

City of Greater Bendigo: Marong Heritage Study Mining Sites

FREDERICK THE GREAT MINE

Other Names

Location 500 metres south of the junction of Three Chain Road/Sebastian Township Road, Frederick the Great/Carshalton Reef, Sebastian

Map Reference Raywood 1:25,000 - BV483.457.

Victorian Heritage Register No

National Estate Register No

Planning Scheme No

Description

Main shaft
Battery- Two storied, wooden framework of 40-head battery, in front of which is a large wooden water tower. Some fire damage has occurred to the north end of the battery framework; part of the framework at the south end has collapsed; generally the timber has decayed badly and the structure is in a poor state of preservation. On the south side of battery is a large brick engine foundation .
Boiler house- Partly exposed brick flues, several boiler sites and the remains of a square brick chimney base.
Winding/pumping engine- An arrangement of large wooden horses
Shaft - May well be open, appears to be covered with sheets of iron. Around the shaft is the remains of a collapsed wooden poppet head.
Mullock - Remnant of large heap.
Tailings - Large dumps of tailings lie to the west of the battery site, stretching for some distance to the south.
South shaft (Bruhn's shaft)
Located to the south of the tailing dumps, near the southern boundary is an open 3-compartment shaft. The shaft still retains sections of its wooden collar. To the south of the shaft is a square concrete winding engine foundation and a linear depression marking the site of a boiler.

History Period of activity: 1864-1913. The first battery of 12-heads was erected in 1864. The battery appears to have been added to, or replaced by a 40-head battery in 1870 when the winding and pumping plant was upgraded.
Line of reef: Frederick the Great/Carshalton
Maximum recorded annual production: unknown
Total production: 73,375ozs (valued at £289,319) obtained from 165,443 tons between 1864 and 1872; £291,750 worth of gold obtained between 1880 and 1887; 170,000ozs obtained between 1887 and 1899.
Dividends: £96,434 between 1864 and 1872; £118,534 between 1880 and 1887; £28,275 between 1887 and 1913.
Deepest working level: unknown
Deepest shaft: 880 feet (below water level)

Thematic Context Mining

Comparative Examples The site is the only medium-level high-production mine in the study area. There are a number of medium-level low-production mine sites in the study area, namely: Lightning Hill (1852-1907), Old Tom Reef (1857-1898), Black Forest (1858-1907), Frühling Reef (1860-1931), King of Prussia (1871-1885) and Lancashire Reef (1890-1908); but these are not really comparable. The only

other sites which may be compared with this site are the New Moon and South New Moon sites, although both were deeper and more successful mines.

Statement of Significance The Frederick the Great mine site is of considerable cultural significance for Victoria, given the age of the artefacts, the context in which they are situated and their remarkable state of preservation. The site displays a sequence of uses or functions over time illustrative of several major phases in Bendigo's mining history (criterion C), it was a success as a mine in terms of production levels, yields and as a business enterprise. It was one of Bendigo's premium mines and was responsible for the establishment of the township of Sebastian (criterion A). The site is part of a network of sites including the cyanide works and the South Frederick the Great mine, and has the ability to answer timely and specific archaeological research questions, because the superb state of preservation means there are many features which can aid in the interpretation of less well preserved sites. The site also has the possibility of buried remains (criterion C). The site contains probably the most complete set of artefacts surviving in Victoria to illustrate the above-ground operation of a large gold mine.

Level of Significance National Estate

Recommendation The site should be protected under the heritage overlay of the Great Bendigo Planning Scheme, by registration with both the Victorian Heritage Council and the Australian Heritage Council, and in accordance with the general principles of the conservation policy for mining sites. The mine site should be purchased by the Victorian Government. Further historical research should be undertaken to determine in more detail the sequences of plant, machinery and equipment used on the mine and their relationship to extant features on the ground.

Heritage Boundaries The site is bounded by Sebastian Road on the south, Three Chain Road on the west, the access road to the north and the pipe track from the Sebastian reservoir on the east.

- References**
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27. "Mining intelligence." The Bendigo Advertiser, Wednesday, 5 May 1880.
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29. The Bendigo Advertiser, 11 May 1880.
30. "Mining intelligence. Frederick the Great Tribute Company." The Bendigo Advertiser, Monday, 28 March 1881, p3, col.3.
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32. Goldfields of Victoria. Reports of the Mining Registrars for the quarter.
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34. Reports and Statistics of the Mining Department for the quarter.
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37. "Mining intelligence." The Bendigo Advertiser, Wednesday, 9 May 1894, p4. col.1.
38. "Mining intelligence. Frederick the Great." The Bendigo Advertiser, Monday, 30 July 1894, p4, col.3.
39. "Mining intelligence. Frederick the Great." The Bendigo Advertiser, Monday, 13 August 1894, p4, col.3.
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Notes The description is based upon a quick site inspection by David Bannear. All remains, except the battery, were obscured by pepper trees.

The present threats to the site are: further collapse of the battery structure, fire, site visitors, pepper tree growth cracking brickwork in the battery engine foundation, the brick flues and chimney base, and further rotting of the collapsed wooden poppet head.

Assessed by David Bannear in February 1992 and reviewed by Peter Milner in June 1998

Chronology 29.05.1863... The locality is now no secret, and therefore our aim will be to give a detailed report of what we saw and heard, leaving the public to draw their own conclusions and act accordingly. The field we believe has not yet been named, but we suppose it will come under the category of flats, rather than that of gullies. The ground is nearly level, except in the immediate vicinity of the prospectors' claim, which is undulating, and lies at the foot of a surface reef - of which more hereafter. There is an abundance of timber, and a creek running within a few hundred yards. The distance from Sandhurst is estimated at from 12 to 15 miles, but having traversed the two ways, we should say that 13 miles is a fair estimate of the nearest route, which is through Eaglehawk, Sailor's Gully, and along Sydney Flat by way of Boyle's store, keeping the creek to the left all the way. The other road is by way of Peg Leg Gully and Myer's Flat, keeping the creek to the right, but this is not so direct a route as the first named. There are, at a fair computation, about 700 diggers on the ground already two-thirds of whom are "shepherding", but we should suppose that nearly 100 holes are in a fair way for bottoming. Up to the time we left (5 o'clock last evening) 7 holes had been bottomed, three of which had struck gold in paying quantities. The sinking is from 30 to 36 feet, through light soil, clay, reds sand and cement, under which the bed of washdirt lies; the depth of washdirt is from 3 feet 6 inches to 4 feet, and is a conglomerate of white gravel, small quartz and sand. The prospect obtained varies from 1dwt to 2dwt to the tin dish, and the gold is of the quality known as "rough". The appearance of the ground has been compared by some to the Epsom Diggings, and by others to that of Elysian Flat. Claims are pegged out for about a mile in length and 400 yards in width, and so much faith is placed in the locality that even on both edges of the creek there are the indications of holes being "put down". As we have before said, about 100 shafts are progressing downwards, but on fully one half of the claims the pick and shovel are lying ready for action. ... There are already temporary stores on the ground, and two or three butcher's shops; 3 blacksmith's shops also contribute their musical hammering to the busy scene around. Spring carts are in abundance, from which provisions of various descriptions are dispersed to the tented settlers. The low range which skirts the claim south of the prospectors', show what may be termed an outcrop from the reef, and in these surface boulders gold is everywhere visible in several shapes, from the finest grain to nuggets of small dimensions. An experienced quartz miner estimated that the quartz would run about 5ozs to the ton, which, notwithstanding the distance it would be necessary

to cart it, would nevertheless pay well for crushing.
(From a Correspondent)

... About 15 miles north from the Post Office, Sandhurst, 5 miles north west from the Flagstaff Hill, Whipstick, and half a mile from Myer's Creek, on the eastern side the new ground has been opened. A party of men - Burgess, Lucas and Flowers - have been prospecting in these quarters for several months, occasionally varying their labours by cutting bark and slabs for subsistence. On the 4th of May they opened the reef, on the rising ground to the north of the alluvial ground now working, but kept the fact to themselves until they fairly tried the alluvial on the surface, and having secured their 200 yards they made their discovery public. Only 12 men were on the ground on Saturday, when the first payable hole was bottomed, Bailey and Company, being the fortunate party who have secured the prospecting claim. They bottomed at 30 feet, with 4 feet of washdirt, and took half an ounce off the bottom.

A second payable hole was bottomed on Monday, and the third yesterday morning yielded 1dwt to the bucket, shotty gold, with quartz intermixed. About four holes have been bottomed without showing indications of gold, but these will be driven and fairly tried. The width of the flat between the reef and the opposite range, which, from the quartz and ironstone on the surface, appears to be auriferous, is about one third of a mile, and the holes are being sunk some 15 claims wide, deepening as they near the centre of the flat from 10 to 40 feet. The deepest ground in the centre has not yet been bottomed.

Opinions vary as to the permanence of the rush, some believing it is merely a spurt from a reef, in which gold is seen to a great extent; but others, from the fact that the gold has been got 3 miles to the south, at a depth of 125 feet, through cement, and amid heavy boulders, and about a distance of half a mile to the south of the present rush, believe that a new goldfield has been discovered to the honour of which the Prospecting Association might have been entitled, had they carried out the suggestion of one of their members, to give help of the men working the deep ground there some weeks ago.

