounds, and could and should have been done by the original prospectors.

Mr Shearn soon responded, asking how Mr Archer and Mr Lamont were made co-partners in the original claim with the prospectors Henry James Turner and Henry Crawford? He implied that Archer and Lamont had blackmailed the prospectors and then stonewalled his attempts to get at the truth. He did not sue for slander, however, which suggested that Mr Archer's charge of fraud had some substance. Mr Archer was a lay preacher and a magistrate, and his character and record did not make it likely he would level a frivolous and false accusation.[30]

Despite all the antagonism and high emotion, a few days later a load of 34 bags of paint oxides from the Rocherlea mine, representing Nos 1, 2, 3 and 4 quality, was finally brought into town to be shipped to England as a bulk sample.[31]

Two large blocks of ochre were also taken to Mr Shearn's office for public display, and the *Daily Telegraph* declared they were "well worth seeing". They were sawn out of a solid mass and were a rich red colour. Why is this property lying idle, the newspaper asked? It's only a mile from the railway at Rocher's Lane![32]

Early in autumn 1891, a very unhappy shareholder wrote to the *Daily Telegraph*. "*Some time ago I became the possessor of some shares ... The company had a lease for 21 years granted by Mr Fawcett, a gentleman resident in England, the owner of the property, and I believe Mr Archer had the grass lease of the property, and the mineral paint was put into the hands of a mining agent by the original prospectors, but up to the present time I and others fail to see what has been done to forward either the interest of the shareholders or the original finder of this valuable property. It having been in this agent's hands for two years, I think it is quite time the directors gave some explanation to the long-suffering shareholders. What is the reason why the property is not self-supporting, as the material could have been sold by ship loads, and the more valuable portion sold as a basis for paint? Why is it kept back?... (We) are expected to pay calls and ask no questions. Have we not a right to know what has been done for our benefit for the last two years?*"[33]

It was a fair question. A half-yearly general meeting of the company was held a few days later and had to be adjourned when it became very heated. Immediately afterwards, Henry Turner, the mining agent and legal manager of the company, resigned.[34]

The Tamar Mineral Paint Association

Apparently in an attempt to get around all the aggravation, Mr Archer and C H F Shearn set out to find their own ochre.

The land owned by Colonel Fawcett at Russell Plains was extensive and had the potential for more ochre deposits. Mr Archer successfully obtained a prospecting lease from him that seems to have covered all that land not already being worked by the Launceston Freehold Mineral Paint Association. That meant most of the 3500 acres at the back of Rocherlea and Mowbray.

A meeting was held on the evening of April 16th 1891 for all those interested in the new project. Several promising sites on the land had already been located. A committee was elected and C H F Shearn

was appointed secretary. Clearly his vitriolic exchange with Mr Archer had been forgiven. The new venture would be known as the Tamar Mineral Paint Association, and would have a capital of £250 in five pound shares. The committee afterwards met and decided to send out a prospector immediately.[35]

A month later, the new group was able to announce success. Samples were brought into town by the prospector and given to the directors. They were obtained from 6ft depth and were part of a very extensive deposit of ochre. The formation was compact, heavy, rich in colour and improving with depth.[36]

A director visited the site in the first week of June 1891 and found a 6ft deep shaft, 5ft by 3ft, showing good-quality solid ore in layers of 18in to 2ft, coursing northeast by southwest. A cutting had put in about 22 yards long and 2ft 6in wide showing ore, and would act as tail race to drain water from the face intended to be opened up from the shaft. A prospecting hole had been sunk 2ft 6in, with a trench commenced about 300 yards away from the intended face. Another shaft 6ft by 3ft was down 7ft showing good ore and a third prospecting shaft was down 8ft, 5ft by 2ft with ore for about 6ft. There was a good road to the claim, and everything looked rosy for the new company.[37]

The location of the new workings is uncertain. It could well have been an entirely new deposit at some distance. As the leases were on private land there are no records at the Mines Department, and the Archer family today has never heard of the venture. The most likely location, however, is adjacent to the existing operation, and the "new" find was really the southern extension of the known deposit.

Meanwhile, the original Launceston Freehold Mineral Paint Association had been having trouble even holding their half-yearly meeting. When it was finally achieved, with Mayor Sutton[38] presiding and a large attendance, it was very heated and the accounts were not deemed satisfactory. Henry James Turner objected to passing them as Henry Paget Turner had undertaken to pay all costs up to formation of the company, yet the accounts had liabilities from before that. Several shareholders asked Henry Paget Turner to produce the certificate of registration for the company, but he said it was at his office. Violence was threatened, and there was very strong language.

The meeting decided that the accounts should be printed and circulated and brought to a resumed meeting. A Melbourne syndicate was said to have viewed the mine, taken samples and expressed interest in buying it. Expressions of purchase interest had been received from two other parties as well. Despite this, and as already mentioned, Mr Turner resigned after the meeting, and the whole board indicated they would follow him.[39]

Two months later a new board was formed, comprising C H F Shearn, J J Doolan, Henry James Turner (the original prospector), W Illingsworth and B Davies. The legal manager was W G Pybus.[40]

At an Extraordinary General Meeting in September 1891 at the Mechanics' Institute, the new board informed shareholders that they'd found affairs in a disorderly state, but had largely sorted it out and could sell the property to Melbourne interests if desired. A ton of ore had gone to John Holman in Melbourne for treatment, and he was acting as their agent for the sale of property. He said he would buy it himself if the current offer fell through. A Sydney assayer had given a satisfactory report on the product, saying it would make very good paint in various colours, and the new mining manager J L Foley also had a buyer in Victoria.[41]

The company, in conjunction with Mr James Lamont, confidently exhibited its iron oxides, iron pigments and ochres at the 1891 Launceston International Exhibition. After a couple of calls on

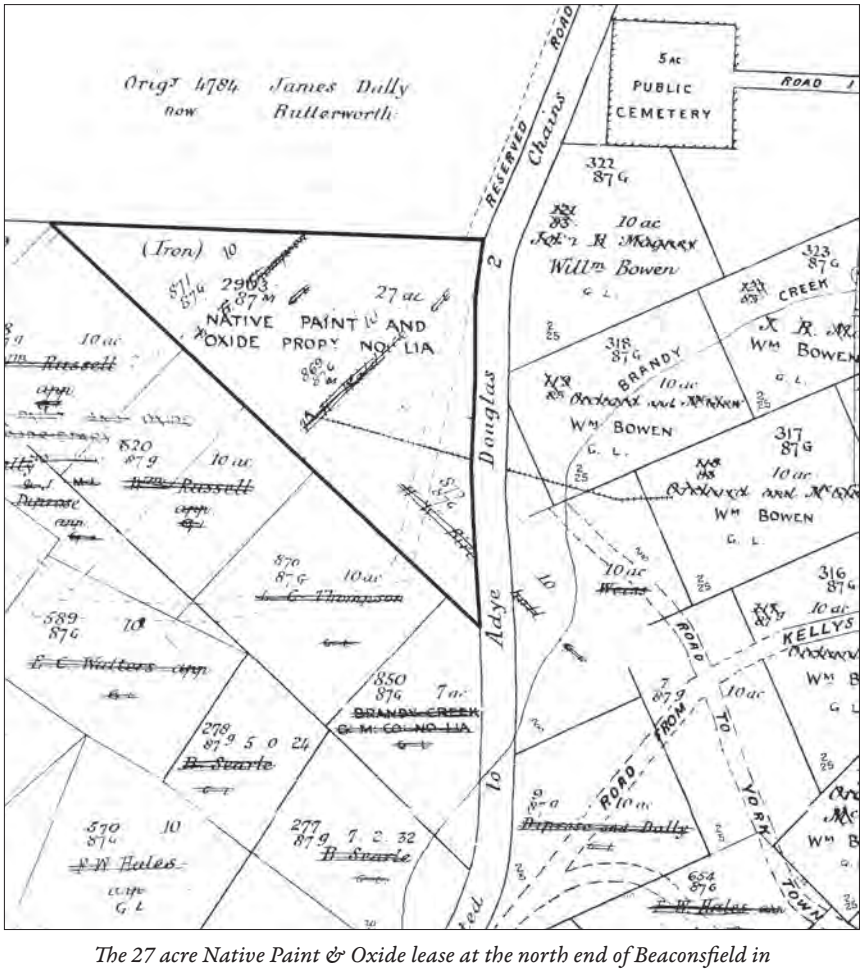
the contributing shares, however, the Launceston Freehold Mineral Paint Association simply disappeared.[42]

Similarly, Frank Archer's Tamar Mineral Paint Association was never heard of again. Mr Archer focussed instead on his vast Landfall and Burnside properties, and entered the Tasmanian parliament in 1893.

The Native Paint and Oxide Company Proprietary NL

While the Chromate Company at Redbill Point was suing its detractors, and the two Associations at Rocherlea were fighting each other, another company quietly took up the third Tamar ochre deposit, located in the gravel pits on the northern side of Beaconsfield.

This deposit was extensively exposed and studied, due to the fact that it was the source of the iron ore feed for the Tamar Hematite Iron Company at Scotchman's point in 1875-6. This was one of the four iron smelting companies around Beaconsfield in the 1870s, distinguished in that though small, it produced a high quality and saleable pig iron from its furnace on Middle Arm. A deserted town called Swift's Jetty still existed at the site, though most of the iron works had been dismantled and removed.



The 27 acre Native Paint & Oxide lease at the north end of Beaconsfield in 1894. This Mines Department map shows how Beaconsfield was carpeted in small leases, and the old ironworks tramline can be seen coming onto the ochre lease from the east. The location is today gravel pits. The roads at the bottom right, and cemetery at the top right, still exist and help fix the site.

The new company was the Native Paint and Oxide Proprietary No Liability, and at the end of 1891 they sent a "splendid" bulk sample of iron oxide weighing two tons to the Mineral Court at the Launceston Exhibition, as well as a large quantity of powdered material. In addition to the obvious use for making paint, the mineral was said to be useful as a disinfectant and in the manufacture of gas. Several cargoes had already been sent to other colonies.[43]

Native Paint and Oxide floated with 1,000 shares of £1 early in 1892. Mr C H F Shearn, fresh from the Tamar Mineral Paint Association, became the legal manager, and it was soon apparent that the venture had begun as a partnership between him and James Blackman of the defunct Chromate, Asbestos, Paint and Gold Mining Company.[44]

The shareholders were listed in the company registration application as J T Blackman, M Blackman, F J Blackman, E J Blackman, M A Shearn, C H F Shearn, and Percy Shearn. The registered office was in George Street, Launceston.[45]

The new company seemed keen to expand its interests. They took what appeared to be a gold lease at Moorina, and the *Sydney Morning Herald* reported that they also proposed to work mineral deposits at Port Sorell. When the Chromate, Asbestos, Paint and Gold Mining Company advertised all its assets in October 1892 they grabbed the Scott's Hill ochre deposit as well.[46]

They worked on the ochre through 1892 and early 1893, shipping 1,000 tons from Beaconsfield to Victoria for use in gas purification, and realised a price of 27/6d to 42/6d per ton. When the Scott's Hill deposit was acquired, they quickly took out 500 tons from there. Their customers were the Metropolitan Gas Co in Melbourne and the Ballarat Gas Company. They must have erected sheds and milling equipment at the deposit on Greens Beach Road, but it was never specifically mentioned.[47]

The company made a first call of five shillings per share in August 1893, and it looked as though the business was getting along nicely until suddenly, on October 27th, James Blackman died at his Distillery Creek home. He was 59.

Mr Blackman was clearly the driving force in the enterprise, for after his death the company also died, though it lingered. In December 1893 the company forfeited the 10 acre gold lease it took up the previous year in Moorina. The rent hadn't been paid. Shareholder meetings were held in February 1895 and February 1896.[48]

The 1896 meeting was at C H F Shearn's office in Launceston, followed by an Extraordinary General Meeting, both with Mr Yeates in the chair. They voted to increase the number of directors to five (a strange decision in the circumstances) and dispose of the assets of the company. Mr Shearn stopped providing his premises as the registered office of the company from May 1896. Their principal lease, the 27 acres covering the gravel pits at Beaconsfield, was forfeited at the end of 1897 for

A Serpentine Paint ad from the 1930s.

lack of work. It was a great pity, as they were the only company since Mr Buchanan's earlier Chromate Company to have proven that there was a market and a good price available for Tamar ochre.

The Serpentine Paint Company

After the demise of the Native Paint and Oxide Company there was little interest in our ochre deposits for twenty years. Then the Serpentine Paint Company was registered in 1917.

The new company secured rights over the deposit at the top of Paint Mine Hill in Rocherlea and commenced tests. They asked the Government Geologist Mr Twelvetrees to come up, and he produced a report in November 1917 detailing the deposit's history and characteristics. He noted that Paint Mine Hill was a flat-topped dolerite hill, and much of the top of the hill appeared to be ochre. The deposit was perhaps 300 metres wide, in the east-west direction, and as much as a kilometre long north-south. He found that the red and yellow ochres, derived from the weathering of dolerite, were very suitable for paint and pigment manufacture. The Annual Report of the Secretary of Mines that year said that: "*It is gratifying to note the inception of a new mineral industry.*"

In December 1917 the *Examiner* ran a big feature on the company. The paper reported that a new paint industry was to be started in Launceston, and would be the first serious attempt to introduce this industry in Tasmania. This was a little hard on the Chromate, Asbestos, Paint and Gold Mining Company, which built a large factory at Beauty Point and won major awards in 1889![49]

The Serpentine Paint Company was a local company "with considerable financial backing", said the *Examiner*, and its shares had been oversubscribed. One of the Executive Directors was Stewart Johnstone, of the old-established Launceston merchant firm of Johnstone and Wilmot at the corner of Cimitiere and St John Streets. Part of the Loongana shed on Alexandra Wharf was secured as the factory site, and a start made on erection of the machinery under the supervision of a 42 year-old Yorkshireman, Mr Alonza Flounders from South Australia, who was an industrial chemist and paint expert and would have charge of the whole manufacturing process. [50]

Mr Flounders was confident that with the material at his disposal he would turn out the finest paint manufactured in the Commonwealth, and he expected to begin operations in January 1918 with a daily output of four tons. Two of the latest granite rollers were to be employed, with one double mill, one disintegrator and three pulverisers, plus accompanying sifters, etc. The machinery would be driven electrically and was rated at 20 to 40hp. Two of the latest pug mills would be installed, capable of putting through 13cwt per hour, and a modern and well-equipped laboratory built.

Serpentine Paint had also taken up a 20 acre mining lease over Scott's Hill (No. 7707M), with an adjoining 5 acres to the west for machinery (No. 7854M). They extended the old Chromate Asbestos Co open drive from the west sideline of the claim into the hill to 250 feet. The maximum depth of the trench was 25 feet, though the deposit was tested to 39 feet depth. The mineral was in a bed rather than a lode and thus not limited in width. Hundreds of tons of earthy pigments and oxides of yellow and red were exposed, separated and sometimes divided by large veins of black and purple oxides, which in places were intermingled with small veins of bright reds, yellows, and touches of white. The deposit was a mass of variegated colours.

It was proposed to erect machinery at the ochre deposit at Scott's Hill for the cleaning and treating process, and this plant would be driven by oil power. The deposits of the mineral and earthy pigments were, in the opinion of Mr Flounders, amongst the finest to be found in Australia as far as the quality of

the oxide and variety were concerned. There were approximately 13 different colours in oxide alone, without the other minerals. Apart from Russell Plains and the Scott's Hill deposit at Anderson's Creek, near Beaconsfield, the company was said to have another, third resource, but what this was is unclear.

Mr Flounders personally collected samples from the deposits, including samples of all the different colours, and put them through a preliminary test. In a report to the company he said: "*I find them to be excellent in staining power and colour, free from grit, but containing a lot of iron in the free state. This iron should be a profitable item if it contains the amount of chromium report credits it with. The paint manufacturer requires chromium in some form or other to get the bright yellow, lemon, and orange chromes so much used as pigments. He also requires chromates etc., for other purposes in the industry. If chromium exists in this iron, the beautiful bright yellow found in the capping of the deposit may prove to be a ferric or ferrous chromate, or ferrochrome upon investigation; but only tests and investigation will teach the full value of the deposit*."

The different colours of the ochre could be separated simply and cheaply, and the cost of mining would be very low. Timber was plentiful, so fuel for drying purposes only required cutting. Water was abundant and transport facilities good. As no paint factory existed in Tasmania, the local trade was expected to be significant, and the high quality of the product meant it could be exported without fear of competition. Mr Flounders was also developing colours that could not be obtained in Australia. The whole range of primary colours seemed to be able to be produced without difficulty, and secondary colours were only a matter of manipulation. One of the key benefits of the intended product was that it was all natural. The oxides provided stable and permanent colour in pigments, and were better than manufactured colours. They were free of grit, which made for easy grinding, and free of reactive elements. In fact they were practically inert and thus yielded a pigment that was, in the words of Government Geologist William Twelvetrees, "*permanently resistant to moisture, light, and climatic changes*".[51]

The plant at Beaconsfield would purify the material as it was mined, and only pure colours without any foreign matter would be delivered to Launceston. Samples of the finished article had been very favourably commented upon by the trade in Launceston, and the black paint was especially admired. Other intended output items were water paint colours and calcimine, for which the necessary machinery had been obtained.[52]

Serpentine Paint was keen to acquire the old Native Paint and Oxide lease at the Beaconsfield gravel pits too. This was the deposit that had been exposed by iron mining in the 1870s, but it was now owned by Mr H J Windred of Beaconsfield (No. 7988M), and he was interested in developing it for ochre and iron himself. The Native Paint lease of 28 acres had been reduced to the core 14 acres in the new lease, in which the ochre was in the north and the iron ore in the east of the block.

This was all happening at the same time as asbestos mining was taking off, and there was considerable interest in the new industries. Visitors flocked to the Durasbestos and Serpentine Paint exhibits at the Beaconsfield Show in March 1918. Then a convoy of eight motor cars, carrying the Governor Sir Francis Newdegate and his wife and daughter, and the Premier and other dignitaries, visited both the ochre mine and the extensive operations at the Durasbestos Company's works opposite. Sheds had been erected for Serpentine Paint, and the oil-fired plant for the cleaning and treating process was all installed and operating.[53]

The Governor's party was given a tour of the mine by Mr Alonza Flounders and Mr A Collins, the latter said to have "discovered" the deposits and to have been working on them for about 10 years. They

The Governor's party at the Scott's Hill ochre mine. From the Weekly Courier 28/5/1918 and courtesy TAHO.

returned afterwards to the Club Hotel for a luncheon hosted by the Beaconsfield Warden.[54]

That same month the Launceston Chamber of Commerce received an enquiry from a firm in Auckland, enquiring into the proposal to manufacture paint at Launceston from the ochre deposits at Beaconsfield. There was a big opening in New Zealand for paint, they said, and they asked that their letter be handed to the company concerned so they could get into communication.

By May 1918 the new works in the old Loongana shed at Alexandra Wharf were turning out a product that "*gives promise of very considerable commercial value, and will probably be on the market within a fortnight. The extent of manufacture has not yet been great, for the installation of the machinery has not long been completed, and it may yet be said to be undergoing the 'tuning-up' process. It is a thoroughly modern plant, capable of treating between seven and eight tons of oxide a week, and once the difficulty of the lack of skilled labour is mastered operations should proceed apace. The quality of the paint already produced is considered to be high-class, and eminently suited to all purposes. There have already been manufactured burnt sienna, raw sienna, red oxide, chrome oxide, must colour, and sage green – the last-mentioned a colour unique, and present in large masses in the Beaconsfield deposits.*"[55]

In early May 1918 tenders were called to cart 50 tons of oxide from Paint Mine Hill to the Company's works at Launceston, and 100 tons from the mine at Scott's Hill to Beauty Point wharf. Later in the month another 100 tons from Paint Mine Hill was ordered.

In July 1918 the company asked the Launceston Marine Board for increased shed accommodation on Alexandra Wharf. This was agreed, and the space created by cleaning out the coal store.

At the Launceston Show later that year, the company had a display at the Hart & Son's stand, where they emphasised that all the raw materials were procured in Tasmania, the bulk from around Beauty Point. Nine distinct samples of crude oxides were shown, just as they were taken from the mine, and then the same oxides ground ready to be mixed with oil. There was a large stand comprising six panels painted in different shades, and they claimed that Serpentine Paint possessed a much greater covering capacity than the imported article. The durability of earth pigments were said to be the greatest of any known paints, and the paint was available in tins from a half gallon to four gallons or larger if required.[56]

Government Geologist William Twelvetrees wrote a report on the company and its mines in 1919 and was quite enthusiastic. "*The variety of permanent oxide colours in the material is striking. Yellow, red, green and brown are elements of the colour scheme".* He reported that they were making lead and chemical paints in addition to the native oxide pigment paints, thus enabling them to supply the whole paint market. He asked that government departments support the new industry with orders.[57]

Twelvetrees' desire for the Tasmanian government to buy locally to support Serpentine Paint was echoed by keys figures such as State Opposition Leader (later Prime Minister) Joseph Lyons and local member Michael O'Keefe MHA, who lobbied the Premier on the company's behalf. They said that the product was better than imports, but suffered from a prejudice against Tasmanian products. The company was endeavouring to fight down this prejudice, and so enable the factory to be kept in full work and their trained hands employed. The Premier said he was in communication with departmental officers on the subject.[58]

In April 1919 Launceston Council and members of the Marine Board visited the company's works for "Factory Week". Mr Flounders told the visitors that commercial production had only commenced the previous August. He said that the company's unique green ochre came from the decomposition of the olive green serpentine rock with an admixture of some decomposed chrome iron ore. Some of the colours taken from the mine were used in the manufacture of oil paint, while others were only suitable for water colours. In addition to the earlier expansion, a large brick store close at hand had now been acquired for storing the completed paint. The whole factory was a busy hive of industry.

Further information on the manufacturing process was given to the Council delegation. "*When the process is levigation, the slimes are dried upon a furnace, and then ground to a very fine powder. From the grinding mill the dry powder is transferred to the pug mill, and incorporated with pure linseed oil, being pugged for many hours and then going in succession first through a granite rolling machine, which precludes any chances of burning the pigment, and thus changing the colour, and then through steel roller mills, where it is reduced to a stiff paste, and finally emerges paste paint of the very finest quality. This paste is then conveyed to the mixing vat and the necessary quantity of linseed oil, turpentine, and a very small quantity of drier being added to bring it to the consistency of liquid paint; rotary planes driven by the electrical plant thoroughly mixes the paint, which is then again taken to the finishing cone mills, and from there run directly to the containers in which it is marketed. One result of the thorough mixing and quality of the materials in Serpentine paint is that it is always in suspension ready for use, with no hard deposit at the bottom of the tin. In addition to this, it is guaranteed that no adulterant of any sort is used in the manufacture so that if purity and durability go for anything, this paint should command a ready sale. Although the company only set out to make oxide paints, they are led by the demand to add the manufacture of lead base and chemical paints. The chemical colours produced include Prussian blues, Brunswick greens, chrome yellows and reds. Owing to the war, chemicals to make some of these colours were not procurable from abroad, and the company had to fall back upon the raw material in their own mines. From some of these their chemist manufactured the required chemicals. The paints are put up ready for market in the dry form as powder, as stiff paste in oil, and as liquid paint ready for the brush. For paste paints the containers are 56lb, 28lb, 7lb and 2lb. The containers for the liquid paint are five gallons, four gallons, half gallons, and pints. All the tins are made in Melbourne."*[59]

At the 1920 Launceston Show the company once again had a display as part of W. Hart and Sons Ltd. The paint branding had been changed to Golden Serpent, made in Tasmania from Tasmanian pigments, with Tasmanian machinery, by Tasmanian workmen, and with Tasmanian capital. The company's office was then at 51 St John Street Launceston, next to the GPO.

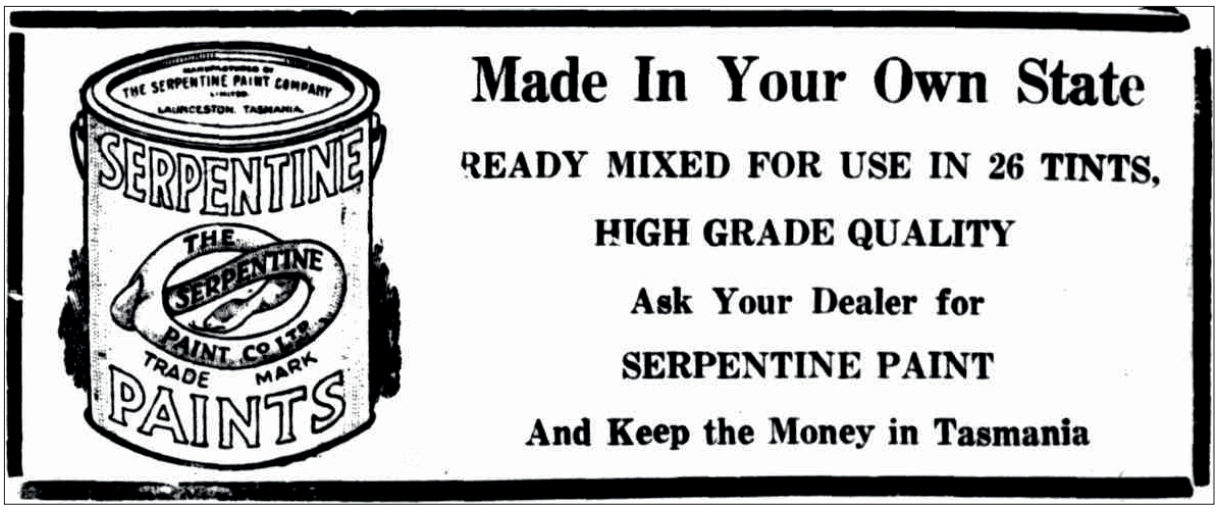
The Annual Statement by the Minister for Mines, Sir Elliot Lewis, in 1920 noted that the Serpentine Paint Company had been steadily at work (except when short of linseed oil owing to shipping strikes) manufacturing a high grade paint from material obtained from the company's leases at Beaconsfield and other parts of the state. The company's product was becoming more widely known, and the demand steadily increasing.[60]

At the fourth annual meeting of the company in 1920 the chairman said there had been a large increase in sales and the cumulative dividends at the rate of 8 per cent per annum on the preference shares would probably be paid early in 1923. He said that the directors had such confidence in the quality of the paint that they would guarantee to make good all unsatisfactory jobs caused by any defect in the paint.[61]

In 1924 the *Examiner* reported that the factory at the Scott's Hill mine had burnt down some time ago and operations were all in Launceston.

At the eighth annual meeting of shareholders in 1926, the Chairman Mr W G Baird reported that the business was affected by the slackness in the building trade throughout Tasmania. They suffered a net loss for the year of £131. The company's factory was equipped with modern machinery, capable of turning out many hundreds of gallons of paint per week, but a depression in the paint trade had forced layoffs. The company lately secured an order from the Tasmanian government in open competition with large paint companies on the mainland. Serpentine paint had been specified for government contracts throughout the state, and it was also largely used by the Launceston Municipal Council and the Launceston Marine Board, with satisfactory results. The board invited shareholders to support the company by recommending Serpentine paint on all occasions. Theirs was the only paint manufacturing company in Tasmania. The retiring directors Messrs T T Cleaver and W Stewart Johnstone were re-elected.[62]

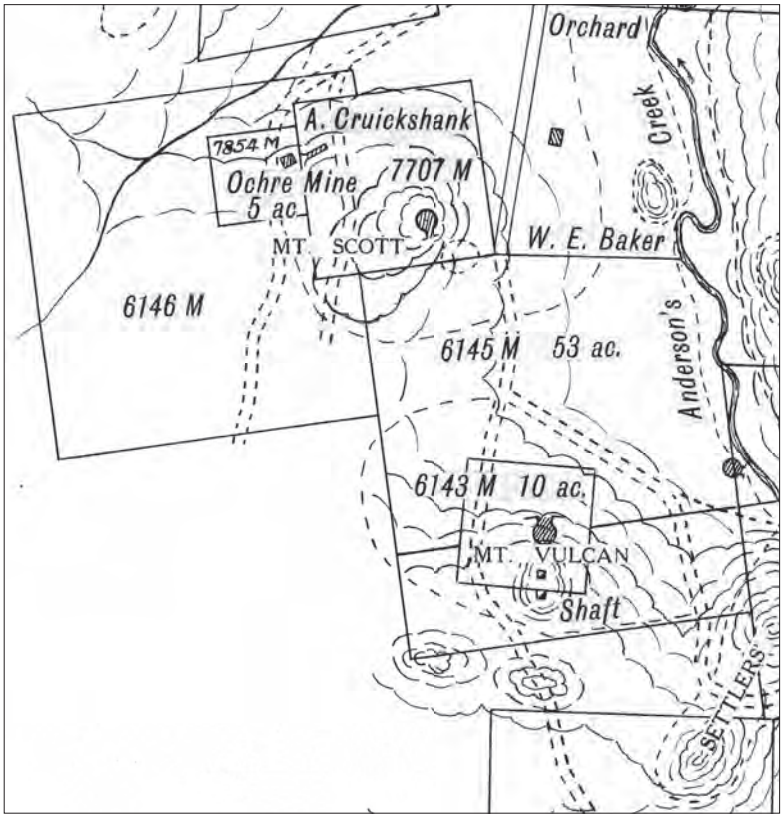
Immediately after the meeting at which the Chairman noted the support of the Launceston Marine Board, there was a fuss over an award by the Hobart Marine Board of a paint contract to a Sydney company at a higher price than that quoted by a contractor using Serpentine paint. The tender was for painting No 1 shed on Ocean Pier, and the tenderers were: Detroit White Lead Co, £145 15s; Cane and Co, £145 15s; R R Rox, £153 12s 6d; and C J Fox, £146 12s 6d. The Board's engineer recommended the



Another Serpentine Paint ad from the 1930s.

acceptance of the lowest tender from the Detroit White Lead Co of Sydney, using a mainland paint, and his recommendation was adopted.

