

& MINITE

HERITAGE ACT 1995

Section 127 - 128

127. Offence to damage or disturb unregistered relics and unregistered archaeological sites

(1) A person must not knowingly or negligently deface or damage or otherwise interfere with an archaeological relic or carry out an act likely to endanger an archaeological relic except in accordance with a consent issued under section 129.

Penalty: In the case of a natural person:
600 penalty units or imprisonment for 12 months or both.
In the case of a body corporate:
1200 penalty units.

(2) A person must not knowingly uncover or expose an archaeological relic or disturb or excavate any land for the purpose of uncovering or discovering an archaeological relic except in accordance with a consent issued under section 129.

Penalty: In the case of a natural person: 600 penalty units or imprisonment for 12 months or both.

In the case of a body corporate: 1200 penalty units.

- (3) A person is not guilty of an offence under this section if he or she picks up or collects an archaeological relic exposed in or on the surface of land in Victoria.
- (4) This section does not apply to an archaeological relic which is a registered object.

128. Safeguarding of relics

A person who knowingly picks up or collects an archaeological relic in Victoria or who knowingly brings into Victoria or receives in Victoria an archaeological relic must -

- (a) safeguard it from loss or damage; and
- (b) immediately give notice in writing to the Executive Director describing the relic and stating where it was found or where it came from; and
- (c) if required by the Executive Director, make the relic available for identification or conservation.

Penalty: In the case of a natural person: 120 penalty units.
In the case of a body corporate: 240 penalty units.



GOLD

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INTRODUCTION

Name: Gold Chemical name: AU

Atomic Number: 79

Melting point: 1064.43 °C

Colour: Gold

Gold is a highly sought-after precious metal, that has been mined from before 3600 BC. Its value has caused wars and helped shape the direction of countries across the world. It remains the backbone of western financial markets.



What is gold

Gold is the name of a natural metal. Its name is derived from the Latin word *aurum*, but in old English, the word *Geolo* was used for gold. *Geolo* meant yellow. In earlier days this precious metal enabled trade across the world, while today, its worth has resulted in world-wide stockpiles designed to ensure the security of financial markets, governments and even countries.

Gold is seen as a symbol of love and commitment between lovers, religions have applied spiritual value to it or seen it as the root of all evil, while people and countries have fought to own it. Tutankhamen's funeral mask was created using well crafted gold in 1200BC and King Solomon was building golden temples of gold in 950 BC. By 500 BC it was being used as a national currency and by 600 BC it was used in dentistry. Today, it is used in areas including: jewellery, electronics, science, space exploration and even for producing telescope lenses.

Gold is described using the term 'Karat' (Kt). Unlike the term 'Carat' used to describe diamonds, the gold karat is a measure of the percentage of gold in the mixture.

KARAT CHART:

24 karat = is pure gold

22 karat = 91.6% gold and 8.4% other metals

18 karat = 75% gold and 25% other metals

14 karat = 58.3% gold and 41.7% other metals

10 karat = 41.7% gold and 58.3% other metals

More recently, gold has been expressed as a percentage, instead of the karat.

PERCENTAGE CHART:

24 karat gold is 0.999 fine gold (this is as pure as humans can process gold)

22 karat gold is 0.916 gold

18 karat gold is 0.750 gold

14 karat gold is 0.583 gold

10 karat gold is 0.417 gold

Gold alloys

Pure gold is soft and easily distorted, it has limited applications. As a result, gold is usually mixed with other metals to form a harder metal. This process creates an alloy. Metals mixed with gold include: copper, palladium, iridium, nickel, rhodium and silver. When mixed with gold, the different metals produce differing colour variations, leading to gold names such as white gold, rose gold and yellow gold.

Gold price fluctuations

The price of gold fluctuates daily. Its price is influenced by things such as world events and the demand for gold. Some people see gold as a safe investment. This leads governments to stockpile it through Central Banks. Financially astute investors constantly monitor gold's value.



INTRODUCTION

Californian Gold Rush

The Californian Gold Rush was the world's first major gold rush and commenced on 24 January 1848 when James W Marshall found gold at Sutter's Mill in California. Over the next two years 300,000 people arrived at the goldfields by boat and overland. Originally large nuggets were being picked up off the ground. Once exhausted, basic gold mining techniques were employed to extract gold, before deep lead mining was introduced to follow gold leads deep underground.

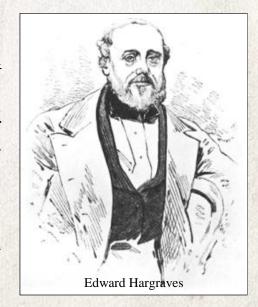
The rush caused San Francisco to grow from around 200 settlers in 1846 to around 36,000 by 1852 and during this time there was a significant increase in infrastructure development such as schools, churches, roads etc. A State Constitution was established by 1849 and California became a State in 1850.

Sadly it is estimated that between 1848 and 1868, over 100,000 native Americans died due to the rush. Many died of starvation and disease, while others were pushed off their land or murdered for it. By 1855 the rush was largely over, and many of the fossickers and miners had already left for the newly opened up goldfields in Australia.

Australian Gold Rush (New South Wales)

By the early 1840s squatting runs had locked up the more viable and productive lands of the new colony for grazing cattle and sheep. This was especially true on the eastern seaboard where some of the countries best land for agriculture was found. It was on the

back of this that the Australian Gold Rush commenced in 1851 when payable gold was discovered near Bathurst, News South Wales, by miner Edward Hammond Hargraves at the bottom of a drinking hole. Edward had spent time unsuccessfully working the California gold fields, then returned to Australia believing he knew of areas in New South Wales which were similar geologically to areas where gold had been found in California. Upon his return he headed inland and found gold, then reported it to the government of the day who were at first reluctant to accept his claim due to fears of a gold rush to the young colony. Eventually his claim was





made public and today he is regarded as the verifiable discoverer of gold in Australia.

Edward was awarded 10,000 pound reward for his find and the *Bathurst Free Press* reported: 'A complete mental madness appears to have seized almost every member of the community. There has been a universal rush to the diggings.'

A number of months after the Bathurst gold find, the Victorian Government offered a 200 pound reward to anyone finding a payable goldfield within 200 miles of Melbourne. This was the same year that the Port Philip District (Victoria) separated from the Colony of New South Wales. Soon afterwards, gold was found in Victoria, causing a massive rush to the newly recognised southern state. The rush saw Australia's population more than triple between the years of 1851 and 1861 and marked the beginning of the settlement of the bush. Up until that time the bush was mostly the location for large agricultural runs and timber harvesting.

Earlier unpublished gold finds

It is not widely known but gold was <u>first discovered in New South Wales by Assistant Surveyor James</u> McBrien, at Fish River near Bathurst, NSW on <u>15 February 1823</u>, 28 years prior to Hargraves discovery. However the find was considered unimportant and was not pursued. According to an article published in the <u>Launceston Examiner on Thursday 15 February 1934</u>, McBrien recorded in his diary that he had 'found numerous particles of gold in the sand on the hills convenient to the river'. He then went back to surveying!

Sixteen years later, Polish explorer <u>Paul Edmund Strzelecki</u> found auriferous pyrites, though was asked to keep the matter secret by Governor George Gipps due to fear of a rush occurring amongst the soldiers and convicts. Gold discoveries remained quiet until the 1850s.

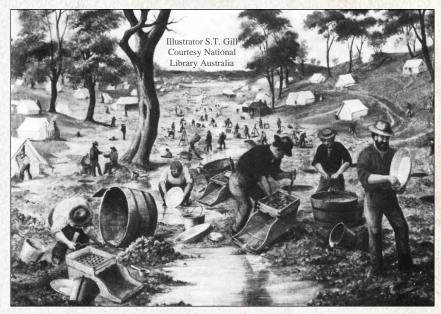
Victorian Gold Rush

According to James Flett in his book *The History of Gold Discovery in Victoria*, the earliest verifiable finder of gold in Victoria was William Campbell who found gold at Clunes in March 1850. There were many others who claimed to be the first, though



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favour lays on the side of William. With the discovery of gold, came a gold rush to Victoria. It was not long before a migration of Victoria's working class men occurred from Melbourne and towards the areas where gold was being found, leaving Melbourne depleted of labour. As gold fever set in on the world stage, men and women sailed for the Victoria goldfields in large and continuous numbers.



Ships were now arriving in Melbourne constantly and so strong was the lure of gold, that even their crews were abandoning their posts. It was estimated that over 24,000 Chinese immigrants alone arrived at the Victorian goldfields during the rush.

However, when miners realised how dangerous the conditions on the goldfields were and how rudimentary the services and living conditions were, many returned to the cities and their jobs. Normalcy was slowly being restored in Victoria. But there were



still tens of thousands of miners actively mining across Victoria.

Eureka Stockade

In an attempt to better control the miners and the goldfields, and stem the flow of young men leaving the cities and their jobs, Governor Charles Joseph La Trobe introduced a Gold License, proclaimed on 1 September 1851. But miners quickly turned against the rights, believing the new system to be an unfair tax imposed by a cruel and uncaring Government.



Anguish amongst the miners was high as fees (30 shillings per month-the equivalent of a week's wage) was payable to the Government regardless of whether they found gold or not. To make matters worse, as the goldfields dried up, the collection of the tax by the police (then known as traps) was often over zealous. Many of the officers were excriminals, with little true regard for law and order, and little sympathy for the miners.

This resulted in a rebellion against the government of the day and the creation of a stockade at Ballarat in Victoria, led by politically astute elected leader <u>Peter Lalor</u>. On the morning of 3 December 1854, with orders to break the stockade, 276 soldiers stormed the blockade. This brutal decision by the government left 35 people dead and 125 imprisoned. Five soldiers were amongst those killed with many more wounded.

This battle became known as the <u>Eureka Stockade</u> and in its aftermath a groundswell of public sympathy and support rose for the miners, while the government were almost universally publically condemned for their actions. The incident led to a Royal Commission, all high treason charges being dropped against 125 imprisoned miners and changes to the law, that better served the developing mining industry. *Gold Licences* were done away with, and replaced with a simpler and more fair *Miners Right* which cost just one pound per year. Peter Lalor, the central figure in the Eureka Stockade, was elected to the Victorian Legislative Council as a representative for the Ballarat area.

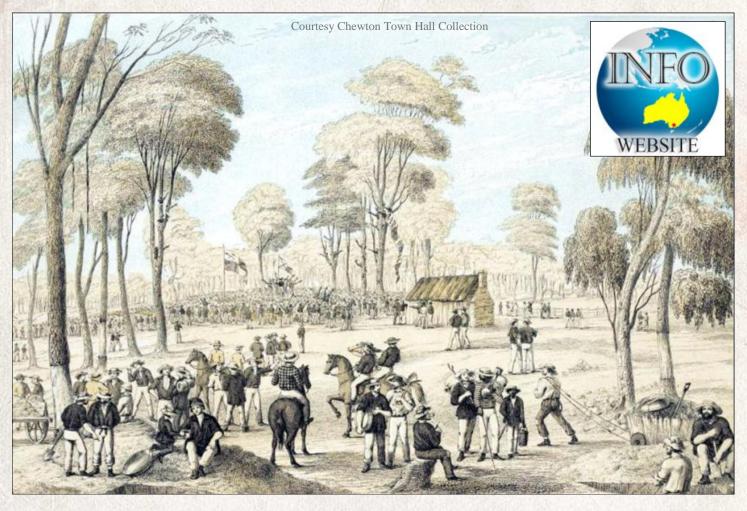
Monster Meeting - Birth of democracy as the Government reacts to public opinion While the history of the <u>Eureka Stockade</u> is the most dominant of all goldfield rebellions, a number of large demonstrations against the new tax and the unfair treatment of miners actually predated Eureka.

Some historians believe that the 1854 Eureka Stockade marked the birth of democracy in Australia, though nearly three years before Eureka there was a peaceful but hugely significant demonstration of miners in a field near the Forest Creek Diggings at Mount Alexander. This demonstration became known as the <u>Monster Meeting</u>. The demonstration followed smaller demonstrations as Buninyong and Ballarat over unfair Gold Licence fee and was the largest demonstration in Australia up until that time.

The catalyst for the meeting was a proposed government decision to double the Gold



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License fee from the already burdensome 30 shillings, to the ridiculous amount of three pound. Incredibly, just two days after the Monster Meeting, the government officially announced its decision to back away from its plan.

The meeting was held on 15 December 1851 and attracted between 14,000 and 20,000 miners. It was well organised, peaceful and even had its own flag (known as the <u>digger's flag</u>) three years before the Eureka Flag. The Monster Meeting is considered the first serious attempt by Australian citizens to influence democratic change. No matter what historians decide on this historical matter, the



meeting was certainly Australia's first massive anti-government rally.



The flag was the first of its kind, was divided into four equal sized sections and each section had its own motif. The bundle of sticks represented unity, the pick and shovel represented mining, the scale represented the idea of justice and the kangaroo and emu represented the land, nature and the idea of pushing forward—as neither animal can walk backwards.

While the Monster Meeting laid the groundwork for democratic change, Eureka achieved what the Monster Meeting could not; a Royal Commission, a far more sympathetic government, the abolition of the miner's right (licence), the right to vote for all full-white male adults, and the election to Parliament of a publically outspoken miners' representative in Peter Lalor (1827–1899). The Monster Meeting taught miners they could stand up for their rights and affect change, while Eureka was the first costly test of these rights!

Today the site of the Monster Meeting (a <u>field off Golden Point Road, Golden Point</u>) is managed by Parks Victoria and is open to the public. Interpretative signage and plaques tell the story of the Monster Meeting.