No stores or shanties are yet on the ground, but a roaring trade has been done by spring carts from various stores from Eaglehawk, Elysian Flat, Epsom and Huntly. Saplings are in abundance, and are falling in all directions, and are being erected as frames for tents, and no doubt a canvas town will be up immediately. About 500 men are on the ground. ... [1]

□06.1863□The Sebastian rush is rather diminished, than otherwise, which may probably be attributed to the principal digging being on purchased land. The yield of gold is not great in most of the claims, though it has been reported that as much as six ounces to the load of washdirt has been obtained. The reef on the purchased land, though proved to be highly auriferous, still remains unworked. Rumours are afloat of many other reefs having been discovered within a radius of three miles from the above mentioned, but only one has been officially reported as payable. [2.5]

□06.1863□Another German digger, Sebastian Schmidt, struck good gold at twelve feet in vicinity of the Seven Mile Hut. Old days were relived even if the rush was brief. The ground was patchy but the following May, Schmidt and his party opened up the main reef there and for many years the mine that eventuated, the Frederick the Great, was regarded as one of the soundest and most competently worked mines in the colony. [3.133]

□02.07.1863□The prospects of Sebastian Flat are decidedly improving. Several of the claims bottomed at between 30 and 50 feet are, we understand on reliable authority, turning out as much as 6ozs to the load; while down the lead (if such it may be called) there is renewed activity. ... No further information relative to the reef discovered by Burgess and Company has reached us. [4]

□07.1863□The Sebastian Flat must be progressing, though slowly, as a company is about to erect a crushing machine. [2.6]

□06.1864□...At Sebastian, the Frederick the Great Company, upon the private property of Mr Hugh Glass, and taken by the company on tribute (30 per cent of the gross proceeds) for ten years, have given most satisfactory returns. [2]

□07.12.1864□The Sebastian - The quiet and stillness which has held possession of the Sebastian Goldfield since its desertion by the alluvial miners

some nine or ten months since, was yesterday broken by the inauguration of what, it is to be hoped, will prove a new and second era in its existence. The event, which caused some little interest in the place, was the starting of the crushing engine of the Frederick the Great Company, on the reef which is leased by the company. It will be recollected that simultaneously with the Sebastian alluvial diggings being discovered, a party of miners, Burgess and Company - discovered a very rich surface reef, traversing the new goldfield. When the goldfield was ascertained to be the private property of Mr Hugh Glass, the alluvial claims were let at a rental, but the discoverers of the reef were not allowed to work it on any conditions. It was consequently allowed to remain unworked until about five months ago, when an arrangement was made between the company who started their machinery yesterday and Mr Glass. The terms under which they hold the ground, consisting of 400 yards by 150 yards along the reef, with the right of 80 acres for drainage, and two acres for a cart road, are under a lease for ten years, by paying the owner 30 percent on the gross amount of gold yielded. The tribute appears no doubt extremely high, but it seems that such was the offer of the company themselves. They consist of eight working shareholders, all practical men, who have erected their plant themselves, in about three months, at a cost of something like £1,600. Their plan has been not to contract for the erection of the machinery, but by the employment of a working engineer (Mr Pickles, of Sandhurst) to devote their own labour to its erection. And under the supervision of their engineer, they have turned out as complete and compact a crushing engine as it would be possible to find in the district. In consequence of the low level and flat surface of the ground, it was necessary, in order to carry off the tailings from the machine, to erect the stamper beds at an elevation of about ten feet; this is accordingly done by the formation of a platform, supported by immense logs resting on the bed rock, some four or five feet from the surface. This elevation necessitates the hauling of the stone from the cutting of the reef up an inclined tramway of about 150 feet in length. The engine is of 12-horse power driving two six-stamper batteries, hauling the trucks, and working a pump, the well of the latter being supplied by an underground flume connected with the dam. The tailings will be carried into an adjoining dam, so as to allow the water, purified after settlement, to flow over into that for supplying the engine. The stamps, ripple boxes, and feeding boxes have all the latest improvements, and are of a very substantial character. This would lead to the greatest benefits for this district, and would be a favourable contrast to the failures of many large companies on the share system. He would therefore ask those present to join with him in wishing that the company might before Christmas have a Christmas cake of gold that would be the forerunner of many large cakes to come. ...

About 2 o'clock, steam being got up, the engine was set in motion, and on the first revolution of the flywheel was christened "Frederick the Great". ...

The toast having been duly honoured, Mr Pendlebury, one of the shareholders, returned thanks on behalf of his brother shareholders. He also expressed his gratification for the attendance of visitors from Sandhurst. He remarked that if they deserved the compliment which Mr McIntyre had paid them, it was because they had always followed the old adage, which said, 'If you want a thing done well, do it yourself.'

Mr Vallentine next proposed the health of the engineer, Mr Pickles, in a few words expressive of the skill and perseverance he had brought to bear in designing the whole works and carrying them to such a successful termination.

Mr Pickles briefly acknowledged the compliment and after a few more of the toasts customary on such occasions the company separated. [5]

□23.12.1864□The Sebastian Reef - The first crushing by the Frederick the Great Company, who commenced work a few days ago, yielded 150 ounces. The company have only been crushing what may be termed mullock out of the new cutting, and expect that their next yield will be much richer, so that, notwithstanding the heavy tribute of 30 per cent, which they have to pay to Mr. Hugh Glass, the proprietor of the land, the speculation is likely to turn out very profitable. [6]

□12.1864□At Sebastian, the Frederick the Great Company, upon the private

property of Mr. Hugh Glass, and taken by the company on tribute (30 per cent of the gross proceeds) for ten years, have given most satisfactory returns. Three crushings only have yet been made, giving the following results:-

First week □ 150ozs

Second week □ 269ozs

Third week □ 207ozs

In these cases the quantity of stone reduced was not accurately kept, the weekly result of gold only being taken, but I have averaged it at 100 tons per week. [7.48-49]

□03.1865 □ Frederick the Great, Sebastian: 520ozs obtained from 250 tons of stone at 8 feet. [7.46-47]

□06.1865 □ Frederick the Great, Sebastian: 624ozs obtained from 2312 tons of stone at between the surface and 10 feet. [7.50-52]

□09.1865 □ Frederick the Great, Sebastian: 180ozs obtained from 1200 tons of surface stone and alluvium. [7.54-55]

□02.10.1865 □ Sebastian - The alluvial workings at this place appear to be wholly deserted. Quartz reefing, however is still going on. The Frederick the Great Company are working in their open cutting, and trying stone from the east side, about thirty feet from the surface. In this gold has been seen; it is expected to pay. It is very profitable that the spurs further east will be prospected, and should they yield sufficient gold for working, there will be an immense quantity of stone to take out. The spurs in other portions of the cutting have not been yielding so well of late, and in consequence they have been left alone. At the south end of the excavation underfoot several spurs show payable gold from the cutting since the company commenced, about 5000 tons of quartz have been crushed, yielding 2100ozs of gold and on the whole the enterprising shareholders have received satisfactory return from their expenditure, capital and labour. Now, however their operations are in a measure of a prospecting character, and the gold obtained is less than hitherto. The company's dam is full and contains 5 month's water. It is very unlikely now that even in the driest summer the company will be without water to crush as they can draw water by means of pipes from the creek. [8]

□12.1865 □ Frederick the Great, Sebastian: 153ozs 1dwt 15.1 grains obtained from 1880 tons of surface stone and alluvium. [7.53-54]

□03.1866 □ Frederick the Great, Sebastian: 70ozs obtained from 150 tons of stone. [7.51-52]

□28.05.1866 □ After a stoppage of nearly five months, in consequence of the want of water, this company commenced operations on Wednesday last. From the supply given by the creek adjoining the ground they will be enabled to continue crushing for the next two or three months. [9]

□06.1866 □ Frederick the Great, Sebastian: 202ozs 3dwts 8 grains obtained from 335 tons of stone at 50 and 90 feet in a reef between 2 and 20 feet thick. Upon visiting the quartz crushing engines and many of the various quartz reefs upon which claims have been taken up, the first visited was the Frederick the Great, Sebastian; I found that the company had just finished crushing for the month. I wished for some specimens for the Intercolonial Exhibition in Melbourne, but the terms upon which this company have the lease from Mr. Hugh Glass precluded any specimens being parted with without his authority. They did not crush during the months of April and May, solely on account of the prolonged drought, and only commenced during the middle of June; they however crushed 335 tons of stone, which yielded 202ozs of gold raised from two levels, 50 and 90 feet; the reef is from two to 20 feet thick. There are many more claims upon Crown lands in the vicinity of Sebastian, but unworked from the want of capital and water. [7.48-50]

□04.07.1866 □ The Frederick the Great Company are raising stone from the open cutting which is paying well. They are also sinking a new shaft, nearer the engine, up which the stone from the cutting will be raised by the engine. This will do away with the whip at present in use. The company have abundance of water for all purposes. [10]

□19.07.1866 □ At Sebastian, the Frederick the Great Company have obtained 57ozs 12dwt for a fortnight's work. They have begun a new shaft which they

intend to sink to a depth of 100 feet, at an anticipated cost of £120. [11]