However it appeared that another tender, from Hobart firm A H Gifford Pty using Serpentine paint, had also been received for just £121 2s 6d, and while the Hobart Marine Board said that it was in order, it was not considered. The *Mercury* noted that Serpentine paint had been used for the new bridge over the Huon River at Huonville, and a "Made in Tasmania" exhibition was soon to be held. The Marine Board said it had to act on the advice of its engineer in such matters.[63]



This closeup of Twelvetrees' 1919 asbestos and iron map also shows the Serpentine Paint leases on Scott's Hill, west of Anderson's Creek. Their ochre mine is on the western boundary of 7707M, and a machinery shed is adjacent on 7854M.

The *Mercury* justifiably got the bit between its teeth and followed up with several detailed articles and considerable investigation, from which it emerged that one of the Marine Board Wardens, Mr F Heritage, happened to be the Tasmanian agent of the winning tenderer and the tender appeared to have been written locally, on plain paper, rather than the Sydney company's letterhead! A letterwriter pointed out that Serpentine paint had been used on No 2 Shed at Princes Wharf seven years earlier and was holding up very well. The matter was raised in parliament, but to no avail, and it was never explained why the Serpentine Paint bid had not been considered. A redolence of corruption around the tender remains to this day.[64]

The ninth AGM of Serpentine Paint was held in October 1927 with W G Baird in the chair, and reported a net loss for the year of £40, with the factory not working at its capacity. The market situation was improving however, and the prejudice against buying local was gradually being overcome. The overheads were low, thus enabling the company to turn out high grade paint at a very reasonable price, and to compete successfully with mainland companies when tendering for the supply of large parcels of paint for the Tasmanian government and local bodies.

The Chairman referred to the dispute over painting No 1 shed at Ocean Pier the previous year. He revealed that in order to demonstrate the quality of the local paint against imported, the directors requested permission from the Hobart Marine Board to paint part of the shed at the company's expense with Serpentine paint. Permission was kindly granted, the Marine Board stipulating that it would pay for the paint, and it was arranged that other competitors should make a similar display.

The company's traveller and expert painter who afterwards inspected the shed, reported: "*We need have no fear about the result of the test on the Ocean Pier shed. Our paint is undoubtedly standing up to the very severe conditions, and holding its own against all other brands of paint. In fact, ours is the best on the shed*." This demonstrated to all that the Marine Board could have saved £25, helped a Tasmanian industry, and obtained a better job if it had used the local article. The Launceston Corporation had also carried out a test on the City Park iron fence. This was painted nearly two years earlier, and shareholders could see for themselves that the panels at the High Street end painted with Serpentine paint compared favourably with the larger portion painted with a high grade English paint, costing *three times* the amount of Serpentine.[65]

In early 1928 the Hobart Marine Board agreed to examine their No 1 shed and compare the durability of the different paints used in 1926. The outcome of this examination does not appear to have been reported.[66]

In late 1929 there was a debate in Launceston City Council as to what paint should be used on the South Esk Bridge. A vigorous defence of the local article was made by Alderman Alexander Evans Jnr, son of the famous soap maker. A Council committee reported that they had considered the tenders received for painting the bridge, and recommended the acceptance of Messrs French Brothers for the execution of the work using an English zinc paint for the sum of £325, the work to be completed within eight weeks from the date of acceptance of the tender. The adoption of the report was moved by Alderman J F Ockerby, who explained that most of the cost was for labour. He claimed to be strongly in favour of using local paint, but the committee had been advised by the City Engineer that the English paint would give the most spectacular result.

Alderman A W Meonds said that the portion of the City Park fence painted with Serpentine paint six years before had preserved its appearance as well as the far more expensive imported product, and Alderman Evans moved that the lower tender of Messrs French Bros at £285 using Serpentine paint be accepted. Much had been said in support of Tasmanian-made goods, he pointed out, and it

The Launceston general merchant firm of Johnstone and Wilmot and its Managing Director W Stewart Johnstone were part of a small group of major local players behind Serpentine Paint. Johnstone and Wilmot were located at the corner of St John and Cimitiere Streets, and Stewart Johnstone took over c1901. The photo of Stewart is from 1891 when he was only 21, and both images are courtesy of TAHO.

was incumbent on the council to set a good example. The council had spent thousands of pounds in a filtration plant to help a local factory, and it should continue the good work. "*Surely to goodness, Mr Mayor,*" he said, "*we ought to do all in our power to help a local industry that has not come to us at any time for a penny!*" The motion was seconded by Alderman H C L Barber, who said that at the Show Grounds Serpentine paint seemed to be better than any other used. However the Mayor (Alderman R M Osborne) said they must be guided by their engineer. Bridges required very careful treatment, and they had a duty to the ratepayers as well as to local manufacturers. It was finally decided that the matter be referred back to the committee for further investigation.[67]

In early 1930 the committee reported that they were sticking to their original recommendation of the higher priced tender, using English paint. The motion for the adoption of their report was strongly opposed by Alderman Evans. There was vigorous debate again, and finally it was decided to refer the matter back to committee yet again, with the specific instruction that they obtain expert opinion as to whether Serpentine paint was suitable for the job.[68]

A month later the matter was finally resolved with the committee, after taking expert opinion, being forced to accept the lower tender using local paint.[69]

The following year the board invited the *Examiner* to a tour of the works at the lower end of Charles St, conducted by Mr Flounders. Alonza Flounders was acknowledged to be one of the most highly qualified paint chemists in Australia, and came from a family of paint manufacturers. The directors told the *Examiner* that even though they'd been established during the war, supported by local capital, using a wide range of Tasmanian raw materials in the form of high-grade pigments, the company had nevertheless had to fight a long battle both against an extraordinary prejudice that existed in Tasmania against commodities produced in the state, and against severe competition from the mainland. At least the company was now filling a large order for the Railway Department. The capacity of the plant was sufficient for all the paint requirements of Tasmania. "*It only needs private users to insist upon their own local paint being used,*" said one of the directors, "*to make certain of a strong, flourishing industry within the city.*"

The chairman of directors (Mr F H Cleaver) said that there was all the talk about the need for more industry, and the development of the whole of the resources of the state, yet so many who could do something failed to give support to an industry already established. "*We have overcome the disabilities placed upon us by the flood in 1929, when serious damage was done to our stock of pigment, but the present difficulties can be overcome only by concerted action on the part of producers and consumers. It seems strange that any such appeal to loyalty to one's own, and against the foolish prejudice against Tasmanian-made goods, should be necessary*." Mr Cleaver said that early in the history of the company, during the war, serious difficulties had been encountered in obtaining first-grade materials, so that although the same formula had been used throughout, the paint produced now was of vastly superior quality to that of ten years ago. Those who wanted an object lesson of its stamina only needed to examine City Park fence.[70]

Sadly, the story of the Serpentine Paint Company's struggle against local prejudices was reminiscent of the demise of the Bangor and Pipers' River slate companies in the 1880s. The slate coming out of Piper's River was universally acknowledged to the best quality in the entire world, but even at a lower price the local product was passed over by builders and government departments in favour of imports of lower quality! Ships taking top quality Tasmanian slate to Melbourne, passed ships bringing more expensive and lower quality slate to Launceston and Hobart all the way from America!

In the end, the depression finally killed off the Serpentine Paint Company. Sales had declined, losses accumulated, and in late 1938 Harrap & Son advertised that they had instructions to auction the company's entire assets in one lot as a going concern.[71]

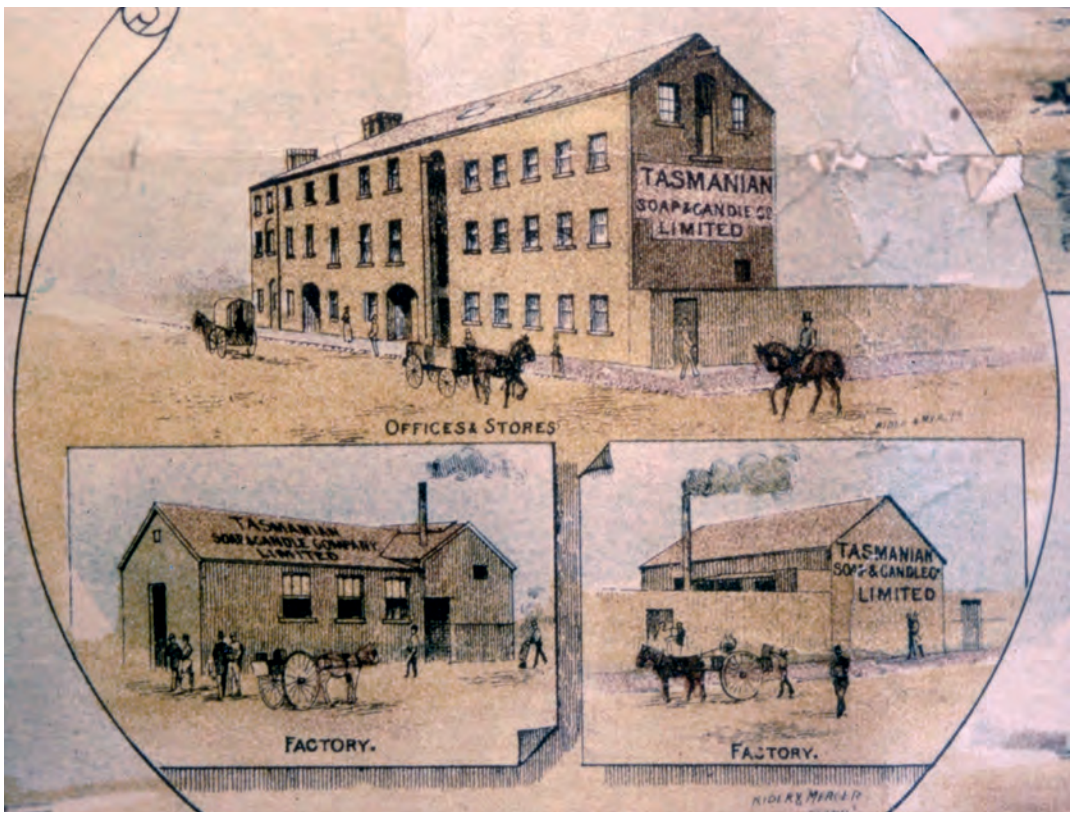
Notes and References

1. The iron on Mt Vulcan was easily found because of the iron boulders strewn over the ground, and it was first reported by Colonel Paterson in 1805. This was first discovery of iron ore in Australia! The ochre was not obvious, yet was found almost immediately when iron miners began operations on Mt Vulcan in 1872.
2. Examiner 2/11/1888 p3 & 1/8/1889 Letters
3. Examiner 2/11/1888 p3 & 1/8/1889 Letters
4. Examiner 2/11/1888 p3 & 1/8/1889 Letters
5. Examiner 2/11/1888 p3
6. Examiner 2/11/1888 p3
7. Examiner 31/10/1888 & 2/11/1888 p3
8. Examiner 23/11/1888p3 & 18/12/1888 & 19/12/1888 p4
9. Examiner 17/1/1889 p2
10. Examiner 14/6/1889 & 28/6/1889 p3 & 29/6/1889
11. Daily Telegraph 5/7/1889 p3 & 17/8/1889 p3, Examiner 17/8/1889. There was no export credit scheme in those days, so the import duty on linseed oil couldn't be recovered. This made the paint too expensive to sell on the mainland.
12. Daily Telegraph 9/10/1889 p3
13. Examiner 24/1/1890 p3 & 26/2/1890 p3
14. Argus 30/4/1890
15. Daily Telegraph 3/7/1890 p3
16. Examiner 28/11/1891
17. Daily Telegraph 19/2/1892 p4
18. Examiner 27/10/1892
19. Examiner 14/2/1894 p2

Sam Sutton's Coffee Palace at 75 Brisbane St. Demolished in 1976. See note 38. Image from 1891 and courtesy TAHO.

20. The two Henry Turners appear to have been unrelated. Henry James Turner was a 51 year-old Canadian-born miner, whereas Henry Paget Turner was a 56 year-old Launcestonian.
21. Examiner 11/2/1890 p4 & 14/2/1890 p4
22. Examiner 13/2/1890 p4 , Daily Tele 14/2/1890 p2
23. Examiner 26/2/1890 p1
24. This showed a lack of knowledge of minerals. The Rocherlea ochre was a product of weathered dolerite, not serpentine such as at Anderson's Creek. Dolerite does not contain chromium.
25. Examiner 6/6/1890 p3, Daily Tele 6/6/1890 p3
26. Daily Telegraph 24/6/1890
27. Daily Telegraph 25/6/1890 p4
28. Examiner 4/7/1890 p3
29. Examiner 25/9/1890 p3
30. Examiner 18/10/1890 p7
31. Daily Telegraph 21/10/1890 p3
32. Daily Telegraph 23/2/1891 p3
33. Daily Telegraph 11/3/1891 p3
34. Daily Telegraph 29/3/1891 p3
35. Examiner 17/4/1891 p3, Daily Telegraph 17/4/1891 p3
36. Daily Telegraph 1/5/1891 p3 & 22/5/1891 p3
37. The Tasmanian 13/6/1891 p22
38. Samuel John Sutton (1836-1906) was a baker who built the Launceston Coffee Palace at 75 Brisbane Street in 1881. It was designed and erected by J&T Gunn for £6500 and had 60 rooms of accommodation. Its prominence propelled Sutton to become Mayor in 1890 and an MHA in 1891. The International Exhibition led to the Coffee Palace adding another 50 rooms and its name was changed to the Metropole Coffee Palace in 1897. Mr Sutton's other achievements included the Albert Hall and the Queen Victoria Museum and Art Gallery. He sold the Metropole to the Chief Steward of the SS *Pateena* William Hunt in 1901 and it became the Hotel Metropole. It was demolished in 1976.
39. Daily Telegraph 1/5/1891 p3, Examiner 29/5/1891 p3
40. Examiner 1/7/1891 p3, Daily Telegraph 1/7/1891 p3
41. Daily Telegraph 11/9/1891 p3, Examiner 12/9/1891 p1
42. Examiner 28/11/1891
43. Examiner 15/1/1892 p3, Daily Telegraph 21/1/1892 p3
44. The Tasmanian 13/2/1892 p27
45. Examiner 12/2/1892
46. Ex 23/11/1892 p4, SMH 24/2/1892
47. *Iron Ore in the Beaconsfield District* Twelvetrees 1919 p31, Cyclopedia of Tasmania 1900
48. Examiner 26/8/1893 & 19/1/1895& 5/2/1896
49. Examiner 19/12/1917 p2
50. Examiner 3/11/1919
51. *Iron Ore in the Beaconsfield District* Twelvetrees 1919 MRT. In contrast to the Chromate Paint Co, Serpentine could export to the mainland because Federation had removed all interstate trade barriers and duties.
52. Examiner 19/12/1917 p2
53. Examiner 5/3/1918 p2 & 15/3/1918 & 22/3/1918
54. Examiner 23/3/1918 p3, Daily Telegraph 6/4/1918 p7. "A Collins" may have been Richard Collins of the Exchange Hotel's son Archibald.
55. Examiner 26/4/1918, Daily Telegraph 21/5/1918 p2
56. Examiner 17/10/1918
57. *Iron Ore in the Beaconsfield District* Twelvetrees 1919 MRT
58. Mercury 17/1/1919
59. Examiner 1/5/1919
60. Examiner 12/11/1920
61. Advocate 1/11/1922
62. Examiner 23/9/1926
63. Mercury 30/10/1926
64. Mercury 1/11/1926 & 10/11/1926 & 27/11/1926 & 8/12/1926
65. Examiner 1/11/1927
66. Examiner 8/2/1928
67. Examiner 26/11/1929
68. Examiner 21/1/1930
69. Examiner 3/3/1930
70. Examiner 29/4/1931
71. Examiner 15/10/1938

Above: *The lighthouse Arch welcoming the Duke and Duchess of Cornwall and York to Hobart. Built by George Kemp for the Hobart Marine Board in 1901.* **Below:** *Mr Upton's Tasmanian Soap and Candle Co in 1891. It had factories in Inveresk and near the Cataract. Both images courtesy of TAHO.*



The Kempo Sandsoap Story

In the late 19th Century, the largest soap manufacturer in the colonies was J Kitchen & Sons Pty Ltd. It was incorporated in Melbourne in 1883, and in 1962 merged with Lever Brothers to become the iconic national brand Lever & Kitchen.

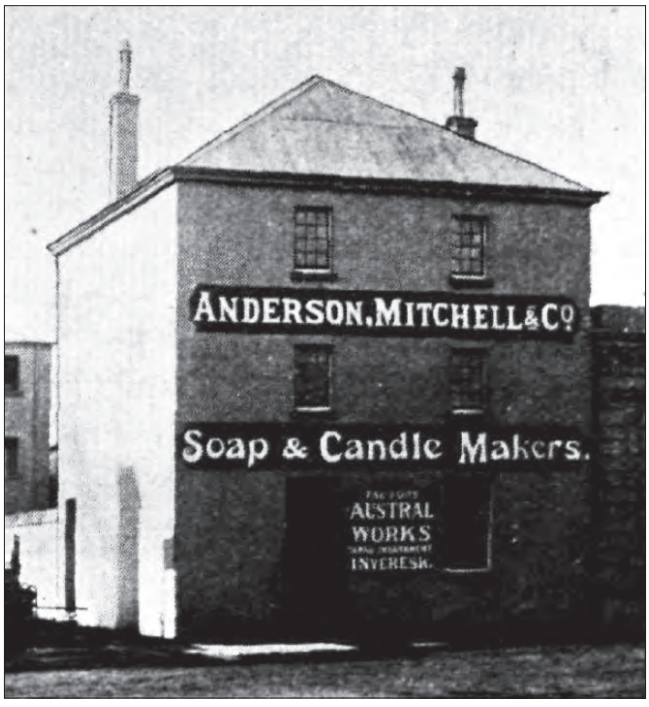
Prior to Federation in 1901, Tasmanian companies were able to compete with mainland firms under the protection of tariffs, and we had a long history of making soap and candles. At the peak we had at least seven local soap manufacturers.

The well-known Launceston manufacturer that we usually think of was Alexander Evans, who built a big new plant in Cimitiere St in 1876 – but there were many more. Two years later a maker called Miller & Burns established the New Soap and Candle Factory in Margaret Street. Miller & Burns became R Miller & Co in 1886 and a new factory was built on the same site.

Another manufacturer in Launceston was W Upton and Son, who were based in Geelong, but opened an Inveresk soap and candle factory in late 1887. They moved their candle making in February 1888 to a new site in Bourke St, near the Corporation Baths, where they could take water from Ritchie's mill race, but the soap-making remained at Frank Street Inveresk where it was convenient to the railway station.[1]

The Upton works were reformed as the Tasmanian Soap and Candle Co Ltd when they split their operations. Mr James Anderson became Managing Director, with Mr Viney in charge of soap production at Inveresk, while Mr C Metz looked after candles at the Bourke Street plant. They became renowned for their "Marvel" brand of soap, which they packaged in Huon pine boxes (a thousand a week!) made by J & T Gunn and J T Farmilo[2]. The company was soon paying nearly £4000 in wages and salaries every year.[3]

The Upton's Managing Director James Anderson[4] happened to have a brother-in-law working at R Miller & Co's Margaret Street plant, named John Mitchell. Late in the century they decided to give up working for others and go out on their own, establishing Anderson, Mitchell & Co and building a



Anderson, Mitchell & Co soap works on the embankment at Invermay. Mr Mitchell lived on the premises, but it burnt down in December 1901. The cause was a mystery. Image from the Cyclopedia of Tasmania 1900.

new factory to make soap and candles on the embankment at Invermay, a mile from town.

The brothers-in-law were very successful and Anderson, Mitchell & Co soon had a state-wide business with 40 employees. Amongst their products they offered their own sandsoap, in competition with Alexander Evans and also competing with substantial imports that had been coming in for many years. Where they got their sand from is unknown.[5]

Sadly for Anderson, Mitchell and Co, and many other Launceston firms, they built a substantial and successful market niche only to see their business destroyed by Federation in 1901. When tariffs on trade between the new states were removed, they were squeezed out by mainland manufacturers.

Although manufacturing ceased, Anderson, Mitchell & Co continued in business as agents for Kitchen & Sons Pty Ltd, who'd opened a Launceston office in 1901. Kitchen & Sons also made sandsoap, and their product was available in Tasmania even while both Alexander Evans and Anderson & Mitchell were making it.[6]

The elimination of the local manufactories by mainland competitors was not always a result of free and fair trade. In the case of candle and soap making, the mainland firms made a deliberate decision to destroy local competitors by selling their product at a price below the manufacturing cost. They reckoned, however, without Launceston's own R Miller & Co!

Back in 1883 R Miller & Co, then called Miller & Burns, had taken over a well-established soap and candle maker in Macquarie Street in Hobart. They also took over a maker in Spreyton and another in Launceston, and so had four factories prior to Federation. After 1901 they centralised in Hobart for manufacturing, though they maintained office premises in Elizabeth Street Launceston as well.[7]

R Miller & Co saved local manufacturing with a clever bit of business.

When they became aware that mainland manufacturers were dumping product here below cost, they contracted with a large Melbourne manufacturer for a large order, delivered to Hobart. Suspecting nothing and intent on doing their evil deeds, the mainland company duly delivered the product to the Hobart wharf. Miller's then put it straight back on the ship and returned it to Melbourne, where they sold it at the same price they'd paid for it, which was of course under the manufactured cost.

The Melbourne firm was horrified. Finding that they were suddenly undercut in their own market by their own product, they quickly came to terms with Miller's, agreeing that there would be no more dumping in Tasmania.

Thus it was that R Miller & Co survived, and in doing so they also saved the Tasmanian Soap and Candle Company. They ended up taking it over a few years later to become the only Tasmanian maker.

Not long after, they saw an opportunity to widen their range and replace imports, and began making a sandsoap at their Hobart plant. Surprisingly, they didn't make it from sand, instead using pumice that they imported from New Zealand and crushed themselves. The 1920 Hobart Show had a large R Miller & Co exhibit with locally made Tasma and Marvel brand soaps, including sandsoap.

George Washington Kemp

The year 1901 wasn't notable just for Federation and the removal of tariffs. It was also the year of the Royal Visit! The future King George V and Queen Mary, then known as the Duke and Duchess of Cornwall and York, arrived in Hobart to an enormously enthusiastic welcome.

The principal decoration for the event was a huge Lighthouse Arch at Salamanca, commissioned by the Hobart Marine Board and built in about two months. The building contractor, according to Kemp family tradition, was the patriarch of their clan Mr George Washington Kemp.

John Mitchell, from the Cyclopedia of Tasmania 1900.

G W Kemp was from Melbourne, and after building the Lighthouse Arch he returned home to become a Richmond City Councillor. He was a forceful advocate for the rights of ex-servicemen and stood unsuccessfully for state parliament in 1920 in the seat of East Melbourne. He was also head of the Protestant Associations of Victoria.

George had enjoyed his Tasmanian sojourn, and it turned out that his later lawyer had interests here and introduced him to our mining opportunities. They set up the Washington silver/lead mine at Moina in 1923, and George probably moved here permanently to run this venture.

In 1926, the national firm J Kitchen & Sons Pty Ltd (later Lever & Kitchen) was building a soap factory at Killafaddy, and had a large display at the October Launceston Show that included sandsoap. It may have been Kitchen's display that alerted George Kemp to an opportunity. He clearly knew already about extensive and high-quality sand deposits at Beauty Point, and decided that he could produce sandsoap in Launceston to compete with Kitchen's imported product, and with R Miller & Co's pumice product.

George must have known Horace Walduck in Beaconsfield too, and it may well have been Walduck who told him about the sand.[8] Horace Walduck had just suffered the failure of his company Tasmanian Green Marble, which he'd set up to take over the Wunderlich asbestos leases at Beaconsfield and convert them to serpentine terrazzo and ornament manufacture.

Kemp created a Melbourne-based company called The Cementoid Construction Company NL with Mr Walduck as manager. Though its registered office was 317 Collins Street Melbourne, its operations would be at Beauty Point, and the value of its property there was set at £20,000. With 60,000 shares of a

pound each authorised, it was intended to be a substantial operation, and large shareholders included Melbourne doctors John Bennett and Don McLean, together with many small investors.[9]

The Cementoid Company sand deposits were at the back of John Torney's orchard[10], on what is now Torney's Road, Beauty Point – though the road didn't exist then. There were huge reserves, and while operations are even today invisible from the main road through the town, in aerial photos they are by far the largest feature of the district.

There were known to be five grades of material available - overburden, fine and finishing, building sand, medium gravel and coarse gravel. The new company would manufacture Cementoid-brand fire and weatherproof sheets, cornices etc, roofing tiles, shingles, slates, chimneys, wash troughs, lintels, bricks, piles for piers, telegraph poles with anchors complete, white internal finish for dwellings and more. One of their chief objects would be to make impervious materials for the erection of modern concrete houses. From the start though, George Kemp was particularly keen on making sandsoap.[11]

Mr Kemp was not satisfied with leasing, and from the beginning the company had 37 acres of freehold land covering the sand deposits, set back about 600m on the west side of the West Tamar Highway. He forecast that they would soon be shipping sand to Melbourne for building purposes. Public interest in his activities prompted a friend of his manager Horace Walduck's, William Davies of Beaconsfield, to take up leases adjoining their property on the north side.

Sandsoap manufacture began in early February 1927, not at the quarry, but in a building at the rear of Messrs Gurr's, Charles St Launceston. Initially only sandsoap was manufactured and two men

George Kemp used to fill his Buick with sandsoap and make sales and deliveries himself. The main photo is from 1927, while the inset is c1922 and is a publicity shot for his Richmond Council election ads. Both are courtesy of his grandson Steve Radford.

employed, but Mr Kemp expected to have work for 30 when in full swing, when the forecast wide range of building products would be manufactured at the same site.[12]

George Kemp was not just a dreamer. While getting underway with the sandsoap, 100 tons of sand were already being shipped to Melbourne for the building trade, and the Director of Mines A McIntosh Reid dropped in to view the Beauty Point operation. The Director, who'd formerly been the Government Geologist, told the *Mercury* afterwards that the quartz sand was valuable, and deposits covered a wide area from Beauty Point to Deviot. Samples were being tested by the Mines Department to determine its various grades and qualities, but Mr Reid said it was clearly suitable for both glass and sandsoap, and the latter could be put into the market at a lower price than currently available. He said that Tamar sands had been used successfully for a long time in Launceston iron foundries for casting work.

Transport difficulties hampered operations somewhat, and as there was no railway on the West Tamar the company had to use motor vehicles to convey sand to Launceston for its factory. So far as export to the mainland was concerned, getting shipping costs down was the key. The Victorian government-owned sand quarries at Frankston charged six shillings and sixpence a cubic yard to transport to Melbourne, and Kemp had to get close to this crossing Bass Strait.[13]

Mr Reid's inspection resulted in the Beauty Point sand deposits being included in an official Mines Department report on sands later that year. It noted that the fine, stoneless, white quartz sands had been investigated by a large number of pits of 6 to 20 feet dug down through the sands to the white clay layer, and represented an old bed of the Tamar River.

Cementoid Constructions had a large display of Kempo products at the Made in Tasmania exhibition in Hobart in 1928. Ad from the Mercury 5/3/1928.

The company soon had trenches and quarries to 10 feet depth and the pit walls showed layers of fine and coarse sand and pea size grit. It was desirable to grade the material before export. Following Kemp's lead, another quarry had been opened up at Deviot by a Mr Room, and he proposed using screens to separate and bag the material into four sizings.[14]

The Reid Report added stimulus and confidence to the new industry. "*Leases have been taken up and test holes are to be seen all over the hill at the back of Beauty Point*," it said. The Cementoid Company soon brought machinery onto the ground for sifting the material into various grades. They intended working from a face in the hill, and an adit was being driven in for about 40m to prospect ahead of the face. Samples taken from the test holes now showed nine different grades, from putty sand, white and coloured, to coarse gravel of even quality.[15]

Some of the sand was to be used in glass making, and this may have been sent to Barrenger and Lansdell. They were Tasmania's first glass manufacturer, starting up in Mulgrave Street Launceston in 1926, then moving to 98 Wellington Street in 1929.[16]

The inaugural annual meeting of Cementoid Construction was held in the first week of September 1927 in Melbourne. Of the £60,000 capital, £25,000 was paid up, represented largely by the enormous £20,000 value they'd put on the mine. Plant was valued at £737 and creditors totalled £318. The company was still in a development stage, but the directors were confident of success. Roads to the works had been completed and more machinery was being installed. A factory building had been erected at 21 Charles Street, and a contract signed for land at Balnarring in Westernport, Victoria, which hosted a road metal resource and an ochre deposit suitable for making pigments.[17]

The export shipping problems and costs had forced the board to buy their own vessel – a three-masted steel auxillary schooner named *Clamin*. It was variously described as 70 to 130 tons (perhaps net and laden) and had originally been built as a steamer and still had a short funnel. It was worth around £5,000, and as this value did not appear in the annual accounts we can assume it hadn't been paid for. Around this time they also picked up sand leases at Deviot.