Melbourne and Australia golden prosperity

During the gold rush, most of the gold was being spent in the cities, and Melbourne saw the greater share of gold being transferred to cash and spent. At one point Melbourne held the prestigious title of being the fastest growing city in the world, while Australia's mining efforts accounted for 40 percent of the world's gold, with a majority coming from Victoria. As the first rush subsided, large finds continued to be made across Victoria, and included areas such as Beechworth, Bendigo, Chiltern, Jamieson, Woods Point and even Redgate. These finds were initially alluvial discoveries, though as these easier finds dried up, deep lead mining took over.

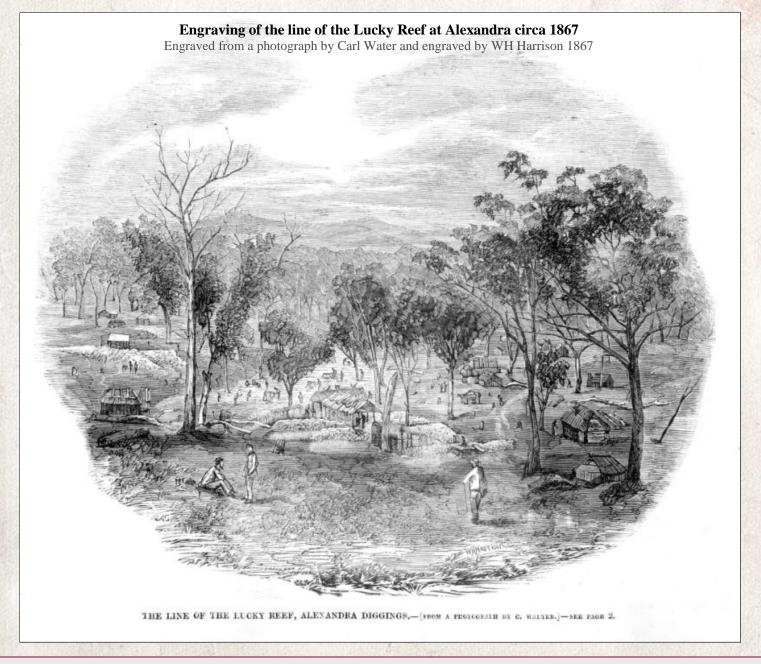
Deep lead mining was the process of mining below ground by following gold veins. It was far more dangerous, causing constant fatalities and long-term illnesses that dramatically shortened a miner's life expectancy. In some cases, their life expectancy dropped to a mere 35–40 years. Due to the trend at the time towards large families, these men often left a wife and 6-12 children, with no way to make ends meet. By 1871, the Gold Rush was largely over and Australia was turning towards agriculture and timber as



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Local gold finds

Alluvial gold was being found in small amounts around the District from late 1851 due to a general flow of fossickers into the bush. Mining reports inform us that by December 1851 there were a hundred cradles working on Muddy Creek (Yea River) and Dry Creek, north of Bonnie Doon in the Strathbogie Ranges. But during the early 1850s most local finds were small alluvial discoveries and were quickly exhausted as men flocked to those areas. By 1854 the junction of the Goulburn and Delatite Rivers as well as the junction of the Goulburn River and Snobs Creek were both being worked. But by 1866 local alluvial finds were becoming less common, and most of the headwaters of the UT Creek was pegged and worked out.





Leading up to this time there were a few very basic horse and dray tracks that led from Melbourne to the goldfields of Jamieson, Woods Point and Enoch's Point. One track ran via Healesville, Fernshaw, Marysville to Woods Point. The other which interests us, ran via Whittlesea, Kinglake and Yea, crossing the Ultima Thule Creek [U.T. Creek] at a location near the back of the current Alexandra Library. It then roughly followed the Goulburn River to the Upper Goulburn District.

Rush to Redgate Diggings

A gold rush to the area then called known as Redgate Diggings (later Alexandra) commenced in June 1866, after two men (Alex McGregor and Sandy Don) discovered a large piece of

quartz encrusted with gold near the old track. It was supposed that an earlier dray team may have broken the top from the quartz rock, exposing visible gold. At the time of the discovery, both men were reportedly working for the McKenzie family, owners of the McKenzie homestead and run. The area of the discovery was roughly along the Grant Street alignment, between the McKenzie's Flora & Fauna Reserve and the Alexandra Flora Reserve.

Eglington mine pegged

Alex and Sandy took their discovery to Government Surveyor John Downey, who was living at a camp at Spring Creek. On their behalf, John pegged out the prospecting claim, financed all costs, and officially registered it as *The Eglington* in June of 1866 at Jamieson Warden's Court.

[From Melbourne papers,]
VICTORIA.
ARARAT, July 28.

ALEXANDRA, July 29.

The death of a very old resident occurred to-day. Alexander McGregor died in the Melbourne Hospital. He was the discoverer of payable gold in Alexandra, and his discovery led up to the rush in 1865. He received £200, portion of the Government reward. He was working in Melbourne when he met with an accident. He was much respected. He leaves a wife and grown-up family here.

The Mercury Wednesday 4th August 1886 Courtesy National Library Australia

The mine was recorded as being located on the property of Donald McKenzie and both men received a reward of 75 pound for their golden discovery. Although alluvial mining had been occurring around the District for a period of time, this discovery marked the beginning of a rush to Redgate, an area directly around a red painted gate placed in a pastoral fenceline beside the UT Creek, separating two runs. It is not known who first coined the phrase Redgate, though it is likely that it was a natural occurrence originating from the miners themselves.

The *Eglington* was a rich mine, with a foot wide gold vein which continued for a few feet before narrowing underground. The name *Eglington* was given to the mine after the *Eglington Sheep Run*, Eglinton Creek and the *Eglington Homestead*. The Homestead at that time was occupied by Henry Johnson and the mine was north west of the McKenzie Mount Pleasant Run.

Nucleus of a town at Redgate

By December 1866 a mining surveyor from Jamieson was commenting on how the nucleus of a township had begun at Redgate, even stating how an estimated 300 miners and tradesmen etc had set up there. It is a less known fact that the new diggings were also referred to as the McKenzie Diggings in 1867 and the Mount Pleasant Diggings in 1870, meaning the area which would later become Alexandra was referred to by at least three names other than Alexandra.

At the time of the discovery, there were no other significant deep reef gold diggings between Alexandra and Yea. But this changed quickly after word of the discovery got out. Within a short time, the *Lucky Mine* was also opened at Redgate, with substantial profits initially achieved. Small alluvial claims were still being pegged, with claims extending from the Mount Pleasant area, down to the UT Creek, where a chock and log fence with a painted red gate stood. The gate was located near the current corner of Webster and Perkins Streets, and the fence-line marked the boundary between the Mount Pleasant and the Eglinton Runs.

The establishment of Alexandra

In early 1867, builder Richard Vining built and operated the Redgate Shanty on the site of the current Alexandra Library, just west of the red gate which was at the back of the shanty. He served the thirsty miners who were pouring into the area and it was reported at one point that the shanty was serving so much alcohol, that it was served directly from the back of the delivery drays, as moving kegs inside would have been pointless. A number of other breweries were being built around this time to supply the thirsty miners. Soon after, three had set up along one short stretch of the Goulburn River near Alexandra.

By February 1867 the Redgate area had been officially surveyed by John Downey and his recommendation to his superiors for a name was 'Eglinton'. However in the Government proclamation (Government Gazette, 19 April 1867) the township was stated as being 'Alexandra'. It is uncertain how the name change from Eglinton to Alexandra occurred.

Alexandra was chosen as the name after Princess Alexandra, the Danish Princess (Rose of



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Denmark), who married Prince Edward on 7 March 1867. Princess Alexandra was later the Queen Consort and mother of King George V.

Mines were now commonplace, and companies such as Albert 2 Co., Fireworks No 4, Ajax 5, Homeward Bound and the Mysterious were seeing excellent returns. A common school was operating at Alexandra by late 1867 and by 1868, the first newspaper publication commenced publication at the newly established town. The weekly was called the *Alexandra Times* by owner and editor John Whitelaw, who along with his son Norman, had moved from the Jamieson and Woods Point District where they had been publishing the *Woods Point Times* and the *Mountaineer*. John, a former schoolmaster, as well as an Auctioneer in Bourke Street, Melbourne, operated as the Woods Point Government Auctioneer and a mining Agent from an office in Scott Street for a period. He lived in Ellery Street during this period. The first Postal Service was operating in Alexandra by January 1868 from a room at Vining's Alexandra Hotel.

Mining was now well established throughout the District, with significant mining communities



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operating at Fawcett, along the headwaters of the UT Creek, the Puzzle Ranges and further afield at Thornton, Eildon, Yea, Godfrey's Creek (Gobur), Woods Point etc.

Cost of mining

Mining companies were being formed and large finds were made through the introduction of deep lead mining (below-ground mining of quartz reefs with veins of gold). With deep lead mining came serious risks to human life. Men were being lost, due to unsafe work conditions and the lack of health and safety regulations governing the industry at the time. The use of mercury and other dangerous chemicals used to process gold from rock was causing deaths, as was the constant breathing of dust from underground mining. This was a darker side of mining which was largely ignored.

First gold crusher

By 1867, Sabelberg's 12 head crusher (British Hero) was operating on the banks of the UT Creek, near the site of the current Alexandra Bowling Club. Crushers were used to crush quartz and rock to help in the process of extracting gold from it. The Sabelberg was later reported as being a 15 head stamper, meaning it was likely upgraded.

GOLD-FIELDS ON THE MOUNT PLEASANT RANGES.

The following are extracts from a special report of Mr George Harrison, warden, &c., at Jamieson, on the recently discovered gold-field known as the Mount Pleasant diggings:—

"On the 6th instant there were ninety quartz and several alluvial claims taken up and registered with the mining registrar at Jamieson. The first reef visited by the warden on this ed by the warden on this the Josephine, held by the new field was brothers Hamilton, late of that district. Seven holes had been sunk on the course of the reef, in each case intersecting quartz leaders containing gold, the finding the main body of the reef being merely a work of time. The distance from the Josephine Reef to the next reef, the Lucky, is a mile; near this reef there is in course of erection a 12-horse power crushing machine of 12 stampers, the proprietors being persons holding interests in the Lucky Reef. An ofishoot from the Lucky Reef is called the Morning Star; from this spur of reel good prospects have been obtained. Near the abovementioned reefs is a small township called Red Gate, south of which is situate Lucky Reef. At the time of the warden's visit, viz., 3rd December, there were twelve claims taken up on this reef, including the prospecting claim, which from its size might be considered to be a double claim. Of the twelve claims, Nos. 7, 8, 9, 4, 2 and 1 have struck the reef and found anriferous quartz.

The Eglinton Reef is distant from the entrance gate
of Mr Donald Mackenzie's station about 12 chains. The Eglinton prospecting claim was the first to discover gold on this field. The population was estimated at 300 miners, tradesmen, &c. There is every probability of this being a permanent and wide spreading gold-field. The flats in the neighborhood of the quartz reefs have much the appearance of the deep lead country on the Ballaarat gold-field.

> The Australian News for Home Readers Thursday 20 December 1866 Courtesy National Library Australia

Mr Parsons Senior was one of the first tradespersons in the township and was contracted to build the large chimneys for the plant. He completed the main chimney just prior to the opening of the crusher plant. By 1868, at least three other gold crusher plants were being advertised in the *Alexandra Times* as operating in or around Alexandra. Many other crushing plants would have been operating directly from successful mine sites around the District, or at other nearby townships by this time. Alexandra based crushing plants included: Connelly's



Machine, the Golconda Quartz Crushing Machine, William Wallace's Gold Crushing Machine and the famous abovementioned British Hero Crushing Mill (run by Theodore Sabelberg).

During the rush, large numbers of Aboriginals were drawn to the area, with over 100 reportedly camping in and around the site between the current post office and the Alexandra Hospital site on the top of the hill (now closed). It was reported in the Alexandra *Standard* in a reflective piece in 1931 by an early pioneer that 'Diggers were arriving from all parts, and so were large parties of friendly blacks, who selected a site for an extensive camp on part of land now occupied by the Alexandra Hospital.' It was also reported by an old pioneer and published by the Alexandra *Standard* that 12 men lost their lives in one incident inside the boundary of Alexandra after a mine in a paddock that was being cleared of alluvial gold, collapsed and caught the 12 men. The article described how others did manage to escape. While currently unconfirmed, if true, this would likely be the largest mining disaster to occur in the Alexandra District. According to the article, all 12 men were buried in the Alexandra cemetery.

Large successful mines, such as the OK, Galatea, Star of the Goulburn etc were producing payable amounts of gold. At Alexandra, the Lucky Mine (east), was running very successfully, though attempts by a different consortium to find gold on the western side of Mount Pleasant, was largely unsuccessful. The Homeward Bound Mine was another mine at Alexandra that was reported as being successful, though as is often the case with mining, success was short lived.

During these early days it was reported how the District was like the 'old west', with some respectable citizens forced to carry firearms, due to the high rate of holdups and gold robberies. Richard Vining, who at one point held the contract to deliver mail to the mining community of Godfrey's Creek (Gobur), was forced to carry a pistol for fear of being bailed up. Apparently once he had the pistol, he had no further troubles.

In the late 1860s, Alexandra and the Italian Gully were both listed as having State-run stampers which offered genuine prospectors the opportunity to gain a free crushing of up to three tons. Though this offer was restricted to those who had a written recommendation of the local Mining Inspector and they would not crush for companies. In Alexandra's case, normal crushing charges for private and State-run crusher were fixed by a State trust. In a booklet published by the Mines Department it was stated that:

By 1938, there were a large number of State run gold battery stampers (crushers). They were located at: *Alexandra, Ararat, Ballarat East, Bendigo, Chewton, Chiltern, *Club Terrace, Creswick, *Dargo South, Daylesford, Dunolly, Eaglehawk, Egerton, *Glen Willa, Granya, Inglewood, Italian Gully, Koetong, Lauriston, Maldon,

Maryborough, Moliagul, *Omeo, Queenstown, Rutherglen, Spargo Creek, St. Arnaud, Stawell, Steiglitz, Tarnagulla, *Walhalla, Wedderburn. (*These batteries were placed in the care of Trusts composed of a local Council or preventative body of public men. The charges are fixed by the Trusts). (Can we help you booklet - Mines Department 1938).