□12.1866□Frederick the Great, Sebastian: 606ozs obtained from 3136 tons of stone at between 20 and 90 feet. [7.45-46]

Frederick the Great Gold Mining Company (Private): held in 8 shares. This company's ground, which contains an area of 480 acres, is held under a kind of current lease from Hugh Glass, Esquire; the latter receiving 22½ per cent on all yields. There are two shafts, both of which are about 90 feet deep. In No.1 shaft the workings lie 30 feet west of the shaft, and the reef measures from 20 to 25 feet wide. In No.2 shaft the reef has been opened out upon for a distance of 270 feet north and south, and the stopes rise to a considerable height above the 90 feet level. Close to the shaft the rise an extensive cutting, which has been worked to a depth of 80 feet by 60 yards long, from which the reef was traced in the present workings. A new winding engine, 12-horsepower, has just been purchased for £475. There is also a 14-horsepower engine on the ground, which drives two batteries of 6 revolving stamps. Another battery is at present in the course of erection, two being found insufficient for the company's stone. While our reporter was on the ground (Saturday, December 8, about 3.15pm), an accident occurred, which terminated fatally, from a mass of slate, about 4 tons weight, falling upon a man in the drive. The ground, although previously deemed perfectly safe, appears to have adhered, in the form of a wedge, to a soft surface of slate, and came away without warning. Mine Force etc.- from 25 to 30 hands are generally employed. Yield of Gold.- for the fortnight ending 7 December, from 337 tons, 134ozs 4dwt. [12.357]

□02.1867□Frederick the Great Gold Mining Company (Private): held in 8 shares. This company holds an area of 480 acres under a kind of current lease from Hugh Glass, Esquire; the latter receiving 22½ per cent on all yields, the company having the option of terminating upon giving 3 months' notice. There is one main shaft, the depth of which is 93 feet, timbered and divided into two compartments. There are two levels, led to by a crosscut a few feet west from the shaft; the first level is 78 feet deep, and the second at 90 feet, from both of which stone is being taken. At the 78 feet level the miners are steadily rising on the backs and working northwards. All stuff from this level is sent down by passes to the 90 feet level, the latter being the principal workings in the mine. To give an idea of the large quantity of stone raised from the 90 feet level alone, a width of 24 feet of reef has been crushed 280 feet long and 15 feet high. To the south end the lode has been run down under foot, as it dips in that direction, and now a start has been made to fill in the open ground leading to the north. For a main level the timbering of this ground is most creditable to the manager and all concerned. In a short time it is intended to sink the shaft deeper, to admit of another stope below. Judging by the quality of the stone left under foot, the deeper workings promise even better returns than at the present level. About 100 feet north of the main shaft stands the main cutting, from which the company took their first stone. This excavation is 160 feet long, 60 feet wide, and 80 feet deep. The cutting communicates with the works, and is used as a footway. The machinery consists of two engines, one 20-horsepower, used for crushing only, the other 14-horsepower, for winding, also drives a circular saw, with which all the timber for the mine is prepared. The crushing plant consists of four batteries of 5 revolving stampers each. The mine is in substantial working order, and gives every encouragement to its owners. Yield of Gold - for the fortnight ending 9 February, from 490 tons, 69ozs 17dwt. [13.104]

□03.1867□Frederick the Great, Sebastian: 630ozs obtained from 3150 tons of stone at between 20 and 100 feet. [7.37-38]

□05.1867□Frederick the Great Gold Mining Company, Sebastian: 412ozs obtained for the month. [13.236]

□06.1867□Frederick the Great, Sebastian: 832ozs 8dwts obtained from 924 tons of stone at between 20 and 180 feet. [7.24]

□09.1867□Frederick the Great, Sebastian: 932ozs 5dwts obtained from 1210 tons of stone at between 200 and 250 feet. [7.21-22]

□12.1867□Frederick the Great, Sebastian: 498ozs 10dwts obtained from 4896 tons of stone at between 93 and 150 feet. I have the honor to report that the low average yield of gold per ton will be found to be caused by the large quantity

(4896 tons) from the Frederick the Great Company's claim averaging only 2dwts 0.87 grains. It is stated that these crushings include all the slate and debris taken in clearing the mine for the purpose of timbering and opening out drives at other levels. [7.20]

□03.1868□Frederick the Great, Sebastian: 1703ozs 16dwts obtained from 4026 tons of stone at 153 feet. The quantity of gold obtained from the Frederick the Great Reef during the quarter is worthy of note, viz. 1703ozs 16dwts. It may be as well to mention that this claim is situate on the private property of Mr. Hugh Glass, and that gentleman receives a percentage upon all the gold raised from the mine. [7.20]

□06.1868□Frederick the Great, Sebastian: 1205ozs 12dwts 12 grains obtained from 3216 tons of stone at 150 feet. [7.23]

□09.1868□Frederick the Great, Sebastian: 860ozs 13dwts obtained from 3784 tons of stone at 150 feet. [7.23]

□12.1868□Frederick the Great, Sebastian: 317ozs 8dwts obtained from 1963 tons of stone at 150 feet. [7.21]

□03.1869□Frederick the Great, Sebastian: 1439ozs 3dwts obtained from 1953 tons of stone at between 150 and 200 feet. [14]

□06.1869□Frederick the Great, Sebastian: 1473ozs obtained from 2834 tons of stone. [14]

□05.07.1869□The Frederick the Great Company still keeps on its prosperous way, and the cake of 350ozs sent in on Saturday showed that this wonderful mine has lost none of its vitality. The question will very naturally arise, are there not good reefs close to it? [15]

□09.1869□Frederick the Great, Sebastian: 1279ozs obtained from 2908 tons of stone. [14]

□□At Sebastian the Frederick the Great Company continues to yield well - 1279ozs in twelve weeks. [7.34-35]

□12.1869□Frederick the Great, Sebastian: 1337ozs 12dwts obtained from 2782 tons of stone at between 150 and 200 feet. [14]

The Frederick the Great Company, at Sebastian, have during the last quarter obtained 1337ozs 12dwts. They are now engaged in the erection of more powerful machinery, the contract price about £4500. [7.30]

□21.05.1870□The Frederick the Great Company, Sebastian -A great deal has been written about the power of gold, but we think that so far as this part of the world is concerned it is indeed the wizard that has changed as by enchantment the aspect of a whole country, and settled a population, with all the adjuncts of civilisation, on a tract of country which a few years ago was a desert. Wherever it has outcropped the same effects are visible as around Bendigo; and perhaps in few places are they shown so vividly as in the vicinity of that great reef which for some years past has been worked with such success by the Frederick the Great Company. The fame of this company had so long been known to us by seeing their magnificent yields that we at last resolved to pay them a visit, especially as they have lately been erecting splendid machinery, with a view to sinking to greater depths and obtaining still greater yields from the reef.

The Frederick the Great Company is situated on a small hill, a spur of the range which is almost surrounded with alluvium, the connection with the main range being hardly perceptible. However it is easy to see at a glance that this is not a formed one, for it is very different from the surrounding plains. The traveller in journeying out to it passes through a wooded country, box being the prevailing timber, and in the course of the ride the Red Rag and Red Jacket rushes, or rather quondam rushes - for their glory is departed - are passed, and the wood continues until the hill on which is the Frederick the Great appears, which is, as it were, an oasis in the desert of trunks and branches and leaves. After passing through a few miles of bush civilization again appears, and here we discover all the most expensive appliances of modern science called into existence by the magic of gold.

The mine is situated on the private property of Mr Hugh Glass, and the reef was discovered in 1863 by three men, who found the gold and quartz on the surface, covered with moss. As they did not keep matters so close as they should have done seeing the good thing they had, it was soon discovered that they had gold,

and they were consequently turned out and the reef was let on tribute to a party which are now called the Frederick the Great Company, who have gone to the greatest expense in thoroughly working and developing the mine, and have spared nothing to make it profitable, and very profitable it has been. They have worked the reef, which averages from 6 feet to 40 feet, about a length of 300 feet and a depth of 200 feet. In one place there is a tremendous cutting, out of which they have taken the reef, nearly 100 feet across. To work the reef they put up a winding engine, with eighteen stamps at first, and this has lasted them a long time. However, when they got down 200 feet they found the water getting troublesome, and they determined to sink a new shaft to the east, towards which the reef underlays a little, and put up splendid drainage machinery. They have this shaft down now about 240 feet and expect to have to go down 34 feet more before striking the reef. We obtained some interesting particulars about the expense of working the stone. It appears that the expense of working per ton, has been, reckoning the machinery old and new, &c, which cost about £7000 - about 12 shillings per ton. The stone has averaged about 6 dwt 15 grains, half of the amount of which was profit, as the stone is so easily got. The cost of raising and crushing the stone is 9 shillings per ton.

A visit down the mine revealed to us the peculiarity of this extraordinary reef. It is a large body of friable stone, in many places covered with a black rust, and the surrounding slate and sandstone is very friable and rotten, so that the great cost is the timber. Were it not that there is an unlimited supply of good amber around, the profits would have been considerably less. Indeed the amount of timber used in this mine is very large, and the powerful props and cross-pieces strike the visitor with an impression that they are strong enough to withstand a convulsion of nature. The reef is worked in a most systematic manner. A level having been driven, and props, &c, put in, the back is sloped, and then the vacancy underneath is filled up with mullock, the passes with wood, and the level filled up as the stone is taken out. The system appears to answer excellently, and none other would answer the peculiar nature of the ground. The number of tons crushed by this company since its formation has been 57,000 and the yield of gold has been over 19,000ozs, which gives a total of £76,000 value of gold obtained from the mine.