Cementoid had a display of their new sandsoap at the Launceston Show in October 1927, and the increasing scale of their quarrying operation led to an agreement with the council and government to put in a proper road to the pit – which was probably what we now call Torney's Road, Beauty Point. An application was also made to the Marine Board to build storage bins at Beauty Point on the north side of the jetty, from the old lime shed to the end of Rowitta's berth, and a tramway was to be built from the works to the bins.[18]

Another 100 tons of sand went out to Melbourne early in the New Year on the company's schooner and it was expected that three or four loads would go out each month. Freight would be brought back on the return voyages.[19]

At the January 1928 board meeting, Managing Director Kemp reported that shafts had been sunk over the whole property, and showed extensive deposits of silica sand and gravel of great purity. Mines Department tests in Launceston showed it to be free of salt and vegetable matter, and Melbourne University had done tensile tests. Hoppers, engines and screens were operating and more hoppers would be erected on their land near the wharf in Victoria. The Beauty Point pier was to be extended for the exclusive use of the company and a new factory had been obtained in Launceston for the manufacture of sandsoap and Kempo cleanser.[20]

March 1928 saw a "Made in Tasmania" exhibition in City Hall in Hobart, and Cementoid's display of Kempo cleanser and sandsoap was featured in the *Mercury*. The sandsoap came in two grades, white and grey, both in attractive wrappers. The company claimed that their sandsoap was unique in being made in Tasmania, by Tasmanian workmen, from purely Tasmanian materials. Already it was claimed that practically every grocer and motor garage in Launceston had their product and it was being distributed along the North-West and West Coast. The challenge now was to put the soap into every grocer, ironmonger and garage in Hobart and the south, and to this end they had already secured a contract for supplying Tasmanian Railways.[21]

The Cementoid Construction Co in Crisis

While the show at City Hall gave a very optimistic view of the company, behind the scenes there were problems.

At a half-yearly shareholders' meeting in Melbourne on May 15th, the legal manager Leo Kaines revealed a loss of £2,328 for the six months to 29/2/1928. Three pits had been opened up at Beauty Point and showed a splendid deposit of the highest grade sand, and engines, shaker and screen, lifting plant and hopper had been installed. Three shipments of sand had been sent to Melbourne and sales of the company's cleanser and sandsoap products had expanded. A shortage of capital, however, and the difficulty of using a No Liability company registered under the Mining Act had retarded progress.

For some reason, it seems that there were legal problems with a mining company exporting to Victoria and acting as a trading company. The board therefore recommended that a new company registered under the Limited Liability Act be formed for the purpose of taking over Cementoid Construction as a going concern. The new company would be called the Cementoid Construction, Manufacturing and Trading Company Ltd.[22]

The directors' plan was agreed to, but then had trouble being effected. To overcome the problem of insufficient capital, the new company decided to issue contributing shares rather than fully paids. Shareholders, who had lost confidence in the venture and the board, were then reluctant to take up shares in the new company, due to the knowledge they would face calls for more money. It was finally decided to wind up Cementoid Construction.[23]

The directors were not ready to give up on the business though. Their products were good and they had markets. The Melbourne University tests, for example, showed that concrete made from Beauty Point sand was 25% stronger than that made from any sand available in Melbourne. It was a superb product. One prominent engineer said they should consider mining it with manual labour rather than machines, as this would work out cheaper. Geologists said the sand was very unusual, being so clean and uncompacted, and it was certainly valuable.[24]

In early 1929 the old board tried again with a new company called Cementoid Silica Ltd, formed to take over the assets of the old company. But then new problems arose and they were forced to form yet another company, this time called Cementoid White Sand and Silica Ltd, to take that over. With this latest company they made sure they would always have shares to sell, by beginning with a nominal capital of an extraordinary £250,000 in £1 shares. Of these, 60,000 shares and £10,000 cash would be issued to Cementoid Silica Ltd to take over the assets and liabilities, then 150,000 shares could be offered to the public and 40,000 contributing shares held in reserve. Unfortunately this plan failed as well.[25]

They still hadn't paid for the schooner they'd bought, and in October 1929, the month of the New York stock market crash, they had a judgment for debt entered against them in the amount of £5,954. With the company in trouble and not operating their pits, Beaconsfield Council then began pinching their sand![26]

George Kemp was not happy, but wouldn't give up. With the company having no money, he'd not been taking his Managing Director's salary. In order to cleanly sever his connection with the company he founded, in February 1930 he and the board agreed that in consideration of his £500 of salary arrears, he would take a 12-acre block of land on the highway at Beauty Point that the company had earlier

bought for £120. The company's rights regarding their tramway to the port, which passed through the block, would be safeguarded. It was a good deal for both sides.

In mid-1930 Mr Kemp was ready to try again to refloat the sand operations. He and the larger shareholders (and directors) of the original company, including the Melbourne doctors John Bennett and Don McLean, formed Beauty Point Silica Sand Ltd for the purpose of acquiring the business of Cementoid Silica Ltd as a going concern. The new company had a capital £220,000 in £1 shares.[27]

Beauty Point Silica Sand Ltd's plan was to work and market the huge and high grade silica deposits at Beauty Point and Deviot, previous worked by Cementoid Silica Ltd. It would establish wholesale depots at Melbourne, Geelong, Sydney, Launceston and Hobart. Drilling had confirmed 12,000,000 "loads" of sand valued at £10,620,000 delivered to Melbourne. They said that they would again purchase their own ship and production would begin at 200,000 loads per annum. The Tasmanian public would be offered 30,000 £1 shares.[28]

But with the depression setting in, this was not a good time for floating any company and once again the attempt failed. At the beginning of 1931 a liquidator was appointed to Cementoid Silica Ltd, without a new company having been formed to take over its assets. Liquid assets were valued at a mere £75, against unsecured creditors (presumably including the schooner) of £10,317. Other assets included freehold and leasehold land at Beauty Point, rails, plant including a reciprocating jaw crusher – and a typewriter.[29, 30]

George Goes It Alone – the Kempo Manufacturing Co

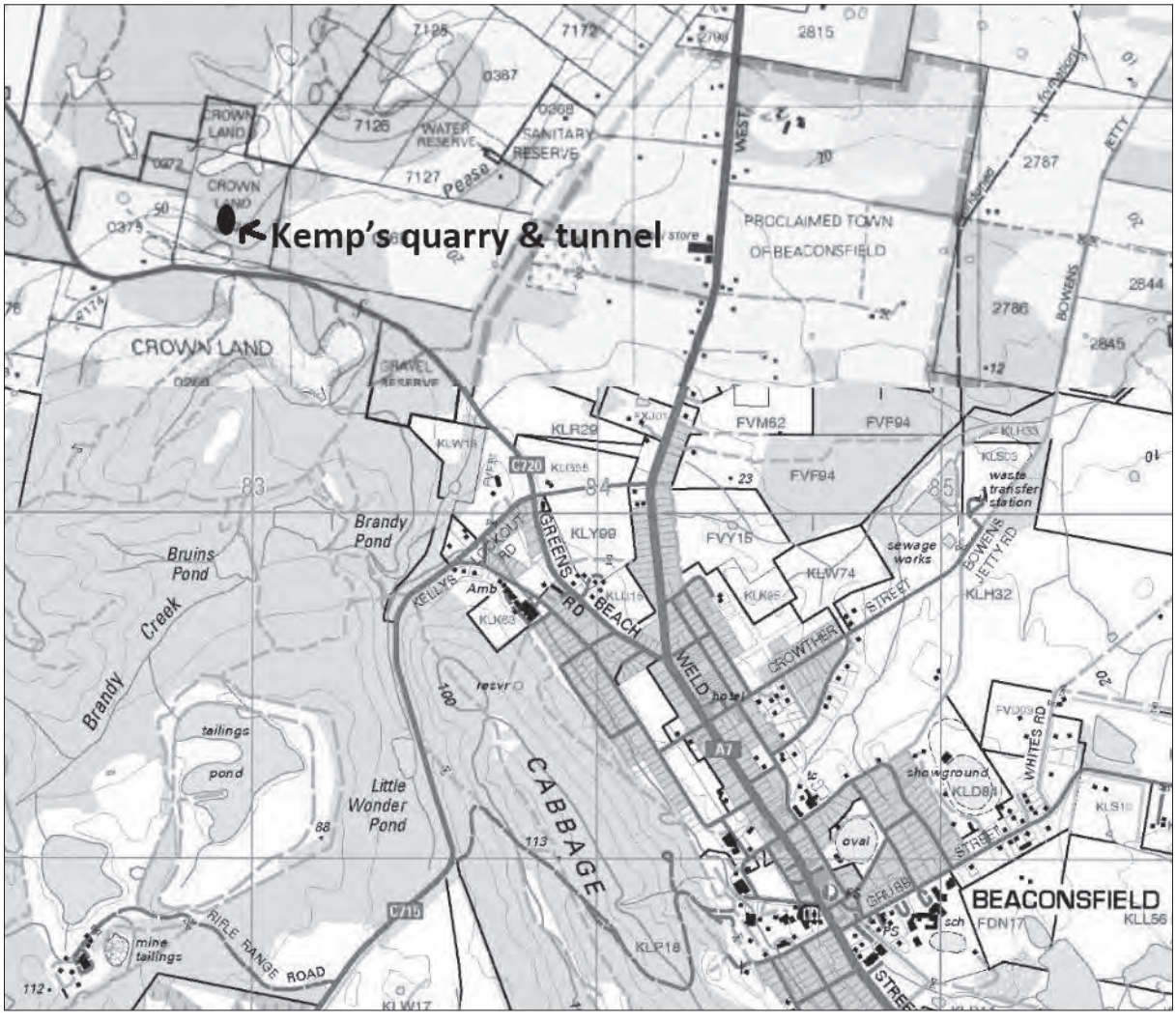
George Kemp gave up on public companies. Being in the middle of a depression it was a wise decision.

He now had an office at 130 Elizabeth St Launceston (and may have been living there) and had taken up tin mining at Moina. He seems to have started with a 54 acre lease, and later had the 'Iris' tin mine. He maintained this interest right through the 1930s.

He hadn't given up on sandsoap though, and rather than lose the brand and goodwill his public companies had established, he now undertook manufacturing as a sole trader. The Kempo brand had never disappeared, and he advertised his sandsoap in the *Examiner* initially at tuppence halfpenny a cake. He took a factory at 85 Frankland St and manufactured both sandsoap and Kempo cleanser right through the depression. From time to time he put his label on other lines such as floor polish and wax. In 1937 he became a company, registering the Kempo Manufacturing Co, with himself as proprietor.

With the Beauty Point sand pits still owned by his old company and probably too large for his purposes anyway, he appears to have pegged a lease at Beaconsfield for his private operation. This property may have been leased by the old companies at one time, and investigated by them, but the lease had clearly lapsed. Taking a lease over a small resource was a lot cheaper than buying a large one. The sand was yellow rather than white, but fine and clean.

Kemp's mine still exists, but is difficult to find now. It is best accessed from a track off Greens Beach Road Beaconsfield, exactly one kilometre north of Kelly's Lookout Road. It is on the hillside, on the north side of and about 150m from the road. The site can also be accessed via Torney's Road and through the Beauty Point sandpits, but this means going through private property.



Kemp's quarry and adit are hidden in the bush, but can be found with a little effort and caution. The tunnel is prone to collapse!

George built up a profitable little business, being careful as to costs, and doing the sales and travelling himself. In 1940 he moved the operation to 35 Frederick Street. He was 70 years old now, and around this time took on a partner, his friend Lin Andrews. His 32 year old daughter Elsie Radford helped out as well. In 1945, aged 75, George finally retired, passing the business over to Lin, Elsie and Elsie's husband Len Radford. George died at his Trevallyn home in January 1948, and was cremated.

After George Kemp's retirement, Lin Andrews set about expanding the operation. He'd been running the show on his own for only 10 months when there was a sensation!

A young man named Maurice Lowe, who was employed at Kempo's Frederick Street factory, had two days before broken up with his girlfriend Beverley Ryan. She was only 17, and lived with her parents nearby at 79 Frederick St.

At 1am, Thursday May 16th 1946, young Beverley came to the factory and waited at the laneway door. Maurice Lowe was informed of her presence and came out to talk to her.

Beauty Point sand is still being excavated and used today. In 2006/7 BHP Temco produced 109,200 tons of silicomanganese alloy using this high-quality silica resource. Photos by the author.

He had taken just two steps out the door when a shot rang out. She dropped. He saw a gun beside her. He ran to her, but she could only whisper "Oh Maurice", and then expired.

At the inquest it emerged that she'd been ill recently and was a witness in a pending but unrelated criminal matter. She'd been under considerable strain. The gun belonged to her father. Maurice was not regarded in any way as being at fault, and he remained at Kempo.[31]

The business was small, but its place in the Tasmanian market had become solid, and a number of people worked there over the years. Transport of the sand from Beaconsfield to town was contracted out in 1947, and a secretary put on part time in 1948. The price of the sandsoap was raised to 3d a cake in the early 1950s.[32]

Jeff Garwood of Beaconsfield worked at the mine as a teenager in the 1950s. "*During my annual holidays, I worked at the sand mine for an old man, Jim Martin. The site was situated about a kilometre from Beaconsfield on the York Town road. Sand was removed from tunnels up to 120 feet long using only a pick and shovel for excavation, a kerosene lamp or candle on a candle stick holder to light the way, and a wooden wheel barrow to transport the sand to the surface. It was hard work and sometimes quite dangerous as sections of the tunnel would often give way. Once retrieved the sand was tipped from the barrow onto four sheets of steel, 14ft in length and 4ft wide. The sheets were raised and supported by four or five bricks. A large fire under the sand heated the sand until it was of water-like consistency. It was then sieved to a fine powder and packed in hessian bags of about 100 pounds each. The bags were then trucked to Kempo in Launceston where it became an ingredient in sandsoap. The soap was grey in colour, very abrasive and could be found in every washhouse and bathroom of the day.*"[33]

Kempo's manager Lin Andrews retired in 1958, and Len and Elsie Radford took over. They moved the manufacturing to Longford, but still brought sand from their Beaconsfield mine. In the mid-1960s they sold the company to an industrial chemist named Merv Kennett and his wife, though the manufacture of sandsoap had already ceased in 1964. When the Kennetts got too old to continue, they passed the company over to their daughter. It finally went bust in 2006, and the infrastructure, recipes and goodwill were sold to their southern distributor Ken Burrows. He moved the operations to Hobart.

Stornoway Hewitt Pty Ltd

The magnificent Beauty Point sand deposit was not to be forgotten though. In the 1950s Jack Brown owned or leased it, and trucked out sand and gravel whenever he had an order.[34]

In the early 1960s the property was bought and worked by Reg Cousins. Before they committed to the purchase, Reg and his father asked Jim Torney, who had lived next door all his life, what he thought of it. Jim said it was okay, in an understated way, and later worked for them washing sand. They took the sand out down to the clay, then put the topsoil back and planted it with trees. They assumed that the thick clay bottom they'd reached represented the base of the deposit. One day, however, Reg decided to see how deep the clay really was, and he took a bulldozer and excavated down through it. It turned out to be about ten feet thick, then there was good sand again!

When Reg Cousins died, the business was taken over by Denver Kenny, who in the mid-1980s sold out to another Reg, Reginald Hewitt, who brought in the Gardner family as partners. A company, Stornoway Hewitt Pty Ltd was registered in July 1986. The name Stornoway came from the name of a small town on the Isle of Lewis in the Outer Hebrides of Scotland that was the ancestral home of the Gardners.

During the Stornoway Hewitt years, the main produce from the pits was washed sand, and the main client was BHP Temco at Bell Bay. However the sand was also and famously used as the turf base for the York Park football stadium, and for the Mowbray and Spreyton race courses. For 10-15 years there was also a concrete batching plant at the quarry.

The Stornoway side of the business dropped out around 2007, leaving just Reg Hewitt. In a double blow Reg died in 2012, leaving his young son to run a business that was largely built around information in his father's head, and then BHP Temco suspended operations. The Hewitt family decided that an administration was the best course of action in the interests of the business and creditors, and Barry Hamilton was appointed.

In 2012 Mr Jim Fawn took over and all creditors were paid in full.

Alexander Evans opened a soap factory in 1876 and was a director of the Industry Gold Mining Co. No image of him has turned up. His ad is from the Post Office Directory of 1890 courtesy TAHO. His son Alexander Arthur Evans (image on right) was a vigorous supporter of local industries such as the Serpentine Paint Company (see Chapter 4) and became Mayor of Launceston in 1926. He was a decorated war hero, serving in the Boer War and WW1, and rose to the rank of Lt-Colonel.

Notes and References

1. Examiner 30/3/1889 p5
2. Marvel was a home favourite across the colonies. A mainland firm had earlier discovered that adding kerosene to soap was very advantageous in many applications, such as in the laundry, however it made the clothes smell. After exhaustive testing Mr Upton found a much better additive to create what was called a "self-washing" soap, and "Marvel" was born.
3. Examiner 31/5/1895 p2
4. James Smith Anderson came to Tasmania from Dundee in 1883. He began as a commercial traveller.
5. Examiner 8/6/1911 p3
6. Alexander Evans was another whose business was ruined by Federation. Anderson, Mitchell & Co opened a confectionery works in Invermay in 1917 and were successful for a while, but folded in 1928.
7. Mercury 17/2/1923 p11
8. The date of discovery and first utilisation of the remarkably clean, white quartz sand at Beauty Point is unknown. The area was mapped by Government Geologist Charles Gould in 1866, and he would have known of the deposits. They were probably used to source sand for "pig beds" for casting iron at the Port Lempriere (Beauty Point) iron works in 1875-6. The Tasmania gold mine in Beaconsfield used the sand and gravel during a major building program in 1905/6, and the Mercury said in one article (9/9/1927) that small lots had gone to Melbourne in the past. The deposit was well-known in Beaconsfield.
9. The Australasian 25/9/1926 p79
10. John Torney came with his brother Henry to Beaconsfield from Victoria around 1900 to work at the Tasmania gold mine. John bought land at Beauty Point and created a magnificent orchard.
11. Mercury 27/1/1927
12. Daily Telegraph 27/1/1927 p4
13. Mercury 28/1/1927 p6
14. Mercury 13/8/1927
15. Mercury 9/9/1927
16. John Allen Barrenger and Bertie Arthur Roy Lansdell incorporated their partnership with a capital of £15,000 in August 1930. They took over the Tasmanian Plate Glass Company in 1931 and so had a factory in Clyde Street Hobart as well. They did much of Tasmania's lead lighting, such as at the Longford Masonic Temple in 1929 (both were masons), the Church of St James at Bracknell in 1932 and St Pat's at Latrobe in 1934.
17. Argus 9/9/1927, CC 8/9/1927
18. Examiner 6/10/1927 &5/1/1928 p4, Daily Telegraph 15/12/1927 p20
19. Mercury 16/1/1928 p8
20. Argus 23/1/1928
21. Mercury 5/3/1928
22. Adelaide Advertiser 8/5/1928, Argus 7/5/1928 & 8/6/1928 & 19/7/1928
23. Adelaide Advertiser 24/7/1928 p23, Argus 25/7/1928
24. Mercury 15/5/1929
25. Brisbane Courier 10/6/1929
26. The Argus 29/10/1929, Examiner 11/2/30
27. Argus 19/6/1930 p6
28. Examiner 24/6/1930 p9
29. The typist was their secretary Kathleen Torney, whose younger brother Jim lived all his life in Torney's Rd, next to the mine.
30. Argus 7/1/1931, Mercury 9/2/1931
31. Mercury 17/5/1946 p6
32. Examiner 18/6/1947
33. The Historian (West Tamar Historical Society) September 2001. Jimmy and Peter Piscioneri and their sister also worked there in the 1960s. Jimmy later bought the Ophir Hotel in Beaconsfield.
34. Author's interview with Jim Torney 25/8/2012.

The Bass Strait Mosquito Fleet

George Kemp's schooner *Clamin* was part of the "Mosquito Fleet" of small sailing vessels that plied the Bass Strait freight routes, picking up business wherever they could, taking on cargoes too small to interest the big, regularly scheduled steamers.

These small vessels were cutters, ketches, schooners and brigantines. They took cargo out from wharves and jetties to ships moored in deep waters, serviced small ports, and could economically take low-value bulk cargoes such as stone.

They were cheap to operate, with minimal crews and using the wind for power, and so lasted well into the age of road and rail and coastal steamers. They needed expert seamanship to run, and raw muscle to load and unload at jetties where mechanised loading was rarely available.

Eventually though, times changed and their disadvantages were no longer tolerated. Customers wanted the assurance of pick-up and delivery to a schedule. Being at the mercy of the weather, a wait of three or four days was common until they got a fair wind, and then a great number would sail out together.

Some of the fleet were coastal vessels servicing Victorian ports, but a large number were the brave little craft plying the Tasmania to Melbourne freight trade, and many tales of heroism, luck and misfortune could be told by the captains and crew.

In 1924 the 61-ton ketch *Eliza Davies* set off from Burnie in fine weather and with a cargo of timber. As so often happened on the Strait, a frightening gale came upon them during the night, straining the timbers of the little vessel so much that water poured in through the planking. They tried to run for the Victorian coast, but the mainsail tore away. So they chose to run with the wind, and luck being with them made Wilson's Promontory.

The 61 ton ketch Eliza Davies, out of Burnie.

They tried to anchor close to shore, but the strength of the storm dragged their anchor, and pulled them into deep water, sinking lower and lower as the shore receded from reach. Rockets were sent up and blue lights burned. A steamer saw their distress but on arrival decided it was too risky to rescue the crew and left them to their fate!

Their last rocket was a dud, and went off while it was fired, without rising. By a miracle a sharp lookout on another steamer saw the spark and came to investigate. Captain Forsyth on the *Chronos* appeared from the gloom and with skilful manoeuvres came

close and threw a tow line. The men on the *Eliza Davies* tied it off and the *Chronos* powered up to take the stricken vessel to safety nearby.

Suddenly a huge wave struck the ketch and plunged her under the boiling seas. She sank like a stone. The cook couldn't swim and drowned almost without a struggle. Three other men and the skipper desperately clung to the side of the partly submerged dinghy in the freezing water. The *Chronos* turned around and managed to come alongside the dinghy and pulled the survivors up with ropes. It was a marvellous illustration of courage and seamanship.

Other ketches of the Bass Strait fleet were the *Lialeeta*, *Evaleeta* and *Leeta May*, made of wood and painted white. They were built at Port Cygnet after the first war. The ketch *Good Intent* was only 35 tons and also built at Port Cygnet in 1887. She had her exciting times, such as when she was leaving Hobart with a cargo of fruit and was run over by the steamer *Westralia*. Only the fruit in her holds kept her afloat. Her luck ran out in the mid-1920s when she was wrecked in Surprise Bay, King Island.

Then there was the 82 ton topsail schooner *Joseph Sims*, built in NSW in 1908, and the three-masted 80 ton schooner *Rabra* (Tasmanian Aboriginal for gannet), built in Sydney in 1912. *Rabra* held the record of 53 hours for the Hobart to Melbourne run, and hauled timber from Hobart to Melbourne all her life.

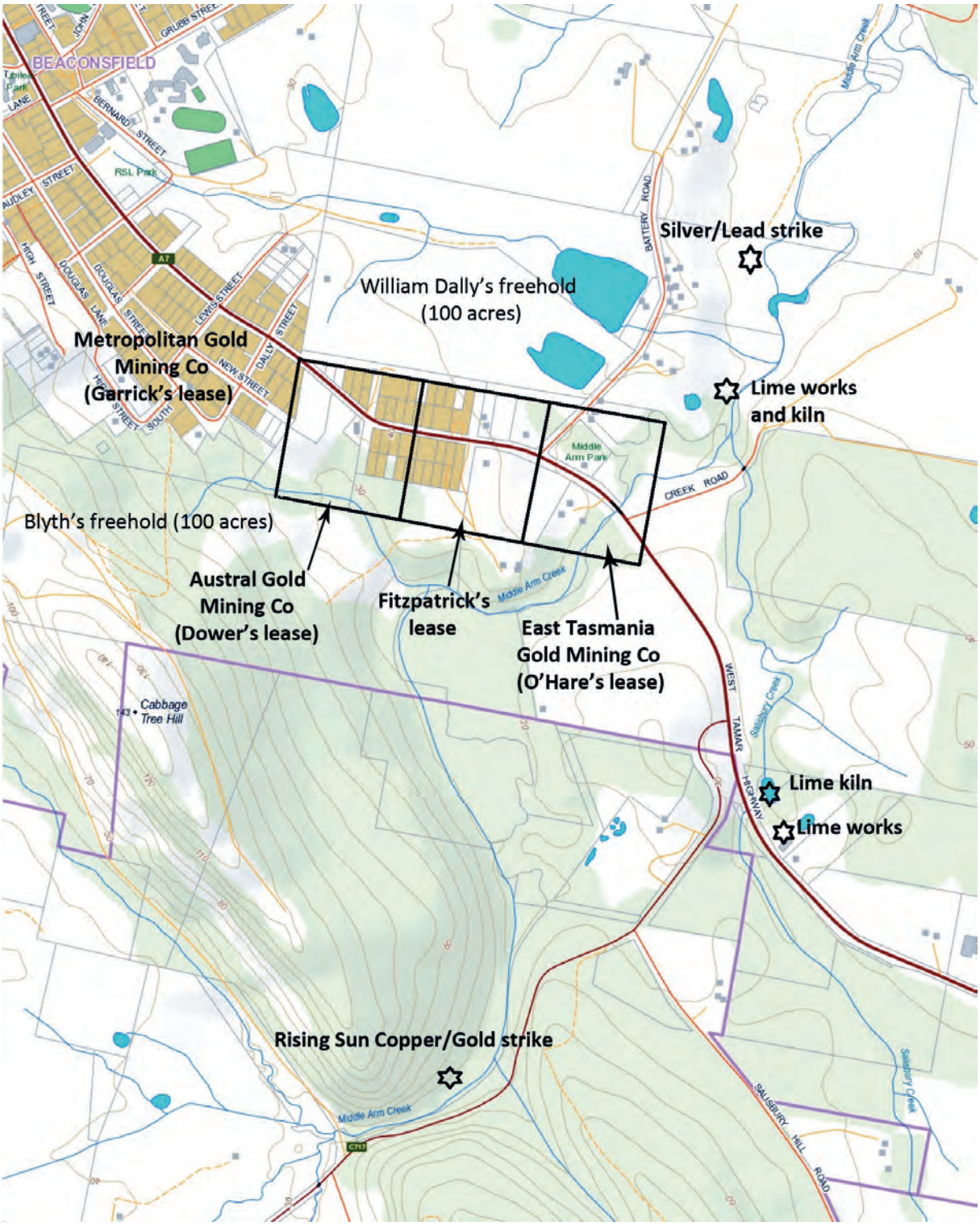
George Kemp's *Clamin* and the *Commonderry* were originally steamers, which was obvious from their appearance. They became schooners, but their masts were stumpy and their bows straight.

For many years the "Little Dock" on the Yarra River was home to the Bass Strait Mosquito Fleet. It was located where the Melbourne Convention Centre now stands, at the foot of Spencer Street, and operated between 1854 and 1929. It was first called the New Dock, then Spencer Dock, and finally Little Dock.

The site is opposite and just two blocks from where John Pascoe Fawkner's party originally landed with a load of palings from Launceston to build Melbourne's first huts and a store. In 1929 it was reclaimed to provide approaches to the new Spencer St Bridge and disappeared forever.

Some of the Mosquito fleet had their lives extended by being equipped with auxillary diesel engines. The topsail schooner *Alma Doepel* was one that bowed to the inevitable, along with *Evaleeta*, *Mileeta*, *Miena*, and the three-masted schooner *Gerard*.

The Little Dock Mosquito fleet has long gone now, but we can still recognise the skill and bravery of the men who sailed those little tall ships, all less than 100 tons, across one of the most treacherous passages in the world.



Mineralisation along Middle Arm Creek, Beaconsfield

There is interesting mineralisation along Middle Arm Creek that has been completely forgotten. Middle Arm Park is the likely area of gold discoveries in the 1870s (by John Dally) and 1880s (by the East Tasmania Gold Mining Co). John Dally had a lime works on Salisbury Creek in the 1860s and moved to the east end of his brother William's property in the 1870s, leading to their discovery of silver and lead ore on the west bank of the creek at the northeast corner of William's land. Further up the creek, in the Gorge, was the Rising Sun copper/gold mine in the 1880s.

Gold, Silver and the Sugar Loaf

One of the features of gold at Beaconsfield was that it often came with silver, sometimes as much as 10%.

Silver has been found on the west side of the Tamar many times, always in combination with gold, lead or copper. It remains possible that a small multi-metal mine including silver could be viable, though none has so far eventuated. Individual prospectors have found interesting prospects and a small operation may one day succeed. The chance of a deposit big enough to interest a mining company is remote, however, and so exploration has been limited.

One area of interest has been quite forgotten for more than a century, and that's the northwest bank of Middle Arm Creek, at the south end of Beaconsfield. The area around Middle Arm Park, on the West Tamar Highway, has in the past thrown up silver, gold, copper and lead mineral samples of great interest. The Rising Sun copper mine talked about in Chapter 3 was on Middle Arm Creek, in the Gorge between Cabbage Tree Hill and Salisbury Hill.

In 1870 the Dally brothers pegged gold leases over the area around today's Middle Arm Park, close to where they were already mining limestone to roast and make lime for building purposes. Much of the limestone along Middle Arm Creek was actually a blue-black marble (on Middle Arm Creek) and pale blue marble (on Salisbury Creek). The stone is beautiful, with veins of white calcite, and it takes a good polish. Sadly, as there was no market for marble it was just burnt.

It was on Middle Arm Creek in 1870 that the Dallys found an interesting outcrop of stone and employed a well-known Victorian prospector, James T Dowlin, later owner of the Ophir Hotel, to open it up. He dug down 8ft and found that the body of stone was already 20ft thick and widening substantially. Within the rock were veins of quartz carrying gold, but the stone was hard and the veins were only from a centimetre to 8cm thick.