By 1871, the local Alexandra mining boom was all but finished, with many of the mines abandoned. Some efforts did persist through to the late 1900s, though large payouts were rare. In very rare instances, a few gold mines have been re-opened and are worked today, however these are very small mining concerns and even hobby mines. The one area that is active in the gold area is the use of metal detectors. These wonders of the modern age have resulted in ongoing gold finds around Australia and prove that there is still plenty of gold to be found.

Although the area was first established by white immigrants on large agricultural farming runs, it was gold that established the area in and around Alexandra as we know it today. For instance, before the rush, there were two sheep runs in the Alexandra area. After the gold rush a township had been surveyed, buildings were established, roads and infrastructure were in place, a Shire Council was operating, schools and postal services were opened and a large local population existed.

Metal Emblem of Victoria

On 30 April 2012, then Victorian Premier Ted Baillieu announced that the Victorian Parliament would be asked to adopt gold as the *Mineral Emblem of the State of Victoria*. The legislation was adopted on 29 January 2013.

Gold mining today

Gold mining continues in Central Victoria today, however there are few deep-lead mines and the pan has been replaced by high efficiency ground penetrating metal detectors. Many old abandoned mines remain open and are a hazard.. Extreme care should always be taken when travelling in bush around the District. If you do find an old mine, do not enter it under any circumstances. If you find an open shaft, avoid it completely. Visit the site below for more in formation on recreational fossicking in Victoria.

earthresources.vic.gov.au/licensing-approvals/recreational-fossicking

GOLD IS ADOPTED AS THE MINERAL EMBLEM OF VICTORIA (January 2013)

On 30 April 2012, the Premier Ted Baillieu announced:

The Parliament would be asked to adopt gold as the Mineral Emblem of the State of Victoria. He went on to say:

'Gold has played a central role in the history of the development of our great State, and I can think of few places more appropriate than the cities of Ballarat and Bendigo to formalise this fact.'

'Indeed, the world's largest alluvial gold nugget was found in 1869 near Moliagul, then a thriving gold town west of Bendigo and north of Ballarat. Appropriately, that nugget – which after more than 140 years is still the largest discovered – was named Welcome Stranger. This reminds us that

from our earliest times, Victorians have been welcoming. I am sure this will be met with bipartisan support' Mr Baillieu said.

On the 29 January 2013 this change was passed into legislation.

In 1958 Victoria was also the first State in Australia to adopt a Floral Emblem (Pink Heath) and we followed in 1971 with a Land Faunal Emblem (Leadbeater's Possum) and a Bird Emblem (Helmeted Honeyeater).

Courtesy Victorian Government Gazette





Victoria Government Gazette

No. S 25 Tuesday 29 January 2013 By Authority of Victorian Government Printer

Constitution Act 1975

MINERAL EMBLEM FOR THE STATE OF VICTORIA

Proclamation

I, Alex Chernov, Governor of Victoria, with the advice of the Premier, the Hon Ted Baillieu MP under section 87E(b) of the **Constitution Act 1975**, do by this my Proclamation declare that Gold be adopted as the Mineral Emblem for the State of Victoria.

Given under my hand and the seal of Victoria at Melbourne, this 29 January 2013

(L.S.)

HON ALEX CHERNOV AC QC Governor By His Excellency's Command HON TED BAILLIEU MLA Premier of Victoria

QUICK FACTS

- ABOUT GOLD -

- Today's production of gold exceeded 2,000 tonnes annually.
- As of 2010 we own less than 30 percent of our own gold production.
- Eighty percent of all gold produced today, ends up as jewellery.
- Around one quarter of all gold ever produced in the world, sits in banks. This equates to over 30,000 tonnes of bullion.
- Today Australia is the world's third largest gold producer.
- South Africa is the world's largest gold producer, followed by the USA.
- Gold production and sales employs over 60,000 people across Australia.
- Deadly cyanide is still used in the gold mining extraction process.
- Victoria's Golden Triangle was the most successful gold producing area in the 1950s. The triangle was the area between Ballarat, Bendigo & Stawell.
- Australia's population quadrupled between 1850 and 1857.
- Australian gold production is mainly owned by overseas interests.
- Smelting is the process of super heating of a material so that the gold and silver will melt into a liquid and separate from the other rock and metals.
- By the end of 1852, around 90,000 new fossickers had arrived in Victoria.
- The final gold rush in Victoria was at Berringa, in the first decade of the 20th century.
- It is not widely known but gold was first discovered in New South Wales by Assistant Surveyor James McBrien, at Fish River near Bathurst, NSW on 15 February 1823.

TIMELINE

BASIC TIMELINE OF EVENTS



TIMELINE

15 February 1823

Gold discovered in NSW by Assistant Surveyor James McBrien at Fish River, near Bathurst NSW. It was kept quite.

1839

Polish explorer and geologist <u>Paul Edmund Strzelecki</u>, who climbed and named Australia's tallest mountain Mount Kosciuszko, found auriferous (gold containing) pyrites, though was asked to <u>keep the matter secret by Governor George Gipps</u> due to fear of a rush occurring amongst the soldiers and convicts.

24 Jan 1848

James W Marshall found gold at Sutter's Mill in California, starting the Californian Gold Rush. It had ended by 1859.

1851

First gold field found in Australia was discovered at Bathurst, NSW by Edward Hammond Hargraves. The find sparked the rush to New South Wales. Edward had recently returned from the Californian gold fields and believed the areas to be similar. He was awarded 10,000 pound for his find and was appointed Commissioner of Crown Lands. In 1877 he was granted a pension of 250 pound per year until his death on 29 October 1891. The find was unsuccessfully contested by his partners John Lister, William Tom and James Tom, who he had taught to mine. However just before Edward died, a second enquiry found they had indeed found the first goldfield. It is not largely recognised.

1 September 1851

Governor Charles Joseph La Trobe proclaimed a Gold Licence.

15 December 1851

A large demonstration against the Government's intention to triple the Gold Licence fee was held by thousands of miners at the Forest Creek Diggings, Mount Alexander. It was named the **Monster Meeting**. The Government repealed its plans.

1850s

Victoria accounted for over a third of the world's gold found.



TIMELINE

1854 Gold was discovered at Casheen's Flat, near the current

township of Jamieson. It was estimated that between 3,000 and

4,000 people lived in or around the new township.

3 December 1854 A stockade formed by miners was defeated by police and

soldiers. It became known in Australian history as the **Eureka**

Stockade.

John Hargreaves published his book Australia and its

Goldfields: a historical sketch of the Australian colonies from the earliest times to the present day with a particular account of

the recent gold discoveries.

August 1866 Gold nugget was found near current day Alexandra by Sandy

Don and Alex McGregor, sparking a rush to Redgate. The rush

had largely ended by 1871.

5 February 1869 The Welcome Stranger was unearthed. It remains the largest

pure gold alluvial nugget ever found in the world. It was discovered by John Deason and Richard Oates at Moliagul,

Victoria. The nugget weighed 2,300 oz (71 kg).

1 August 1890 Mines Act 1890 introduced into law.

15 January 1931 The Golden Eagle, the largest nugget ever found in Western

Australia, was unearthed by John Senior and Junior Larcombe in

Larkinville. It weighed 1,135 oz (35.3 kg).

26 September 1980 The Hand of Faith nugget was unearthed with a metal detector

near Kingower, Victoria by Kevin Hillier. It weighed 874.82 oz

(27.21 kg). The nugget was 30 cm below the surface.

February 1894 The Mines Department published the first edition of its *Miners*

Handbook, prepared by ex-Minister of Mines Mr McColl and

issued by AW Howitt, Secretary of Mines. It was described at its



TIMELINE

launch as a digest of the by-laws of the several mining districts and included illustrations of puddling, sluicing, hand dollying, dish washing, panning and cradling etc. An update to this unique and now rare book was not released until the mid 1900s. (*Bendigo Advertiser*, Saturday 17 February 1894), (*The Traralgon Record*, Tuesday 11 December 1894).

16 June 2012 Work on this factsheet commenced.

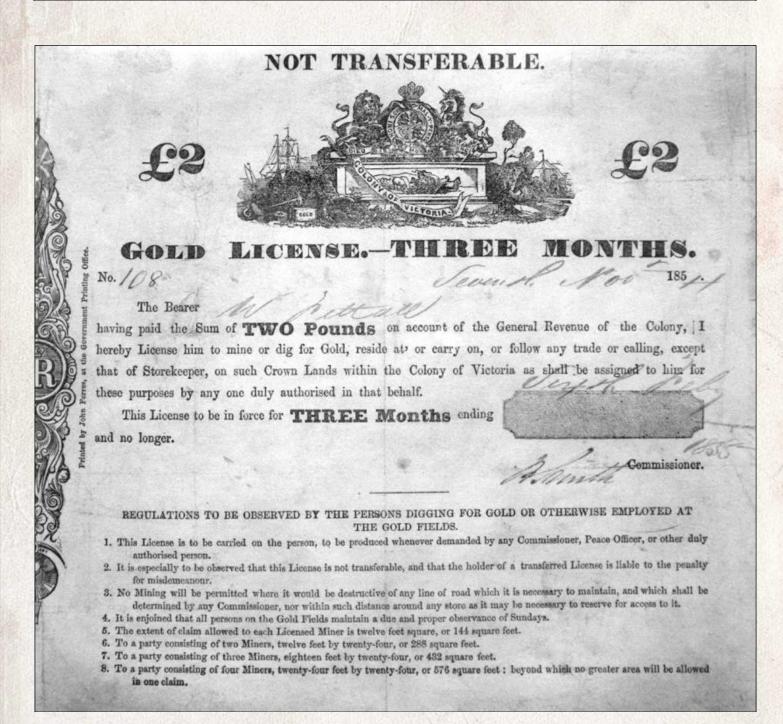
29 January 2013 Gold was officially established as the Victorian Mineral Emblem by then Premier Ted Baillieu.

GALLERY

RELATED IMAGERY



GALLERY



The Gold License [sic] predated the Miner's Right



GALLERY









Engraving of the great meeting of gold diggers at Forest Creek diggings 15 December 1851

Illustrator D. Tulloch, Engraver Thomas Ham



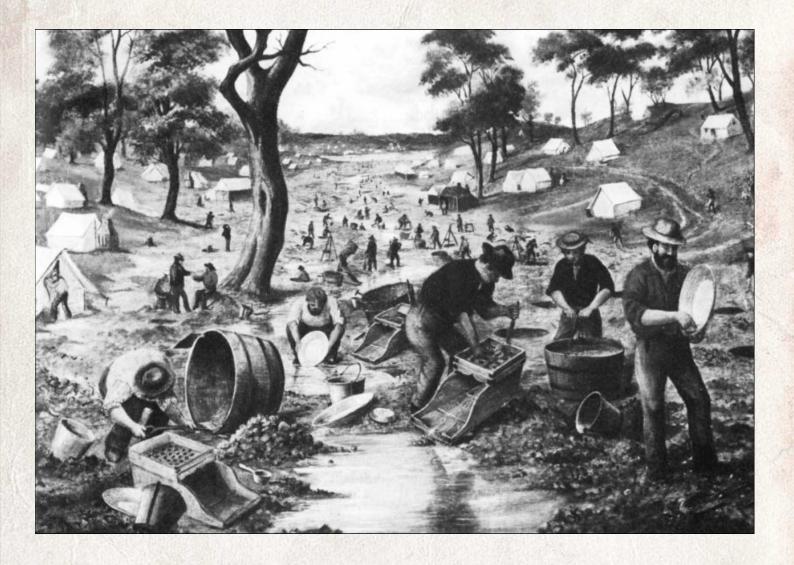
GALLERY



The Miner's Right followed the Gold License [sic]



ALLUVIAL MINING



1860 alluvial gold works using bucket puddlers, sluicing boxes, gold pans

Illustrator S.T. Gill Courtesy National Library Australia



ALLUVIAL MINING



Panning for gold in 1946

Courtesy Leisa Lees 2015



ALLUVIAL MINING





Coolgardie works in the 1880s. In some areas, where water was neither plentiful or easily accessible, a method called 'Dry Blowing' was used as a replacement for panning.

The rock and dirt was crushed up, then the lighter waste was blown away. Bellows, similar to the ones used in Blacksmith shops, were often used for this. This resulted in very dusty workplaces and posed a serious health hazard.