The new machinery is a real credit to the enterprise of the Frederick the Great Company; the founders, Langlands Foundry Company, Melbourne; the contractors, J. Horwood and Son, Sandhurst; and last, but not least, the company's engineer, Mr Angus Kennedy, under whose superintendence the machinery was put up. The following is a description of the new plant. The engine and boiler was manufactured by Langlands Foundry Company Limited, Melbourne. The engine is a horizontal high pressure of 40 horse-power, the cylinder being 20 inches in diameter with 42 inch stroke. It has been made to order, and is a superior article, highly creditable to the manufacturers. All the parts which require strength are of wrought scrap iron, including the crank shaft and crosshead. The flywheel is cast in segments, and is 17 feet 6 inches in diameter, weighing over four tons. The boiler is 25 feet 6 inches by 6 feet 6 inches, with a flue of 42 inches in diameter and weighs eight and a half tons. The cost of the engine and boiler was £825. Another boiler of the same size is to be added as soon as required. The winding, pumps and pumping gear were manufactured by Messrs Horwood and Sons, Sandhurst, who were also the contractors for the erection of the plant, except the poppet-heads and fixing the pumps which were done by the company, and the contractors are to be congratulated on the most able manner in which they have performed their task; indeed, we question if a stronger plant than that of the Frederick the Great Company is to be found on Bendigo. As this machinery is of peculiar construction, an accurate description may prove interesting. The gearing is what is commonly known as step gear. There [are] two spur wheels and a pinion, which are 16 inches wide on the face with the rim at both ends of the teeth and 8-inch pitch. The pinion is 24 feet in diameter. The pump wheel is 9 feet 4 inches in diameter, and weighs 5 tons. The winding wheel is 4 feet 6 inches diameter, and weighs about 25 cwt. The wrought iron shaft for the pump is 6 inches diameter, and weighs 28 cwt. The pump crank plate weigh [?] cwt and

has 4 bosses for the crank pin for 3 feet, 4 feet, 5 feet, and 6 feet stroke. The plummer blocks in which the shaft works weigh $8\frac{3}{4}$ cwt without the brasses, which alone weigh over 7 pounds each. The bearings are 14 inches long, and the sole plates on which all the plummer blocks rest are 16 feet long, and weigh over 1 ton each. The sweep rods for the pump (2) are made in two pieces of Oregon timber, 18 inches by $7\frac{1}{2}$ inches at the middle, and tapering to 10 inches. At both ends, the rod ends of wrought iron weigh over 7 cwt each, and each rod complete weighs 21 cwt. The bell crank is made of boxwood and iron, the bottom piece is 31 feet long by 19 inches by 21 inches, the whole complete weighing about 8 tons. The pump rods are 9 inches square, Oregon, in 20 feet lengths. The plunger is $11\frac{3}{4}$ inch diameter, the pipes of the plunger column are 12 inches diameter, and those for the draw-lift are $12\frac{1}{2}$ inches diameter. The pump will make from 6 to 7 strokes per minute. The shaft and plummer blocks of the winding gear are similar to those for the pump gear. The spider wheels are 9 feet 6 inches diameter, and measure over all 15 feet inches, and wind at the rate of 540 feet per minute - they each weigh about 3 tons. They are made with a three-pronged clutch, the clutch piece is made to engage and disengage at pressure, so that one rope may be stopped, shortened, or lengthened in an instant, or both ropes may be stopped directly without stopping the rest of the machinery - an important improvement in case of an accident such as occurred some time ago at the 'Waterwitch' engine. This arrangement is for the purpose of hauling from different levels. The pumping gear may be stopped when the engine and winding gear are at work, and the winding may be stopped also and the engine kept at work. The poppet-head pulleys are each 10 feet diameter, and weigh about 17 cwt each. They have each 16 wrought iron arms, and are 50 feet high. The brace is 19 feet from the mouth of the shaft. The shaft is only 220 feet deep as yet, and it is timbered with 4 inch by 8 inch sawn stuff. There are sets, or frames, every 20 feet, of 9 feet square. The shaft is 12 feet 8 inches by 5 feet 6 inches in the clear; where the plunger is fixed it is 17 feet 6 inches by 6 feet in the clear. There is not much water as yet. The engine house is of brick, covered with corrugated galvanised iron. It is 17 feet high in the walls, $42\frac{1}{2}$ feet wide, and $43\frac{1}{2}$ feet long. The stack is 69 feet high from the surface. The whole weight of the cast and wrought iron in the job is about 100 tons, and the cost of the new machinery, sinking shaft, etc, is £4400. The engine rests upon a peculiar framework, or diagonal piles of box, so combined that the pressure is broken, and they can support double the weight uprights could. The whole reflects credit upon all concerned, and the Frederick the Great Company are to be congratulated on the boldness and enterprise which they displayed in erecting such machinery. [16]

□23.05.1870□In our report of the Frederick the Great Company, in Saturday's issue, an inaccuracy crept into the statement that the pinion was 24 feet in diameter- it should have been 24 inches. The poppet heads are fifty feet high. [18]

□06.1870□Frederick the Great, Sebastian: 870ozs 1dwt obtained from 3624 tons of stone at between 100 and 150 feet in a reef 6 to 20 feet thick. [18.31-32]

□09.1870□Frederick the Great, Sebastian: 1302ozs 5dwts 12 grains obtained from 3868 tons of stone at between 100 and 150 feet in a reef 15 to 25 feet thick. [18.29-30]

□19.12.1870□Some particulars of the changes in the Sebastian reefs, and district, since we noticed them last, may be interesting. This district appears to have received far less attention from quartz miners than it actually deserves. Some very good patches of surface stone have been found from time to time in the Whipstick (as the district is called), but as they soon ran out, or got too poor to be profitable, owing to the heavy expense of carting long distances and crushing, and abandonment soon followed. The only party who have gone to work in a really systematic and intelligent manner is the now famous Frederick the Great Company, consisting only of six or seven shareholders, without too much capital at starting; but with a great deal of perseverance and intelligence they have managed, notwithstanding many drawbacks, to make nice fortunes, and have now property, in point of value second to none in the Bendigo district. Until lately their deepest workings only reached 200 feet. The new shaft which

is really a splendid one, is 375 feet deep. At 300 feet a cross cut has been driven 140 feet west, at the end of which splendid stone was struck on Thursday last; perhaps better than anything hitherto found in the mine. Specimens from it showing splendid gold were exhibited at the Bank of Australasia on Saturday. The thickness of the stone is not as yet known. A winze is being sunk, now down 50 feet, from the 200 foot level, to the 300 foot level. The winze is 7 feet across the reef, and no sign of either wall, the stone going over 1½ozs per ton. The prospect is really good, and will, it is to be hoped, amply reward the energetic proprietors for their lately heavy outlay in erecting machinery and prospecting the mine. This discovery proves, without any doubt, that good payable reefs may be looked for and easily found in the Whipstick district at Sebastian. The only prospecting done outside of the Frederick the Great Company's ground is the sinking of two or three shafts, apparently out of the line of reef, by the Band of Hope Company, whose lease lies to the north, and a shaft is now being sunk on the south of the company's ground. The strata in this shaft is of a similar character to the western back in the Frederick the Great Company's mine. The line of reef southwards can be traced for miles by the numerous outcrops of quartz on the surface; still the ground is open to the miner when the discovery in the company's mine is better known. [62]

□12.1870□Frederick the Great, Sebastian: 851ozs 15dwts obtained from 3518 tons of stone at between 100 and 170 feet in a reef 10 to 20 feet thick. [18.32]

□06.1871□Frederick the Great, Sebastian: 2317ozs 4dwts obtained from 2437 tons of stone at 300 feet in a reef 8 feet thick. [18.30-31]

The past yields of the Frederick the Great Company's mine, and the splendid prospects of that company, have caused a rush for claims near it. [18]

□01.07.1871□The Frederick the Great Company have 936ozs 10dwts. from 340 tons of stone. The cake will be in today. This splendid yield is likely to be but the first of many larger ones to follow. ...