Seven years passed. In 1877, just after William Dally's big gold strike on Cabbage Tree Hill, a visiting journalist stopped at John Dally's house, which was 50 metres from the lime kiln at his original

limeworks on Salisbury Creek. He noticed a big stockpile of quartz next to the house and asked Mr Dally about it. John said he'd recovered it "years before" and it wasn't worth hand crushing, as it only ran at ¾ ounces of gold a ton! This was before the Tasmania mine's crushing plant was built, and presumably it was crushed later, as ¾oz is very rich.[1]

The most likely place for this rich, gold-bearing quartz to have come from was Middle Arm Creek, where the Dally brothers had their gold leases in 1870 and employed James T Dowlin to dig. John and James Dowlin would not have carried stone far in a wheelbarrow with no roads! The source must have been close to his house and lime works, and the mining of narrow quartz veins by James T Dowlin years before, fits with the pile of quartz seen by the journalist. The exact spot is now impossible to say, but it must have been close to Middle Arm Park.

What is now the park is sandwiched between two private properties dating from the mid-19th Century. To the north was William Dally's farm, and to the south Robert De Little's limeworks. The area around the park was Crown land until later, and thus available to be pegged by miners.

John Dally had problems with his original lime operation on Salisbury Creek due to flooding, and in the 1870s discovered that his brother William had good quality limestone (actually marble) on the southeast corner of his private land on Middle Arm Creek. While working on this new source, where they built another lime kiln, John and William found silver/lead ore in the creek a little downstream, at the northeast boundary of William's land.

Investigation showed that the small boulders of silver/lead ore were coming from quartz veins on the creek's western bank, and the quartz was also carrying a little gold. While most of the veins were narrow, one was 12ft wide and trending approximately east/west. The Government Geologist Gustav Thureau identified the main minerals in 1883 as galena (some with 50% lead), plus anglesite, siderite and pyrite, and he confirmed there was considerable silver, and traces of gold with it. He thought that the spot where the main reef intersected another at right-angles should be investigated, as it had the potential for a large deposit at depth, but this was never done. A later Government Geologist, Mr Montgomery, thought that there was probably also a rich alluvial gold vein called a "deep lead" at depth below the park.

The East Tasmania/Austral mines

The Middle Arm Park area, from just east of Dally Street to Middle Arm Creek, was originally intended to be the Beaconsfield State School site. A survey done in mid-1879 marked out 33 acres "for government purposes" including a school.

There was quite a stir in early August 1882, when it was realised that the government had quietly released this land for mining – the new school being already under construction on a different site in the centre of town. Three men, who seemed to have had some sort of inside knowledge of the release, had pegged out three 10-acre leases before anyone else in town even knew it was available, and everyone knew that gold and other minerals had been found on it.[2]

The three peggers were John O'Hare, James Fitzpatrick and James Dower Snr, and they were part of a private association of ten men, managed by the owner of the Beaconsfield (formerly Brandy Creek) Hotel, Mr James Burnett. Permission had been obtained from Gold Commissioner Shaw to commence operations on the property at once, in advance of the leases being surveyed and granted.

The party's original intention had been to immediately float a company called the East Tasmania Gold Mining Company, covering all three leases, but common knowledge of the ground's potential decided them to create three separate companies. The westernmost lease, next to Dally Street, would become the Austral Gold Mining Co, and the easternmost lease, on Middle Arm Creek, would be the East Tasmania Gold Mining Co. The middle lease was yet to be named.[3]

A prospectus was issued for the Austral Gold Mining Co, which had the right to purchase the westernmost (Dower's) lease. It was to have 32,000 shares of five shillings each, totalling a considerable £8,000, and the legal manager in Launceston would be Mr Owen Meredith.

While a second prospectus was prepared for East Tasmania, which would take over O'Hare's 10 acres, the syndicate couldn't resist doing a bit of prospecting. Naturally they chose to do so on the most promising part of their land, being the East Tasmania ground. This was where good indications had been already been found, and was probably where John Dally had taken out his rich quartz years before.

Their decision to divide the properties and do some prospecting was immediately vindicated. Late on Tuesday August 22nd 1882, a rumour passed excitedly around Beaconsfield and Launceston, to the effect that they'd discovered a rich reef.

A letter from the party's manager, James Burnett, to the intended company legal manager, Andrew Reid, was immediately made public, and the mining community learned that work had commenced on August 18th, trenching on the spot where surface indications had been obtained. At a depth of about 4ft 6in they struck a large body of stone, about 8ft wide, with good prospects from the casing and rubble. Gold was found in every dish they took, everywhere about the reef. Dynamite was used to see what the lode was like inside, and again gold was found.[4]

The syndicate took advantage of the good news to put the East Tasmania prospectus onto the market, while the Austral Gold prospectus was immediately closed to further applications for shares. A third of East Tasmania's shares were offered, and half of these were taken up immediately.[5]

Just two days later Mr Burnett wrote again to the legal manager in town, revealing that another reef seemed to exist "further up the hill" – presumably to the west. A shaft was then commenced near the original find to try to cut the reefs at depth.[6]

A letter to the *Daily Telegraph* from Beaconsfield miner Hugh Morrison caused a stir, when he said he'd mined the East Tasmania reef back in 1876. He said he sank to 27ft and then drove out (tunnelled) until he was flooded. He found plenty of quartz, but nothing was in it. "*Has gold grown there in the interval?*" he asked facetiously. "*It may, for aught we know; strange things happen nowadays.*"[7]

This prompted the famous *Examiner* correspondent and mining cynic "Flaneur" to pop up for the day. Flaneur was a miner himself, but he was always on the alert for scams and often railed against crooks in the industry and their ramping and manipulation of stocks.

Flaneur was quickly convinced. "*I wasn't expecting to see anything, but in the trench is the cap of a reef about 8ft wide and gold can be obtained in the rubble and a little in the stone. Surface prospects can be obtained on the hillside. The reef is nice, kind, open and well lined stone. It is nearly EW and at £25 a promoter's share it is a good speculation... A man is saying around town that it is a swindle. He is no doubt jealous. I have no scrip in this but say it is the best show around at present because I have seen the gold, it is a large body of stone and it is near to the creek.*"[8]

The reef may have been on the south side of today's West Tamar Highway, as it was said that it was south-east of Fitzpatrick's section. However it was also said by the prospectors that extrapolation of its east-west trend showed that the reef "cannot fail" to pass through the entire width of Austral's ground, which suggests that it was not anywhere near the southern end of the East Tasmania lease, and may have been under today's Middle Arm Park.[9]

Unfortunately for East Tasmania and the promoters, only a month later the El Dorado swindling case exploded over the goldfield, filling Tasmanian newspapers with lurid stories of salting, corruption and intimidation on the Beaconsfield goldfield. With Hugh Morrison's letter still fresh in people's minds, enthusiasm for the East Tasmania collapsed. It appears that they ran out of money and couldn't raise more, even with independent observers validating their find.

The loss of confidence thwarted James Burnett and his syndicate from floating a third company on Fitzpatrick's section, but fortunately the Austral Gold Mining Co prospectus had already raised substantial funds prior to closing its issue when the good results first came in, including a large parcel taken up by the owner of the *Examiner*, William Aikenhead.

Austral Gold met in early December 1882 and elected a board comprising William Aikenhead, Alex Corrie, Steel Traill, David Powell, Alex Reid, Douglas Mackintosh and William Abbot as directors. A company of 32,000 shares of 5s was formed, and registered the following week with Owen Meredith as legal manager. Its major shareholders were the directors, and the original peggers O'Hare, Fitzpatrick and Dower.[10]

Work began in the new year, sinking a shaft to find the East Tasmania reef. This shaft must have been located next to the intermittent creek behind 35 Weld Street, Beaconsfield. The diggers came to the water table at 35ft and commenced driving north and south at that level, in stone showing a mass of thin quartz veins, and very fine gold on panning.[11]

The appearances suggested that the lode they were looking for must be in the south drive and deeper than they could go without pumping machinery. In late March 1883, after driving 30ft or so south, they were forced to suspended activity through lack of funds.[12]

One of the original peggers, James Dower, his son and the company's legal manager Owen Meredith were unable to meet the calls on their shares and had to give them up. A new legal manager, Henry Power, was appointed, and as other shareholders met their obligation and paid up, work was able to resume.

A new mining manager, Mr Pollingtine, was engaged and he decided to try a new shaft 140ft north of the first, in hopes it would be drier and thus avoid the expense of buying a pump. It was an odd thing to do, given that the indications were that the reef was south of the original shaft. By May he was down 37ft, in soft ground that would need to be timbered to be safe. At this level he began driving south to intersect the north drive from the first shaft, and by June was 86ft in and only 12ft from connecting the drives. He had quartz in the stone, but it was barren.[13]

It can be assumed that the drives were connected, but there is no evidence of work after that. Original pegger John O'Hare defaulted on calls and was sued, and in July 1883 the company could not even raise a quorum for a general meeting.

With both Austral and East Tasmania collapsing for want of funds, the apparently rich gold reef next to Middle Arm Creek was never investigated. As all the land is now either park or private property, it probably never will be.

Similarly, the silver/lead discovery on William Dally's property, a short distance down the creek, has never been followed up and perhaps never will be, despite the Government Geologist suggesting that a large deposit could be there at depth.

Taberg Prospecting Association & Sugar Loaf Hill Prospecting Association NL

Middle Arm Creek was not the only area with silver indications.

In July 1891, a prospector name R J Wilson told the *Examiner* that his Tamar Prospecting Association had found silver ore "near Beaconsfield". He pegged three leases and claimed to have found a mineralised formation 20 metres across, on a steep hill he'd christened "Mount Douglas" in honour of former Premier Adye Douglas.[14]

The *Examiner's* Beaconsfield mining correspondent identified the ground as a large hill in the Flowery Gully area, about three miles from Beaconsfield and locally known as Buck's Hill. It hosted an iron gossan previously assayed at 2oz to the ton silver. More of the gossan had now been assayed by Wilson with returns of two and three ounces of gold, and ¼ to 2½ ounces of silver. There was a small rush to the locality and claims pegged for both gold and silver.

Silver was much in the news, with mines on the West Coast and near Sheffield and finds being reported at Gunns Plains and other places regularly. Stimulated by the possibilities, and by Mr Wilson's conviction that there was a silver mine to be found in the area, prospectors were quick to look further afield than Flowery Gully, and soon reports were coming in of good prospects at the Black Sugar Loaf, past Glengarry.

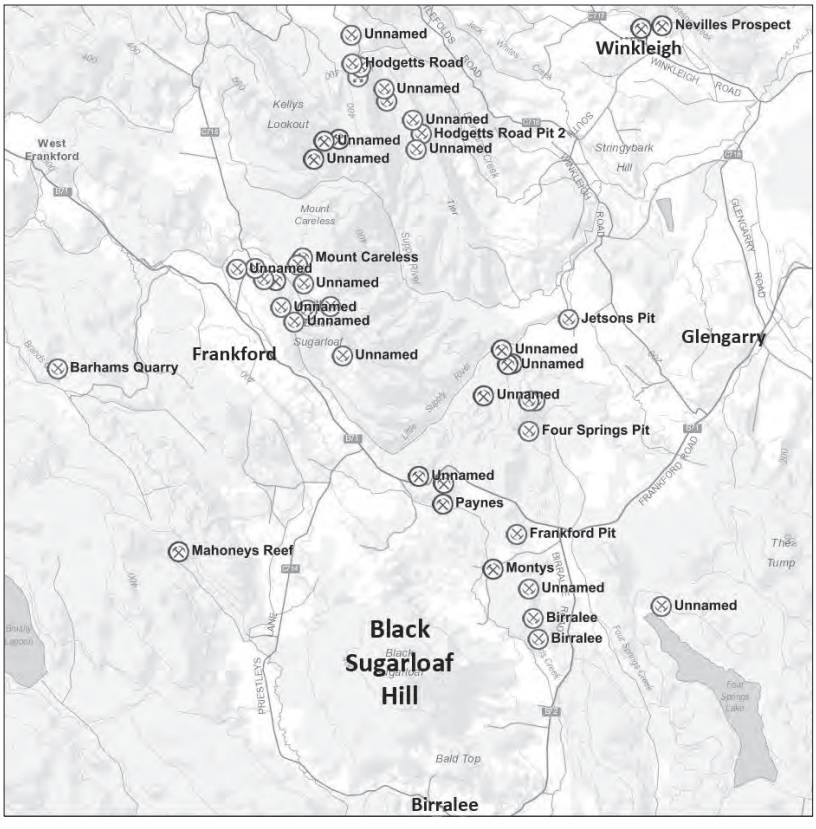
Several men who'd been dabbling in the district decided to merge their interests into a two companies. One was called the Taberg Prospecting Association, and the other the Sugar Loaf Hill Prospecting Association.

Sugar Loaf Hill Prospecting was quicker off the mark, and issued a prospectus on July 23rd 1991 to raise £1000 in 1000 shares of £1 each. The pro tem secretary and legal manager,

Owen Meredith (1847-1927), legal manager of Austral. Owen and his brother George were sons of Charles Meredith MLC and pioneered mining on the West Coast. They pegged the first leases and later pitched the first tent at Strahan. In recognition of this, the brothers were granted a handsome pension in 1911. Image c1870 and courtesy of TAHO.

Tom Bateman (1844-1900), legal manager of Taberg and Sugar Loaf Hill. He was a Launceston mining agent who went to the Klondike in 1897 and then to London. Image from 1891 and courtesy TAHO.

Tom Bateman, showed the *Examiner* a plan of the sections held by the company, comprising six of 10 acres and one of 5 acres, and also showed assays for what they'd found. The issue was fully subscribed within two days![15]



Mineral Resources Tasmania shows many old quarries and mines in the district, but none on Black Sugar Loaf. They were completely forgotten, and the good assays never followed up by modern explorers. Nor were the good assays at "Bucks Hill" Flowery Gully ever followed up in modern times.

An inaugural meeting was held on July 28th, with Percy Hart, Robert Gibton, Alexander Evans (the soap baron who also had shares in East Tasmania and Taberg), J A Moore, B Waters, W J Southerwood and W Young elected to the board, and a decision made to commence operations immediately.[16]

Just two weeks later samples assayed from the new mine yielded over 49oz of silver and 4.5 grams of gold per ton. Nine days after that, on August 20th, a sample from a different formation on the property returned 27oz of silver and 3 grams of gold to the ton. These were excellent results and suggested a viable mine.[17]

Just as the second assay report came in, the Taberg Prospecting Association held their inaugural meeting. There was a large attendance and they elected F Holmes, S W Margetts, David Dally, J Brandwood, J Klang, Percy Hart, and T Carr as directors, with the same Tom Bateman as legal manager as the other company. The capital was set similarly as £1000 in 1000 shares of £1 each.[18]

Taberg Prospecting also commenced work immediately, sinking a shaft to look for a lode, and with this expenditure a call of a shilling a share was shortly made, and apparently met by the shareholders without any fuss. The first call for funds from Sugar Loaf Hill Prospecting was also sent out to shareholders.

In late October David Dally reported that a bulk test of stone from the 27ft level of the Taberg shaft had returned an encouraging 20 ounces of silver at ton, together with respectable gold. There was an increasing impression in Beaconsfield that the announcement of the first local silver mine was not far off.[19]

Sadly, the encouraging assays soon petered out, and no mineable lode was found by either company. Both companies suspended operations, and after a couple more attempts to raise funds, quietly disappeared.[20]

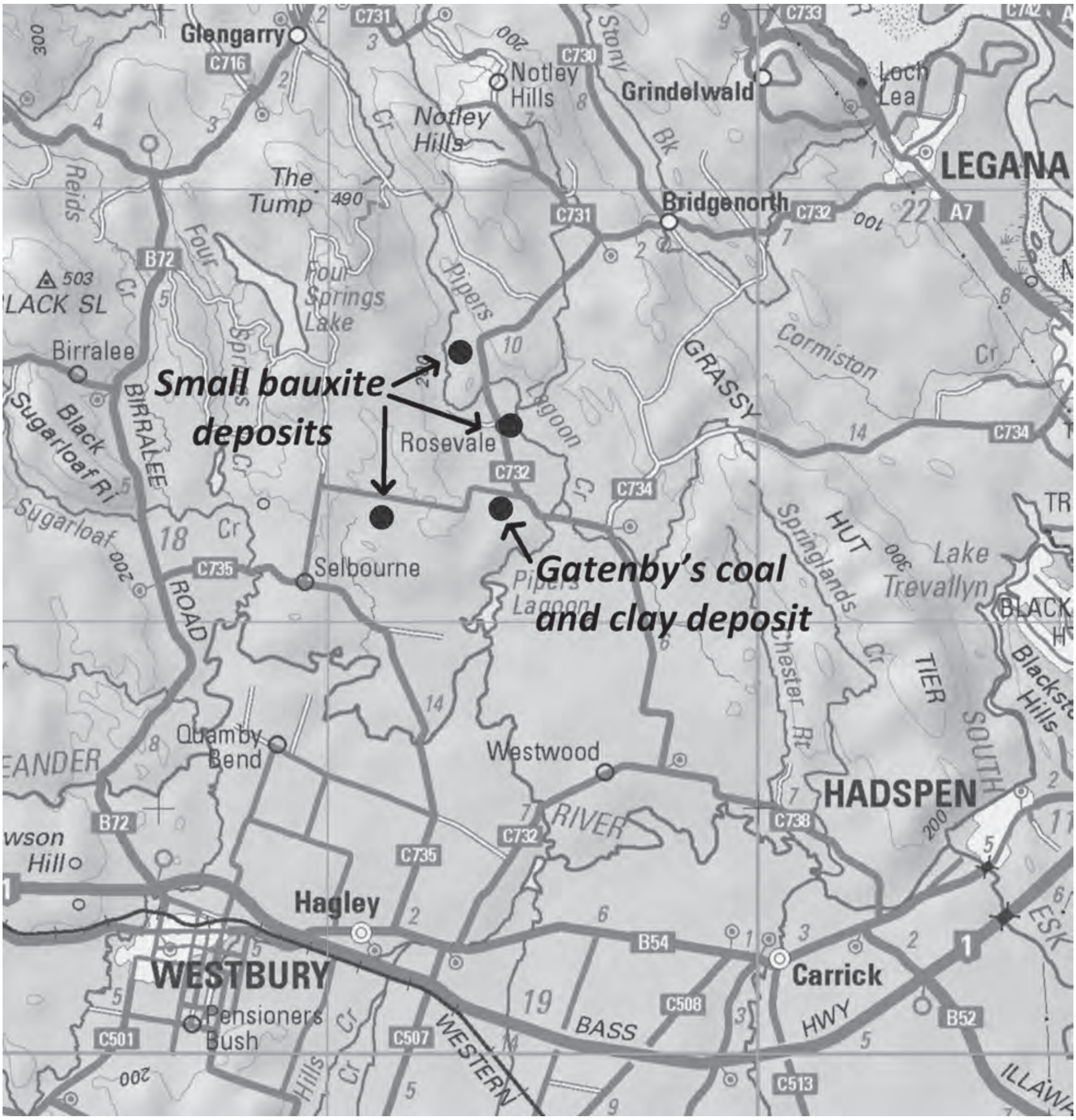
Neither Black Sugar Loaf, nor "Bucks Hill" has been tested in modern times. The Mineral Resources database doesn't even show the old workings that are on the Sugar Loaf and they appear to have been forgotten.

"Bucks Hill" from 1891 appears to be the unnamed hill at Flowery Gully that is the source of both Salisbury Creek and Rookery Creek and is at GPS -41.26628 146.83576. This is interesting, as Allstate Exploration (then owner of the Tasmania mine at Beaconsfield) found two old adits and a shaft in this area in 1999, which they believed to be the old Derwent Company workings from 1879-82. They believed that the hill had potential and listed it as a priority drill target, but appear to have never followed up.

Notes & References

1. Cornwall Chronicle 22/8/1877 p3
2. Examiner 7/8/1882 p2
3. East Tasmania should not be confused with a later company of the same name that was located at the north end of the Beaconsfield cricket ground.
4. Tasmanian 26/8/1882 p18
5. Examiner 24/8/1882 p1
6. Mercury 26/8/1882 p4, Examiner 29/8/1882 p2
7. Daily Telegraph 6/9/1882 p3
8. Examiner 30/8/1882 p1 & 6/9/1882 p3
9. Examiner 28/8/1882 p3, The Tasmanian 2/9/1882 p969
10. Mercury 5/12/1882 p3, Examiner 14/12/1882 p4
11. Tasmanian 24/2/1883 p214, Mercury 7/3/1883 p3. The spot is well away from houses, and the shaft, which was not particularly deep, was filled in later.
12. Examiner 14/3/1883 p2
13. Mercury 10/5/1883 p3, Examiner 11/5/1883 p3 & 30/5/1883 p2
14. Examiner 24/7/1891 p3, Daily Telegraph 24/7/1891 p3.
15. Examiner 23 July 1891
16. Examiner 29/7/1891 p1
17. Examiner 11/8/1891 p3
18. Examiner 17/8/1891 & 21/8/1891
19. Examiner 29/10/1891
20. Examiner 2/11/1891 & 2/12/1891 & 14/12/1891

Tom Carr in 1891 at age 36. He was chemist in Brisbane St and a director of Taberg Prospecting. Unfortunately he was also an alcoholic. Image courtesy TAHO.


Small bauxite deposits
Gatenby's coal and clay deposit
Glengarry
Notley Hills
Grindelwald
Loch Lea
LEGANA
The Tump
Bridgenorth
Four Springs Lake
Birralee
Rosevale
Selbourne
Pipers Lagoon
Lake Trevallyn
Quamby Bend
Westwood
HADSPEN
Hagley
WESTBURY
Carrick
Pensioners Bush
BASS HWY

7

Radioactive Rosevale & the Search for Coal

Like copper, the possibility of coal around the Tamar tantalised prospectors for decades. There are many places in the West Tamar that you can find layers of wood deep underground, in various stages of decomposition. People sinking holes for water, or looking for limestone or other commodities, often brought up signs of an old buried forest.

The first steam-powered boat arrived in the Tamar in the summer of 1840, and with the nearest coal being in Newcastle, the *Cornwall Chronicle* called for government incentives to foster exploration for a local source. The editor recommended looking on the west bank of the Tamar, where "it is said to abound."[1]

Samples of Tamar coal in early stages of formation were often brought to meetings of the Royal Society in Hobart. At the May 1851 meeting, fossilised wood from Anderson's Creek at York Town and from "a slate quarry east of George Town" were shown. The Secretary tabled specimens of lignite (brown coal) from a 30ft shaft sunk by Mr Ralston on a flat on the west bank of the Tamar at Rowella, about 2½ miles north of Point Rapid. He also described three shafts sunk for coal by Mr Reed on the west side of Whirlpool Reach.[2]

Louis Gatenby's Coal Fertiliser

Thin seams of brown coal do exist at some places, and there is a resource at Rosevale of sufficient size to feed a brown coal fired power station, if we ever had to build one. Investigations in the 1980s suggested that the resource was some 118 million tons, in three discrete deposits. It is about a sixth ash and expensive to open cut, so wouldn't be attractive for power generation in ordinary circumstances.

The Rosevale deposit was found in April 1915 by a 41 year-old local farmer named Louis Gatenby.

Louis had probably been wondering about all the shaley material around the area, and decided to see what was under his land. In 1913 or 1914 he sank a shaft on one of his paddocks, at a spot 300 metres south of Roseburn Road.[3]

Instead of oil shale or coal, he first struck a rather good-quality pottery clay near the surface, in a layer 35ft thick. He was working out how to develop a clay pit when the war broke out and scuttled his plans.

He decided to persevere with the shaft over the summer, and in April 1915 found the lignite (brown coal) at a depth of 50ft. The seam appeared to be 12ft thick, but as it was dipping its true width would have been rather less. The dipping suggested that it might come to the surface nearby, though he doesn't seem to have ever found it. The depth deterred Louis from further work and the shaft filled up with water.

In June 1917 he returned to the project. Transport was becoming easier, and he was able to dig out a two ton sample of clay and send it via the Mines Department to Broken Hill Associated Smelters in Melbourne for testing.[4]

Shortly afterwards, the public was fascinated by French reports that radioactive radium in coal stimulated remarkable growth in plants. Still waiting to hear from Sydney about his clay, and receiving many enquiries from local farmers, Mr Gatenby found himself stimulated to dewater his shaft with a view to bringing up a bulk sample of the coal for testing. He bought a small portable steam engine to drive a pump and grinder.

At first he may well have simply ground the coal, but as it was half water, he soon decided to "calcine" (or roast) it. He used an open-air partial burn, probably achieved by heaping the material up and not allowing air into the pile. This achieved a 40% reduction in volume without burning away all the carbon, which was a valuable soil additive itself. The process was similar to making charcoal from wood. After putting the fire out, he ground the residue into flour and gave samples to local farmers to try, saying that he could sell it locally for 30s a ton. This price was quite reasonable, being less than the bulk price of black coal.[5]

Tests by local farmers confirmed that it was as good as superphosphate in promoting growth in oats, peas and potatoes, and was cheaper. When used as a heavy dressing it seemed to burn the crops, probably because of its salt content, but at 50kg an acre, inserted with the seed, it was very effective. Whether there was radium in Mr Gatenby's coal was never tested, but the *Daily Telegraph* gleefully carried a large headline: "Radioactive Manure".[6]

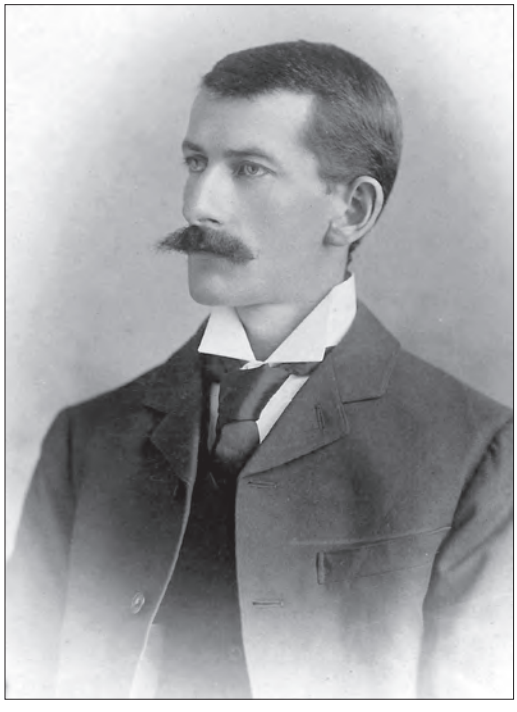
While farmers were testing Louis' coal on their crops over summer 1917, word came back from Broken Hill Associated Smelting, saying that his china clay had potential for making smelting vessels. They apologised for the delay, saying that clay (like concrete) needed time to reach its maximum strength. The *Daily Telegraph* reported them as saying it was as good as, and cheaper than, the best product from St Louis USA, but this was an exaggeration. In fact BHAS said it wasn't even the best they'd seen from Tasmania. Nevertheless they wanted 60 tons more, in 20 ton shipments out of Devonport to their Port Pirie plant, in order to do full field tests.[7]

While very welcome, the 60 ton clay order was never going to sustain a mining business, and encouraged by the successful tests, increasing orders and the end of the war, Mr Gatenby engaged two coal miners in 1919 to open up the mine at the 50ft level. He sold his small engine and bought a larger one, together with a larger crusher and a steam winding plant to haul up the product from below. He was also interested in what might be below the coal seam, and it was probably at this time that the

shaft was sunk to its final depth of 107ft. At 100ft they entered a second coal seam and were still in it when they suspended at 107ft.

In April 1919 Louis was grinding 60 tons of coal a week, and his new mill could do 20 tons a day if required. Orders were coming in faster than he could mine the coal. As well as the underground workers, he had two or three men splitting and carting timber to shore up the diggings and his fortnightly paysheet was nearly £40. A group of mining men went out to visit his operation. Soon after, however, he had to suspend for winter. Apart from there being no demand for fertiliser in winter, it was difficult mining and carting in the wet.[8]

Operations resumed in spring, with five men working underground and four on the surface, while Louis himself worked the steam engine and superintended. It is certain that he was now roasting the coal. It was brought up in a large cask to the surface, then run on a short tram and tipped on to one of three great heaps, which were constantly burning. At the end of four or five days the remains were raked out to cool, ground to a powder and bagged. The output was 20 tons a week, hindered by wet roads and slow orders.



Above: *Louis Gatenby (1874-1954).* **Below**: *Ella Mary Gatenby (1868-1937). These photos were taken around 1906 and are courtesy of Peter and Vona Clark.*

A display was arranged at the 1919 Launceston Show, and the *Examiner* was effusive in praise of the product, describing it as "nothing short of marvellous" and "phenomenal". In 1919 Louis mined 700 tons of his "shale" in total, and after calcining and grinding bagged 400 tons. Sales were said to have been just one ton in 1917, 17 tons in 1918, and 245 tons to the end of September 1919.[9]

The following year Mr Gatenby sold his 700 acre farm to a Mr Morgan, except for 60 acres which hosted the coal, and used the proceeds to develop the mine and build a house nearby.[10]

Production via a shaft had proven very expensive, and so Louis and his miners dug an inclined adit (tunnel from the surface) to intersect the shaft at the 50ft level and provide a flat path for bringing product out. They suspended production while they dug, and while they dismantled the machinery and buildings and re-erected them to service the adit. Once done, and with the shaft providing ventilation and an escape route, coal production resumed. The adit had the additional benefit of passing through the best clay and making it possible to recover that for sale too. Interest in his workings prompted Mr O'Keefe MHA to ask

the Mines Department to investigate coal around the Tamar, including at Louis' farm, George Town, Richmond Hill (now Kayena) and the Westwood Estate (Carrick).[11]

An acute shortage of black coal led to much interest in whether brown coal could be used instead, but the Mines Department said that the deposits were too small and poor quality. They said the best use that could be made of it was as Mr Gatenby was already doing "on a fairly large scale."[12]

One of Louis' neighbours wrote to the *Daily Telegraph* in May 1920, saying that Louis had found three seams of coal, of 12ft, 4ft and 6ft width, and was still in coal at the bottom of the shaft. This could hardly be described a small and unworkable deposit. While it was true that Louis was working at 50ft, the seams dipped to the northwest, so had to come to the surface somewhere to the southeast, and in fact a farmer had found Louis' main seam at the surface while digging a pond a mile east of the shaft. Coal had also been found on the surface a mile west, the letterwriter said. The coal was not best quality, but it was suitable for briquettes, and in fact Louis used it himself (with a little green wood added) to feed the boiler generating steam for the winding engine. If a cement company were to establish on the Flowery Gully limestone deposits, as proposed, they could use Louis' brown coal as fuel and make the deposit a valuable asset.[13]

Others agreed with the Rosevale resident's letter to the paper, and in November 1920 a Melbourne company offered to buy Louis out. Unfortunately the sale fell through, probably because the cement factory didn't proceed. Shortly after, coal was struck on the surface at Mr G Shaw's farm a mile or so north of Louis'. This was the fourth coal strike on the surface at Rosevale.[14]

In 1921, a year after the original request from Mr O'Keefe MHA, the Government Geologist, Mr Loftus Hills, visited Rosevale. The following year he produced a major and definitive report entitled "*The Coal Resources of Tasmania*".