Illustrator N.J. Caire Courtesy State Library Victoria 2011



GALLERY





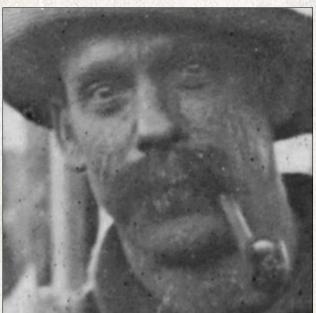
Alluvial works

Courtesy National Library Australia



GALLERY



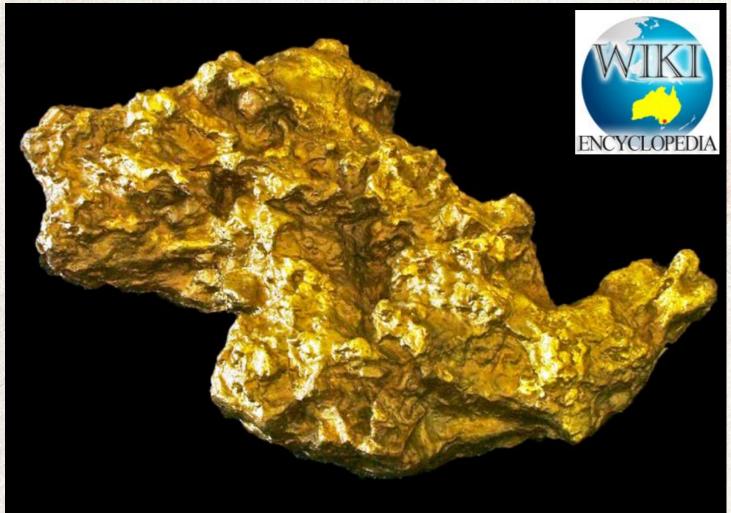


Workers at an unknown Alexandra mine circa 1900

Courtesy Kelly Petersen and David & Debbie Hibbert



GALLERY





The Welcome Stranger

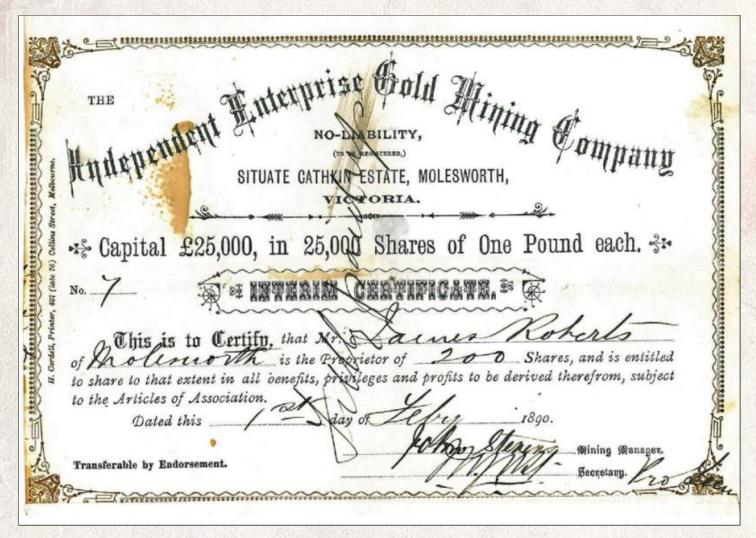
Unearthed 5 February 1869
Largest nugget found in the World

The Welcome Stranger was the largest 'pure gold' alluvial nugget ever found. It was discovered by John Deason and Richard Oates on 5 February 1869, at Moliagul, Victoria.

It was just 2.5 cm below the surface. John struck the earth with his pick while fossicking near a stringybark tree. When he investigated what had broken the pick, he discovered the history making nugget. Due to its weight, it was cut into three pieces in order for it to be weighed. It weighed 2,300 oz (71 kg) and sold for £19,068.



LOCAL BUSINESS FORMS



r of 200 Shares is and profits to be derived to

1890 gold mine chare certificates

Courtesy Sue Dundas 2013



GALLERY

Boo	k 26 E.		No. 6
00000000	GOLD	BUYER'S L. (Gold Buyers Act 1901.)	CENCE.
8	16	f Petty Sessions sitting at October day of Lewbo	liscandra 21,190 Shas by its Certificate
authorized the issue to William Henry Pack of a Gold Buyer's			
Licence under the authority of the Gold Buyers Act 1901, No. 1780, and whereas the			
declare that the said William Henry Hadys licensed			
or gold amalgam. And this Licence shall commence upon the State of Victoria, unwrought gold or gold amalgam. And this Licence shall commence upon the Successful day of the organization of the state of Victoria, unwrought gold or gold amalgam. And this Licence shall commence upon the State of Victoria, unwrought gold or gold amalgam. And this Licence shall commence upon the State of Victoria, unwrought gold or gold amalgam. And this Licence shall commence upon the State of Victoria, unwrought gold or gold amalgam. And this Licence shall commence upon the State of Victoria, unwrought gold or gold amalgam. And this Licence shall commence upon the State of Victoria, unwrought gold or gold amalgam. And this Licence shall commence upon the State of Victoria, unwrought gold or gold amalgam. And this Licence shall commence upon the State of Victoria, unwrought gold or gold amalgam.			
December next ensuing, both days inclusive, if not forfeited in the meantime. Given under my hand at Alexandra 16			
day of Sep tube one thousand nine hundred and Here			
7000000000 Fe	e Paid = 11	Mobile	Receiver and Paymaster.

Alexandra Gold Buyer's Licence dated 16 September 1903

Courtesy Sue Dundas 2013



GALLERY





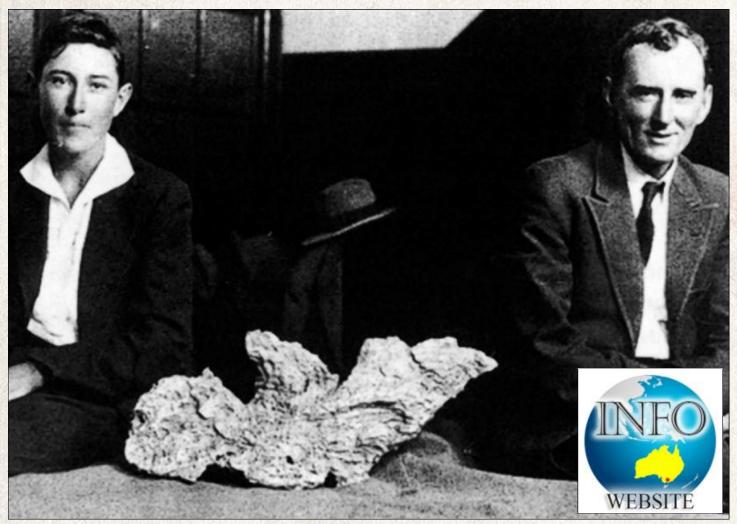
Bank manager JH Broad and his staff with a ton of gold ready for dispatch from the Day Dawn Bank in Western Australian. The photo appeared in the Western Mail on 13 May 1905 and the men are in Murchison costume (shirt-sleeves). It was the largest consignment ever sent from the Murchison Goldfield.

John Broad had at an earlier time been the Accountant at the Alexandra (Vic) branch of the National Bank and had married Mary (née) Hill. Mary's father Robert was the first baker at Alexandra, and his first oven was on the site of the Library.

A daughter of Mary Broad was brought up in Alexandra by her uncles, after Mary's passing. That daughter, Dorothy, married Herbert FitzRoy.



GALLERY





The Golden Eagle Unearthed 15 January 1931

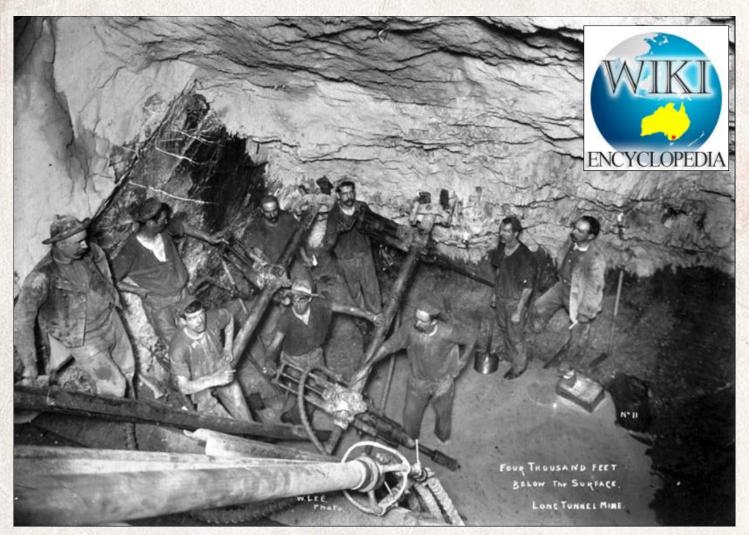
Unearthed 15 January 1931 Largest nugget found in WA

The Golden Eagle was discovered in a hole in a road by the 17 year old son of Jim Larcombe on 15 January 1931.

It is the largest nugget ever found in Western Australia and one of the largest gold nuggets found in Australia. The discovery was made at Larkinville, north of Kalgoorlie and weighed 1,135 oz (35.3 kg).



WALHALLA QUARTZ REEF MINE





Walhalla Long Tunnel Mine

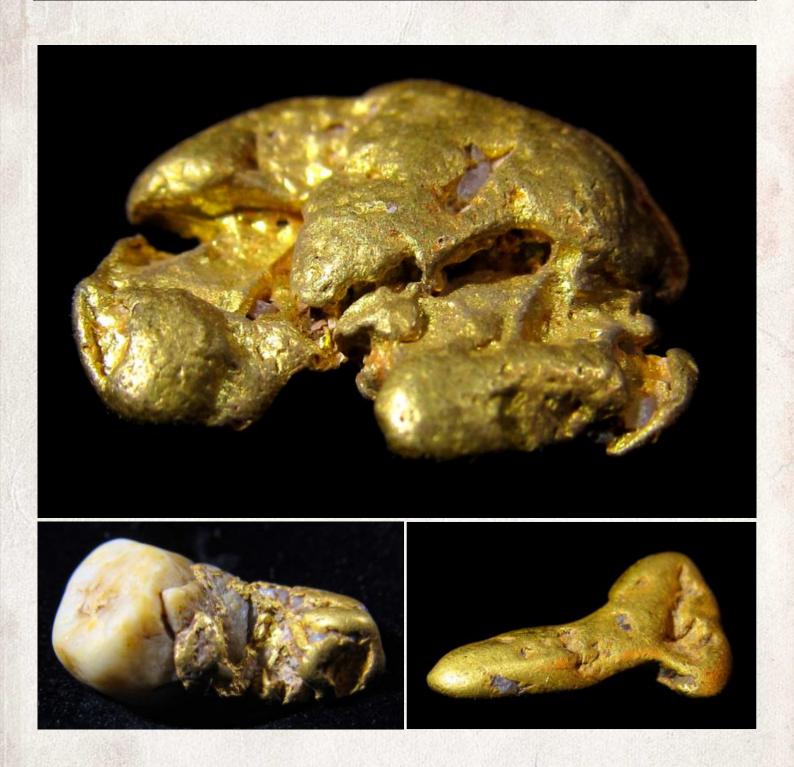
The Long Tunnel Mine, in Walhalla, was an extremely successful deep lead (underground) mine. This shaft was sunk to over 3,000 feet (920 m) and included over 8.2 km of diggings. Between the years of 1885 and 1911, when it finally closed, the Long Tunnel Mine was ranked as the top yearly Victorian gold producer six times.

It originally started operation in 1863, however its first eight years of operation resulted in no gold being found and the company collapsing. It was taken over in 1871 by the Long Tunnel Extended Company, who worked a different area and uncovered one of the area's richest reefs.

Photographer W Lee



LOCAL GOLD SAMPLES



Local gold found by local fossickers







GALLERY





Bendigo memorial plaque highlighting the first gold find in Bendigo by women (Mrs Margaret Kennedy and Mrs Farrell). They found gold in the Spring of 1851, the year gold was first being discovered in Victoria.

The discovery of gold at Bendigo in 1851 resulted in the establishment of the city we know today.

The location is not highly publicised, even though it marks the first major find of gold by women in the State of Victoria.



GOLD IN ART



The Prospector

Artist Julian Ashton Courtesy Julian Art School (NSW)

This painting by renowned Australian artist Julian Ashton, depicts a miner as he pans for gold. Located at his feet is his pick and shovel, the basic tools of the early gold trade.

The ferns in the background help us to understand how mining areas ranged from desert, to lush green bush settings.

The metal gold pan was essential to a miner, with many making their income from tedious gold panning.

Julian Ashton was born 27 January 1851 and died 27 April 1942. He was a great supporter of the Heidelberg School of Arts and was well known for his influential art school (Julian Ashton Art School) in Sydney NSW.



NEWSPAPERS

RELATED NEWSPAPER ARTICLES



NEWSPAPERS

MOUNT PLEASANT GOLD-FIELDS.

(FROM A CORRESPONDENT.)

The township of Alexandra, on the Mount Pleasant diggings, is rapidly increasing, and at the Government land sale on Friday, the 5th, of the sixty-three lots offered, forty-five found purchasers. The majority of the improved lots were bought at the upset price by the owners of the improvements, whilst those without valuations on them excited brisk competition, one in a favourite locality being run up to £29. The rapidity with which houses spring into existence, is something wonderful even to an old chum. The old calico system has given place to buildings of a more permanent and comfortable character. There is scarcely a calling that has not its representative, and goods of all kinds are sold at very low rates. The number of grog shanties is astonishing, and if one is to judge of the demand by the supply, the people of Alexandra must be a thirsty race indeed. There is a rumour that the shire revenue officer has been taking measures for putting a stop to this sort of thing, and it is presumed that there will shortly be a sufficient number of licensed houses to meet the requirements of the entire' population, there being at present only two hotels.

With the exception of an occasional visit during the day, the place is entirely without police protection, and most disgraceful scenes are of constant occurrence. On Saturday night, the 30th ultimo, there was a free fight among the roughs, which is supposed to

day night, the 30th ultimo, there was a free fight among the roughs, which is supposed to have resulted in the death of one of them. At any rate, one of the combatants was discovered in the morning lying on a pile of dirt, in a state of insensibility, from which he dirt, in a state of insensibility, from which he never recovered, death taking place on the following morning. As might be expected, nothing definite was elicited at the magisterial inquiry which was held. This adds to already numerous instances in which the want of a coroner has been sadly felt in this district. It is gratifying to be able to state that the council of the shire have urged strongly on the Government the necessity of establishing a police camp at Alexandra, and strongly on the toyceriment the necessity of establishing a police camp at Alexandra, and proclaiming it a place for the holding of courts of petty sessions; and that they have also undertaken some important works for the benefit of that locality, whilst several others are in contemplation.

others are in contemplation.