Our Raywood correspondent sends us the following:-

Being on a visit to the thriving town of Sebastian yesterday I encountered Mr. Robert Charlton, one of the shareholders in the widely-celebrated Frederick the Great Company, who with the greatest courtesy invited me to see the splendid cake of gold obtained from 336 tons of quartz crushed within the last 12 days, and which, with the cleaning of the tables, weighed 986ozs 12dwt. With such returns as this fortnightly, no wonder that Sebastian appears a thriving place, and that every one looks cheerful and contented. I observe that great improvements are taking place around the township. Land is being taken up and cultivated, and Mr. Charlton is building what appears to be intended for a permanent building - a large brick house - that will be superior to any building on this side of Eaglehawk. It is to be hoped that this prosperous state of things will continue, and certainly at the present time there is no appearance of anything to the contrary, as I understand that the body of stone from which this cake of gold was obtained is 16 feet thick, and these or similar returns may last, as is sincerely hoped, for many years. [19]

03.07.1871□Our Raywood correspondent fell into error in stating the Frederick the Great Company's reef was only 16 feet thick. The reef is 39 feet thick, and is taken from wall to wall, averaging the same throughout. [20]

□31.07.1871□The Frederick the Great Company had a cake of about 600ozs. This would give a dividend of over £2000. This company is about erecting a fourth engine, the manager, Mr Charlton, being at present at Ballarat for the purpose of buying one. [21]

□09.1871□Frederick the Great, Sebastian: 4279ozs 13dwts obtained from 2649 tons of stone at 300 feet in a reef 45 feet thick. [18.29]

□12.1871□Frederick the Great, Sebastian: 1314ozs 11dwts obtained from 2668 tons of stone at 300 feet in a reef 45 feet thick. [18.29-30]

□03.1872□Frederick the Great, Sebastian: 3034ozs 11dwts 11 grains obtained from 2305 tons of stone at 300 feet in a reef 40 feet thick. [18.28]

15.06.1872□Put through 2305 tons, the return being 3034ozs 11dwt 11 grains, or 1ozs 6dwt 7.92 grains per ton, the reef being 40 feet wide, and the depth 300 feet. [22]

03.04.1877□The Frederick the Great Company, Sebastian, where rich yields a

few years since, resulted in a long succession of dividends, and subsequently ceased, have, we learn, struck a promising body of stone in the new shaft which they have for some time engaged in sinking, from which good returns are anticipated. [23]

□13.05.1879□The projectors of the scheme to work the Frederick the Great mine at Sebastian have received sufficient encouragement to warrant the supposition that the undertaking will be a success so far as the floating of the new company is concerned. The purchase money is to be £8000 which is made up of as follows:- £4000 for the plant and machinery; £2000 to be expended in purchasing the 400 acres on which the claim stands; and which by the way is freehold property not leasehold; as was previously stated; and £2000 in the development of the mine. [24]

□29.04.1880□The Frederick the Great Tribute Company, which has been lately formed to work the ground of the old and celebrated Frederick the Great Company at Sebastian, has engaged some little attention from some of the local speculators during the past few days. Yesterday the shares had a slightly upward tendency, the cause being probably that a report was received at the office of the manager (Mr J. G. Weddell) that the men working in the open cutting had found gold in the stone in trial shafts, both at the north and south ends. A special meeting of the shareholders was held in the afternoon, at which the directors were empowered to let tributes south of the main she shaft and north of the old cutting. [25]

□03.05.1880□Frederick the Great Tribute Company (Sebastian) - During the past fortnight we commenced crushing with ten heads, the whole of the battery is now ready. The stone in the cutting is about 4 feet thick, of very promising appearance and showing gold. We have found the stone we are now working south of the cutting 4 feet deep and north of the cutting 140 feet deep. The amalgam is 80ozs. [26]

□05.05.1880□There was an average amount of business done in Frederick the Great ... during the latter part of the afternoon, owing to a report of an improved prospect having been wet with. [27]

□11.05.1880□Frederick the Great Tribute - This claim has of late occupied prominent attention at the hands of the public, and such a market demand has been made for shares that a few remarks upon the present and future prospects of the company may not be out of place. The mine - situated as it is some 15 miles out of Sandhurst - seems to be comparatively unknown, as regards the present workings, by even the most of those speculators in the market who are supposed to be au fait with all mining ventures. The shares have reached a value in the market which brings the mine more particularly under the public notice, especially on account of the quick rise which has taken place in them. The mine and plant was formerly in the hands of Charlton and Company, consisting altogether of five shareholders, who made very handsome dividends out of it. The present company have tributed the holding of 400 acres, on which is situated the mine and plant, upon very advantageous terms, viz, 10 per cent, 2 per cent for wear and tear of machinery, and another 2 per cent as a guarantee up to £300, with the option of purchasing the machinery in six months at £4,000. The shafts and plant may be said to be situated in the centre of the ground. The other company sank their main shaft to a depth of 600 feet, and four levels altogether have been driven in it to various lengths. The first was at 100 feet, the second at 380 feet, the third at 480 feet, and the fourth at 600 feet, most of the levels being driven north. There is a great quantity of stone which has been met with in this shaft from the 380 foot level to the 500 feet, dipping south; the stone in the face in all the levels is dipping underfoot. It is the intention of the company to pump out the water, and let the lower levels on tribute. The necessary repairs to the machinery and apparatus for this purpose are now being effected, and it is expected that the pumps will be going in the course of a month or thereabouts as soon as the pumping gear is fixed. The shaft, which is a very large one, is 13 feet by 5 feet, and divided into three compartments - a pump shaft and ladder-way, and two winding shafts. The air apparatus for the mine is of the most complete order, connected with the main engine, and the fan, besides supplying air to the underground levels, is also

connected with the smithy and drives the bellows. The pumping gear is of a very superior kind, consisting of a 12-inch lift and plunger, whilst there appears to be a large supply of pipes on hand, both for this and for the air connections. The present workings of the company, which are situated at 300 feet north of the shaft, and about the same distance from the northern boundary, partake most of the nature of a surface cutting, being partly open and partly a tunnel, driven towards the north, and not deeper than 20 feet. This is just south of the old cutting from which the former company gained such good returns, and is separated from it by about 12 to 15 feet of an embankment. The old cutting has a considerable quantity of water in it, but this will be pumped out during the week and operations commenced upon a large body of stone lying to the east, which it is understood was left untouched. In the present cutting at the open end a sort of improvised timbered shaft has been built and a windlass erected, by means of which the stone is hauled up from below. About 20 feet or so in a short level to the west has been driven, and the men are at present rising on the stone met with herewith the intention of breaking through to the surface, when more expeditionary means of conveying the stuff to the surface and the battery will be adopted. A tramway will also be laid down, so that the stone may be hauled right up and delivered at the battery, which will save the slow and tedious system of cartage. The company intend to keep this portion of the ground to work on, and also a large area around it. Trenches have been sunk in different portions of the ground, in several of which stone has been met with almost up to the surface, and apparently showing the existence of three lines of reef. Of course, until they have been further prospected there is no saying what their nature may be.

It was decided at a meeting yesterday to let a large portion of ground in blocks of 100 foot square to the number of 5 from the old workings south, these blocks being situated to the west of the main shaft and plant. The first or north block it was decided to let at 57 per cent, the second at 55 per cent, the third at 53 per cent, and the fourth and fifth, or most southerly, at 50 per cent, these being surface tributes extending to a depth of 150 feet, the company undertaking to cart and crush. Other portions of the ground on the east of the present workings will probably be let on tribute, but nothing definite has as yet been determined on. A shaft a short distance from the present workings constitutes a sort of winze from the surface to the 300 feet level of the main shaft, and has been opened out at 70 feet and 150 feet, where the stone has been rich. It is intended to connect the 150 feet level with the surface workings, and to make it into two blocks.

The prospects of the company may certainly be deemed to be very good if the past be taken into account, and also the prospect as far as obtained, although the yield of 110ozs 12dwts on Saturday from 245ozs of amalgam, with 175 loads, has not, apparently, given as great satisfaction as possible. This, however, is a matter of opinion. This return was the result often days "crushing with ten head of stampers on. It is intended to put twenty head of stampers in order this week to enable crushing to be more expeditiously carried on, there being already something like 30 or 40 tons of stuff on the surface. The character of the stone is not what one is accustomed to meet with in gold-bearing quartz. It is of a brownish rubbly description, and the specimens which are kept back for show have gold plentifully distributed throughout them. The cutting from which the stone m is taken presented a mullocky-looking appearance, in which the stone could be seen mixed up, but not having gold perceptible when viewed by the light of the candle. There was every probability of any particular portion of the stone which did not give any signs of gold yielding a very good return. It is also pretty hard working, although, when a shot is put in, it brings down a large quantity of stone and mullock, whilst a quantity more can be removed by the [?] of a pick. It is said that the reefs which have been opened up by means of the trenches have all been prospected, and given payable results. The crushing and other plant is of the most extensive order, and is reputed as being the most complete of its kind in the district. The crushing plant consists of eight batteries of five head each, or forty head in all, revolving stampers. There is a separate pump and engine in the battery room for supplying water to the tailing e and the