Surprisingly, Rosevale only rated a couple of paragraphs in the report. Mr Loftus Hills said Louis' coal was comparable in quality to that from the Latrobe Valley in Victoria, but its depth meant that an open cut was not practicable. If it could be mined more cheaply though, it would be suitable for briquettes. This was particularly surprising for the fact that it didn't acknowledge the recent surface discoveries.

Mr Loftus Hills had probably given Louis this opinion verbally when he visited, but Louis wasn't to be discouraged. He had the mining bug now, and was vigorously endeavouring to get his fertiliser business going. A correspondent for the *Examiner* and *Daily Telegraph* visited in March 1922 and gave a description of the works.[15]

At the time of the visit, Louis had 30 tons bagged and ready for despatch to his Launceston agent, Mr Guy Meredith. Power for his operation was supplied by a 10hp portable boiler, which covered hauling, grinding, and steam via a pipe to a pump at the 50ft level. Water was collected in a well sunk in the floor of the adit, and pumped up to a tank on the surface which fed the boiler. Coal was hauled up the 1 in 5 inclined adit by a wire rope, and then rolled in its trucks to the calcining area, and then down to the grinding mill, where a jet of water laid the dust. It was finally hoisted up into a large hopper, where it could be bagged at leisure. At the rear of the boiler Mr Gatenby had a saw bench rigged to cut up timber to supply to local farmers, where there was always a demand. The radium in coal, said the journalist, stimulated growth like electricity does seeds.

The journalist saw the good clay in the tunnel, passing through it to get to the coal. The cost of cartage, however, had killed this operation. It cost a pound a ton to cart it to the potteries in Launceston, where

it was only worth a pound a ton on arrival. Unless a railway line was built through the district, the clay business was not going to be viable.

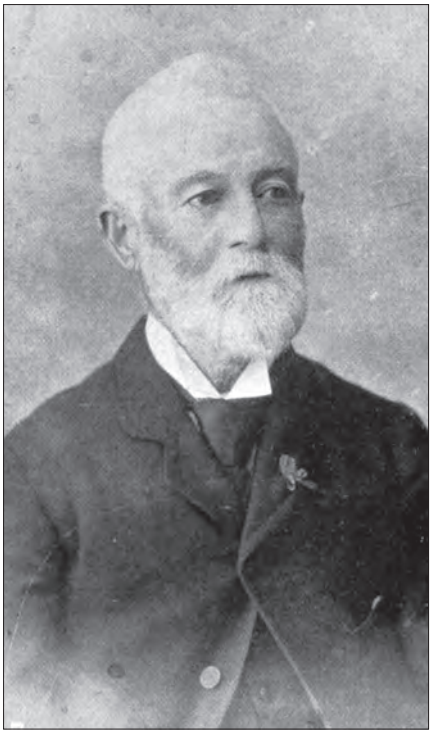
Reverend Gibbs at Beaconsfield was hugely impressed with Louis' efforts, and talked about him at length at the Tamar Board of Enquiry that was held in Launceston in September 1921. He said that Louis had already mined over 1,000 tons for fertiliser, and had high-quality kaolin (clay) and sandstone as well. When Reverend Gibbs praised the quality of the coal for heating purposes, Mr Loftus Hills said that he was exaggerating, but agreed that the clay was promising.[16]

Sadly, despite all the good reports and advertising, the fertiliser business did not survive past 1922. It may be that the announcement by the Electrolytic Zinc Co at Risdon that they would enter the superphosphate market, affected Louis' prospects. While EZ did not begin selling until late 1924, super prices fell 10% immediately after their 1922 announcement, as competitors moved to consolidate their markets.

Disappointed in the venture and no longer interested in farming, Louis sold the remaining property and became a miner, working at Waratah, Rosebery and Victoria. After the Second World War he and his son John built a house at 9 Frankland St Launceston, which is still there and solid and stylish. There was a severe shortage of bricks at the time, and despite being in his 70s Louis had to make 35,000 of his own out of concrete. This was ironic, given that he'd found high quality clay at his Rosevale farm and couldn't sell it.

The Search by the Dallys of Beaconsfield

In the years leading up to Louis' mine at Rosevale many shafts and adits were dug around the Tamar, but were unsuccessful and have long since been forgotten. These days the mining industry is certain no good-quality coal exists in the Tamar basin, and the low-grade occurrences that were followed up in the early days are now known to be of very limited extent.



Job Dally shortly before his death. From the Weekly Courier 20/5/1915 and courtesy of TAHO.

In 1862 James Dally had a 100 acre property that is today opposite the gravel quarry on Green's Beach Road just north of Beaconsfield, though of course there was no Beaconsfield, or Greens Beach or even a road in those days. Mr Dally's property can still be seen on modern maps (such as the Bell Bay 1:25,000) marked as block 0369.

Seduced by the obvious presence of hydrocarbons all over the Beauty Point-Beaconsfield area, James and his father and brothers decided to sink a few holes in an attempt to locate a payable coal seam. They chose a spot on the north bank of Brandy Creek and in October 1862 had five or six men working on two shafts. Other people in the area watched on with considerable interest.

The first shaft was inspected by Francis Evans and Zephaniah Williams in mid-October, and they returned to Launceston to purchase a pump and tools and tackling equipment for

Around 1897 a party from Beaconsfield went to look for coal in West Arm. They were rather optimistic, given the results of previous searches by David Dally and others. In the centre of the photo is Launceston business personality Charlie Dempster. On the left is Robert Thomas (Tom) Boyd, the Tasmania Gold Mine assayer. He died of a brain fever the following year at Lisle Road (later renamed Nabowla), aged only 23. Carrying the spade is Captain Frederick Carrington, the well-known skipper of the Launceston passenger steamer SS Coogee. He was killed when the Coogee had a sensational collision with an Italian iron four-master in thick fog on the way from Low Head to Melbourne in December 1903. On the right is Ross Macartney, then battery manager at the Tasmania Mine and later battery manager at Mount Bischoff. His little brother William Macartney is at the back left. He was only about 17 here, and became a well-known and highly regarded metallurgist at the Tasmania mine later.

the Dallys. Zephaniah Williams was a famous ex-convict who became a major coal producer in the Devonport area. He seems to have owned a block of his own adjacent to James Dally, so one can understand his interest in the proceedings.

A few days later one of the holes had been sunk to 16 feet, but struck sandstone, and Job Dally went back to Launceston to buy blasting equipment. They persevered to 25ft, but then gave up shaft sinking and continued with a bore for another 80ft. We don't know how deep they got with the second shaft, but Government Geologist Twelvetrees reported that a second bore went to 225ft, so this was probably from the bottom of the second shaft. We now know that there is no coal there, so the attempt was valiant, but doomed from the outset.

David Dally's digging experience with his brothers led, soon after, to him being invited to sink a shaft at the top of the hill on the west side of Penquite Road, west of St Leonard's railway station – possibly in today's Benwerrin Crescent. The 108 acre property was then called Upper Verulam, and later Benwerrin. Mr Dally sank and timbered a shaft 120ft deep from a spot at the crest of the hill, not

far from the homestead, and found a foot-thick seam of reasonable quality at 80ft. Below that were various layers of fossilised leaves and wood that could have been mined for fuel if near the surface.[17]

Mr Dally's limited success did not stop exploration in that area though, and years later, at the beginning of 1886, the government was persuaded by a Mr William Garrard to use their new diamond drill rig to sink 570ft on his land at Carr Villa, but without success.[18]

David Dally also sank a 20ft shaft in the sandstone at Swift's Jetty (now Scotchman's Point) at Middle Arm, and it may have been him or his brother James who sank a bore at Port Lempriere (now Ilfraville, Beauty Point) reported by Twelvetrees years later.

Though the Dallys' efforts were fruitless, they appear to have inspired Francis Evans and Zephaniah Williams, for both continued the coal search themselves. Williams sank an 80 foot bore "west of Beauty Point" (or more likely on his own land at Beaconsfield) and found brown coal. The same material was found at 200ft depth on F Y Wilmore's block east of Middle Arm. In 1867 Mr Evans tried drilling on his property near Holwell, and sank three bores near the old sawmill tramway on the Hello Creek flat at the western base of Peaked Hill. This is on Craig Sheehan's "Ilfracombe Farm" property on Holwell Road today. One of the bores apparently struck some sort of "coaly matter".[19]

Like Louis Gatenby at Rosevale, Beaconsfield's Dallys don't give up easily, and a few years later David Dally tried again on the north side of West Arm.

He dug a short adit into the river bank above West Arm, opposite and northwest of Redbill Point. This was into a formation of yellow and grey sandstone, which around this time was being quarried to build a huge iron smelter at Redbill Point. The quarrymen had probably seen thin bands of coal in the vicinity. Unfortunately, David Dally found nothing beyond the bands already seen. About 50m west of this adit he sank a shaft to about 20ft, but only found degraded wood. He persevered, moving to another spot nearby and sinking a 75ft bore down through the sandstone, but still found nothing.[20]

In the end, the Dally brothers didn't go away empty-handed though. In their digging all over the Ilfracombe district from York Town to Exeter for coal, lime and whatever else they could find, they eventually found gold. In 1877 William Dally discovered the fabulous Tasmania Reef and he and his brothers became wealthy overnight. They certainly deserved it for the effort they'd put in.

Other Sites on the West Tamar

One of the things that kept people looking for Tamar coal was the frequent discovery of samples in the river. Dredging at the confluence of the North and South Esk often turned up good looking coal, and it was assumed that a bed must exist under Launceston. Large pieces were sometimes washed up on both sides of the river, and their appearance and size seemed to preclude the natural assumption that they had come off boats. According to the *Daily Telegraph* in 1903 "*Coal has often been picked up in huge pieces on the beach. Half a ton was picked up on the south-west shore of Swan Bay past David Medwin's Woodlawn Estate and found to be very good quality.*"[21]

Wherever indications appeared, someone would have a look. Two shafts were sunk at Mr Plummer's place in Rosevears according to Government Geologist Mr Twelvetrees - one in the 1840s and one in the 1880s. He saw these shafts and said the later one was 90ft deep and had "a good deal of shining lignite" in it, but he didn't give the exact position of either.

A small adit was apparently driven into an outcrop near Kayena, and a bore sunk by Mr Ralston at Rowella went to 200ft and found lignite similar to that at Beauty Point. Bores were put down along the Supply River in 1863, according to a local resident who was prospecting for gold in 1865.[22]

Late in the 1850s small discoveries of coal had been made between Rosevears and Blackwall, and in 1903 Mr Steel Traill at Exeter put together a little syndicate to search for coal on his 500 acre Glen Ard Mohr estate, concentrating on sinking a shaft at Blackwall near the river, but found nothing useful.

The most significant site of exploration on the West Tamar bank was Muddy Creek, on the north side of Legana. Here, a bed of clay exposed at low water was rich in prints of ancient leaves.[23]

In early 1886 a Mr Miller and party were prospecting for coal on Mr Murray's property, and sank and timbered a shaft between the West Tamar Road and the river, just below Muddy Creek. At 40ft, below the sandstone and mudstone, they found a low-grade lignite seam of 5ft, and at 92ft they brought up a petrified tree branch and put it on display at Mr Miller's soap factory in Margaret Street. They continued to 100ft depth, but found nothing of real interest other than fossils.[24]

Dilston

On the other side of the river, searchers concentrated around Dilston and Swan Bay.

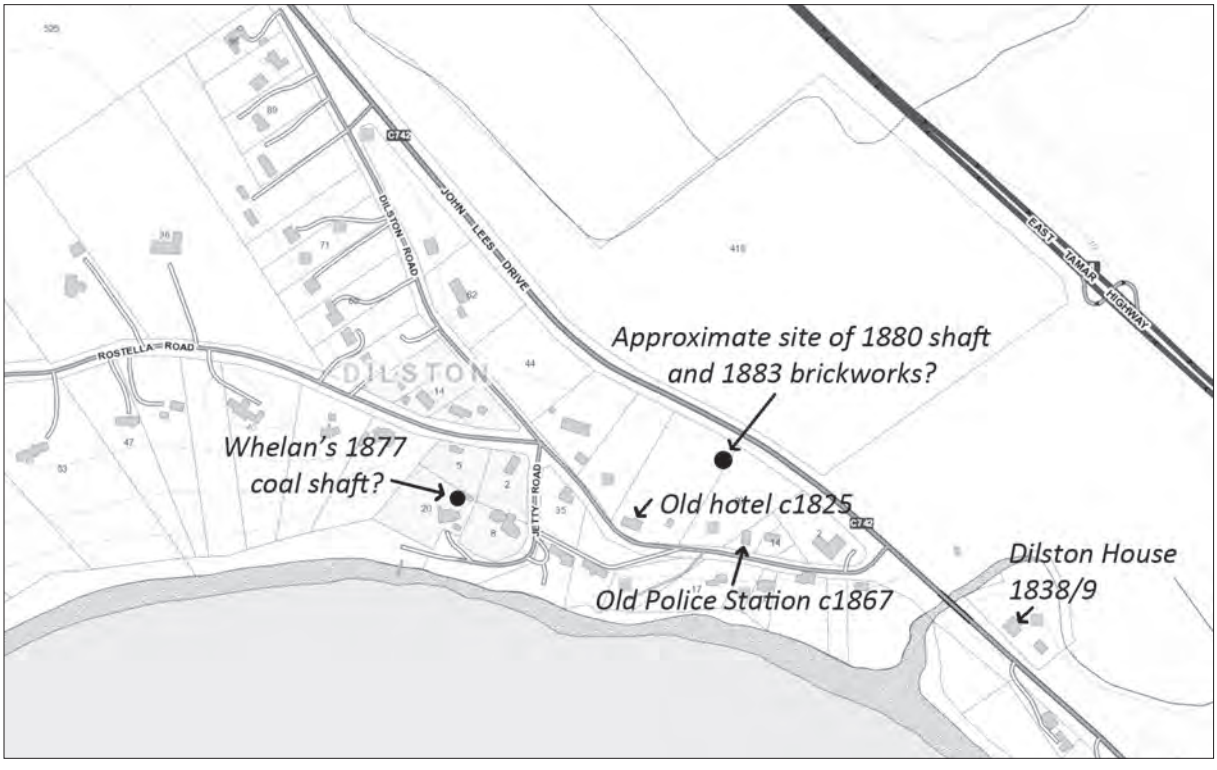
In June 1880 Michael Whelan at Dilston announced the discovery of high-grade coal on his property and sent a sample to the *Examiner*. His analysis was said to show 52% volatiles and 42% carbon, a very high class of coal indeed. A prospector told the *Examiner* he'd sunk an exploration shaft on Whelan's place, and went through 27ft of clay before coming to a 4ft seam of the coal from 35 to 39ft, after which the hole was terminated at 56ft when the ground became too hard. He was probably in sandstone.

Mr Whelan sent a sample of the clay, which looked rather good, to Mr McHugh at Sandhill for examination. McHugh Brothers were well-known potters, and pronounced it eminently suitable for the manufacture of fire bricks. And if this wasn't enough, Mr Whelan also had iron ore on the property, which he claimed assayed at 83% metal oxide and 58% pure iron. A very good ore.[25]

The *Mercury* was a little more circumspect, and had a good memory. They pointed out that Mr Whelan had actually announced this discovery in 1877, three years before, when he found a seam of coal outcropping at the foot of a low cliff by the water's edge. A shaft was then sunk on the hill above, which passed through several layers of excellent fireclay overlying the seam, and the first assay of the coal made showed a great deal of earthy matter, meaning ash. Mr Whelan was unsuccessful in raising capital to work either the clay or coal and dropped the matter. From the fact that he had announced it again it had to be assumed that he had sunk a new shaft and found better material, for what he has announced was equal to the best Newcastle black coal! If so, it was more valuable than a gold mine.[26]

The 42 year old Mr Whelan, from Tipperary, was a rather interesting character. He was the new owner of the East Tamar Hotel at Dilston, also known colloquially as the Nine Mile House. It was a good-sized stone building, built by a Captain George Coulson around 1825.[27]

The previous owner of the public house had been Charles Edwards, who obtained a licence in 1869, only to lose it in 1870 due bad character and the utter unsuitability of the house. In 1877 Michael Whelan reapplied. Though it wasn't specifically stated, he must have extensively upgraded the establishment, and he was a former policeman with references from his Chief District Constable and from one of the



Dilston, East Tamar

Many of Dilston's old features still exist today. The Friends' Arms Hotel building is one of the oldest houses surviving on the Tamar, dating from about 1825. The c1867 police station has been renovated into a lovely home, and the 1838 Dilston House is still there too. The creek next door to Dilston House is not natural—it was excavated by convicts in the 1830s. Whelan's first coal shaft is still visible in a backyard, though recently filled in. Only the brickworks pit, shaft and works are no longer visible.

magistrates sitting on the licencing decision. The latter was Gold Commissioner Bernard Shaw, cousin of the famous playwright George Bernard Shaw, who knew Whelan from his time as a goldfields bobby. Whelan could hardly fail, and he didn't.

One of the other magistrates at the licencing court was a neighbour of Whelan's, Mr W K Hawkes. The following year Hawkes tried to block renewal of the licence, accusing Whelan of "tampering with people's servants". It sounded salacious, but was really just an argument over some fence posts, and it was rather improper and inappropriate for Hawkes to bring it up. Nor did it affect the renewal of Whelan's licence.

In April 1879, fire destroyed the outbuildings of the hotel, including the detached kitchen, barn and toilet. As Whelan was away at the time, it did seem that it had been deliberately lit. Whelan didn't bother renewing the licence that year, but reapplied in February 1880 after renovations. This time he was rejected, and it was his old adversary Hawkes who blocked it, saying, probably incorrectly, that traffic had declined and the facility wasn't needed anymore.

Whelan appealed the rejection, and was supported by the Hon Adye Douglas, then Mayor and later Premier, who said that without the East Tamar at Dilston, there was no hotel between town and Lefroy. Magistrate Hawkes tried to block it again, but Whelan's appeal was upheld and the pub reopened and proved itself a boon to travellers.

A few weeks after reopening, Whelan nearly got shut down again. He was short of money, and had opened without actually paying for the liquor licence. His wife Sarah was arrested on a sly grog charge in June 1880, and told the court that she understood her husband had a licence. Whelan freely admitted that both he and his wife had been selling spirits as soon as he was granted a licence, and if the court would give him another week it would be paid for! He got a £20 fine on top of the licence fee, so he was then even shorter of cash.[28]

At the time of the coal announcement, Mr Whelan had paid his licence fee and his hotel was conveniently located to service any business arising out of the clay and coal exploration and exploitation effort.

Not having a shilling to develop the project himself, he advertised for someone to make an offer to him, saying that he would be very accommodating. The ad was prominent, with a headline "*Discovery of Coal at Dilston*" and said he was "*prepared to treat with any company on liberal terms for the purchase or rental of the coal, fireclay, and iron seams on his property at Dilston. Full particulars given on application.*"[29]

There was no interest for some time, but finally, two years later, a St John Street mining agent named William Garrard agreed to take a 21 year lease over the property. This was same William Garrard who would have the government diamond drill rig on his property at Carr Villa, looking for coal a few years later.

The East Tamar Brick Making Association

A prospectus was released in November 1882 for the East Tamar Brick Making Association. It advertised a 21 year lease over 200 acres with a deep water frontage at Dilston, "where there exists an enormous bank of first-class clay", and noted that there was a severe shortage of bricks in Launceston, with many of poor quality.[30]

The new company would be formed in 80 shares of £25 each, with half issued to the public to raise £1000. The money would pay for the construction of permanent kilns and buildings, and purchase an 8hp engine, pug-mills, barge, trucks etc. Output would be around 50,000 ordinary and ornamental bricks a week, realising a profit of £59 10s a week. Tests done at Mt Bischoff proved the quality, and showed that a first-class fire brick could also be made if wished. The *Examiner*, who ran the ad, was supportive, saying "*Altogether the scheme seems feasible if it can be worked out according to the prospectus, but it must always be remembered that there is a difference between paper and practice.*"

The prospectus must have been a success, as Mr Garrard was advertising for brickmakers in March 1883. In April he advertised for builders to erect two labourers' cottages and a 60ft by 20ft shed, and in August for brick moulders. Somewhere along the way the name got changed to the East Tamar Brick and Pottery Company.

There was a hiccup in autumn 1884 when the brickworks shut, with Mr Garrard advertising the sale of the lease, buildings, plant, self-acting tramway and about 150,000 first class bricks close to deep water.[31] This proved a temporary setback though, with Campbell's Pottery buying the works and reopening in spring the same year.[32]

The Whelans were struggling though. Michael Whelan was prosecuted for being drunk on the hotel premises in May 1882, and his licence was not renewed for 1883. He put in a manager named Richard Barker and reopened at the beginning of 1884, only to close a few months later and then be prosecuted

for non-payment of rates. He found someone else named Richard Phillips to be manager from August 1884, but Phillips only lasted six months and the hotel closed again.

Dilston was a popular destination for river tour boats in those days, and visitors were very interested in the brickworks. A company off the *Heather Belle* in 1884 related how they met Michael Whelan, and found him to be a genial character who "*kindly let us know of his unblemished character and pointed out where he sunk some 56ft and obtained good coal. He is sorry this valuable deposit lies idle, but there is not enough energy in Launceston to mine it!*"[33]

The site of the shaft Whelan pointed out was his second shaft, sunk in 1880, which was presumably adjacent to the brickworks that were operating at the time of the visit. His 1877 shaft, brought back to memory by the *Mercury*, must be the one that can still be seen in a backyard 150m west of the hotel, at the end of today's Jetty Road.

The brickworks site lease had now been reduced to just the 18 acres needed for the operation. Despite this, Campbell's Pottery seemed unable to make a go of it and put the business back on the market in October 1885.[34]

Curiously, the failure of the brickworks for a second time may have been caused, in part, by the post office.

The Editor of the *Daily Telegraph* reported on March 17th 1885 that: "*I have a letter before me that has 13 distinct postal stamps. It was posted in Bangor and addressed to the Manager, Brick and Tile Manufactory, George Town Road, Dilston. It has gone via Frankford, Bracknell, Tunnack, Sheffield, Hobart and Launceston! There is a post office at Dilston and mail goes there twice a week on the George Town route. Dilston estate was a mail dropoff point from the early days. The proprietor of the Dilston Brick and Tile Works is a man of intelligence. The letter has taken 105 days to get to him, and contained an order for 100,000 bricks that he has now lost. He should be entitled to compensation.*"

The *Daily Telegraph* didn't say who the order for 100,000 bricks was from, but everyone would have known that it was from the Bangor Slate Quarry Association, now owned by the fabulously wealthy Joseph Clarke. He was spending vast sums of money, and the mine needed bricks to build 50 cottages for all the slate workers and their families they were bringing in from Wales and Cornwall. When no answer to the letter was received, the mine bought their 100,000 bricks elsewhere, and then another 100,000 as well. Sales of that magnitude could have given Dilston Brickworks months of profitable work.

While this was going on, Mr Whelan got a man named Douglas Mackintosh to take over the Inn on a lease, and with it being in good condition and well-furnished he had no problem in gaining a licence and reopening. In future, however, it would operate as the Picnic Hotel.[35]

Like Michael Whelan, Douglas Mackintosh was quite a character.

He was well-connected, having been on the board of Austral Gold at Beaconsfield, for example, with Steel Traill, William Aikenhead and others. He'd also been a publican in town before, and now that he was a publican again, he seems to have decided to capitalise on his notoriety to stand for election for the district of Selby the following year.

Unfortunately he was promptly arrested for using insulting language to Sarah Whelan. He got off the charge because the charge sheet said the offence was committed on the public road, when it was actually on private property, but didn't win the election anyway. He was soon in trouble again, and told

the court that his wife was the boss. She ran the hotel and he was only her barman. He said she didn't even pay him, and he only ever had money when she gave him a few shillings! Needless to say, he lost his licence.

Whelan tried desperately to sell or lease the property. It was described as the "iconic Picnic Hotel", with eight rooms, kitchen, outbuildings, stables and 60 acres of first-class land, nearly all under cultivation and a quarter-mile of river frontage and magnificent views. The price was £1080, but this soon dropped to £950, then £900, then £800. Alternatively he would lease it for £75 a year, which he eventually dropped to £60. It really needed a decent new jetty so that the tourist trade could be developed, and though there was a proposal from G E Harrap to build one in 1886, and tenders called, it doesn't seem to have eventuated.[36]

The Dilston Brick, Tile and Coal Works

The hotel wasn't sold until 1889, when a rather flamboyant gentleman named Henry Law came along.

Henry Law was a recent arrival from Newcastle, where he'd been a minority shareholder in a coal mine. He seemed to believe this was sufficient experience to become a coal baron in Tasmania.

Needing development capital, he popped in to the Bank of Van Diemen's Land in Launceston to get it. He explained to them that he was an expert on coal, but they weren't as impressed as he expected and churlishly demanded security, which he didn't have.

Undeterred, and apparently without shame, he sauntered off to Hobart and walked brazenly into the Bank of Van Diemen's Land office there. Apparently unaware that their Launceston branch had already rejected him, and impressed by his claimed credentials, the Hobart branch gave him a large advance.

With somebody else's money to spend, Mr Law seemed to go a little mad, spending it lavishly across the north and northwest, in a do or die determination to realise his coal baron dreams. He took offices in the Bank of Australasia Chambers in St John St, and from there built an empire, focussing on Dilston, Railton and Spreyton.

Mr Law's enthusiasm for Dilston went far beyond his interest in its coal potential, and he bought property with gay abandon. Dilstonians, such as Michael Whelan, reasoned that they might only ever get one Henry Law in their lifetime and took full advantage, selling everything. Mr Law soon owned everything of substance including the hotel, police station and Dilston House. Whether the brickworks were then owned by Whelan or Campbell's Pottery is unknown, but he bought that too.

In January 1890 Law advertised for five shaft sinkers at Dilston, but ended up contracting James Nixon and George Kerrison to do the job at £3 15s a foot. Whether this was a new shaft or a widening and deepening of Michael Whelan's shaft is unknown. Two months later there were 70 men working there.[37]

A petition was sent around Dilston, asking that a telegraph office be put into the hotel for the convenience of the company and locals, and most of the landowners signed it. They pointed out that the telegraph wire to George Town passed only 5ft from the hotel door, and so the cost of the service would be small, and would save the two days it took for a letter to go to town and back. Despite pressure from William Sidebottom MHA, the Treasurer, Mr Bird, rejected the request, saying that the Dilston

brick and coal industry was not yet established, which was true. The government did, however, pay for the bridge to be redecked, replacing the rotten old planks that had become dangerous.[38]

The shaft sinking continued over winter, until the influx of water in July forced a suspension of operations. Before long, pumping machinery was acquired and operations resumed. With no saleable coal found, the focus shifted to brick making, and by the end of August extensive machinery had been erected and brickmaking was in full swing. Three blocks of land near the wharf in Launceston were also purchased, presumably to receive bricks.[39, 40]

Mr Law never stopped. He advertised for brick moulders and labourers early in summer, rebuilt the jetty, and in the first few days of 1891 had the *Beagle* loaded with Dilston bricks for export. His brickworks manager was a Mr Bayliss, who believed it to be the first export of bricks from Tasmania. Mr Law was exporting coal from Devonport too. He had leases from Deloraine to Devonport and was producing 6,000 tons a month and increasing. On top of all this, in 1891 he opened the Blythe River Iron mine.[41]

More machinery, believed to be for coal production, went out to Dilston at the end of January 1891, and the curious public were coming up on river steamers such as the *Empress of India* to view the works.

April 1891 saw an accident in the shaft, though fortunately not serious. One of the men was being pulled up the shaft by the windlass, with his foot in a bucket (as there were no cages), when he was struck by another bucket descending. The Mines Inspector came out to investigate and decided that there should have been a strap to securely fasten people being raised or lowered in the shaft. He charged the mine manager, John Price, with negligence. When the matter came to court the charge was withdrawn, as a number of miners from Lefroy swore that such a system was impractical and they would refuse to use it.[42]

Things started to go seriously awry when the shaft contractors, James Nixon and George Kerrison sued for £100 damages. They'd been idle for nine weeks when the mine flooded. They'd been raising 450 gallons of water a day with the buckets supplied, but couldn't keep up and needed 50 gallon buckets or pumps. Edward Kerrison had been working for his brother, and corroborated. Henry Law did not appear, and the court found for the plaintiffs. Then Joshua Higgs sued for unpaid surveys.[43]

Mr Law was seriously overextended, and his profligate spending and unfounded belief that he would find coal almost wherever he sank, finally caught up with him. In November 1891 he went bust.

This put the Bank of Van Diemen's Land in a tight spot. Not only had their Hobart branch foolishly staked Law initially but, realising their error, they had continued to provide smaller advances in the fear he would go bust and they would lose it all. When his coal dreams failed they were exposed to the tune of £48,000 on virtually no security. It was the last straw for a bank that already had problems, and the bank failed in January 1892. Mr Law simply walked away. He left the mess he'd created behind, returned to Newcastle and became an auditor!