As to mining, things are in a most prosperous state, the only drawback being the want of water—a want which, if appearances are to be relied on, will be quickly relieved. The following is the state of the claims at present:—On the Lucky Reef there are twelve claims north of the prospecting claim, and an extent of seven claims under lease on the south, all at work. The prospectors have got a quantity of good surface ters have got a quantity of good surface stone; but although they have sunk several ters have got a quantity of good surface stone; but although they have sunk several shafts, they have been unable to strike the reef. The results of their only crushing I have not succeeded in learning. No. 1 north is now eighty feet down. The reef is about two feet thick; there are ten men working, and they have a good lot of stone raised. The last crushing of 150 tons yielded eight and a-half ounces to the ton. No. 2 north struck the reef on the surface, and have carried it down to the present depth of ninety feet. Firsternshing, 101 tons, yielding 1.616 ounces. The quantity of quartz now raised is 100 tons, which it is expected will go twenty onnes to the ton. No. 3 north, twelve shallow shafts; no reef yet. No. 4 north, struck reef four feet thick on surface; present depth ninety feet; thickness of reef at this depth, one foot; about eighty tons crushed, yielding ten ounces to the ton. Have plenty on surface now ready for crushing. No. 5 north. No reef as yet. No. 6 north.—Just struck reef. No. 7, 8, and 9 north.—Just struck reef. No. 7, 8, and 9 north. Just struck reef. No. 7, 8, and 9 north. Just struck reef. No. 7, 8, and 9 north. Reef eighteen inches thick, and splendid stone also. No. 10, 11, and 12, although having found nametous specimens, have not yet touched the reef. No. 1 south.—This claim is under the same proprietary as the prospecting claim. No defined reef has been struck, but plenty of good surface stone. No. 2, 3, 4, 5, 6 and 7 south have been taken up under have by M'Kenzie and party. Two shafts have been sunk, one to a depth of eighty feet through alluvial deposit; the other, fifty feet. Working was to have been resumed on Menday. On the Eglinton Reef there are seven claims taken up; four north, and three south. The prospectors', whose shaft is down ninety feet, is the only claim that has maded stone for crushing. The reef is twelve index thick, and the thirty tone crushed nised stone for crushing. The reef is twelve inches thick, and the thirty tons crushed yielded four and a-half ounces to the ton.

yielded four and a-haif ounces to the ton.

The Josephine Reef, on Johnstone's run, about half a-mile from the Red Gate, has but two claims taken up on it, one of which is being worked. One and a-half tons crushed yielded nine ounces. The Morning Star keef, also on Johnstone's run, and nearly a mile from the Red Gate, has had numerous claims taken up on it both north and south. In the prospecting claim the ref is from six to twelve feet thick; the stone is hard, the gold light and well distributed. There are but three claims now tributed. There are but three claims now tibuted. There are but three claims now working on this line. No stone crushed yet. A new nef was struck at the head of Spring teck, on J. and W. Bon's run, about ten miles from Alexandra. The specimens which I saw, evidently from a thin leader, were very rich. Without hazarding any opinion as to the auriferousness of the stone, I may state that the whole country from Alexandra to Hell's Hole, is traversed with numerous quartz-lodes. Aliuvial mining at Alexandra is at a stand still from, as I before mentioned, a scarcity of water. At the foot of Mount Prospect, on Johnstone's run, toot of Mount Prospect, on Johnstone's ran, tood alluvial, yielding one pennyweight to the bucket, has been struck. Several claims have been pegged out: but as the nearest water is one mile distant, scarcely any work has been done. There are from 100 to 150 claims taken up on the alluvial flats at Mount Pleasant, although but about fifty men are at work. These are obtaining from \$2\$ to \$4\$ per week per man. The entire population may be roughly set down at \$00, including those prospecting in the neighincluding those prospecting in the neigh-bourhood. Of course, there is the usual number of the loafing fraternity to be met

with on every new gold-field, whose chief with on every new gold-field, whose chief occupation seems to be supporting the door-lests of the virious liquor shops.

The roads leading to Mount Pleasant are just now in a very fair condition, whilst the improvements entered into and contemplated by the shire council will enable them to bear tayourship contents of the council will enable them. to hear favourable comparison with those of any country district in the colony.

> The Argus Tuesday 23 April 1867 Courtesy National Library Australia

Alexandra land sales to be held at Mount Pleasant Diggings, as well as a general description of the township, its people and local mining.

The Argus Tuesday 23 April 1867 National Library Australia



NEWSPAPERS

ERUSHING MILL,

SCALE of CHARGES ;-

For crushing under 10 tons £1 0

" over 10 tons and under 20 15

", over 20 12

Mr Sabelberg begs to inform the inhabitants of Alexandra that he has determined to crush quartz, brought to Lis mill, at the above rates, and trusts that by paying strict attention to maintaining the efficiency of his mill, he will always continue to merit their support.

He begs to thank them for their past kindness and has but little doubt that, notwithstanding the example tion of other machinery in the district, he will always secure such an amount of patronage as will render his somewhat expensive speculation remunerative.

Alexandra, 11th June, 1869.
THEODORE SABELBERG.
Proprietor.

Connelly's Machine.

ALEXANDRA

RATES FOR CRUSHING :-

Over ten tons as per agreement.

HEALEY & JONES,

Proprietors.

Golconda Quartz Crushing Machine.

UNITED KINGDOM.

RATES for CRUSHING :-

Ten tons and under £1 0 0

Over ten tons per agreement,
GERARD PENDLEBURY,
Proprietor.

A crusher operating in Alexandra at the same time as the British Hero

5 June 1868 Alexandra Times Courtesy National Library Australia 23 June 1868 Alexandra Times Courtesy National Library Australia

The William Wallace Crushing Machine.

ALEXANDRA.

PATES FOR CRUSHING :-

Over ten tons as per agreement:

HEALEY & JONES,

Proprietors.

A crusher operating in Alexandra at the same time as the British Hero

23 June 1868 Alexandra Times Courtesy National Library Australia

PROVIDENCE CRUSHING MILL, YEA.

Till E Tribution of the Percidence Peef intend to affind every encoura tement to Prospectors in the district, and will Crush Trial Combings at

GREATLY REDUCED RATES

NO DELAY AT THE MILL

Yea crushing mill advertisements

5 June 1868 Alexandra Times Courtesy National Library Australia THE MOUNT PLEASANT DIGGINGS.

[From our Special Correspondent.]
They are not a boastful people at Mount
Pleasant, otherwise the Mount Pleasant diggings would have been better known throughout the colony. They are a selfcentained people, too well content with their the world to eace for being bothered with strangers. They don't look busy, but they very soon croate a suspicion that they are doing more than they give themselves credit for. The district contains a comparatively large labouring population, in the prevailing exercity of employment would have suffered severely had they not had some investigation had they not had some ingenuity of their own to bring into exercise. When the farmers exaced to be able to employ them they did not hold fown Hall meetings, for the proper rose a that their Town Hall is in feture. They d. I not memorialize the Government; for in the present degradation of national politics they could not, as independent electors, have stooged to They did not threaten to cost themselves headleng on the mercy of the Destitute Board. They went out to the adjacent gullies with pick and shovel to prospect for pold. The conviction that recis traverso these gently aloping hills, and that alluvial deposits are almost universal on the flats, is an essential part of the local croed. It was entertained long before the settlers suspected that any of them should ever be thankful for a chance to dig for tucker. Occasional finds of suriferous quartz fostered the notion, but it was never seriously acted upon tall during the past twelve months

Last winter was a really bad time for Mount Pleasant, especially for those who had no stake in the country to which they could moor themselves until an opportunity offered for "turning the corner." Every man in the ed who had acquired a little experience in Victoria was tempted to try what it could do for him and his family. The original idea was to go straight to the source of plutenic wealth. Nothing less than a rief was worth condoscending to notice at first, and the local indications gave some excuse for such ambition. Bosides, recting was the fashion of the day, and Mount Pleasant could only follow the example of Baronsa and South Ethino. The seen of low hills which enclose the township on the north, though of sundstone formation, contain many traces of promising quartr. Bestard granite may be seen in great boulders on the ridges, and the thin crust of soil on most of the flats overlies a conglemerate of freestons, alternating with slate and a kind of cement. To the custward the granite becomes purer in quality, known as the South Khine Gold-field it is of a dark grey, but nearer the libine proper it

About the end of last winter a party of Iceal residents commenced a shoft on a hill about two miles north of Mount Pleasant. They carried it down 75 feet without finding a leader or any other procursor of the anticipated reef. It did not even show any suriferous stuff, but they ra sel some which had traces of eilver in it. This was taken to Reedy Creek, and a trial crushing yielded about six ounces to the ton. In the same neighbourhood trial pits were sunk by other porties, and a considerable quantity of wash dirt brought sat, but the gold was too fine to afford a very profitable return. Meanwhile a second set of prospectors had established then silves in the adjoining gully, and started what is now a hopeful gold-field, though of limited size. It is on Covernment reserve, which is sell not to exceed four hundred acres in extent, and which is becomed in by private property. It two niles from the Torrens, the meanest available water. Nevertheless it prospered, and from its commencement in October it. has extended until it now exprorts an average of from maty to seventy men. Perhaps one-half of these have arrived within the past mouth, and many of them are old hands from Jupiter or Bare is

A district road from the township leads the visitor to the upper part of the gally, in order to reach which a private section has to be crossed. The diggings have a branead upward, consequently the newest claims come first under notice. These present as yet mere surface week; on some of them nothing could have been done beyond the stripping of the surface = of. That is not a very archeous unlertaking, for the crust as a rule is thus, and a very few

inches of sinking shows the san latene underneith. It is exceedingly pulverized, and in washing it betrays a large mixture of mica and broken quartz. The former may be seen glistening all over some of the heaps of wash-dirt. Very little can be said about yields here, as no systematic washing has yet been begun. A German farmer, who has been about a week at work, found that a sample of his wash-dirt produce1 about 8 grs. to the barrowful. He has taken out another claim higher up, which he hopes will show a better average, down the gully the nature of the bottom may be more distinctly seen. About the middle there is a cluster of claims which have been systematically worked, and may be accepted as a criterion of the capabilities of the field. Some of them are held by Germans, who are clearing them throughout to a depth of six or eight feet, after which they intend to try them with deep sinking. Mr. Deskovitch, who has one of the best claims in the gally, washed during last week about five loads of stuff. and realized more than 4) ozs. The maxiam yield, so far, is an ounce per load, and only in this one instance has such lack been admitted. Diskovitch's neighbour, Mr. Schmidt, washed his first lead about the end of the work, and it yielded him fully an ounce. Mr. Defletz, though he holds a claim very close to those, does not plead guilty to anything like their

good fortune. But, like a true Truton, he emaiders it too ston for him to indutes grand expectations, socing he has been only tan days on the ground, . He is planaed with the appearance of his claim, however, and he himself has the appearance of a man who om work it.

A Jupiter party comes next to those ermans, most of whom are local residents. German, most of whom are local residents. The fernor came over before Christman, and took out five or six claims in the middle of the gully, but the yield being too poor to support so large an establishment, they dissolved partnership, and are now conterned over the field. They and are now someone over tan man. Inou had previously done a lot of work in their original ground, which is sunk, and driven, and honeycombed in all directions. One or two remained here—a circumstance which in Mo If mys something for the place; me prhap, than the men themselves considered in expedient to do. They protest that they are making here wager; but a quarter-ox. per load is evidently their minimum. The bettom here is of a very conclument. on here is of a very cough character, and patchy. Within a very narrow compan the pick fetches up rotten martine, slate, coment, and freetone. one, slate, coment, and freetone, Occasional basins of "mulicoth"—a mix-bars of ringh said, clay, and quarts— here a good effect upon the general average. Lower down McKenzie's party are raising stuff which prospect-washing indicates to be worth 5 or 6 dwts. to the load. They did considerably better than this during the first few weeks they were on the ground; but altogether they have not cleared more than wages. According to their own account, the st return has not exceeded £2 per week per man. Pursons, the original leader of the Jupiter party, is now working with a single mate toward the lower on 1 of the gally. By careful picking they have kept so their average to from a quarter ounce to half an ounce per lost. Latterly it has not quite reached that, and what was being washed during our visit would be under six dwts. Parsons and a few others do their washing at some old workings in a neighbouring gully, where the holes were filled by the recent flood. It is much nearer a the Torrens, and for small cradies it were well enough. Without the flood these holes, and even the Torrens itself, would not have been available now. The river was almost dry, and the prospect of having to abandon the field during the rest of the summer seemed very close. The supply of water is far from being plentiful even yet, and without early rains the district cannot be half so well tested as it deserves Those who wash at the river he about three shillings per load to pay for cartage—a moderate charge considering the circuit which drays have to make, but, evertheless, a large deduction from the diggers' returns.

In its general aspect the Mount Pleasant gold-field is not imposing. The workings do interest that a quarter of a mile from end to end, and the whole length of the gully would be over-estimated at half a nule. The old hards have convinced themselves that it is already over-rowded, and that very 6 a other likely claims are to be that very few other likely claims are to be had. But the new corners make room themselves, and work with the impression that there is still some gold left. Latterly there has been a set toward the rising id, and if these claims should prove self supporting the area of the field may be indefinitely extended. Local authorities believe that there is a wide distribution of gold, but they doubt its being often found in paying quantities. Both the hills have been prospected from one ridge to another, and very solden a prospect washing did not show the colour, but not often did it show much more. There are other guilles, however, of very similar appearance which are certain to be tested during next winter. Judging from physical conformation and from the surface quartz, one gully should be almost as good as in ther. It may happen, also, that the alloyal visids will be only a prelude to something the nore The abundance and variety of rich quartz which has been picked up between this gully and Rosack's are wholly inconsistent with the supposition of their being mere geological waits. The specimens which have been exhibited cannot have travelled far. The nature of the country is in accordance with their local origin, and it is well known to be throughout an antiferous country. A geologist wholly free from the bias of intending speculation would infer that there must be a complete system of reefs traversing the hills which border the Torreus. The diggers share this opinion with the lucky specimen collectors. They would be glad to assist in a methodical prospect, and the services of experienced men might be obtained at present on very reasonable terms. Some have on their own account devoted a great deal of time to examining indications of reefs. All around Mount Pleasant, or at any rate all Crown land, has been fairly explored already. It is known where would be the most likely places for sinking, and abundance of qualified labour is to be had

on the spot for the asking.