battery. There are four Cornish boilers, which have a guaranteed test pressure of 100 pounds to the square inch, and are all fixed up in good order, set in brick and cement, and having connections to the various engines. The engine to the crushing plant consisting of a condenser and cylinder 2 feet, with a 4 foot stroke. It may be mentioned that each battery can be disconnected and work alone by means of the sliding clutches whilst the stamper boxes, which are self-feeding, are fitted with loose lining. The winding gear in connection with the shaft consists of a double cylinder engine, each 14½ cylinders, with link motion and double winding gear, 5-inch plat Manilla ropes, about 1500 feet in length, having been used, and at present lying in the engine-house. The winding drums are themselves 10 feet in diameter, fitted with separate brakes. The old company evidently determined to cope with the influx of water in no niggardly spirit, for the pumping plant is about one of the strongest in the colony, consisting of a 22-inch cylinder, with 3 feet 6 inch stroke with the 12-inch lift on all connections underground. The fly-wheel is 18 feet in diameter; a large pumping wheel 9 feet in diameter, 14-inch face, bored, and keyed to 8¾ feet, a pumping shaft, and a strong disc with crank pin, sweep rod, traveller, and pumping bob. The whole of the machinery, crushing, pumping, and winding, together with the boilers, is enclosed in a substantial corrugated iron shed, and also comprises a filter" room, with all the necessary appliances. There are also connected with the mine a carpenter's shop and a store room containing a large supply of material. Everything in connection with the mine and machinery has been of the most extensive scale, apparently without regard to cost, and would be far more suitable to some of the companies in the Sandhurst district carrying on operations in the deep levels ... There is every convenience afforded in the magnificent machinery for obtaining the best results provided the ground turns out to be payable. The prospects of the company in this respect may be said to be brilliant. What the stone they are at present working on, and the reefs which have been disclosed, will give is a question for future operations to reveal. Those who are interested in the company seem to have great faith, and this feeling is shared by Melbourne purchasers, who during last week bought heavily into the shares. The company have something like 30 or 35 men at work, and when the main shaft has been bailed out, and the whole of the ground it is decided to let been partitioned out, it is said there will be work fore very large number of men. The company has already moved in the matter of one lot for tributing, and, it is expected, will shortly decide upon the other portions. The fact of it being almost surface workings may induce a ready demand for tributing blocks. The locality lately was quite rushed by cager prospectors, and a large number of pegs put into ground surrounding the locality, but the company seized the golden opportunity, and seem to have the cream of the land. [29]

□05.1880□Several specimens from the Frederick the Great mine are on view at the Bath Hotel, and in consequence . . the rise in the stock drew several visitors . . .The quartz is different from what the mining public have been accustomed to see, being of a dirty brownish appearance and of a rubbly character. It was taken from the cutting 20 feet from the surface, and the broken portions exhibit what appears to be a fair distribution of the precious metal throughout the stone in what should certainly be very payable quantities. . A meeting of shareholders in the lease next north of the ground now being worked by the Frederick the Great Tribute Company, Sebastian, was held on Tuesday when it was decided to register under the name of the North Frederick the Great Company (No Liability), in 24,000 shares of 10 shillings each. Messrs R. Hailes, Herron, and S. Derbyshire were elected directors; Mr J H McColl legal manager, and Mr W G. Blackman auditor. [63]

□06.1880□At Sebastian, some tributers of the old Frederick the Great Company have found good stone on a continuation of the reef which gave such very rich returns to the company not long since. The discovery caused some excitement, and nearly all the available ground in the neighbourhood has been taken up. [18.29]

□09.1880□Frederick the Great, Sebastian: 981ozs 5dwts 6 grains obtained from 4756 tons of stone at between the surface and 100 feet in a reef 6 to 30 feet thick. [18.29]

□12.1880□Frederick the Great, Sebastian: 1254ozs 2dwts obtained from 3253 tons of stone at between the surface and 100 feet in a reef between one and 25 feet thick. At Sebastian the Frederick the Great Company have been doing well, with a large reef yielding nearly 8dwts to the ton, taken from the surface to 100 feet only in depth. A considerable amount of cross-cutting is being carried on now. Rock-borers are doing their work satisfactorily, and their success should strongly recommend them as an efficient means of lessening the cost of mining. [18.31]

28.03.1881□Frederick the Great Tribute, Sebastian: during the fortnight water in shaft lowered 38 feet below the 380 foot level. Water still heavy. Yield of gold for the fortnight is 990ozs 17dwt, being from No.3 tribute, 12ozs 10dwt; from Nos.14 and 15, 39ozs 12dwt; from Nos.18 and 19, 20ozs 18dwt, from No.5, 3ozs 3dwt, from Nos.1 and 2, 19ozs 16dwt, from No.12, 2ozs 10dwt, from Barnes, 1ozs 8dwt. [30]

□06.1881□Frederick the Great Tribute, Sebastian: 1530ozs 18dwts 22 grains obtained from 2584 tons of stone at 380 feet in a reef between 6 inches and 20 feet thick. Several mining ventures have been started to work the reefs at Sebastian and vicinity, some of which have paid good dividends, and, as will be seen by the (prefixed) returns, have yielded a considerable amount of gold. [18.30-31]

Frederick the Great, Sebastian: 1541ozs 13dwts 22 grains obtained from 2629 tons of stone. [14]

□09.1881□Frederick the Great Tribute, Sebastian: 2002ozs 4dwts obtained from 4378 tons of stone at between the surface and 400 feet in a reef averaging 12 feet thick. [18.33-34]

□12.1881□Frederick the Great Tribute, Sebastian: 1150ozs 11dwts obtained from 3844 tons of stone at between the surface and 580 feet in a reef between one and 40 feet thick. [18.33-34]

□03.1882□Frederick the Great Tribute, Sebastian: 1415ozs 11dwts 12 grains obtained from 3928 tons of stone at between 100 and 580 feet in a reef between 2 and 40 feet thick. [18.30-31]

□06.1882□Frederick the Great Tribute, Sebastian: 951ozs 4dwts obtained from 3759 tons of stone at between the surface and 600 feet in a reef between 14 and 50 feet thick. [18.35-36]

□09.1882□Frederick the Great, Sebastian: 1332ozs 10dwts obtained from 3832 tons of stone. [14]

□03.1883□Frederick the Great, Sebastian: 4038ozs 9dwts obtained from 4470 tons of stone at between the surface and 460 feet. [14]

In the mines off the main line of reef the chief place must be given to the Frederick the Great Company (Sebastian), from which for some weeks splendid yields have been obtained, principally by tributers. [18.32]

□06.1883□Frederick the Great Tribute, Sebastian: 5386ozs 15dwts obtained from 5325 tons of stone. [14]

A considerable amount of attention has been paid to outside places, and at Sebastian especially success has been pronounced. The reef being worked there is situate about seven miles north of Eaglehawk, and is supposed to be on the northern continuation of our main lines. It was very rich in former years, and is now giving splendid returns.[18.34]

□09.1883□Frederick the Great Tribute, Sebastian: 6393ozs 16dwts obtained from 6793 tons of stone at between 300 and 460 feet. [14]

The claims at Sebastian are being steadily worked, and Bruhn's Tribute Company are turning out splendid yields from a very large reef. [18.35]

□12.1883□Frederick the Great, Sebastian: 330ozs 3dwts obtained from 2066 tons of stone at between 150 and 380 feet. [14]

Bruhn's Tribute, Sebastian: 5069ozs 13dwts obtained from 3849 tons of stone at between 150 and 250 feet. [14]

At Sebastian, the leading companies are still meeting with gratifying success. [18.35-36]

□03.1884□Frederick the Great, Sebastian: 1093ozs 3dwts obtained from 2934 tons of stone at between 300 and 400 feet. [14]

Bruhn's Tribute, Sebastian: 5768ozs 9dwts obtained from 6459 tons of stone at

between 150 and 250 feet. [14]

The yields from Sebastian have not been quite so good during the quarter, but the total average yield is still very fair. [31.35-36]

□06.1884 □Bruhn's Tribute, Sebastian: 2556ozs obtained from 4909 tons of stone at between 150 and 300 feet. [32]

Frederick the Great, Sebastian: 3332ozs obtained from 7945 tons of stone at between 150 and 380 feet. [32]

The present has been even more successful than the past quarter, the dividends being £89,253 14s and the calls £47,428 10s, which is an increase on last quarter's return of dividends over calls of £10,624 4s. The principal contributors to this grand total are the Bruhn's Tribute Company, at Sebastian, its yield being 2556ozs 4dwts for the quarter. [31.15-16]

The Frederick the Great Tribute Company. During the past quarter this company have been engaged breaking stone at the 327-foot level, taking the eastern side of the reef, which is showing gold. The intermediate level below the 380 has been extended 130 feet. The reef is solid and well defined, and shows good gold. The reef in the stope over this level is making stronger. The western level at 380 feet has been extended 197 feet. [31.15-16]

The Bruhn's Tribute. The reef at the 300-foot level of this mine is 19 feet wide, and showing splendid gold. This level has been extended 35 feet during the quarter. The 250-foot cross-cut has been extended 20 feet, and holed through to the wet winze from the 200-foot level. [31.15-16]

□09.1884 □Bruhn's Tribute, Sebastian: 2071ozs 12dwts obtained from 3708 tons of stone at between 150 and 300 feet. [32]

Frederick the Great, Sebastian: 3895ozs 2dwts obtained from 7945 tons of stone at between 150 and 380 feet. [32]

No.20 Tribute, Sebastian: 642ozs 15dwts obtained from 1054 tons of stone at between 150 and 200 feet. [32]

Frederick the Great Company, Sebastian: £1950 declared in dividends for the quarter. ... At the 320-foot level there is a large body of stone showing splendid gold. The 380-foot level has been extended 218 feet from cross-cut, the stone here being 12 feet wide, and showing gold. The south winze has been sunk 14 feet from 380-foot level. The western side of this level is a fresh make on a sandstone floor, dipping south. [31.19-20]