Only a year later, Dilston's past as a coal and brick centre had already passed into mythology. The Government Geologist, Alex Montgomery, said in a lecture to the Natural Science Association that Mr Law had found considerable quantities of brown coal, but that seems very unlikely. More probable is that there was no coal at all found in the main shaft at the brickworks. Where Whelan's coal sample came from must now be viewed with suspicion.

Anne Rumpff in 1891 aged 53. She was a daughter of James Morrison Stephenson and was left a widow when Justus Rumpff suicided a year after liquidating the Dilston brickworks. Image courtesy TAHO.

The brickworks, bricks, machinery and buildings were seized by the Receiver, Mr Justus Rumpff, and after several attempts at sale were put up for auction in April 1893. The auctioneer chartered a river steamer to bring up intending bidders. The properties appear to have been subdivided by Mr Rumpff to maximum their value when sold, and the brickyard as presented for sale was on 14 acres with 3 cottages and river frontage, plus 30,000 bricks (later reassessed as 60,000).[44]

The Colliery manager, Mr Price, stood for parliament in 1893 in the seat of South Launceston. He'd come down from the Newcastle coal mines to take up the position, and the *Examiner* said that the fact that he'd found nothing didn't reflect on him. This was true, but the association with Henry Law would not have been good, and he lost regardless of any merit.[45]

Swan Bay

Close by Dilston was Swan Bay, and it attracted the attention of coal seekers largely because of the interest on the opposite side of the Tamar. Men like Steel Traill at Exeter reasoned that any seam of coal on their side of the river would likely extend to the other side.

Their expectation was reinforced by the common finding of coal pieces on the river bank. Half a ton, for example, was picked up on the south-west shore of Swan Bay and found to be very good quality. Successive Government Geologists cautioned that it could well have been brought in by ships. This was quite true, and though no-one remembered at the time, an example was the barque *Rialto* running aground in Swan Bay back in 1869, and tossing coal overboard to lighten herself.[46]

In early 1903 there was quite a bit of activity in the area. Mr Medwin was sinking a shaft on the foreshore of his 250 acre estate, and got to 24ft before suspending while he obtained better equipment. He'd found much fossiliferous coaly material. While waiting on materials, he and Steel Traill commenced another shaft and took it down to 20ft. On the Rocky Forest Estate west of Saltwater Creek a Launceston syndicate under Messrs J Will and J Brooks, both experienced miners, were sinking a third shaft in the area.[47]

David Medwin had come to Swan Bay from Circular Head around 1893. His property was where the famous prospector Philosopher Smith, discoverer of Mt Bischoff, had been born in a little cottage about 30 metres from the high-water line. Perhaps Mr Medwin saw this as a good omen for his coal search, for his shaft was sunk in that very place. He called his property Woodlawn Estate and planted 14 acres of apples and pears. With his shipments of apples to the mainland beginning around 1901, he and his family were probably the first commercial export orchardists on the Tamar.[48]

Government Geologist William Twelvetrees came to have a look in the first week of May 1903.

Mr Twelvetrees found three shafts in progress. All were close to the river. The first was on Mr A E Evershed's property at Roberts' landing north of Swan Bay. It was just above the high-water mark and down to 40ft. The second was just inside the south boundary of Mr Coward's farm, and the third a mile south on David Medwin's property being sunk by him and Mr Traill. The first was showing much stone, but the latter two were in a coaly clay. There was the fourth shaft next to Mr Coward's house sunk to 24ft, but it had found only the same coaly clay. Mr Coward's new shaft was now 30ft deep and he'd brought up globules of resin similar to those found previously at Evandale.[49]

There were further old shafts and trenches south of Evershed, on Mr Taylor's land between Little Saltwater Creek and Swan Bay Creek, but the ground had produced nothing but stones.

Mr Twelvetrees cautioned against expecting coal in any of these shafts. He said that the mined material was useless as clay because of the coaly matter in it, and would never produce coal because it was of too recent an origin. Furthermore, shaft sinking and hand boring would not get to sufficient depth to properly test the area. It required diamond drilling. If they wished to persist in their efforts, he suggested three sites near to where they were already working.

Pursuant to Mr Twelvetree's recommendations, Steel Traill and David Medwin extracted a promise from the Mines Department to bring one of their diamond drills up in October 1903, and try at the position suggested on Saltwater Creek on Mr Coward's land. It seems that the drill never turned up though, and the partners tried hand boring instead. They persevered until stopped by sandstone at 150ft, having found nothing. Mr Medwin went back to orcharding.[50]

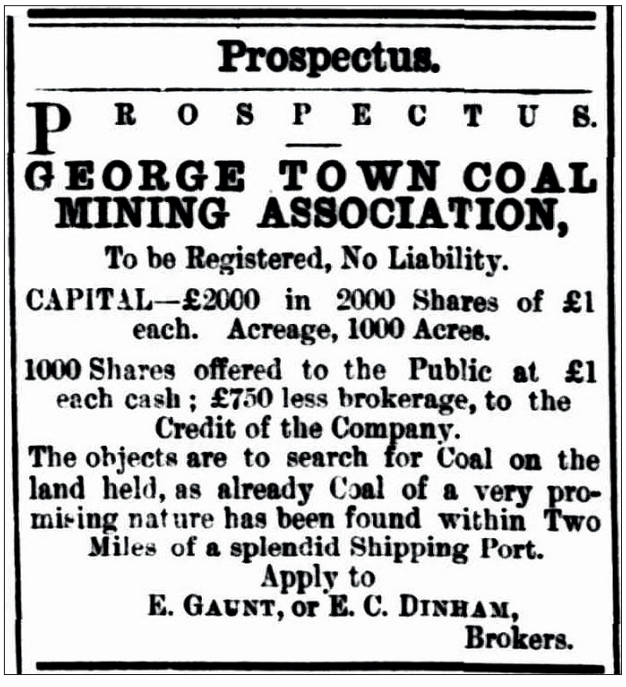
Steel Traill as a Beaconsfield Councillor in 1908. After searching for coal on his own land at Exeter, he reasoned that any seams might go under the river and be found on the east side. Mr Traill was also a gold miner and a pioneering orchardist, who helped found and run the Tamar Farmers' and Fruitgrowers' Association. Image courtesy West Tamar Council.

The George Town Coal Mining Association

There was a stir in George Town in November 1888, when it was announced that Mr J H Hackett had discovered coal next to Mr William Lawton's Musk Vale Estate at the back of Mount George.[51, 52]

It was only a thin seam, but the quality was good, and Mr Hackett and his associates pegged out 400 acres of claims and applied for a 318 acre reward claim. An adjoining section of 300 acres was also taken up, but whether this was by Mr Hackett's group or a competitor is not clear.

Alfred Evershed of Swan Bay in 1891. Image courtesy TAHO.



Prospectus.

PROSPECTUS.

GEORGE TOWN COAL MINING ASSOCIATION,

To be Registered, No Liability.

CAPITAL—£2000 in 2000 Shares of £1 each. Acreage, 1000 Acres.

1000 Shares offered to the Public at £1 each cash; £750 less brokerage, to the Credit of the Company.

The objects are to search for Coal on the land held, as already Coal of a very promising nature has been found within Two Miles of a splendid Shipping Port.

Apply to
E. GAUNT, or E. C. DINHAM,
Brokers.

The Daily Telegraph 6/12/1888 p1

Money was needed to fund drilling, and a prospectus released in the first week of December for the George Town Coal Mining Association. Capital would be £2000 in one pound shares, and 1000 of these shares were offered to the public for cash. Interested parties could see specimens of the coal at Mr Gaunt's office in St John Street in Launceston.[53]

Shaft sinking for the new Association was soon begun under the direction of a Mr Perks. The spot they chose appears to have been a few metres above where a thin seam was visible in a creek on the property, between two basalt hills. They sank the shaft 19ft and then from the bottom sank a hand bore for another 133ft. In February 1889, at 109ft down the bore, they had a shock.[54]

News spread like wildfire. Instead of finding coal, the George Town Coal Mining Association had struck gold! From 128ft depth, they had a 2ft 6inch reef, and it looked rich. A reward claim of 20 acres was immediately pegged for the Association, and blocks east and west of the bore hole grabbed and put in the names of individual members.

It was now necessary to raise money for sinking a deep shaft to get to the gold, and at a meeting of the George Town Coal Mining Association it was decided to wind up the organisation and form a new gold company registered under the No Liability Act with £246 capital in one pound shares. It was thought this would be enough to test the find. A prospecting area of 50 acres was secured.[55]

From the distant perspective of Launceston, the *Examiner* was amused at the excitement around the Tamar. The Coal Mining Association had been expected to make George Town a second Newcastle, it said cheekily, but was now being reformed as the George Town Gold Prospecting Association. The *Daily Telegraph* reported that jumpers had already pegged 10 acres inside Association's area.[56]

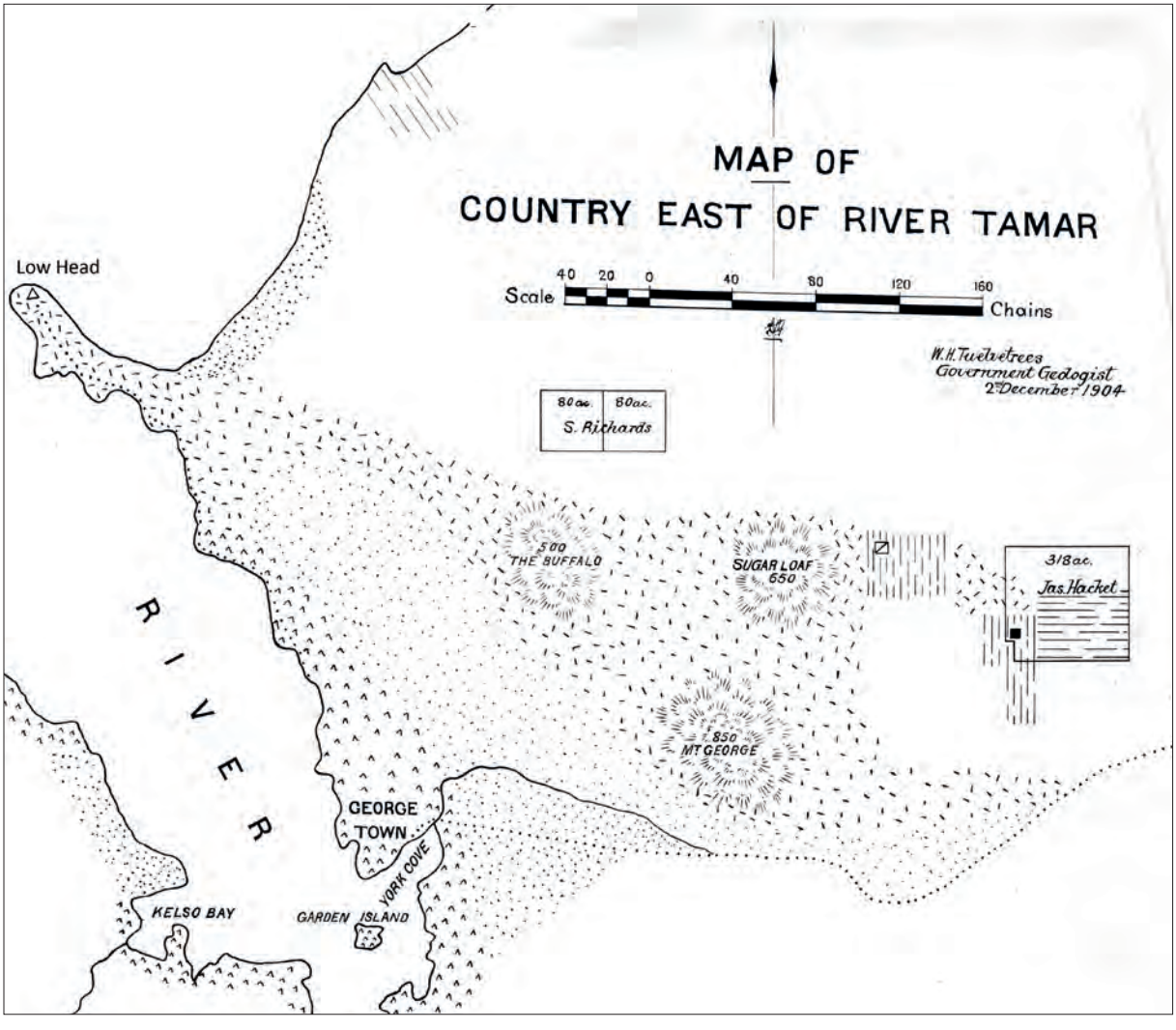
Money was quickly raised, and those lucky enough to get the one pound shares were immediately able to take a 'stag profit' and sell them at three pounds! A new shaft was sunk adjacent to the coal prospecting hole, with the intention of driving from one to the other at depth. This would both prospect the ground, and provide air circulation at depth. They were soon down 55ft. Meanwhile, the coal reward claim of 318 acres was granted, but the group had quite lost interest in coal.[57]

By the end of May 1889 the new shaft had got to 110ft, but struck water. At first they were able to overcome the flow by baling with buckets, and said they would open out at this level and drive for the borehole where the gold was found. Their stone was apparently similar to Cabbage Tree stone from Beaconsfield, and had a lot of pyrite.[58]

Before long the water had beaten them again, and they were forced out. They would need pumping machinery, which could double as a winder, to go on.

Then came extraordinary news from the well-known assayer Mr Jenkin. Their pyrite sample from the borehole had returned an amazing assay of 720 ounces to the ton! A shareholders' meeting was held in the first week of July in George Town to formally report and decided on the way forward.[59]

Mr W G Barker took the chair and Mr A S Widdowson was elected the new secretary. Mr Barker said that the company had been forced to suspend operations due to the water, and around £350 had been expended. They would need machinery, and had to raise money to get it. There was no argument from the shareholders. After the incredible assay, Mr Barker was preaching to the converted. It was decided that a new issue of 246 one pound shares (doubling the number on issue) would be offered to existing shareholders, and then if necessary to the public at 30 shillings each, to raise £369.[60]



1904 Mines Department map by William Twelvetrees showing the location of James Hackett's 318 acre reward claim. His shafts are marked in the lower left corner of the claim. Mr Lawton's Musk Vale farm was along the southern border of the claim, and Lawrence Quin's farm south of Musk Vale. Twelvetrees has marked another shaft a mile to the northwest and said it was the gold shaft, but this cannot be correct, as the gold was struck in the coal workings. Twelvetrees may have been looking at later coal workings on Lawton's place, thinking they were Hackett's. Map from MRT.

The next month tenders for sinking the shaft further, and for pumping and winding machinery, were advertised and returned, and James Barrett was awarded the sinking contract. It was decided that he would dig down another 20ft to get to the same level as the gold, and drive to the borehole.

What happened then is a mystery. Not a word was heard from this company ever again. Did James Barrett complete his contract? It seems likely that he did. More than a decade later the Government Geologist William Twelvetrees visited the site and said in passing that a George Town group had followed "a false scent of gold". It is odd, however. The assay that returned 720oz to the ton was done independently, and pyrite does often have high gold values. Was the problem that there was very little pyrite, and the quartz around it was barren? Who knows? The shaft was abandoned and it seems no-one has ever followed up on the amazing find.[61]

The area was not forgotten entirely though. Six months later another seam of coal was struck on William Lawton's property, next to the 318 acre reward claim (No. 1880-87M) still held by Messrs Hackett, Dinham, Gaunt and Huston and a mile or so east of the gold shaft. This stimulated Hackett and party to overcome their disappointment at the failure to confirm the gold find, and return to coal exploration.[62]

A sample of the coal from Lawton's was sent to Sydney and returned an analysis of 38% volatiles and 46% carbon, with only 11% water and 5% ash. This was a good coal and it was said that mainland investors were interested. Another syndicate, perhaps led by Messrs Gaunt and Evans, secured 320 acres on the line of the seam and began boring operations.[63]

A shaft was sunk on Lawton's freehold and struck two seams of good coal, but they were only narrow. One was 6 inches, found at 30ft, and the other 15 inches, found at 35ft. They hoped to persuade the government to send out the diamond drill rig, but it didn't happen.[64]

All was then quiet for a number of years. Various people visited the site, hand boring was done, and it is likely that George Grubb from Lefroy, the son-in-law of Felix McCarron, sank a shaft in 1894. In late 1904 the Government Geologist William Twelvetrees visited and wrote a report. He noted that the gold shaft was over the hill and a mile to the west of where he was.[65]

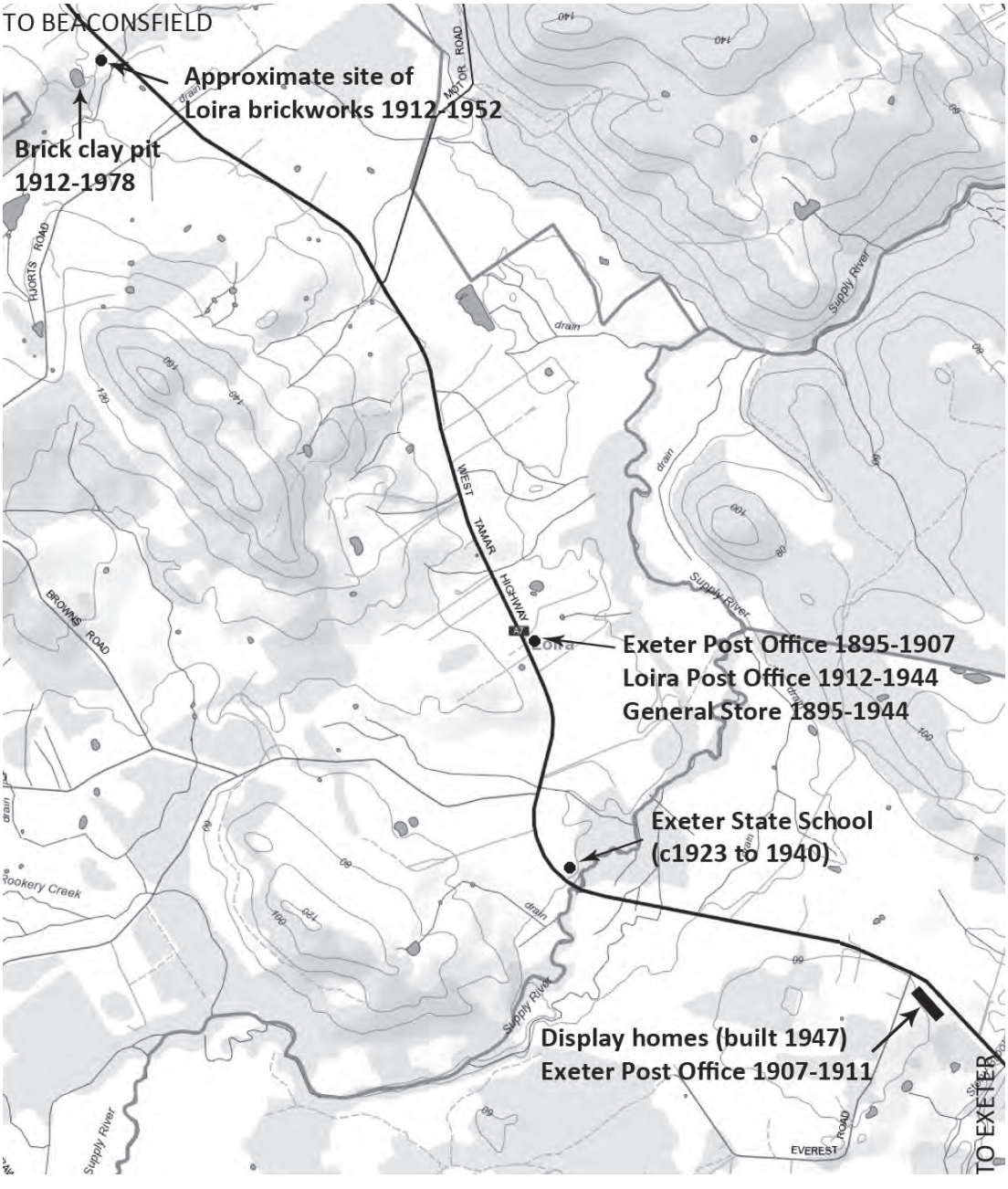
After the war a new shaft was sunk to 45ft. It found two seams of good quality coal, one of 8 inches, and the other of 6 inches, but then hit water and was flooded out. The new Government Geologist Mr Loftus Hills visited in 1920 and put in 8 pegs at positions that he thought warranted hand boring. He thought that the water could be useful to nearby towns for domestic purposes.

In December 1935 a government drilling program was finally undertaken. Six holes from 85ft to 215ft in depth were sunk, but sadly, no coal was found. Another government report in 1949 (Hughes) noted that the location of the drilling was below the level of the previously found narrow coal seams, and thus proved that no larger seams existed at depth. The 1949 report also decided that the size of any potential field was much smaller than earlier investigations had thought.

The area was said to have been tested again by Avoca Transport Pty Ltd in 1981 with auger holes and costeans and found nothing significant. This was not quite correct though, as Avoca only tested the coastal plain to the north.

Notes & References

1. Cornwall Chronicle 28/11/1840 p2
2. Hobart Town Courier 24/5/1851 p2. The reference to a slate quarry east of George Town is interesting. Could it be the first recorded reference to the magnificent Back Creek slate deposit?
3. Daily Telegraph 10/4/1915 p4. Roseburn Road was then called Selbourne Road. The mine is on Loatta farm, owned by Tim Eddington, but is no longer visible as the adit and shaft have collapsed and just look like pasture.
4. Daily Telegraph 9/6/1917 p6. The newspapers mistakenly said the sample went to Sydney.
5. MRT Annual Report 1919 p32
6. Daily Telegraph 4/12/1917 p3 & 22/2/1919 p5
7. Daily Telegraph 4/12/1917 p4, Mines Department Annual Report 1917
8. Daily Telegraph 14/4/1919 p3 & 10/7/1919 p3
9. Examiner 9/10/1919 p9, MRT Annual Report 1919 p32
10. Daily Telegraph 30/3/1920 p8
11. Mercury 15/6/1920 p4, MRT Annual Report 1921
12. Daily Telegraph 29/4/1920 p4
13. Daily Telegraph 6/5/1920 p2
14. Examiner 15/4/1921 p4
15. Examiner 2/3/1922 p2, Daily Telegraph 3/3/1922 p8
16. Daily Telegraph 21/9/1921 p6
17. The Tasmanian 29/8/1885 p20
18. Examiner 19/1/1886 p3
19. *On Cement Minerals at West Arm* Twelvetrees 1914 MRT
20. Twelvetrees 1903 Beac & Salis
21. Examiner 27/8/1892 p4, Lecture by Alex Montgomery to Natural Science Association
22. Examiner 5/1/1865 p3 Letter from TH
23. Examiner 27/8/1892 p4, Lecture by Alex Montgomery to Natural Science Association
24. Examiner 19/1/1886 p3, Ex 21/4/1888 p3, *Brown Coal and Lignite in Tasmania* F Blake 1940 MRT
25. Examiner 2/7/1880 p2 & 19/7/1880 p2
26. Mercury 6/7/1880 p3
27. Cornwall Chronicle 25/1/1878 p1
28. Examiner 15/6/1880 p3
29. Cornwall Chronicle 5/7/1880 p1
30. Examiner 20/11/1882 p3
31. Daily Telegraph 29/3/1884 p1
32. Daily Telegraph 28/3/1885 p3
33. Examiner 3/1/1884 p2. The location of this 1880 shaft pointed out by Whelan, and hence the brickworks, is uncertain. It was later said by Government Geologist William Twelvetrees that the second shaft was about 200 yards east of the original shaft, but we can't even be sure which property they were on – the original hotel 36 acre block or the Dilston House 58 acre block adjacent.
34. Daily Telegraph 15/10/1885 p1
35. Examiner 9/10/1885 p1, The Tasmanian 6/2/1886 p22
36. Daily Telegraph 18/10/1887 p4
37. Daily Telegraph 14/1/1890 p1
38. The Colonist 29/3/1890 p21, Daily Telegraph 26/4/1890 p5
39. Examiner 19/3/1890 p2
40. Daily Telegraph 1/7/1890 p3, The Tasmanian 30/8/1890 p25
41. Examiner 19/12/1890 p1, Daily Telegraph 3/1/1891 p4, Examiner 23/2/1912 p3
42. Daily Telegraph 21/4/1891 p2, MRT Annual Report 1891
43. Daily Telegraph 2/9/1891 p3
44. Examiner 4/3/1893 p2 & 13/4/1893 p2
45. Examiner 13/12/1893 p3
46. Cornwall Chronicle 13/11/1869 p8
47. Daily Telegraph 7/4/1903 p4 & 16/4/1903 p4
48. Daily Telegraph 8/4/1903 p5
49. Daily Telegraph 7/7/1903 p4
50. Daily Telegraph 26/3/1909 p3, Ex 6/10/1903 p2
51. Examiner 29/11/1888 p3
52. It was often said that the diggings were on or reached through Mr McCarron's property. This was confusing, as other references talk of William Lawton and Musk Vale Estate. It appears that Felix McCarron was Mr Lawton's overseer at Musk Vale and not a property owner. Mr McCarron had a rather rough and sad life. He was orphaned young and raised by Mr Lawton, to whom he became a right-hand man. He was just getting established and raising a family when his wife Ellen and baby were killed in 1874 in the Little Nell disaster – the vessel that blew up in the Tamar killing all aboard. He was left with five young children. He remarried in 1876 and was getting ahead again, with four more children, but then contracted cancer, and after a long slow deterioration died at Musk Vale in 1889 aged just 47. Daily Telegraph & Examiner 25/11/1889 p2
53. Daily Telegraph 6/12/1888 p3
54. Daily Telegraph 15/2/1889 p3, Ex 20/2/1889 p3
55. Daily Telegraph 20/2/1889 p3
56. Examiner 2/3/1889 p6
57. Daily Telegraph 3/5/1889 p3
58. Daily Telegraph 1/6/1889 p3
59. Examiner 18/6/1889 p3
60. Daily Telegraph 5/7/1889 p3
61. Examiner 24/12/1904 p6
62. Examiner 1/4/1890 p3 & 4/4/1890 p3
63. Examiner 28/5/1890 p3
64. Daily Telegraph 30/4/1890 p3
65. Examiner 24/12/1904 p6



Loira is between Exeter and Beaconsfield on the West Tamar Highway. It was never a town, but was a substantial orcharding district in the first half of the 20th Century. The brickworks were on the main road, but exactly where is unknown. They would have been very close to the clay pit, which survives today masquerading as a dam.

The Fairy Clay Pit of Loira

Superb brick clay was found around 1912 at Loira, on the West Tamar Highway north of Exeter, by Beaconsfield brickmaker Jimmy Edwards.

Jimmy's father Charles had been a hand-made brickmaker employed at John Machen's brickworks in Kings Meadows, which opened in 1885. With its excellent clay deposits, Kings Meadows was quite a centre of brick and pipe making in those days, and the Cosgroves had a new factory next door to John Machen.[1]

The evidence suggests that Mr Machen opened a subsidiary plant in Beaconsfield in the early 1890s to serve the Tasmania mine and meet the local demand for bricks for domestic and commercial chimneys. Many home chimneys in Beaconsfield were still timber and very prone to catching fire. Somebody from Machen's needed to move to Beaconsfield to make the bricks, and Charlie Edwards and family volunteered.

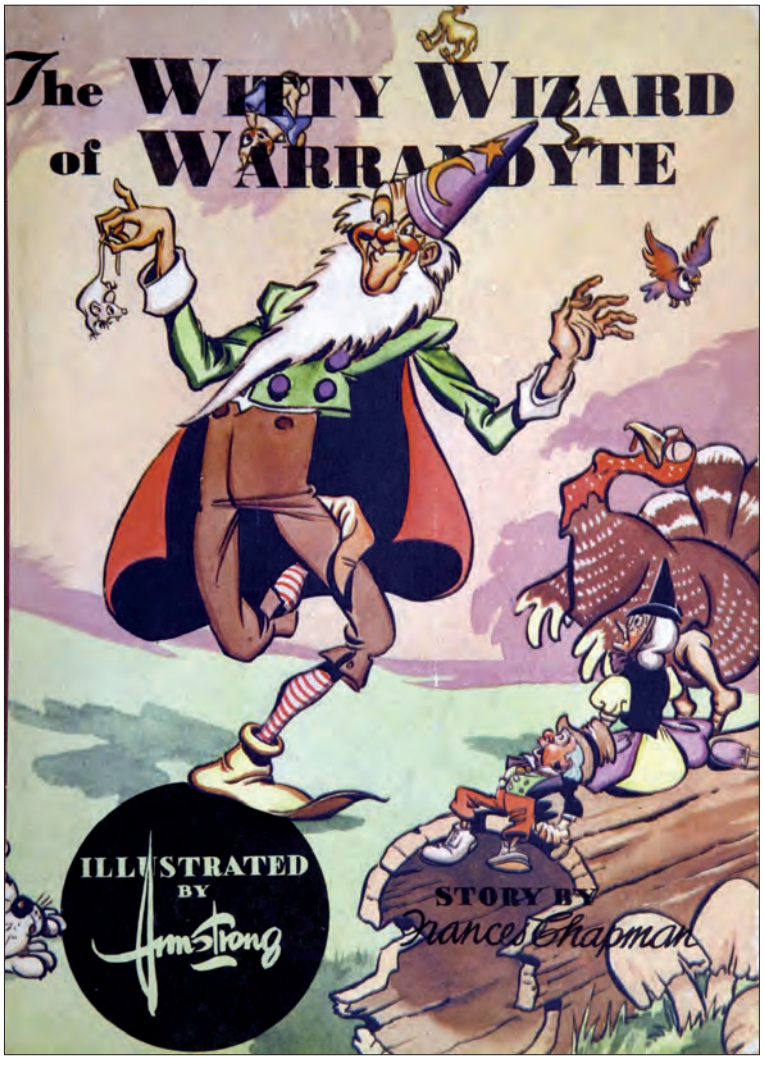
Late in the 1890s Jimmy Edwards was approached by a local crook named Louis Henn. Henn saw an opportunity to get a monopoly on the brick trade, either because Jimmy's father had retired or was fully tied up meeting orders from the mine. Henn contracted with Jimmy to take everything he could make, at 29 shillings a thousand, and then sold the bricks into the Beaconsfield market at 45s 6d. With no other supplier, people were forced to pay. The arrangement fell apart around 1900 when Henn was exposed and gaoled for massively defrauding his employer, the Tasmania mine, where he was paymaster. He'd created around 50 fictitious employees in order to collect their wages.[2]

Jimmy was probably an innocent party in Henn's monopoly scheme. As the mine paymaster, Henn had status and credibility. After the scheme fell over he supplied his product direct to customers, at a proper and reasonable price of 30 shillings a thousand. He made the bricks for the Beaconsfield Wesleyan (now Uniting) Church in 1900 and for the big Tasmania Mine redevelopment and building program in 1905/6.