It is remarkable that nothing to call a negget has yet been found in this gully near Mount [Pleasast, though it is within a mile and a half of Rosack's section. The gold is for the most part small, but not greatly waterworn. Little pieces of quartz, richly specked, are occasionally found in washing, but as a rule the gold tends more toward the floury than the nuggety. It weighs well, and is of first-rate quality, the local storekeeper, Michael and the commenced to purchase in October last, and latterly he has averaged ten ounces per week. His gross purchases in December amounted to 30 css. In January they increased to 37 ozs., and the receipts are still growing. For a single buyer, and omnidering the small number of men hitherto

are still growing. For a single buyer, and considering the small number of men hitherto at work, this betchens a good general result. These are very diverse opinions among the digeres as to the uniformity of the deposit and the advisability of deep sinking, been greatle at the bottous being so patchy, while others consider it much more regular than Jupiter Creek. But weaking on a larger scale will be required to decide that point; and it is possible that as the ground becomes better known, the washing on a larger scale will be required to decide that point; and it is possible that as the ground becomes better known, the washing on a larger scale are, with a few exceptions, in the position of reclaim waiting for the cruction of crushing machinery. The past returns can only be regarded as more samples of what the deposit can greatlest, the destination of which will depend on the result of small parents which are being out to the river and washed at odd times. If from these experimental efforts enflicient manay can be obtained to materially quicken the vicenhation in the district, it is all the more entiefactory to know that there is also a large reserve for future use. The affectial hash in only beginning to be drawn upon, and it may here many secret branches which have yet to be discovered.

The digger's lot is hard at beet, but if it ever could be called any Monat Pleasant might claim that henour. The variating is very straightforward work, and the sinking, though stiff, is nothing to the quarrying which has to be duke on some parts of the Onkaparings. On the Torrens is altogether a different situation from the neighbourhood of the Wheathbeaf. There are no granite hills to climb, no tangled brushwood to cut through, and no occasion for slarm at boing washed out. In the wet season Monat Pleasant will have every accessory of a

will have so consiortable camping-ground as is in the colony, and so fair a chance of lack as remains to them on any other gold-field. Men of moderate expectation and strong made may combine a tolerable liveritheod with an independent, though laborious, mode of life. There are now many such in this district whose prospects for the winter will be very gloomy should the diggings fail them. At present they are putting a good heart into their work, and either they must be doing better than those at Onkaparings, or they must be more easily satisfied. They believe that another deposit will be waiting them somewhere not far off by the high ethery have liniabed the four hundred-nore patch of Geyvernment land which they are now working. The remission of the prospecting fees has happened very opportunely, not only on account of the amountpayed in town, but as regards finding substitutes for their gold-fields which are being exhausted. Baroea and Jupiter Creek, the mainstay of the past two winters, will manifoldly not suffice for another. There must be new discoveries, and it is high time they were being systematically searched for.

Old hands, who know bost where the shoe

Old hands, who know best where the shoe pinches, complain that it is usedes prospecting near town, where there is so much sold land. In their terre phrascology the country is "cooked" when the digger cannot get away out of sight of fences. It is hardly worth their while to camp on a patch of a few hus bred acros, and is is only tant dising to have to listen to starties of 13 ounce nuggets when they cannot go, pick in hand, to "root up" the country all round. Many of them wish they could start off for several months into the Murray Flats or away beyond the Burra. They would be willing to hire themselves out as prospecture to any speculators who would furnish an outfit and provisions for them. Others speak of taking four shirlings a day to explore the guillies along the Torsens. They are duly thankful to Mr. Cavenagh for his liberality with regard to prospecting fees, and the circumstances majul justify him in taking another step in the same direction, could it be done without disarranging the nanagement of the eddhelid.

taking another step in the same direction, could it be done without disarranging the namagement of the gold-fields.

Five shiftings a half-year may be in itself a very triting cluarge for the benefits which diggers un-iombtedly reactive from the proper supervision of the gold-fields, but it is equally true that there are many men new digging to whom the payment of that live shiftings to severe tax. The troopers who collect it could tell of dozens who give their last penny to make it up, and have then to treat to their in dish for carning their first meal. When Mr. Cavenagh took offer a whole well-empty of their last penny to make it up, and have then to treat to be paid down before entering, but a memorial from the diagness to subdivide the true was wisely granted. Might it not be furtier divided, and the rate also reduced? A quarterly license at a shifting would qually answer all the purposes of a title; it would be within the puwer of the existing staff to collect, and in the event of new gold fields being declared the lows to the revenue might be recouped by a larger issue of ficences. As it is the prevailing gold fields being declared the lows to the revenue might be recouped by a larger issue of ficences. As it is the prevailing you mainting him that his present rates are double what the Victorian digger has to pay. In this township I have been shown a miner's right nove current on the large-wood field-field with the price stamped upon it—fire shiffings per annum, reckoning to the end of June and the end of December—a happy arrangement, by which the digger may lose several montas of the time he pays for.

When we conventibility ourselves on the

when we congratulate ourselves on the opportune discovery of gold deposits there is a danger of confounding the manipulation of gold with personal prosperity. The diggers of South Australia are not as a class prosperous; they have not even the prosperity of a common day labourer. All that can be said of them is that they are much better off than if they loafed about in King William-street or carried a swag in the bush. It is better for the colony also that they should be digging, however small the return, than that they should be creating chitical agitation. But it would be paying them.

them a cruel compliment to measure that they here much supery to space for Ava litate. So far from being elegible subjects for extra taxation, they are less able than the generality of the community to bear ordinary taxos. Absolutely free gold-fields may not be possible, but the mearer the Commissioner can come to that point, the greater consideration he will above for the hardest-worked class in the colony, and the one which is design most new to tide it over its difficulties.

South Australian Register Tuesday 8th February 1870 Courtesy National Library Australia

Mount Pleasant Diggings

South Australian Register Tuesday 8 February 1870 National Library Australia



NEWSPAPERS

MINING ACCIDENT.

A serious accident happened yesterday afternoon, at the Fawcett diggings, Johnson's Creek, when a miner named Joseph Petitt, received severe injuries. Petitt was working in the claim known as The Treasure, with his mate Alec Dunlop, and was employed tunnelling. Without any warning a sudden fall of earth and rock occurred almost covering the unfortunate man. With great presence of mind, Dunlop started to release his companion and succeeded in removing his helpless mate to a place of safety.

Without any delay a spring cart was procured and Petitt was conveyed to the hospital, where everything possible was done until the arrival of Dr. Johnson.

Petitt was perfectly conscious and was able to converse with his friends, but complained of having lost the sense of feeling in his lower extremities.

Dr. Johnson found, on examination, that Peritt was suffering from serious injuries to the spine, several broken ribs, wounds on the scalp and badly bruised body.

Everything possible was done to relieve the sufferer and in a short time he was located in the ward and receiving every attention.

Petitt had a remarkable escape from instantaneous death, as the weight of the fall of earth is estimated at about three tons.

The unfortunate man is well-known throughout the district.

At 9 o clock this morning, Petitt was in a very low condition, in fact it is doubtful if he will recover.

> Alexandra & Yea Standard Friday 19th January 1906 Courtesy National Library Australia

Mine collapse at the Fawcett Diggings, Johnson's Creek



NEWSPAPERS

The Naming of Alexandra

Reference to certain documents and plans in the Land Office, Melbourne, has brought to light some facts concerning the naming of Alexandra, which have more than ordinary interest at this time, when a statue of Queen Alexandra is about to be unveiled in Perkins Street. In brief they are as follows:—

A. McGregor and S. Don discovered gold in quartz, on the bullock dray track from Thornton to Yea, not far from McKenzie's homestead, in June, 1866. As they were first discoveries of a goldfield (there being no mining between their find and Yea at that time), they re ceived a reward-to each £75. They named their claim "Eglinton," which was that of a run and homestead (occupied by Henry Johnson, on the Yea side of McKen zie's Mount Pleasant run), and al' so of a creek (now Johnson's Creek.) Other claims were soon being worked from McGregor's and Don's claim in the direction of the U T. Creek ; and there were alluvial diggings along that creek for several miles.

THE NAMING.

The track ran along what is now Grant Street till it came within a few yards of the U.T. Creek, where it turned up the stream and led to a crossing place near the junction of the present Webster and Perkins Streets. There was a chock-and log fence (the boundary at one time between the Mount Pleasant and the Eglinton runs) along the bank of the creek. In this fence stood a gateway (painted red), through which the track passed not many yards from the turn. The track became, after crossing the creek. almost a straight line to the neighborhood of the present Josephine cutting (so named after Henry Johnson's sister). There was a rush in the second balf of 1866 to the Red Gate diggings (that name, contracted to "Redgate" for the field, appearing for the first time in 'Bradshaw's Guide' 1867.) Richard Vining erected a small building in the vicinity of the turn of the track from Grant Street up the creek, and other buildings rapidly followed. Thereupon John Downey was instructed to survey a town and a parish. The Shire Hall at the junction of the present Grant and Perkins Streets is on allotment 1 of section 1.

The title-page of Downey's Field Book, No. 1, runs thus: 'John Downey's Field Notes. Survey of the Township of Eglinton on the U. T. Creek, Upper Goulburn River, Surveyed by John Downey, Government Contract Surveyor, Jan., His finished plan, with "Township of Eglinton. the title, Upper Goulburn River, County of Anglesey,' was dated February, 1867. A proclamation in the Gov. ernment Gazette in the following month (March) begins : "Sale of Crown Lands in fee simple at Alexandra, on the 5th April, 1867." This shows that the name had been changed. Downey's plan has now a slip with the word "Alexandra" on it gummed over "Eglinton."

The new name was that of a Danish princess, the "Rose of Denmark," who, about four years earlier (the exact date being March 7, 1863), had married the Prince of Wales (afterwards Edward VII).

> Alexandra & Yea Standard 28th July 1939 National Library Australia

Gold found by A McGregor and S Don near the McKenzie Homestead

Alexandra & Yea Standard 28 July 1939



NEWSPAPERS

Gold at Mt. Pleasant

I was not surprised when I saw it notified that gold had been located on the Mount Pleasant pre-emp tive, presumably about McKenzie pinch, where the original dray track passed leading to the Upper Goulburn.

One Sunday morning early in the Sandy 18m and Alec-egor (rouscabouts) were McGregor were going up McKenze's pinch on their way to 'Bill' Fenton's, for a 'hair of the dog' and picked up some rich specimens of quartz showing gold very freely. They took same to John Downey - Surveyor's camp on Johnson's Creek. He financed them pegged out the prospecting claim and registered it as "The claim and registered it as "The Eglington." That was the begin ming of Alexandra. The Eglington was rich and about a foot wide for a few feet. Then it pinched at a few feet. Then it pinched at both ends and in the sink the ground got very hard and the vein narrowed until at about 150 ft. it was a mere streak. But nearly all gold. In fact the last few hundred weight of quartz and rocks saved went about 60 ounces to the ton. The owner got nothing out of the mine, and after spending a lot of money Lin a foot for sinking for instance he forfeited it. He knew no more about mining than I know about the climate in Mars. He got very little of such gold as was actually mined you may be sure. A pretty varied experience of mining since that day has enlightened me as to where the gold went. Also some other mat-ters. When shaft sinking ceased the vein was really merely an "indica-No driving was done on it at tot. depth. Now it is quite possible that at one end or the other the na-ture of the ground is different if it was driven on, and there is probability of a large and rich make of stone similar to that occurring at the Lucky line, Homeward Bound, etc., three quarters of a nale north. For all those mines are situate in the one belt of auriferous country. which extends from Gobur to Woods Point. And gold occurs in a hundred places within the com-paratively narrow width of that belt. A ruler placed on the map of Victoria showing a line through Alexandra and Woods Point discloses where there has been much gold obtained.

To sink or drive and prospect the old Eglington would be a gamble and could not be even commenced without a comparatively large capital. But in future days, when more sanity prevails in relation to mining laws and regulations, there will be much gold obtained between Alex andra and Matlock, and within the

belt referred to: A. P. DOWNEY, Joyces, Queesdand. Oct. 19th, 1900.

> Alexandra & Yea Standard Friday 14th November 1930 Courtesy National Library Australia

Mining collapse in Alexandra claims 12 men. All are buried at the **Alexandra Cemetery**

Alexandra & Yea Standard 22 May 1931

Gold found at Alexandra

Alexandra & Yea Standard 14 November 1930

OLD ALEXANDRA.

who selected a site for an extensive camp on part of land now except ed by the Alexandra Hoopetal.

The bark shanty was quite close to the red gates marking the boundary between McKenzie's and Johnson's stations. Vining's shanty was known far and wide as the Red Gate, and the beer used to arrive in three horse drays. The stocks, however, were never inhorded, the casks being tapped on the dray, and retailed to the everthirsty miner at oue shalling pannikin, the customers drinking away until the supply ran our. In a very brief period form our. In a very brief period form was cleared at the Red Gate Shanny by Mr. Vining's father, who had buint an hotel next to the building now the Commercial Hotel. Vining's hotel had a verandah in front of it with a small room, at each end, one being used as a bank and the other the nost office. Just about the time Vining's Alexandra Hotel, with large ballicoom attached, was opened Grant street was formed, after which numerous hotels sprang up all over the township, and two breweries started operations on the banks of the Goulburn. Shortly from Alexandra to the Creek and back, as there was no mail service; he was paid sixpence each way for every letter he carried.