Bruhn's Tribute Company, Sebastian: £1350 declared in dividends for the quarter. ... have lately driven a cross-cut from the 200-foot level, a distance of 10 feet, through a strong body of stone. The 300-foot level has been extended 69 feet. The reef is here 15 feet wide, showing fair gold. Have also started a winze at 250-foot level, which is now down 12 feet in a large body of stone, showing gold. [31.19-20]

No.20 Tribute Company, Sebastian: £600 declared in dividends for the quarter. ... The 150-foot level has been driven 80 feet. Ground slate and spurs. The north winze from the intermediate level has been sunk 45 feet. Stopes at 225 feet showing gold. [31.19-20]

□12.1884 □Bruhn's Tribute, Sebastian: 2119ozs 18dwts obtained from 3987 tons of stone at between 150 and 300 feet. [32]

Frederick the Great, Sebastian: 3873ozs 11dwts obtained from 7889 tons of stone at between 200 and 380 feet. [32]

No.20 Tribute, Sebastian: 837ozs 4dwts obtained from 1690 tons of stone at between 150 and 225 feet. [32]

At Sebastian the mines are turning out fairly good yields. [33.17-19]

□03.1885 □Bruhn's Tribute, Sebastian: 2622ozs 6dwts obtained from 5193 tons of stone at between 150 and 300 feet. [32]

Frederick the Great, Sebastian: 2606ozs 1dwt 11 grains obtained from 6237 tons of stone. [32]

No.20 Tribute, Sebastian: 476ozs 3dwts obtained from 814 tons of stone at between 150 and 225 feet. [32]

The mines from Sebastian are still giving satisfactory yields. [33.18-20]

□06.1885 □Bruhn's Tribute, Sebastian: 1311ozs 7dwts obtained from 2676 tons of stone at between 200 and 300 feet. [32]

Frederick the Great, Sebastian: 1945ozs 4dwt obtained from 4788 tons of stone

at between 200 and 460 feet. [32]

No.20 Tribute, Sebastian: 12ozs obtained from 77 tons of stone at 150 feet. [32]
Frederick the Great Company - the winze from the 580-foot level has been sunk 19 feet. Stone improving in appearance. The 327-foot level has been holed through to the winze from the 300-foot level. Have extended the cross-cut east in the rise above the 300-foot level, a total length of 32 feet; ground - slate and spurs. [33.18-19]

Bruhn's Tribute Company are breaking stone from the second stope north from the main winze at the 250-foot south level;. At the north winze, 18 feet below the 200-foot level, have opened out on the east stone. The reef is about 5 feet wide, and showing a little gold. [33.18-19]

□09.1885□Bruhn's Tribute, Sebastian: 1509ozs obtained from 3930 tons of stone. [32]

□12.1885□Frederick the Great, Sebastian: 2912ozs 2dwt 12 grains obtained from 6102 tons of stone at between 150 and 460 feet. [32]

□03.1886□Frederick the Great, Sebastian: 582ozs 14dwt obtained from 1486.5 tons of stone at between 150 and 460 feet. [32]

Bruhn's Tribute, Sebastian: 1038ozs 14dwts obtained from 2621 tons of stone at between 150 and 300 feet. [32]

No.20 Tribute, Sebastian: 1262ozs 6dwts obtained from 1510.5 tons of stone at between 225 and 300 feet. [32]

□06.1886□Frederick the Great, Sebastian: 1125ozs 12dwt obtained from 3521 tons of stone at between 120 and 300 feet. [32]

Bruhn's Tribute, Sebastian: 1271ozs 12dwts obtained from 3521 tons of stone at between 120 and 300 feet. [32]

No.20 Tribute, Sebastian: 1184ozs 7dwts obtained from 2371 tons of stone at 130 feet. [32]

□09.1886□Frederick the Great, Sebastian: 2373ozs 12dwt obtained from 6501 tons of stone at between 150 and 400 feet. [32]

Bruhn's Tribute, Sebastian: 747ozs 17dwts obtained from 2825 tons of stone at between 150 and 300 feet. [32]

No.20 Tribute, Sebastian: 1169ozs 8dwts obtained from 2134 tons of stone at between 200 and 300 feet. [32]

□12.1886□Frederick the Great, Sebastian: 1762ozs obtained from 5133 tons of stone at between 200 and 350 feet. [32]

Bruhn's Tribute, Sebastian: 739ozs 12dwts obtained from 2792 tons of stone at between 150 and 250 feet. [32]

No.20 Tribute, Sebastian: 293ozs obtained from 225 tons of stone at 200 feet. [32]

□02.1887□Lease obtained on 23 February by the Frederick the Great Tribute Company under the Mining on Private Property Act for 394 acres 2 roods and 2 perches at Sebastian for 70 men. [34]

□03.1887□Frederick the Great, Sebastian: 744ozs 9dwts obtained from 1358 tons of stone at 327 feet. [32]

Bruhn's Tribute, Sebastian: 463ozs 8dwts obtained from 1158 tons of stone at between 200 and 250 feet. [32]

The dividends for the quarter amounted to £19,020, compared with £21,250 for the December quarter. The difference is more than accounted for by the fact that the Frederick the Great Company and its tributes at Sebastian have been doing scarcely any work, pending the settlement of the question as to the renewal of their lease under the Mining on Private Property Act. The decision of the Supreme Court is expected daily, and if favourable to the company, work will be pushed on with vigour. ... At Sebastian, preparations are being made to resume work with the old vigor, as soon as the law case is settled. [33.20-21]

□06.1887□Frederick the Great, Sebastian: 238ozs 8dwt obtained from 1806 tons of stone at between 150 and 300 feet. [32]

At Sebastian, the Frederick the Great Company has had a very poor quarter, the yields obtained not paying expenses. Bruhn's Tribute and the No.20 Tribute Companies, having worked out their tribute blocks, have been wound up, final dividends being paid. [33.20-21]

□09.1887□Frederick the Great, Sebastian: 824ozs 4dwt obtained from 4634

tons of stone at between 150 and 300 feet. [32]

At Sebastian, the Frederick the Great have been operating extensively, but latterly the yields have been poor. [33.22-23]

□12.1887□Frederick the Great, Sebastian: 896ozs 15dwt obtained from 4315 tons of stone at between 100 and 460 feet. [32]

The yields from the Frederick the Great (Sebastian) and ... have been fairly good. [33.21-22]

□03.1888□Frederick the Great, Sebastian: 950ozs 9dwt obtained from 4704.5 tons of stone at between 150 and 460 feet. [32]

At Sebastian, the Frederick the Great Company and its tributes are yielding moderately. [33.17-18]

□06.1888□Frederick the Great, Sebastian: 868ozs 10dwt obtained from 4349 tons of stone at between 150 and 300 feet. [32]

At Sebastian, one or two claims, such as the Frederick the Great and South Frederick the Great Companies have somewhat improved prospects. [33.19]

□09.1888□Frederick the Great, Sebastian: 881ozs 18dwt obtained from 3788 tons of stone at between 150 and 460 feet. [18]

□09.1888□At Sebastian, the Frederick the Great Company's yields have been poor, but they have now got a somewhat improved prospect northward. [33.20-21]

□12.1888□Frederick the Great, Sebastian: 792ozs obtained from 3271 tons of stone at 300 feet. [32]

□03.1889□Frederick the Great, Sebastian: 779ozs 3dwts obtained from 2504 tons of stone at 300 feet. [32]

At the Whipstick, at Raywood, and at Sebastian, mining has been very quiet, and devoid of development of note. [33.18]

□06.1889□Frederick the Great, Sebastian: 463ozs 16dwt obtained from 1729 tons of stone at between 300 and 460 feet. [32]

At Sebastian, the yields from the Frederick the Great Company have recently been very moderate. [33.17]

□09.1889□Frederick the Great, Sebastian: 696ozs 10dwt obtained from 2910 tons of stone at between 300 and 460 feet. [32]

At Sebastian and Raywood mining is just now very dull. [33.19-20]

□12.1889□Frederick the Great, Sebastian: 459ozs 18dwt obtained from 1937 tons of stone at between 300 and 460 feet. [32]

At Sebastian and Raywood prospects at present are dull. [33.18]

□06.1890□Frederick the Great, Sebastian: 291ozs 18dwt obtained from 1348 tons of stone at between 250 and 580 feet. [34]

□09.1890□Frederick the Great, Sebastian: 291ozs 12dwt obtained from 1163 tons of stone at between 300 and 500 feet. [34]

□12.1890□Frederick the Great, Sebastian: 188ozs 2dwt obtained from 752 tons of stone at between 300 and 580 feet. [34]

□03.1891□Frederick the Great, Sebastian: 144ozs 5dwt obtained from 5348 tons of stone at 300 and 580 feet. [34]

□06.1891□Frederick the Great, Sebastian: 254ozs 18dwt obtained from 651 tons of stone at between 460 and 580 feet. [34]

□09.1891□Frederick the Great, Sebastian: 395ozs 12dwt obtained from 1599 tons of stone at 540 feet. [34]

□30.12.1892□Frederick the Great - crushed 50 tons for 18ozs gold. They have a lot of stone in the winze below 400 feet. [35]

□17.03.1894□Several months ago Messrs W. W. Eskdale and G. H. Crawford were deputed by the shareholders in the Frederick the Great mine, Sebastian, to visit England with the object of placing the mine on the London market. For a considerable time no news of a definite nature came to hand, and the general impression was likely to prove unsuccessful. Consequently, a cablegram in yesterday's Age regarding the venture aroused considerable interest in mining circles. The message, which is published elsewhere, merely announced that the venture had been put on the market. ...