For reasons unknown, by 1912 Jimmy was looking for other sources of clay. He found exactly what he wanted right next to the main road at Loira, and decided to move down there to live and produce his hand-made bricks on site. The location was convenient for the whole Exeter to Beauty Point market and it really was a superb clay, suitable for tiles and pottery as well as bricks. He bought a 260 acre property on the north side of today's Hjort's Road, fronting the West Tamar road.

In 1916 Jimmy supplied the bricks for the new All Saints Church at Exeter. He charged £2 a thousand, which was a substantial increase over the 30s a thousand charged for the Tasmania mine project, but it was a decade later and a smaller order.

Eventually he installed a horse-driven machine to pug the clay (i.e. mix it with water and work it into the right consistency), but continued digging the clay and moulding the bricks by hand. He built a house out of his own bricks, which he had time to do as he could only operate the business six months of the year. That house still exists right on the main road, though its year of construction is not known.



Fairy tale writer Frances Chapman was really Mrs Williams, who owned the Loira Brickworks. Profits from the sale of fairy tales, like this one, paid for the brickworks.

Jimmy's production was limited by the fact that the bricks were dried in the open air prior to firing, and could not be subjected to a frost. He could only produce about 120,000 a year.

When the First War finished Jimmy's son John came to work with him, and they expanded their product range to include drain pipes. Loira was nearly all apple and pear orchards by then, and the local manufacture of what were said to be excellent pipes was a boon to the orchardists.[3]

In 1930 Jimmy and John set up a fully mechanised brick and pipe factory in Dover for orchardists down there, and it seems that John may have stayed in Dover to run the new factory. Around this time Jimmy put in a kiln at Loira to replace the hand-baking process.

During World War Two production from the Loira works was brought under government control. Then, when the war ended, it triggered a release of pent-up demand for houses and construction generally – and therefore building materials. Jimmy had ideas of expanding production and employing people,

but the government continued the wartime controls on who you could sell to, in order to ensure urgent industrial and domestic needs were met. Jimmy was then 73 years old and more suited to retirement than expanding his business and dealing with government regulations. He moved to Beauty Point and his plans were abandoned.[4]

The Return of Wunderlich Ltd

The end of the war and consequent demand for bricks and tiles led to the Sydney company Wunderlich Ltd, which had exited the Beaconsfield asbestos industry a generation earlier, to return and buy the old Cosgrove brickworks factory on Hobart Road in Kings Meadows (near the Kings Meadows Hotel) that had opened in 1885 next door to Machen's new plant.

The Wunderlich brothers were pioneers of terra cotta roof tiles in Australia, having got into the business by accident. A shipment of red tiles from Marseille landed in Sydney in 1892, for a firm that had got into financial difficulties while the consignment was in transit. Wunderlich did the firm a favour, taking over the shipment, and found that it was a good business. They imported more and in 1916 opened tile factories in NSW and Victoria.

The Cosgrove works seemed to have a substantial deposit of high quality clay. In 1945 Wunderlich decided to build a new terra cotta tile factory at the site, at a cost of around £20,000. They sent samples to Sydney for testing and found that the tiles were equal to any on the mainland. Wunderlich forecast that its Kings Meadows production that would be sufficient to meet all Tasmania's needs.[5]

The new factory was completed in 1948 and its 95ft tall chimney became a recognised landmark of Kings Meadows. Production began at around 90,000 roof tiles a month from two kilns. The complex was opened by Premier Cosgrove on June 2nd 1948 and the Premier autographed the first tile produced.[6]

Wunderlich didn't have the market to itself though. Others saw the opportunity, and there were other high-grade clay deposits in the Tamar Valley. One very good deposit was at Jimmy Edwards's now suspended operation at Loira.

Loira Brick and Tile Works Pty Ltd

Over Christmas 1946, an interesting and talented couple named Williams were holidaying in Tasmania, and were introduced to the Loira clay pit while they were staying at the Brisbane Hotel in town. Perhaps Mr Williams was related to the former Loira Postmaster George Williams and heard about the business from him.

Mr D A Williams was a Scottish archaeologist and wrote books on the card game bridge. He was co-founder of the world's oldest bridge journal – aptly named "Bridge Magazine" and established in 1926.

His English wife was the one with the money though. She spoke seven languages and wrote novels and fairy tales under the pseudonym (or perhaps maiden name) Frances Chapman.

Mrs Williams must have been quite an entrepreneur as well as an author. After viewing Jimmy Edwards's suspended plant, she immediately formed a Victorian company called the Loira Brick and Tile Works Pty Ltd, took a lease on the entire property from Jimmy Edwards, and began construction of a major new factory complex to replace his hand-made operation.[7]

In April 1947 Mr Williams placed an advertisement in the *Examiner*, saying that the Loira Brick & Tile works were reopening under new management. Orders were being accepted immediately for bricks, cement tiles and terracotta tiles. The address was given as Private Postbag, Everest, West Tamar, as the Loira Post Office had closed in 1944. The Post Office had been at Everest Road from 1907 to 1912, and perhaps the old building was again serving as an unofficial mail point.[8]

The *Examiner* said that the Loira brickworks were being extended with two extra kilns (Jimmy only had one) to produce 50,000 bricks at a time and a modern tile plant that could turn out up to 9,000 a day. Ten men were engaged, with a Mr S Duncan of Victoria as manager. Big new drying sheds, each 140ft by 20ft, were being built to replace the open-air drying that had restricted operations to six months a year, and the tile factory would measure 60ft by 30ft. A dam was being built, together with two residences. A change room and messroom would be provided for the eventual 20 employees.[9]

An office was rented at 60 St John Street in town, with a Mr Plummer in charge. It was later moved to No. 75 in the same street.[10]

The new kilns began producing Loira bricks in August 1947, and the company decided that an opportunity also existed to build prefabricated fibro-cement kit houses at the same site, using their own cement roof tiles. They constructed four display homes on the West Tamar Road, just south of Everest Road. Three of those houses are still there.[11]

The Wunderlich brick and tile factory in Kings Meadows. Image courtesy of TAHO.

The official opening of the Wunderlich tile factory at Kings Meadows by the Premier in June 1948 seems to have given Mr Williams the idea to emulate the event, thus generating excellent publicity. The Premier was persuaded to return in November for an 'official' opening of the Loira Brick and Tile Works, which was probably facilitated by the fact that some government assistance had gone into the project. He attended accompanied by the Minister for Housing, the Minister for Lands and Works (Eric Reece), the Speaker, and the Warden and Deputy Warden of Beaconsfield Municipality. The Deputy Warden at this time was Tom Adkins who, like Wunderlich, had previously been active in the asbestos industry.

It was said at the launch that the plant would help meet the shortage of building materials post war. The Warden of Beaconsfield proudly added that two-thirds of Launceston was built on foundations taken from the Beaconsfield district, though what he meant exactly wasn't clear. The Loira Company Chairman Mr R G Gillespie noted that their clay was good enough for china.[12]

At the official opening was Jimmy Edwards, now 75 years old. He'd recently sold the freehold to the company, and told journalists that he'd been making bricks since age five. He told them about making 100,000 bricks by hand for the new Wesleyan Church in Beaconsfield in 1900, and how amazed he was to see the machines turning out 20 a minute. He said he was born too early in the brick business!

Sadly the company was not a success. Less than two years after the Premier's official opening, Loira Brick & Tile Works and its associate Tamar Industries Pty Ltd were in liquidation. In early 1952 the liquidator put up the whole property, with all buildings, bricks and so on, for sale at £1500 or near offer. There was "no better clay in the State", the liquidator said. Jimmy Edwards's old house and two of the display homes seem to have been included in the sale, and there were also good quality sand pits at the back of the large property.[13]

It's an ill wind that blows no good, and the collapse of the Loira company came at just the right time for Wunderlich Ltd.

Their Kings Meadows tile factory was in trouble. When they bought the old Cosgrove brickworks in 1945 they'd assumed that the clay supply they were mixing from their two pits was unlimited. But they were wrong.

They arranged permission from the Australian Aluminium Production Commission to strip clay overburden from a bauxite site at St Leonards, five miles from the factory. This was good quality clay and they mixed it with their own remaining resource. The arrangement suited both parties as the aluminium company got a free pre-strip in return for giving away the material.

Unfortunately, kiln losses increased sharply, up to an impossible 43% due to cracking, shrinkage and poor glazing arising from the increased alumina content. The company drilled at St Leonards hoping to find better clay, without much success.

In 1951 they closed their city office and moved sales to the 9-acre Cosgrove St factory at Kings Meadows. Things were looking bad for them. By a great stroke of luck, the Loira deposit then came onto the market.

The Mines Department kindly sent up the Government Geologist, Mr B L Taylor, who was just writing his comprehensive report on the Anderson's Creek asbestos field near Beaconsfield. He inspected the Loira pit and agreed it was suitable, though he was doubtful about the quantity of clay there and concerned about the cost of transport. He consulted with Wunderlich's local geologist Mr D Crowder

and factory manager R Skinner in November 1952, and they decided to proceed and purchase the Loira resource.[14]

Notwithstanding Mr Taylor's assessment, Wunderlich quarried their Loira clay for many years. The Kings Meadows plant didn't close until 1978. Did they finally run out of clay? Was it the cost of transport? No-one remembers. Either way, the Loira fairytale was over.

The White Clay of Beaconsfield

Where Jimmy Edwards got his clay from while he was at Beaconsfield is now forgotten, but he would certainly have known of a superb white clay deposit located there at the north end of Cabbage Tree Hill. It was a fine pottery clay though, and without additives wasn't suitable for bricks.

The deposit, being on Brandy Creek, was almost certainly discovered by the first gold miners in the area, who were digging on the exact site in 1869. The owner of the *Cornwall Chronicle*, T C Just, who knew the district well, seems to refer to it in his newspaper in 1875: "*At Ilfracombe Bay there is an extensive bed of a pure white clay which seems very refractory, and which when mixed with fine quartz (also abundant and close at hand) forms an admirable fire brick.*" He had a patent on fire bricks that he'd made from Anderson's Creek asbestos, so knew what he was talking about.[15]

Mr Just had apparently sent 20 bags of this clay to the Gillbrook Pottery Works in Brunswick, Melbourne, for testing the previous year. The proprietor of the works, Mr Luke Nolan, was so impressed that he came to Launceston in 1876 to talk to Council and arrange for a pottery works to be built at Ilfracombe (Beauty Point).[16]

Launceston Council was looking at this time for pipes to use in its new sewerage works, but there was stiff competition for the tender. Mr Nolan put in a proposal but was unfortunately beaten by a whisker for the job by Mr Alfred Cornwell. Mr Cornwell then built a factory on the Sandhill, next to the Hobart and Westbury Road junction. As it turned out, Mr Nolan would have also have built on the Sandhill. After arriving here, he found that some of the clay on the hill was perfect for making pipes. Council's tender led to the creation of a new industry, but Mr Just had also drawn attention to the Ilfracombe white clay deposit.[17]

In 1882 the former Mayor of Hobart, Mr W P Green, came up to collect copper ore specimens from Saxon's Creek (near Holwell) and as he was staying at the big new town of Beaconsfield, took the opportunity to inspect the white clay. Someone had made a jar from the material and presented it to him to show the quality of the resource. He was told that there were "vast deposits" of both pink and white clay next to Brandy Creek.[18]

No Hobart manufacturers took up the opportunity, but Alfred Cornwell's pipe factory on the Sandhill had just acquired a new owner. Mr John Campbell bought the company in 1881, and wished to add a variety of pottery products to his range. He began taking small quantities of Beaconsfield clay to use in the production of their higher quality wares. The cost of transport may have precluded its use in their general range.[19]

The location of the clay on highly-prospective gold ground meant that the deposit was usually within someone's lease. In 1906 it was Beaconsfield Prospecting Association ground, and they were well aware of the possibilities of the clay, assuming they didn't find gold.

Campbell's continued to take clay in small quantities, and over the years this began to add up, so that by 1911 they'd taken hundreds of tons. Local people also dipped into it for making whitewashes, and it was a favourite material for painting fireplaces.[20]

Campbell's had a large display at the 1891 International Exhibition in Launceston. Image courtesy of TAHO.

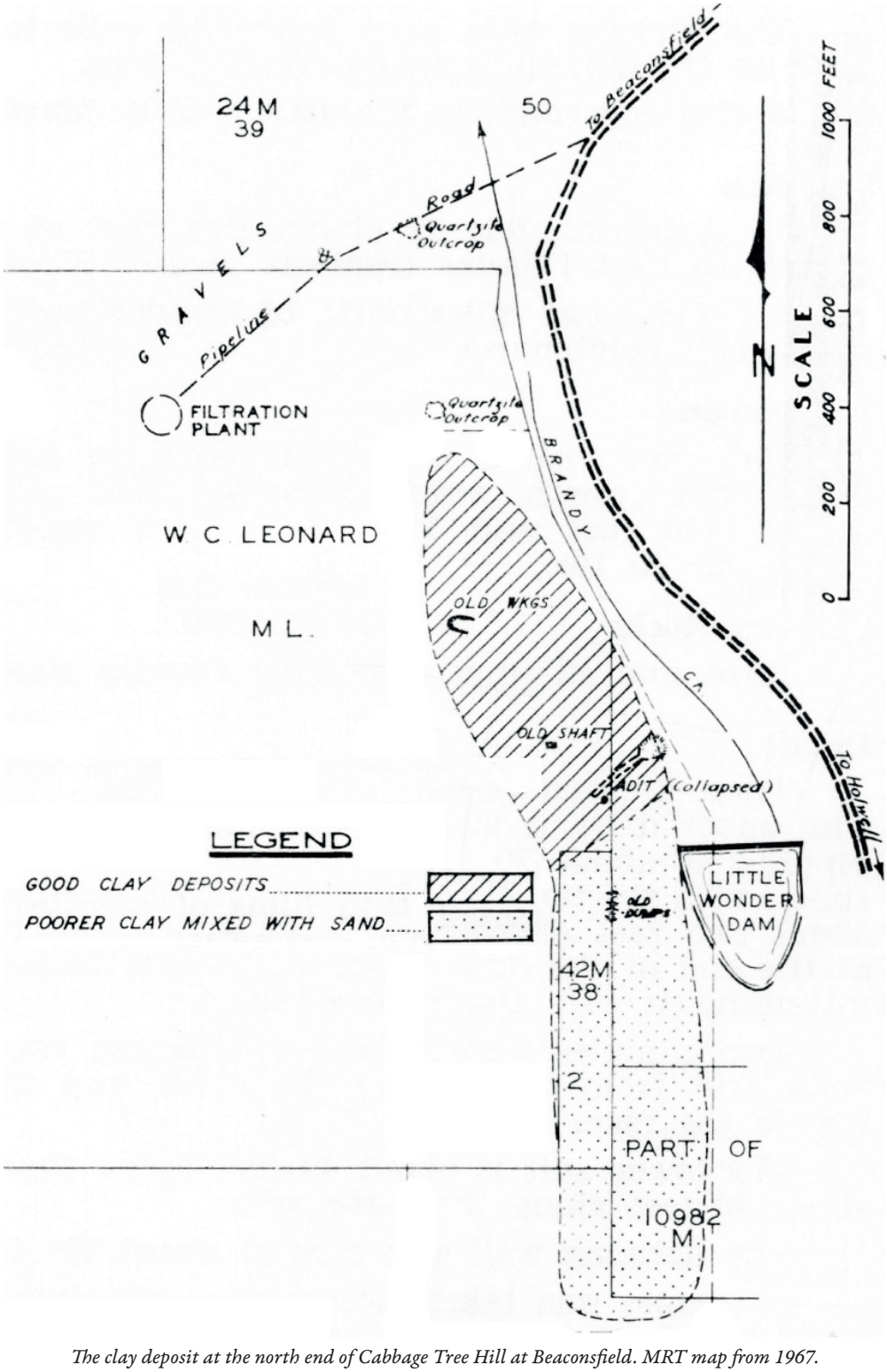
During the First War, pottery works in Sydney and Melbourne were short on supplies and interested in Beaconsfield and other Tasmanian sources. Tests in Sydney confirmed that the Beaconsfield product was of excellent quality, but when the war ended they lost interest in distant deposits.[21]

In 1920 the deposit was owned by J W Brown, and he sent two tons to the McHugh Brothers for tests. Nothing came of it and he seems to have given up the lease. With the improvement of roads and introduction of motor transport though, the cost of freight from Beaconsfield was falling. Campbell's were still able to compete with imports in the Launceston market, using clay from Beaconsfield and from their own pit in Prospect.[22]

More tests on the material were done on the mainland in 1936, and another lease was taken over the deposit by an unnamed local in 1940 (No. 67M/40).[23]

The new lease was transferred to William Leonard in 1947. Though it was for gold, he was taking out clay, so Campbell's may still have been buying. Mr Leonard gave a sample to the Mines Department for analysis, and they confirmed its fineness and quality. They noted that it was bright white when dry, but was not suitable for paper or brickmaking.[24]

Exactly when Campbell's stopped taking Beaconsfield clay is unknown, but as the company closed in 1975 it was probably well before then.



The clay deposit at the north end of Cabbage Tree Hill at Beaconsfield. MRT map from 1967.

Notes & References

1. Another brickmaker at Kings Meadows was T B Innocent in Thistle Street, who bought his ground in March 1883. It was just over 6 acres, and an impenetrable mass of blackberry that took him three months to clear. He then erected cottages and machinery bought from W H Knight. To commence production he had to get experienced men from Melbourne to supplement his own, but by January 1884 had completed his first order and was working from an 8ft face, tramming the clay up a 90ft incline to a mixing mill. The clay was extruded (forced) out the bottom of the mill to be taken by the moulders, who could put 2,000 bricks a day on the 50 yard long "hacks" to dry. After a few weeks the air-dried bricks went to large kilns, containing 50 or 60,000 bricks. A fire was lit underneath and they were roasted for about two days. In late 1883 James Cosgrove nearby was clearing his ground ready to commence, and Mr Jorey on Hobart Road next to the old tollbar had two or three kilns on a 95 acre clay property. Mr Luttrell had been making bricks at Carr Villa, but may have given it up by then. William and James Machen, Mr Gibson, and Mr Whitsey were working as usual, but in a smaller way than the others. Another brickworks was at Dilston, and Gunn's had a steam brickworks at Prospect Village. Daily Telegraph 10/1/1884 p2
2. Daily Telegraph 11/12/1901 p5
3. Examiner 10/3/1921 p6
4. Mercury 29/5/1945 p5, Sunday Examiner Express 20/8/1983 p4
5. Examiner 5/6/1945 p4 & 22/8/1945 p4
6. Examiner 3/6/1948 p5
7. Examiner 23/6/1947 p5
8. Examiner 30/4/1947 p6
9. Examiner 20/5/1947 p4
10. Examiner 10/7/1947 & 11/1/1950 p12
11. Advocate 2/8/1947 p2, Examiner 2/8/1947 p3
12. Mercury 27/11/1948 p6, Examiner 27/11/1948 p5
13. Mercury 21/7/1951 & 6/9/1950 p25, Examiner 1/3/1952 p21
14. MRT 1952 Supply of Clay report for Wunderlich.
15. The Tasmanian 14/8/1875 p4. This was before Beaconsfield existed, and Ilfracombe Bay likely refers to Middle Arm.
16. Cornwall Chronicle 28/2/1876 p2. From the 1830s the area that is now Beauty Point was known as Ilfracombe, and a subdivisional survey was done for a future town of that name. From 1872 a town grew up around Redbill Point, at the north end of Ilfracombe, to service the huge iron smelter there. This was named separately as Lempriere (or Port Lempriere) while it existed. A large jetty, the first on the spot, was also built at what we now call Beauty Point, and named Longden's jetty. The name Beauty Point, then applying only to the point itself, first appears in 1879, and according to the Examiner of 20/4/1889 p2, the name was in honour of a cow of that used to graze there. When the Beauty Point jetty (really Longden's jetty) became the Port of Beaconsfield in 1882, the name Beauty Point began to replace Ilfracombe in common usage. Ilfracombe remained the official name, however, until about 1910.
17. Cornwall Chronicle 6/3/1876 p2 & 6/12/1876 p2
18. The Mercury 10/4/1882 p3
19. The Tasmanian 3/11/1888 p14
20. Examiner 18/8/1911 p7
21. Examiner 14/8/1917 p2
22. Daily Telegraph 5/3/1920 p4, Mercury 13/10/1931 p5
23. Examiner 24/6/1936 p4
24. *Clay Deposit of W C Leonard* Terence Hughes 1957 MRT

Above: *The stone and brick residence next to Dilston Bridge—built by Captain George Coulson in 1838. It is often referred to as Dilston House. Image courtesy tasphotoalbum.com*

Below: *The Friends' Arms Inn, built by Mr Coulson around 1825 and originally called Dilston. It was later known as the East Tamar Hotel and the Picnic Hotel. The timber annex was added in 1879. Image courtesy tasphotoalbum.com*

Appendix

The Fascinating History of Dilston

Dilston has a fascinating history, and not just because of the brickworks and coal discussed in Chapter 7. It is known to be the site of an Aboriginal stone quarry for tool making, for example, that was lost and has never been rediscovered.

Its European settlement began with the appointment of a new District Constable named Michael Fitzgerald in 1818, on a rather paltry salary of £12 10s a year.

Michael Fitzgerald was an Irish nationalist from County Cork, convicted of political crimes in 1797 at the age of 26 and transported for life. He went to Sydney first, as that was the only colony then, but after the establishment of Port Dalrymple he was transferred. He received a full pardon in 1810 and married Mary Wood in 1811, producing four children over the following seven years. His appointment as a policeman suggests his behaviour as a convict had been excellent.

When Mr Fitzgerald was appointed District Constable, in 1818, he was given responsibility for the George Town Road from Launceston. This was in its first phase of construction, and he had oversight for the convict work gangs on the road. He probably couldn't perform the role from Launceston due to travel times, and so built a cottage for himself and family at a convenient spot on the Tamar, where a permanent creek came within a few metres of the river, next to a marshy, fertile valley. There was a lagoon at the site through winter, and it was home to many nesting waterbirds and largely clear of trees.

In 1819, the Fitzgeralds were visited by a gang of escaped convicts and robbed. A court said they should be compensated by a grant of land, and it may be because of this that in February 1821 Michael was awarded an acreage surrounding his East Tamar cottage. The grant was listed in 1821 as No. 20 for 30 acres, but when the area was formally granted on June 30th 1823, Sir Thomas Brisbane said he was increasing it to 50 acres, as married men were usually entitled to an extra 20 acres for their wives. Years later it was resurveyed and found to be 58 acres. At the same time as Fitzgerald got his grant, a man named Richard Naylor was granted 30 acres adjacent to Fitzgerald on his northwest side. They were probably friends.[1]

Three convict labourers were assigned to assist Constable Fitzgerald, which was useful, as in 1821 his wife Mary gave birth to their fifth child, Mary Ann, the first person born at what was to become Dilston. Governor Macquarie dropped into their little cottage that same year on his way to George Town. As others going north from Launceston would find, nine miles to Dilston on a dreadful track was enough, and it was time to transfer to a riverboat for the rest of the way to George Town.

The year Michael Fitzgerald got title to his 50 acres, 1823, was noteworthy for the arrival in Port Dalrymple of the first ship direct from Britain.

A merchant named William Lawrence felt the need of a better climate, and bought a ship in England to sail him and his family to Launceston. The vessel he chose was the 71 ton cutter *Lord Liverpool*, and Lawrence engaged a 44 year-old Captain named George Coulson (pronounced Coll-sun) to run it, with a small crew and a blacksmith.

The *Lord Liverpool* was on a one-way trip, as all aboard knew, and it arrived in February 1823. Captain Coulson stopped at George Town first, while Mr Lawrence arranged for a land grant, then sailed up the Tamar to Launceston in the remarkable time of 4½ hours. Perhaps on the strength of this, he soon had a position as a pilot, assisting other vessels to navigate the very difficult Tamar estuary. Before long he became Launceston's first Harbour Master. The ship was sold to a local in September 1824, after an earlier sale to an American fell through.

Captain Coulson had a wife Mary, a son and three daughters, and he was anxious to secure his situation so that he could send for them. The family needed somewhere to live, and he seems to have looked at once for something that could be permanent. Richard Naylor's grant of 30 acres next door to the Fitzgeralds was ideal.

Naylor's block was a spot where the deep river channel came right up near the shore. It had an excellent view of the river and good land at the back, and with the ability to apply for convict workers to clear, farm and build, must have seemed perfect to the Captain. He could have applied for a land grant himself, but the undeveloped Naylor property would have been cheap to acquire, and enabled him to preserve his grant rights for the future. He may have bought the right to the grant from Mr Naylor, as no title seems to have been issued up to that time, but this was normally prohibited. It is more likely that Naylor forfeited the grant due to non-compliance with the grant conditions and Captain Coulson then bought it from the Crown. Whatever happened, his name appears as grantee. As happened with Fitzgerald's next door, a later resurvey found that the area was more than first thought, and he had 36 acres rather than 30.

Captain George and Mary Coulson in later life. Probably taken at Thorpe around 1860. Image courtesy of John Coulson.

The timing of the purchase of Naylor's land is uncertain, but it was probably in late 1823, soon after the grant to Naylor was confirmed. Captain Coulson was then able to send for his family in late 1823 or early 1824. This timing fits with the arrival of Mary and the children on the 300 ton merchant sailing ship *Harvey* in May 1825, after

a passage of over eight months.[2] Their son William Patten Coulson is recorded as having been born on the property nine months later, in February 1826.

Captain Coulson had his convicts build a substantial two-storey stone home made from rocks gathered around the area. As he was expecting his family any time from the beginning of 1825, the house would have been completed by then. It is possible that a timber cottage was built first, then replaced by the stone house shortly after, but this was probably not necessary, and he did have a large family already![3]

Captain Coulson called his new property Dilston (pronounced "Dill-stun") after the village in Northumberland in which he'd been born.

Things were not going as well for the Fitzgeralds. Michael was prosecuted for fraud, and despite the charge being dismissed, it seems to have left a smell about the family. Their son was also getting into trouble, and in 1827 Michael was sacked from the Constabulary. His wife Mary may also have died that year, and with Michael being officially branded as of "bad character", this led to little 5 year-old Mary Ann being removed and put in an orphanage. She would stay there for 20 years![4]

Without his job, circumstances were difficult for Michael. He was soon in debt to his friend Richard Naylor, now a Launceston publican, and in 1829 his property was put up for auction. It failed to sell, but at least this meant he still had somewhere to live.[5]

The property was put up for auction again the following year, in June 1830, and advertised as being next door to Captain Coulson. There doesn't seem to have been a jetty then, as none was mentioned in the advertisement. The cottage wasn't mentioned either, so the advertiser didn't regard it as adding any value. The property didn't sell, and the Fitzgeralds were still there in 1831.[6]

The year 1831 was a fateful one for Michael Fitzgerald, and it would have been better if he'd been evicted by the sale of his property! In April a group of Aboriginals camped nearby and began raids on the cottage, stealing food, blankets, and other useful articles that the family could ill-afford to lose. One of the raids turned deadly. Michael was sitting near his front door, engrossed in reading. One of the Aboriginals crept up behind. Michael was speared in the back, with the weapon forced right through him and out his chest. It took him eight days to die.[7]

The newspaper said he'd sent his family back to the farm rather than have them watch him die, but weren't specific about who they were. Had he remarried and perhaps had more children? All we know is that he was buried in the Merrys Lane Catholic graveyard in West Launceston. That burial ground no longer exists, and his body must be under the bowling green, or the children's playground there now.[8]

In contrast to the Fitzgeralds, things were going swimmingly for the Coulsons. George continued to add to their land holdings, with 830 acres in total by mid-1833, part of which he named "Thorpe". Most of the acreage was grants, such as 421 acres he'd just got title for, but he'd also bought the Fitzgerald property, and ran an advertisement in the paper to let people know that they would be trespassing if they came onto it.[9]

In 1833 George and Mary Coulson decided to convert their home into a hotel. They gained a licence late in the year and called the premises the Friends' Arms.[10]

An unexpected consequence of opening the hotel was that it became an invitation and opportunity to bushrangers. On the night of December 29th 1833, three men woke the family up, demanding to be

served drinks. When Mr Coulson opened his bedroom window the villains threatened to murder him unless he opened the door. Then they robbed the family of food, clothing and the considerable sum of £36 that Mary Coulson had hidden away (something like thirty thousand dollars today). The crooks must have been hiding outside and listening earlier, for they'd heard Mary mention the amount of money she had to her husband, and now demanded she hand over that exact sum, or they'd grill her on the fire. They then shook Mr Coulson's hand and left, wishing the family good night![11]

The opening of the Friends' Arms Inn saw Dilston become quite a popular little settlement, and not just for bushrangers. It was very convenient for travellers going up to George Town, and often referred to as "the Nine Mile House". George built a solid little jetty below the hotel, and offered use of it to load and unload stock, together with agistment on his properties.