Mr. Walter Vining, of No. 8
Parest street, Collingwood, for many years engaged in the timber industry in the Alexandra district, claims to be the only one now alive who lived at the Red Gate Shanty, Alexandra, when the licensing laws had very little effect in curbing the activities of enterprising colonial freetraders in those hectic days of gold mining.

In 1864 Mr. Vining, when only six months old, left Melbourne with his father (Richard Vining) and mosther, and with a three horse dray leaded with provisions, headed Alexandra, when the liceasing laws had very little effect in curbing the activities of enterprising colonial freetraders in those hectic days of gold mining.

In 18-1 Mr. Vining, when only six months old, left Melhourne with his father (Richard Vining) and mother, and with a three borsed for Thornton along rough country roads or trucks. They travelled through Vea as far as Molesoworth, and, as the Goulburn river was runt or crossable in those days, they had to turn to the right along the three chain road through what was known as Whantregarven. Next the track below the Acheron cutting was taken along past Dobson's and over the hills and out by Gilmore's at Thornton. There Mr. Vining's and the static, but before long started business on his own account, taking a contract from Mr. Donald McKenzie's Hill. All the timber for the Mount Pleasant for the builting of a homesterad.

Mr. Vining, senior, at this time moved off to Mount Pleasant district, building a slab hut on the banks of a lagoon, and a sawpit a quarter of a mile from the foother. While this building was being constructed gold was sawn at the pit. While this building was being constructed gold was sawn at the pit. While this building was being constructed gold was sawn at the pit. While this building was being constructed gold was sawn at the pit. While this building was being constructed gold was discovered in these fit of the mount of the bank of the pit of the mining township sprang into existing the two to the same hand on the pit of the mining township sprang into existing the two to the same hand on the pit of the mining township sprang into existing the stand of the mining township sprang into existing the weak in the pit of the mining township sprang into existing the two to comment with the product of the mining township sprang into existing the two to truck there is an along the three for the mining township sprang into existing the two to truck the truck that there is a station that there is a station that the truck the truck that the truck t

district.

While living in the district Mr. Vining con recall numerous fires, some of which removed many of the old landmarks of Alexandra. After retiring from the hotel business Mr. Vining and his son bought the sawmills at Crystal Creek, and after his father's death, carried on until 25 years ago, when he sold out and has lived in Collingwood ever since.

ever since. In his early days Mr. Vining, jur., In his early days Mr. Vining was In his early days Mr. Vining, jur., thought that kangaroo hunting was some of the best of week-end sports. Kangaroos abounded on the contry round Alexandra and they used to be hunted by men on horse-back, with packs of dogs.

Mr. Vining, jur., attended the old No. 942 School at Alexandra, but previous to that, and before free education was established, he had to jay a fee of one shilling every Monday morning to the school teacher.

Monday morning to the school teacher.

For many years Mr. Vining, jur., was attached to the Alexandra Brass Band, said to be the first monuted band in Australia. When the then Premier of the day would pay an official visit to Alexandra, the members of the band would rite out on horseback to Molesworth, the Shire boundary, and with tuneful music essort the distinguished guest of the day to the township.

thigh shed guest of the day to the township.

Alexandra's first milk supply was from John Hall (known as Hall the milkman); he used to bring it into the township by pack horse from Hall's Flat (no roads made at that time).

Alexandra & Yea Standard Friday 22nd May 1931 National Library Australia



MACHINERY: STAMPER BATTERY

Sabelberg's Mill in 1867

"F.F." writes : - They were cleaning up a crushing from the celebrated "No. 2" at Sabelberg's mill on the day of my arrival in December, 1867, and I was present at the interesting process of retorting the amalgum, which was placed in a thick round-bottomed pot having a lid carrying a long pipe through which the mercury, in the form of vapor, passes, till condensed cold, caused by a constant stream of water falling on the pipe when it comes spluttering out in little globules of quicksilver, to be received in an open vessel underneath. When this spluttering ceased the staples securing the top of the retort were knocked out and the lid removed. For several minutes after this had been done no one approached the retort for fear of being salivated by the fumes still rising from it, for one breath of it would cause the teeth to loosen and drop out, besides other undesirable effects. The first to advance and peep into the pot was a rough sailor-looking chap with one eye. He squirted a lot of tobacco juice on to the red hot cake of gold with the remark, - 'a quarter of that is mine, anyhow." The cake when weighed at the bank proved to be over 400 ozs, which meant a Christmas box of about "Charlie" Jones !

(Jones was the discoverer of the Lucky.)



Sabelberg's 15 head Battery Stamper Mill at Alexandra

The above photograph is believed to have been taken between 1860 and 1867 at Alexandra. The Sabelberg's were the first to erect a battery stamper (crusher mill) in the District. They sold out their mining interests in the District in early 1868 and a large farewell was held in July of that year. It was reported that every luxury that the District could produce, was supplied for the event, such were the impact of the Sabelberg's on the community.

The British Hero was the name given to the undercover battery stamper, which at its peak is reported to have operated night and day. The site of the stamper was on the current site of the Alexandra Bowls Club.

In the Alexandra & Yea Standard, dated 26th June 1931, it references how long term local bricklayer William Parsons erected the chimneys for the stamper in 1867.

Courtesy National Library Victoria

TYPES OF MINING

DEFINING THE MINING TYPES



TYPES OF MINING

The two main types of gold mining used in early Australia were:

ALLUVIAL MINING:

Processing of gold from waterways, rivers, streams, creeks etc, where it had washed into over time. When alluvial gold was discovered in a waterway, miners would remove the gold as they followed the gold up stream to its source. When the gold ran out in the waterway, they would look to the valley walls and hills for the source of the gold. Once found, it would be mined, sometimes requiring quartz reef mining (also known as deep lead

mining).

QUARTZ REEF MINING:

Digging for gold found in veins in hard rock (usually from quartz reefs). When this rock was weathered down over time, the gold would wash to the valleys below and enter the waterways, becoming alluvial gold.

During the early gold rush days, miners needed over 30 grams per ton of gold to make it profitable enough to warrant extracting it from the ground. Today, thanks to cheaper and much more efficient extractions methods, the ratio has dropped to just under five grams per ton.

When enough gold was found to cover the price of extraction, with money left over as profit, it was known as payable gold, The mine was also known as a payable mine. When ground was known to contain ore in sufficient quantities to warrant extraction, that ground was known as pay dirt.

As the world price of gold fell and rose, so did the mining effort. If the world price of gold was low, then so was the profit and the mines would close. They would often reopen as the price of gold rose. A modern day example of this is the A1 mine near Jamieson which has re-opened numerous times.



ALLUVIAL MINING

ALLUVIAL MINING

Gold found at ground level

Pick & Shovel

Shallow shaft or tunnel

Hydraulic sluicing (pressurised)

Deep Lead shaft

Dredging

Picked up off the ground

Puddling to break down materials

Puddling to break down materials Puddling to break down materials Puddling to break down materials

Panning Cradling or sluicing

Brought to surface

Pressurised water washes away dirt

Brought to surface

Panning Cradling or sluicing

Mud runs down to a sluice box

Sluicing

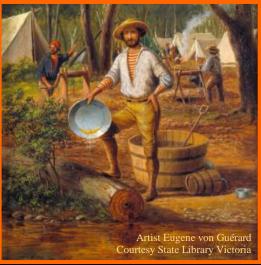
Sluicing

Panning Cradling or sluicing

Panning Cradling or sluicing

SNAPSHOT HISTORIC





Also known as dish washing, panning was a simple way for miners to separate gold from sand and gravel. It employed the use of a large round metal plate. The pan is partially filled with gold bearing sand or gravel, then water is added, then the pan is moved in a manner that allowed non-bearing materials to be washed away, while the gold sinks to the bottom of the pan where it is extracted.





SNAPSHOT STORIC





Also known as bucket puddling, tub washing was a simple way to reduce the amount of clay and dirt from around sand, gravel, rock and quartz, prior to it being processed for gold. After being washed, the cleaned materials were easily crushed and gold extracted by the use of a gold pan or a cradle for larger quantities. Wooden and steel buckets were used as were repurposed wooden barrels.



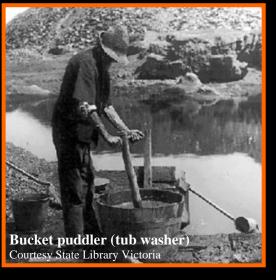


SNAPSHOT HISTORIC





The puddling machine was a simple mechanical setup designed to harness the power of an animal to help remove clay and dirt from larger quantities of gold bearing rock, gravel and sand prior to processing. The animal pulled one end of a long centre-pivoted beam while the other end pulled harrows, attached to the beam, through a channel containing the possible gold bearing materials and water.





SNAPSHOT HISTORIC





The cradle or rocker box is a long wooden box open at one end and fitted with rockers like those in a child's cradle so it can be moved back and forward. Crushed and cleaned sand and fine gravel is placed into the cradle to be processed. The rocking action of the cradle helps heavier gold or gold containing sand and gravel to move downwards in the unit and get caught in gold catching ripples or carpet.









Hydraulic sluicing is sluicing using a hose that is able to direct high pressure water into an area of rock or soil to dislodge gold bearing materials. The resulting sedimentary slurry is then channelled through sluicing boxes in order for gold to be removed. Hydraulic sluicing was highly successful and often used in Victoria, with those areas sluiced now having permanent deep scarring.





Illustration from the 1894 first edition of the Miners Handbook

SNAPSHOT HISTORIC





Ground sluicing offered a method of extracting gold from auriferous alluvial deposits. A channel was cut in bedrock below an alluvial deposit, then water was allowed to flow through the deposits via a channel before flowing through the rock channel where gold-catching materials had been laid to catch the heavier gold particles. The left over water and dirt was washed away via a tail race.





SNAPSHOT HISTORIC





The tail race is a race which can carry water and was designed to remove unwanted water and dirt from the gold processing area. This material was a byproduct of gold processing and no longer contained gold. Water and dirt from the tail race usually ended up in rivers and streams and muddied the water, making it unsafe for drinking or for animal life to survive.





Illustration from the 1894 first edition of the Miners Handbook

HISTORIC SNAPSHOT





In some instances it was possible that small quantities of gold could be scattered across the ground. This was especially the case around auriferous reefs, or where a patch of surface gold had not been carefully drawn up. Sweeping could also be used to expose possible gold-bearing bedrock. Locally, a hill known as Nuggetty Hill was reported as being entirely swept by Chinese miners.





Illustration from the 1894 first edition of the Miners Handbook

SNAPSHOT HISTORIC





The California pump had an endless belt passing over rollers, with small buckets attached to the belt at regular intervals. When the belt was in motion, the buckets would pass through the water at the bottom, fill themselves, and then travel with the belt to the top where the water was discharged as the buckets turned over. They were generally hand powered by the use of a metal arm.







QUARTZ REEF MINING

QUARTZ REEF MINING

Deep shafts are sunk or adits (tunnels) dug

Poppet heads may be built over larger shafts

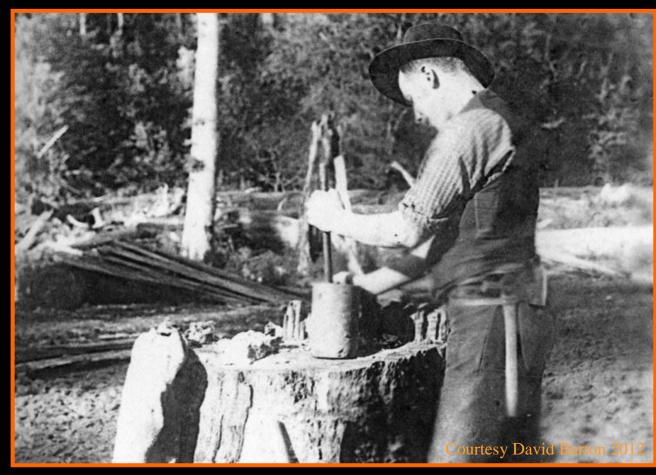
Quartz and hard rock brought to surface

Crushed using a Battery Stamper

Crushed using a Chilean Wheel

Extracted via panning or sluicing

HISTORIC SNAPSHOT





Basically a metal mortar and pestle, the dolly is the simplest method of crushing small pieces of quartz into even smaller sized particles which can then be inspected or panned off to remove gold. Quartz is usually crushed with a hammer first to get the rock to the size needed for the dolly operator to process. The smaller the pieces, the easier the processing was.





SNAPSHOT HISTORIC



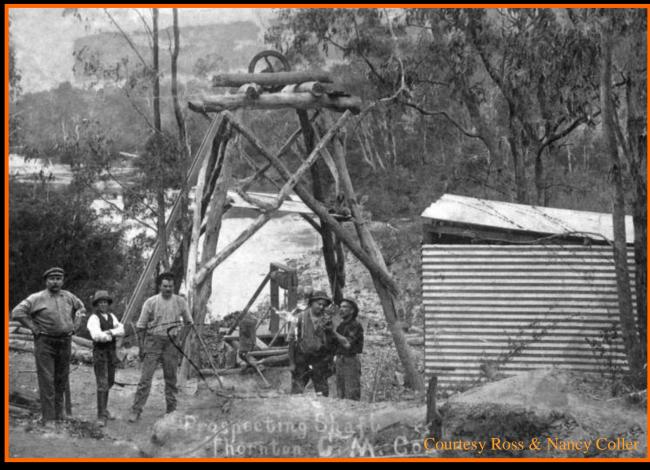


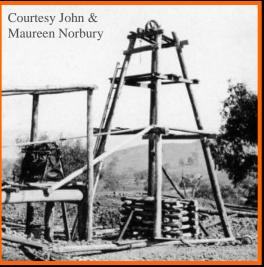
The windlass is the simplest form of winding gear employed by the miner during the early mining efforts. It consisted of a wooden cylindrical barrel with a winch handle at one (or both) ends. Early versions stood on a wood stand which was placed over a shaft where they could be used to draw up buckets of rock. Smaller versions were lightweight, could be carried by horses and installed in adits when further shafts were being sunk.





SNAPSHOT HISTORIC





A poppet head is a wooden or steel frame constructed over the top of a mine shaft to enable the hoisting of ore from under the ground. They can also be used to lift or drop tool and men up and down the shaft. Poppet heads have a series of large pullies which are used with ropes or cables. Poppet heads were powered by steam powered engines, but today are powered by strong industrial engines.





HISTORIC SNAPSHOT





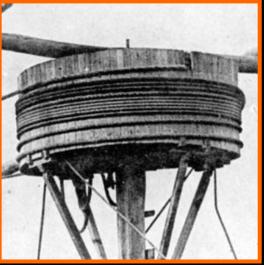
The whip was a strong wooden beam firmly planted into the ground at one end, firmly stayed, with the other end placed over the head of a shaft. One pulley wheel was mounted at the end of the beam and another on the ground near the base of the beam. A horse then pulled a rope through the pulleys to raise a bucket containing rock from the shaft, or lower an empty bucket.





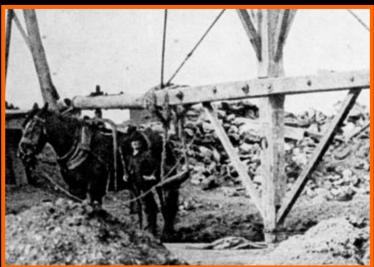
SNAPSHOT HISTORIC





The whim had four parts: supporting frame, upright spindle, drum and arm. A rope is coiled around the large drum, which then passes through a series of pulleys before passing down the shaft where it could be used to raise and lower buckets of quartz. It was driven by a horse connected to the arm and as it was pulled, the whim would rotate and create mechanical pull.





SNAPSHOT STORIC





The Chilean Wheel was much like a puddler in that it was used to mix dirty gold bearing rock and clay with water, allowing for the earth to become watered down from the gold bearing rock and run off. The Chilean wheel had the added benefit that it crushed the rock. More water would be added and mixing would continue until the mixture was clean and the rock finely crushed and ready for processing, such as panning.

THE CHILEAN MILL

Adapted from the ancient olive crusher and used for stone crushing in mediaeval times, it came to us via the Spanish silver miners of South America. Gold containing quartz was crushed in this way before the general use of steam driven batteries in the late 1860's.

The stones of this mill were found in the bush at Little Bendigo, 5 miles from here. They weigh 41 tons and were banded countries and the banded countries are the banded countries.

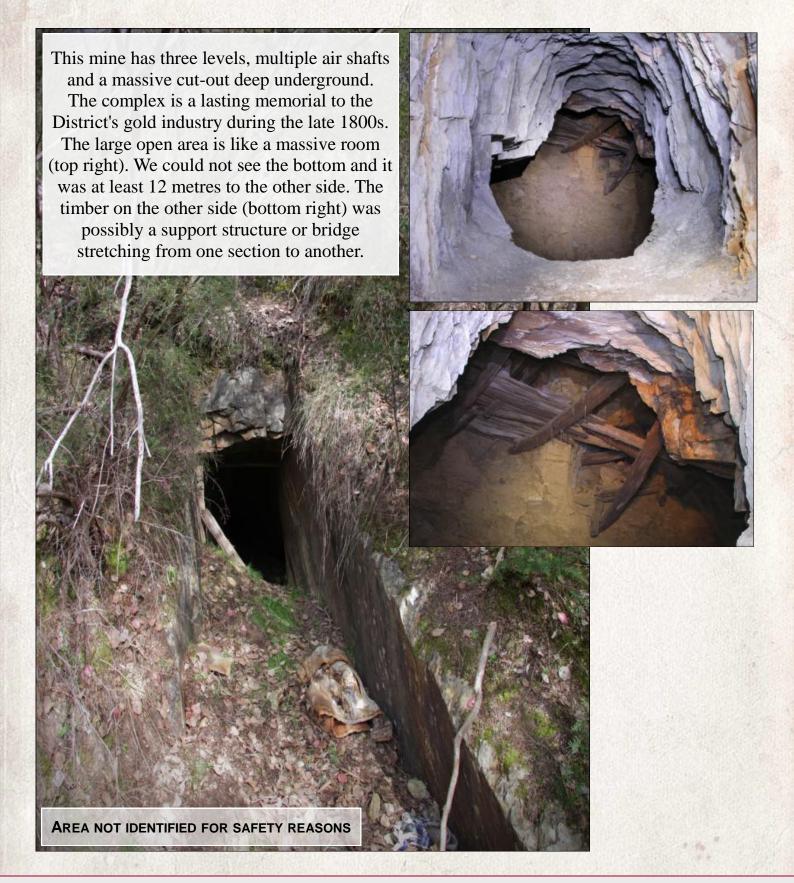


LOCAL MINES TODAY

HOW LOCAL MINES APPEAR TODAY

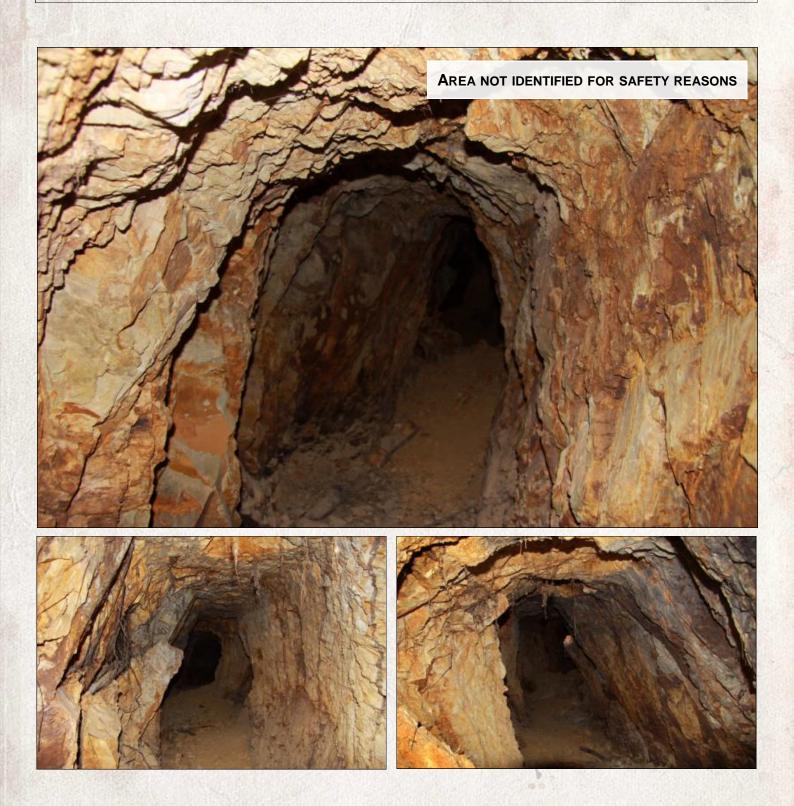


LOCAL MINES TODAY





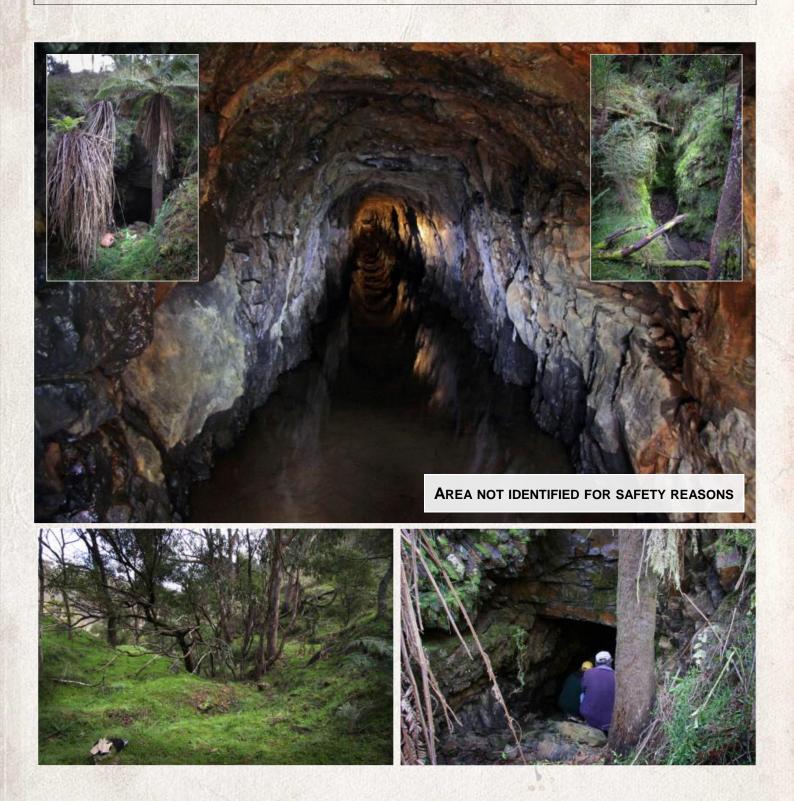
LOCAL MINES TODAY



This local mine was dug out in the late 1860s, yet still remains fully intact, thanks to the hard rock which it was cut through. This mine was a deep lead mine, where miners followed a vein of gold as far as it went.



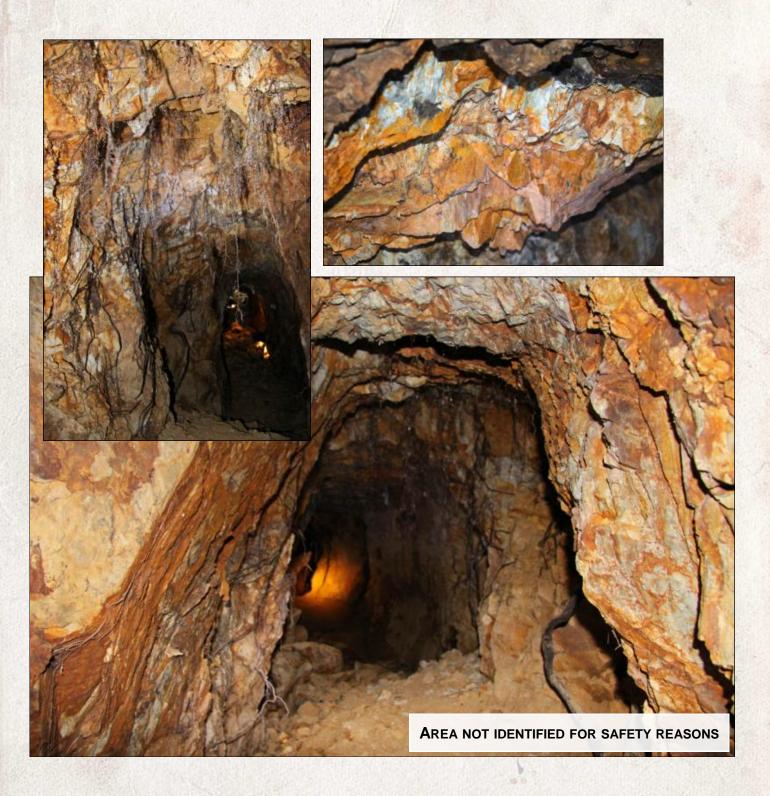
LOCAL MINES TODAY



Possibly one of the longest local gold adits (tunnels) left in our District in this condition. This tunnel is part of a very large and complex series of shafts and adits, all working together.



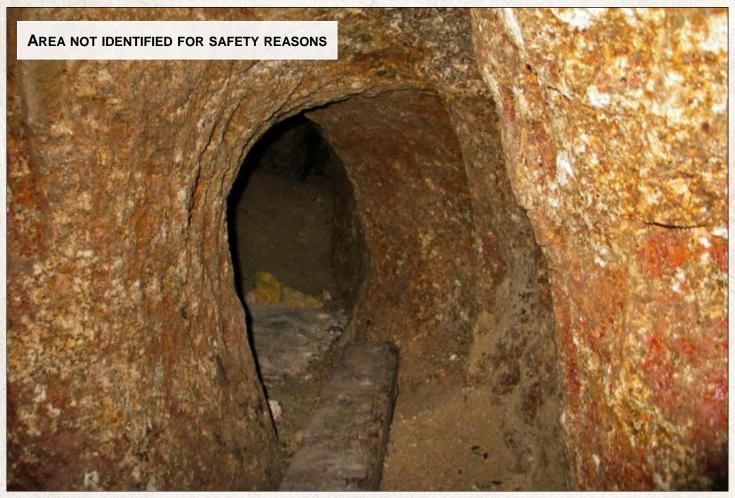
LOCAL MINES TODAY



The cramped conditions in which early miners worked, is evident when you are moving through many of these mines. Their work was conducted without hard hats or Government regulated health and safety conditions.



LOCAL MINES TODAY







This is not strictly a gold mine, though it is dug the same way. This shaft has a second parallel shaft separated by a steel grate. The mine also has multiple tunnels leading out from the two shafts where much of the mining work was conducted.



LOCAL MINES TODAY







Balaclava Gold mine

Located at Whroo, in Central Victoria, this was a deep reef mine, where the centre of the hill was removed, as miners followed multiple gold veins.



LOCAL MINES TODAY







This mine followed a deep quartz reef, resulting in a three level mine of significance, over a great distance.



Artworkz Serving the Community

The night too quickly passes
And we are growing old,
So let us fill our glasses
And toast the Days of Gold;

When finds of wondrous treasure
Set all the South ablaze,
And you and I were faithful mates
All through the roaring days.

Henry Lawson *The Roaring Days*, 1889