A distinguished new settler in 1834 was Army Captain William Neilly of the 63rd Regiment. He'd served against Napoleon and recently retired from a quartermaster's position in Hobart, receiving a grant of 407 acres at Nelson's Point (now Pedder's Point) as a reward. This was located along the Coulsons' western fenceline.

Captain Neilly was immediately assigned convicts, including the loan of two bricklayers, to build a large house that he called Rostella, after his wife's home in central Ireland. It had a cellar, well, solid brick walls, and two attic rooms where convict maids could be locked up each night. The bricks were made by his convicts on the property, leaving an excavation that became a pond, and in 1835, when the family were settled, a road to their new home was surveyed up from the old Fitzgerald cottage on the George Town Road. Captain Neilly was also appointed a magistrate.[12]

The convenience of the location of the Friends' Arms Inn was illustrated by Governor Arthur dropping in during February 1836, on his way to George Town. Mr Coulson noted the fact in his advertising shortly afterwards: "*The Friends' Arms offers an excellent house of call for refreshment to parties sailing on the river, as a vessel of large size may lay afloat alongside the wharf at low water. For land travellers (the house being an easy ride from Launceston) Mr Coulson has provided excellent stabling and good fodder. His Excellency the Governor did Mr Coulson the honor of patronizing his house when on his last visit on the northern side, and many respectable families have expressed themselves much pleased with the attention and accommodation afforded.*"[13]

The increasing settlement and convenient location of Dilston also led to an impromptu visit by Jane, Lady Franklin in January 1838. Like Governors Macquarie and Arthur before her, Lady Franklin and her party found that the overland trip from Launceston to George Town was simply too much. After becoming lost along the way and then being put right by a local landowner, the party stopped at Dilston to rest, and changed to a schooner waiting at Coulson's jetty.

Lady Franklin wrote in her diary afterwards: "*The river was then out from our view till we approached Colson's inn, when it opens finely on the left. A little before coming to the inn, we crossed a badly constructed timber bridge over a deep trench or drain made to drain a morass behind a tenant of Colson's who holds the land. We were received with extraordinary civility by Mrs Colson, who regretted she had not been apprised of our arrival. We had some of her ginger beer and raspberry puffs, and then took to the boat which was lying at their jetty stairs. Mrs C thanking us for the honor done her, and begging Sir John's aid in the building of a new house which they contemplated living in after letting the inn to a tenant.*"[14]

Lady Franklin's reference to Sir John's aid to build a new house, seems to be a reference to the need for convict builders, and if so it was successful. The "new house" appears to be what we today call Dilston

House, which still exists next to the Dilston bridge. In December 1838 the Coulson advertised for lease (not for sale): "*that old and well-established Inn, known as the Friend's Arms*", of 11 rooms with barn, stables and outhouses, an excellent wharf at which vessels of large burthen may load and unload in any tide, and about 150 acres of which 20 were cultivated, with excellent garden and orchard. "*Also a new stone dwelling house, with 10 or 12 rooms, good garden and stable, on the main road with 60 acres adjoining. Ready for occupation about February*."[15]

The description of the new dwelling as being on 60 acres, on the George Town Road and made of stone, seems to identify it as Dilston House. It was clearly built as an investment, even though it has been generally believed that it was Captain Coulson's first home and earlier than the Friends' Arms Inn. It was probably at this time that he built a second jetty to service the new house. With Captain Coulson advertising both properties, one wonders where he intended to live. Lady Franklin's diary entry above, however, makes it clear that if the Inn rented out first, the family would move to the new stone house on the main road – Dilston House.

The Coulsons did have another residence at Thorpe, the big property on the north side of Dilston, but it was already being rented. The cottage there was probably timber, with stone footings and chimney, and seems to have been built in 1835, when Captain Coulson is recorded as "borrowing" a convict mason.[16]

Lady Franklin's 1838 diary entry referred to "*a tenant of Colson's*" who'd had a "morass" problem. This would have been the tenant at Thorpe, Mr William Bransgrove.

In Launceston there was a well-known butchers' shop run by brothers William and Tom Bransgrove until 1836, when William pulled out of the business and took the lease of Thorpe from Captain Coulson. The arrival of the Bransgrove family confirms that there was already a cottage on the property, and Mrs Harriet Bransgrove produced a new daughter there late in 1837.[17]

The occupation of Thorpe by the Bransgroves in 1836 was likely what prompted interest by them and George Coulson in ways of draining the valley behind Dilston, and eliminating the floods that regularly inundated it. The close approach of Nelson Creek to the Tamar, at the old Fitzgerald house below the Inn, suggested the possibility of cutting through the ridge of conglomerate rock so that the creek could drain directly into the river, rather than running north through the valley. The availability of convicts to do the work cheaply must have decided them, and it was probably in 1836 or 1837 that the cutting was made, requiring the "badly constructed bridge" Lady Franklin crossed in January 1838. The excavation of the Dilston cutting may also have required demolition of the Fitzgerald cottage.

The Bransgroves at Thorpe had been assigned a number of convicts, and were growing champion turnips up to 18kg in size. The quality of these turnips was commented upon in the press in 1838 and through 1839-40. It seems that Bransgrove's convicts were also assigned to build a huge barn by the creek, 84ft long by 20ft wide, with 3ft thick stone walls on the ground level and an upper floor of bricks made on the spot. Years later it was suggested that Mr Bransgrove intended the commodious building (called the Granary today) as a distillery, but couldn't get a licence. If this is true, then the barn could have been built around 1837, and then been caught by the temporary prohibition on manufacture of spirits that was introduced in 1838.[18]

Once safely ensconced at Thorpe, William Bransgrove purchased 100 acres next door[19] and named it Hanwell. The Hanwell name became commonly applied to both the 100 acres and that part of Thorpe that the Bransgroves held under lease. It was an unfortunate choice, as it was also the name of a well-

known lunatic asylum in Britain. Fortunately it didn't last, and seems to have been changed to Burnside by Frank Archer years later, when he bought both Thorpe and Hanwell and combined them into one large farm of over 1,000 acres.

With the area moving ahead, George Coulson's 1839 advertising of both the Inn and the new stone house attracted some interest. In April 1839 a Mr Charles Coward announced that he'd taken over the "Friend's Arms Tavern and Family Hotel" and fully repaired the wharf. Mr Coward had a large grazing property at Mount Direction that he leased from the Crown, so the location was very convenient to him. In 1840 he was fined £5 for giving drinks to his convicts at the Inn on a Sunday, which suggests he was an easy-going master.[20]

Strangely, even though Mr Coward continued to run the hotel through 1841 and 1842, George Coulson continued to advertise it for sale or lease, and it is possible that Coward had defaulted on the rent and perhaps become an employee. Though the property was described as "Dilston Lodge" rather than the Inn, there can be no doubt that it was the hotel, as the advertisement said, in capitals for emphasis, that it had on it a 10 room two-storey stone dwelling house. Only the Inn had two stories, and the name Dilston was only used for that property. It included barn, stable, 60 acres, all fenced and subdivided, with 20 acres under cultivation. Enquiries were to be made to George Coulson on site, or George Alexander Coulson (his son) in town.

Given that the Bransgroves were at Thorpe and the Cowards at the Inn, we can assume that the Coulsons had moved into the new stone house next to the bridge. Captain Coulson seems also to have been taking the odd job as a skipper on the Bass Strait run, as he is listed, for example, as master of the schooner *True Love* in March 1839. He was also taking vessels up to Sydney, and may have been importing sugar, coffee and other goods to Launceston on his own account. Brigs such as *Black Joke* and *Brazil Packet* were also using Coulson's jetty to load stock, mainly horses and sheep. The founding of Melbourne and Geelong in 1835, and Adelaide in 1836, had created enormous cross-strait traffic, and Dilston was a very convenient port of embarkation for livestock.[21]

In 1843 William Coward, rather than Charles Coward, renewed the Friends' Arms licence, and up the road William Bransgrove at Hanwell (or Thorpe) was declared insolvent. Bransgrove's lease from Coulson was advertised for sale, with five years to run, and the property was said to be 670 acres, with 124 acres in wheat, 30 in oats, 5 in barley and 12 in the famous turnips. It didn't sell, and the Bransgroves saw out the lease, finally auctioning off all their implements and stock when the lease expired in 1848.[22]

Almost as soon as the Bransgroves left, the timber house they'd occupied was burnt to the ground. It was not insured and would cost £200 to replace. It seems likely that it was replaced by a stone cottage, and William Patten Coulson, one of George's sons, moved in. The Bransgroves moved closer to town and were soon in the news with a double murder of two of their convicts by Tom Kelly, another of their convicts, who was now on the run.[23]

The old hotel was now tenanted by a man named Attwell, and had acquired a skittle ground but lost its licence. Attwell fell behind on the rent though, and his possessions were sold up and the building advertised for lease again in 1850.[24]

By now, Captain George Coulson was an old man. He joined his son George Alexander in town when his other son William took over Thorpe from the Bransgroves, and there may have been no-one at either the Inn, or the stone house at Dilston bridge for a time. The inability to sell or let any of the

properties led to financial difficulties. He sold up his town assets with the intention of going to Sydney, but with limited funds ended up moving in with his son William at Thorpe around 1852.[25]

In 1854 a Mr Tom Spicer (the well-known Chemist's brother) finally took over the Inn and reopened as the Tamar Hotel. He seemed to do everything right, renovating and enlarging the stable, erecting a new jetty and building a bathing house. Sadly it was all for nought, and he left at the end of the following year, but at least Mr Coulson had the benefit of the improvements. The hotel was put up for auction, but didn't sell.[26]

With Nelson Creek (later renamed Lady Nelson Creek because of confusion with two other creeks) now entering the Tamar at Dilston, the northern part of the creek had been renamed Coulson's Creek. A bridge was probably built across it in 1852. The cutting and rerouting of Nelson's Creek to drain and improve the fertile valley behind Dilston turned out to be of limited benefit, as Coulson's Creek soon silted up and the flooding resumed. This was good news for the waterbirds though, as they got their breeding grounds back. In 1856 floods badly damaged the Dilston bridge and the cutting wall was widened at the top while repairs were made.[27]

Early in 1857 Captain Coulson finally found a new tenant, and it was one of his own profession – a Captain James Long. Captain Long and his wife had just arrived in Port Dalrymple, skippering the *Rebel*, and had an eight-year old daughter Louisa with them. They moved into the Inn and reopened it as the Tamar Hotel in February 1857, noting that steamers now called daily at their jetty. They lasted three years, and then the hotel was advertised again.[28]

Meanwhile, William Coulson at Thorpe had married. The lady was 17 years old, a Miss Mary Ann Worledge, and he was 27. Her mother's maiden name was Fitzgerald, but she was not related to Michael Fitzgerald so far as is known. Sadly she died a few years later, and was buried in town. William ended up marrying Captain Long's daughter Louisa, then fully grown up, though a lot younger than William.[29]

Reverend Henry Kane opened a private boarding school at Rostella House, up the road from Dilston, in 1860. Reverend Kane had recently retired as head of Launceston Grammar, and was married to one of the Neilly girls of Rostella. Down the road, George Coulson had finally sold the stone house at Dilston bridge to a Mr John Griffiths.[30]

In 1862 Captain George Coulson died at the ripe old age of 84, and was buried at Windermere. His will instructed that his wife Mary should have use of the remaining properties for the term of her life, but she died shortly after he did, and so a deceased estate auction was held in October 1864. The executor of the estate, Mr Milligan, advertised the hotel for lease, but as an accommodation house, as it was no longer licenced.[31]

At the sale, William Coulson bought Thorpe, where he was already living under a lease, for £1925. It came with 625 acres in a number of paddocks and included over 110 acres of rich marshland. A good stone house (presumably built after the old Bransgrove wooden cottage burnt down) with 6 rooms and cellar was included, plus six-stall stable, the big barn we now call the Granary, cart sheds, piggeries etc, and a one acre garden. There was also a police constable named John Livesay stationed on the property.[32]

The hotel also sold, to a Mrs Rumney. It had 174 acres and went for £420. 'Mrs Rumney' was actually Jane, William Coulson's widowed sister. The acreage was different from what was advertised, and the siblings had clearly agreed to swap a couple of paddocks. The following year Jane Rumney managed to

find a new lessee, Mr F B Watson, and after gaining his hotel licence he put in a stock saleyard which operated for a number of years.

At the stone house next to Dilston Bridge, new owner John Griffiths was busy. He'd built a couple of boats, one called the *Emily,* and fully renovated the house too. Perhaps he'd overdone it, for he was in serious financial difficulties in 1863, and the home and 58 acres were auctioned that June. The property came with large barns, storeroom and a garden and orchard.[33]

Dilston became the focus of enormous attention in 1865, with the inauguration of the East Tamar Regatta. The first race was held on New Year's Day 1866, and was a great success. The committee, including William Coulson and the Mayor (later Premier) Adye Douglas, chartered the paddle tug *Tamar* for the day for officials and visitors, and a viewing platform was set up next to the hotel – which had recently reopened under Mr Watson. Afterwards Reverend Kane hosted a big dinner at the Rostella schoolroom.[34]

The 1867 East Tamar Regatta was another big success, but the committee then decided to move the event from New Year's Day to Boxing Day, so the third Regatta was held at the end of the same year. It was a disaster. Other events were being held that day, and the steamer booked to bring visitors couldn't enter the Tamar due to adverse winds. The Committee did the right thing, dipping heavily into their own pockets to pay the promised prizes, but then gave up on running it again. The Regattas ended, the Tamar Hotel closed and Mr Watson left.

Around this time it seems that a police station was built next to the hotel, and the constable at Thorpe relocated to it. Although the site was next to the Inn, it was just inside the boundary of the old Fitzgerald property, now owned by H F Neilly of the Rostella Neillys, who bought it when John Griffiths went bust in 1863. He leased a small block to the government, charging only a nominal fee as it was to everyone's benefit to have the police there. With the government putting up a house (including two cells) on the block, Mr Neilly would one day gain this for nothing, unless it was transported elsewhere. As it turned out, Mr Neilly sold the 58 acres, with the stone house and Police Station to William Coulson around 1870.

Louisa Maria and William Patten Coulson. Probably their wedding photo taken in 1872. Courtesy of John Coulson.

The new Police Station also became the Post Office, replacing an informal but very long-standing mail drop-off and delivery that was probably based at the Inn, and Constable Tom Vincent, a family man, was appointed postmaster. Late in 1869 a Mr Charles Edwards took on the hotel licence, reopening as the East Tamar Hotel, and was promptly charged with assaulting Constable Vincent! The charge was proven, but the charge sheet was technically in error, as Edwards was accused of assaulting a policeman, when he'd actually assaulted the postmaster. Even though they were the same person, Edwards was let off.[35]

Mr Edwards was a lucky man. Apart from getting off on the assault charge, he'd been fortunate in getting a hotel licence. His application was opposed by one of the Licencing Court magistrates, Mr Mason, who accused Edwards of living in sin with a woman named Jane Ashley. The magistrate knew Mrs Ashley from Carrick, where she'd seduced a young man 19 years her junior and married him, being later convicted of bigamy. He said Ashley was now living with Mr Edwards. Edwards protested no, she was only his housekeeper. Chief District Constable Propsting said she was not his housekeeper, but living as his wife.

Mr Rocher (after whom Rocherlea is named), appeared for Edwards, saying it was all hearsay and four other magistrates had supplied testimonials as to Edwards's character. He said Mr Edwards would agree to sack Mrs Ashley, and on this promise he was given a licence. He then applied for a reduced fee on the basis of isolation. Ordinarily this wouldn't have been a problem, but it was refused – which can only be regarded as magisterial petulance.[36]

Unfortunately for Edwards, just before the next licencing hearing in 1870 he appeared again before Mr Mason, the very magistrate who had opposed his licence application the previous year. This time it was to answer a charge of assaulting Jane Ashley at their East Tamar Hotel residence. Clearly he had not sacked her as promised.

At the licensing hearing shortly afterwards, Mr Mason opposed Edwards's licence vehemently, saying that: "*last year was on the understanding that a Mrs Ashley should be put away. Instead of doing that he kept her, and the other day she came into town to lay an information against Edwards who had beaten and smashed her all to pieces....but the woman did not make her appearance, having gone home to Edwards and made it up.*" Constable Vincent testified that both Edwards and Ashley were "given to drink" and could not be married as both already were. The licence was refused on account of the bad character of the applicant. It must have been rather embarrassing for the four magistrates who'd provided him with references the previous year![37]

The hotel was then unlicenced for six years, until it was finally sold to Michael Whelan in 1877 and reopened at the beginning of 1878. Being unlicenced didn't mean it was unoccupied, and Mrs Rumney may well have run it as an accommodation house. With the final exit of Coulsons from the Inn, and William Coulson having earlier bought the stone house property from Mr Neilly, the names Dilston, Dilston Lodge and Dilston House seem to have migrated from the Inn to the stone house next to the bridge, and the property associated with it that included the Police Station.

After Michael Whelan took possession of the hotel he found coal and clay on the grounds, and his adventures with this are revealed in Chapter 7. Like his predecessor Mr Edwards, Mr Whelan was quite a character, and Dilston became a busy little place for a while.

They had a succession of police appointments, with Constable Vincent getting into trouble after a nasty verbal stoush with a belligerent local woman named Kitty Howes. Mrs Howes was a long-time servant of Reverend Kane's, and was in the habit of abusing and slandering Mrs Constable Vincent and the Vincent progeny. Tom Vincent eventually lost his patience with her and became most unconstabulary when he publicly denounced her as a "dirty old monkey-faced bitch" and copped a fine for doing so.

The force moved quickly to transfer Constable Vincent out of the place and replace him with James Emsell in June 1871, but Emsell only lasted a year before being replaced by Constable William Coghlan. In 1876 District Constable Peter Keegan and his wife Susan moved into the station, but sadly she died soon after, aged 60. Keegan may have been younger than her, as he was still serving six years later, in

This c1898 photo is of the Dilston Bridge over the convict cutting that created Lady Nelson Creek. Dilston Church and hotel are in the background. Northern Tasmania Camera Club image courtesy TAHO.

The Dilston School closed in 1953. The property had been earmarked for transportation to Ravenswood as a preschool, but was grabbed by the community, which needed a Memorial Hall. It was vested in Council in 1954 and administered by a local hall committee. That was also the year town water came to Dilston. Image courtesy tasphotoalbum.com

1882, when he was finally replaced as postmaster by Miss Helen McCulloch, and then as constable by Alfred Ray in 1883.

A Dilston store had been opened by James Burr and family by this time, and Constable Ray started a Sunday School as soon as he arrived in mid-1883. The district's evident desire for religious instruction prompted the Church of England to send a minister out once of month to hold an evening service in a farmhouse. In turn, this prompted the locals to form a Church Building Committee, and with a donation of land next to the Police Station from William Coulson, a new non-denominational church opened on January 23rd 1885. After all the donations of land and materials and volunteer labour, it only cost £26 to build! Reverend J M Easterling did the opening honours, and the new organ was ably played by Miss Alice Franks. The church building also found immediate use as a school, as well as accommodating the Sunday School, and the Education Department contributed by putting in fencing and other minor modifications. Sadly, four days after the church opened, Michael and Sarah Whelan's 14 year-old boy Edward was killed while loading a cart with posts and rails.[38]

In 1886 William Coulson sold Thorpe to J C West for £4100, and bought Rostella for £2000. The construction of the rail line to Scottsdale caused a flurry of activity that year. The new line passed only a mile and a half from Dilston, and that spot happened to require the biggest rock cutting of the whole project, plus an 8ft wide brick culvert under the line next to it. The railway camp was accessed by a good bush track from Dilston, and was quite a sight, with men in tents and huts camped in all directions. The sounds of blasting echoed around the district for some time.[39]

Not everyone was pleased to have all the activity and population. Mr R S Gleadow, with 640 acres next to Thorpe, found that sheep were mysteriously disappearing from his runs, and Constable Alfred Ray couldn't be everywhere. The rail construction and its light-fingered workers moved on soon enough, however, and things returned to their quiet normality. Robert Sutcliffe became the local constable and postmaster in 1887, replacing Constable Ray, and the mail came and went twice a week. He was replaced by George Shegog in 1889.

A visitor came by in April 1889, and recorded their impressions of Dilston for the *Examiner*. "*In the centre of Humbug Reach, on the east side, is Dilston, locally known as Roaring Creek, which in winter becomes a swirling eddy, the noise of which can be heard for miles ...I discovered a charming bathing place, a perfect Diana's pool, a deep basin of salt water, about 20 yards across, and within six paces of it a fresh water hole, five or six feet deep. The creek originally debouched at the head of Nelson's Shoals, three miles lower down, but a fertile valley was reclaimed by cutting through a ridge of conglomerate, through which the creek now flows to the rivers. It is overlooked by a tumble down building, once an old police station, now known as the Haunted House owing to a frightful murder committed on a lonely woman there, whose body was found, horribly mutilated, by a person unknown. Just below is a deserted hotel, formerly the Nine Mile House; then a defunct brick company's jetty, near which brown coal has been found, but never worked. An energetic farmer (Mr Coulson) bought some land here, which was bush a year ago, but is already laid down in grass; more power to him.*"[40]

A few days later the *Examiner* had to print a retraction. The alleged haunted house was a reference to Dilston House, next to the bridge. Not only was no murder ever committed there, the *Examiner* now admitted, but there hadn't been a death in the house since it was built. [41] Neither was it ever used as a police station. The only police station ever used in the locality was the one near the hotel. Its lease would expire in a year, and the government had purchased a site south of Dilston House on which to erect a new station. (They never did build the new police station though, and the block became a recreation ground.)

The correspondent's reference to a "deserted hotel" was probably accurate, but within months William Ryan had taken over and reopened, still under the Picnic Hotel name acquired in 1885. He only kept it for a few months before passing over to John King, who lasted two years. Then William Shegog took over in 1893.[42]

Around the time of the visitor's sojourn through, the well-known surveyor and painter Joshua Higgs Jnr also came by, and created an oil painting of the bridge. It was exhibited in town the following year, but seems to have been subsequently lost. It may be in a private collection somewhere, and will hopefully turn up one day.[43]

The church organist, Miss Franks, who also worked in the Sunday School, moved to England in 1889 and one of the Coulson girls (Alice) took over her duties. Louisa Coulson, William's wife, had also been a tireless supporter. In 1890 the Dilston church was bulging at the seams, and it was decided to lengthen it by 10ft on the northern side. Mr Coulson took up a collection for the church enlargement and supervised the construction. Land was donated for the purpose by Henry Law, who was now the proud owner of the Dilston House estate, which he presumably bought from William Coulson at the end of 1889, at the same time as buying the hotel from Michael Whelan and the Police Station from investor Mr A E Goetz of the Don. He owned most of Dilston at this time, and had spent £250 making thorough repairs to Dilston House next to the bridge, which was now one of the neatest homes on the Tamar.[44]

The small extra piece of land was donated on the understanding that the Church trustees would attend to, and pay for, the transfer. It was the same understanding as when William Coulson donated the land upon which the church had been built six years before. When Mr Law went bust in 1891, however, it was found that they hadn't done so in either case, and the church became part of Mr Law's bankruptcy estate and was put up for sale! Clearly rather embarrassed, the liquidator tactfully described the church he'd seized as "Lot 7" on which "a building is erected, now used as a school-room etc". Fortunately for the congregation and the liquidator, Mr Coulson and William Hart came to the rescue and acquired it. For Mr Coulson, this meant he had to buy and donate land that he'd already owned and donated!

William Hart MLC came to the rescue of the Dilston Church. He was a director of a number of companies in this book. Image from 1877, when he was 52, and courtesy of TAHO.

The liquidator also got into a bit of strife by describing Lot 10 as the "haunted house". He quickly had to change the description to 3 acres, with "Dilston House". Neither the hotel nor Dilston House sold immediately. The only substantial property that did sell was the Police Station on 1⅓ acres, which went to a Mr James Fenton for £100. With little interest shown, the liquidator bought the best riverside building block for himself.[45]

After the auction most of the remaining properties, except Dilston House, were bought privately by William Coulson, but he died only two months later and they became part of his deceased estate and on the market again, with 203 acres. The Picnic Hotel and land were bought in late 1895 by George Henderson, who cleaned up the hotel and built another house nearby. Dilston House stayed with the defunct Van Diemen's Land Bank, as mortgagee in possession, for some years.[46]

Frank Archer, the MP and Reverend who became interested in ochre at Rocherlea (see Chapter 4), acquired both Hanwell and Thorpe around 1891 and renamed them Burnside. He built a new house next to the big barn that Mr Bransgrove built, and when he died in 1905 had 1060 acres in total. The property was then acquired by Mr E Archer.[47]

William Coulson died in 1893, only 10 days after taking his sister Jane Rumney's body to Richmond for burial. His second wife Louisa lived to 72 years of age, dying at Rostella in 1921. She was buried with William at Windermere.[48]

The hotel William's father George built may have become a coffee palace in 1901, as there was one at Dilston at that time. For most of the time since the golden days, however, it has been a residence, although it did shine as an antique shop for a few years. Michael Whelan, the colourful owner of the hotel for much of the latter 19th Century died at Dilston in April 1900, after a long and painful illness.

The church ceased services in the 1950s and was sold and demolished around 1981. Fortunately the Police Station has survived and prospered. It was fully renovated and is now in the proud possession of Mrs Ronnie Thomas.

Notes & References

1. The Naylor grant is in Grants Volume 7 Page 122 at TAHO
2. Hobart Town Gazette 6/5/1825 p3
3. Daily Telegraph 19/7/1893 p1
4. 1827 Census of Children, "*Michael Fitzgerald- his life and family*" Debbie Rainbow
5. Hobart Town Gazette 11/8/1827 p1, Daily Telegraph 17/3/1885 p3
6. Launceston Advertiser 21/6/1830 p2
7. Hobart Town Courier 16/4/1831 p3, Launceston Advertiser 5/9/1833 p4, Ex 18/9/1847 p5
8. The Independent 18/4/1831, *Michael Fitzgerald – his life and family* Debbie Rainbow
9. He gained title to Fitzgerald's 58 acres in June 1837, when he found it necessary to advertise against trespassing again. The Colonist and Van Diemen's Land Commercial and Agricultural Advertiser 29/10/1833 p4, Launceston Advertiser 5/9/1833 p4, Cornwall Chronicle 1/7/1837 p1.
10. The Colonist and Van Diemen's Land Commercial and Agricultural Advertiser 17/12/1833 p2
11. Launceston Advertiser 2/1/1834 p3
12. Colonial Times 18/3/1834 p7, Launceston Advertiser 16/6/1834 p2 & 26/6/1834 p4 & 23/7/1835 p4, Personal communication with John Coulson.
13. Cornwall Chronicle 21/5/1836 p3
14. Lady Franklin's Diary January 1838, State Library
15. Cornwall Chronicle 26/1/1839 p3
16. Launceston Advertiser 9/4/1835 p4
17. Cornwall Chronicle 23/12/1837 p2
18. Daily Telegraph 24/3/1909 p3, *Launceston's Industrial Heritage Part One* Morris-Nunn & Tassell 1982 p51
19. Launceston Advertiser 20/6/1839 p3. The 100 acres adjoining Coulson was a grant by Governor Arthur to William Drant in 1828, but he seems never to have occupied the property. It was advertised for auction in June 1839, and Bransgrove got title a year later. The big barn known today as the Granary is on Thorpe, not on this 100 acres. Hobart Town Courier and VDL Gazette 14/8/1840 p2
20. Cornwall Chronicle 13/4/1839 p3
21. Cornwall Chronicle 2/1/1841 p1, Launceston Courier 10/1/1842 p4, Launceston Advertiser 21/3/1839 p4
22. Examiner 25/3/1848 p6
23. Colonial Times 20/6/1848 p3, Examiner 26/10/1850 p2
24. Cornwall Chronicle 27/4/1850 p271
25. Cornwall Chronicle 26/6/1852 p40, Examiner 11/2/1852 p2
26. Cornwall Chronicle 23/12/1854 p7, Examiner 26/2/1856 p5
27. Cornwall Chronicle 20/9/1851 p600, Examiner 23/12/1858 p2
28. Cornwall Chronicle 18/2/1857 p7 & 30/5/1860 p1
29. Cornwall Chronicle 30/1/1858 p4
30. Cornwall Chronicle 29/12/1860 p1
31. Examiner 20/10/1863 p1
32. Cornwall Chronicle 20/7/1864 p5, Examiner 22/10/1864 p7
33. Examiner 28/4/1863 p6, Cornwall Chronicle 23/5/1863 p6, Daily Telegraph 17/3 1885
34. Examiner 2/1/1866 p5
35. Cornwall Chronicle 3/12/1869 p3
36. Examiner 2/12/1869 p3
37. Cornwall Chronicle 2/12/1870 p2 & 30/11/1870 p3
38. Examiner 5/1/1886 p3
39. Examiner 30/12/1886 p2, Daily Telegraph 7/5/1886 p3
40. Examiner 20/4/1889 p2
41. Everyone was forgetting the murder of Michael Fitzgerald. He was speared in his timber cottage that existed, perhaps on the same spot, before the stone house was built, though he died in hospital, not at home.
42. Daily Telegraph 21/11/1889 p4
43. The Tasmanian 30/8/1890 p25
44. The Tasmanian 30/8/1890 p25
45. Examiner 4/3/1893 p2 & 20/4/1893 p4 & 6/2/1939 p2
46. Daily Telegraph 21/11/1895 p4
47. Examiner 20/12/1890 p1, Daily Telegraph 24/3/1909 p3
48. Daily Telegraph 19/7/1893 p1 & 4/2/1921 p8

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