In the Advertiser of 29 July last, full particulars regarding the affair were published. The ground held by the company is 394 acres of freehold, with 100 yards along the line. From this area, 352,703 tons crushed had yielded

160,965ozs 5dwt 4 grains, valued at £626,773 11 shillings 8 pence of which £210,090 10 shillings had been paid in dividends. £30,000 expended on machinery, and £75,052 6 shillings 11 pence paid in percentage to the freeholders. The latter item ceased when the ground was taken up under the Mining on Private Property Act. The shaft is only 600 feet deep, and the lowest crosscut, in which a large reef was passed through, 580 feet. [36]

□09.05.1894□The Frederick the Great mine has now been formally handed over to the English company, and work started under the direction of Mr. T. Parker, formerly of the Shenandoah. The shaft will be sunk at once. [37]

□30.07.1894□The main shaft has been sunk 17 feet; total from plat, 40 feet and from the surface 620 feet. Also timbered 16 feet, ground sandstone and slate. Were delayed 27 hours fixing new plunger; also cut a trench across the strata on the surface west of Barnes's shaft a distance of 30 feet, 5 feet deep by 2½ feet wide. [38]

□13.08.1894□The main engine shaft has been sunk a further depth of 20 feet; total; from 580 foot plat, 60 feet, and from the surface 640 feet; ground passed through slate and sandstone; water heavy; also timbered 21 feet and fixed a snug penthouse. ... [39]

□27.08.1894□The shaft has been sunk 17 feet; total from plat, 77 feet, and from surface 657 feet. At a depth of 612 feet cut a floor coming in from the west with 4 inches of quartz on it, and making a lot of water. [40]

□24.09.1894□Shaft sunk 11 feet; total from plat 102 feet, and 682 feet from surface; ground hard sandstone with a foot of slate now coming in from the west, also timbered 13 feet; fixed penthouse and cistern and skidded 80 feet of the shaft. [41]

□08.10.1894□The main shaft has been sunk a further depth of 16 feet; total from 580 foot plat, 120 feet, and 700 feet from the surface. Ground sandstone and slate. Water heavy. [42]

□05.11.1894□Crosscut west from 680 foot plat driven 8 feet; total from shaft, 24 feet; put down plat sheet, bearers and clayed plat; fixed plat sheets and launder to convey water into cistern; also fixed door and penthouse over pump shaft, cleaned out cisterns and put in 4 new clacks; resumed sinking on 24 October and have sunk 15 feet; total from plat 680 feet, 35 feet, and from surface, 715 feet; ground, sandstone and slate. [43]

□03.12.1894□Frederick the Great shaft is down 757 feet. [44]

□17.12.1894□Main engine shaft sunk 20 feet; total from 680 foot plat, 97 feet, and from surface, 777 feet; ground sandstone and slate; also timbered 19 feet; shaft being sunk 3 feet 6 inches longer this fortnight to make room for plunger workings. [45]

□01.01.1895□Shaft sunk 17 feet hand labour; total from 680 foot plat, 114 feet, and from surface, 794 feet; ground passed through sandstone and slate. Owing to the breakage of winch, sinking stopped on Monday the 24th. and will be resumed on Wednesday next. Shaft has been lengthened 7 feet, making 20 feet overall, to make room for cistern and plunger workings. [46]

□14.01.1895□Repaired and fixed winch and made all necessary repairs to machinery and sunk shaft 5 feet; total from plat 119 feet, and from surface 790 feet. Ground passed, blocky slate. Also timbered 14 feet, placed cistern in position and cut plat back a distance of 9 feet. [47]

□28.01.1895□Have completed the 780 foot plat, 17 feet by 16 feet by 10 feet 4 inches. Also cut back east side of pump shaft to make room for swell of H-piece, and driven crosscut west 17 feet. Water heavy at this plat; also fixed plat set, timbered shaft 14 feet, and sunk a further depth of 17 feet; total from plat 26 feet, and 806 feet from surface. [48]

21.05.1895□Mr C. H. Richards has prepared, on behalf of the local management of the Frederick the Great Company, Sebastian, an elaborate plan, some 15 feet in length, on a scale of one inch to 2 feet, showing the work done in the shaft sinking from 580 to 803 feet, with the pumping works, including the plunger workings and drawlifts. The plan will be sent to England, and will show the shareholders there the excellent work which has been done under the management of Mr T. Parker, while a copy kept here will be very useful as a working plan when repairs etc. to the pump are needed. Mr

Richards will be battery manager when crushing operations are commenced, and his well-known scientific qualifications will be of great value. [49]

□02.02.1897□The Mining Revival - A Long-neglected District - Bendigo furnishes a marvellous record of productiveness. Last year Victoria's gold yield was 805,000ozs, of which Bendigo produced one-fourth or eight tons. The same ration has been preserved since the birth of gold-mining in Victoria, the total production of the Bendigo field from 1851 to the end of 1896 being 16,342,310ozs, of the value of £65,369,240 sterling. In other figures, Bendigo has produced upwards of 650 tons of gold. The great bulk of this enormous wealth has been won from the quartz reefs in a very circumscribed area - a length of nine miles (from the Great Southern to the New Moon mines) by a width of less than two miles. Innumerable other auriferous reefs crust in the district, but they have not yet been prospected systematically. About fifteen miles eastward from Bendigo proper lies the new reefing field of Ellesmere, where some 400 or 500 men are profitably employed dealing with large deposits of low-grade ore, which yields fair profits. Nine miles westward lies Marong, where the mining industry is again reviving. Fifteen miles northward from Bendigo is the Sebastian field; and 15 mile southward are the Sedgwick reefs. It is significant that the outposts of Bendigo's mines, the Frederick the Great, at Sebastian, to the north, and the Great Eastern, at Sedgwick, to the south, are two of the few ventures which are being carried on by the aid of British capital. [50]

25.12.1897□The Frederick the Great has not shown the English shareholders any of its old quality, for though at times some fair returns were obtained at 680 feet, the yields were on the whole not payable. A reconstruction of the company is now taking place, the local shareholders having agreed to the scheme put forward by the English shareholders. [51]

02.01.1898□The Frederick the Great ... prospecting for the most part, the majority ... crushings put through not being payable. [52]

□08.1898□The Frederick the Great, Sebastian: 53ozs 4dwt obtained from 195 tons of stone. [53]

□09.1898□The Frederick the Great, Sebastian: 105ozs 18dwt obtained from 676 tons of stone. [53]

□10.1898□Frederick the Great, Sebastian: 165ozs 10dwt obtained from 772 tons of stone. [53]

□11.1898□Frederick the Great, Sebastian: 38ozs 8dwt obtained from 223 tons of stone. [53]

□12.1898□Frederick the Great, Sebastian: 120ozs 9dwt obtained from 365 tons of stone. [53]

□01.1899□Frederick the Great, Sebastian: 141ozs 8dwt obtained from 441 tons of stone. [53]

□02.1899□Frederick the Great, Sebastian: 104ozs 14dwt obtained from 368 tons of stone; 60 head of stamps. [53]

□03.1899□Frederick the Great, Sebastian: 113ozs 5dwt obtained from 865 tons of stone; 60 head of stamps. [53]

□04.1899□Frederick the Great, Sebastian: 113ozs 5dwt obtained from 865 tons of stone; 60 head of stamps; 394 acres. [53]

□05.1899□Frederick the Great, Sebastian: 31ozs 9dwt; 60 head of stamps; 394 acres. [53]

□06.1899□Frederick the Great, Sebastian: 69ozs 16dwt obtained from 211 tons of stone; 55 head of stamps; 394 acres. [53]

□07.1899□Frederick the Great, Sebastian: 16ozs obtained from 72 tons of stone; 55 head of stamps; 394 acres. [53]

□08.1899□Frederick the Great, Sebastian: 92ozs 9dwt obtained from 193 tons of stone; 55 head of stamps; 394 acres. [53]

□22.09.1899□Frederick the Great tributers: crushed 84 tons for 25ozs 7dwt. [54]

□09.1899□Frederick the Great, Sebastian: 68ozs obtained from 164 tons of stone; 60 head of stamps; 394 acres. [53]

□10.1899□Frederick the Great, Sebastian: 107ozs 10dwt obtained from 430 tons of stone; 60 head of stamps; 394 acres. [53]

□11.1899□Frederick the Great, Sebastian: 78ozs 15dwt obtained from 235 tons

of stone; 60 head of stamps; 394 acres. [53]

□12.1899□Frederick the Great, Sebastian: 54ozs 8dwt obtained from 237 tons of stone; 60 head of stamps; 394 acres. [53]

□ 1899□Frederick the Great, Sebastian: The reef being worked by this company traverses the centre of the Myer's Creek Pre-emptive Section, Parish of Yarraberb. It was discovered about the year 1864 by a party of miners (Charlton and party) who took up a lease of about 400 acres, giving a length along the strike of over 3400 feet, erected a costly plant, and worked the reef to 450 feet from the surface. This party, it is stated, in eight years crushed 165,443 tons of quartz, which yielded 73,735 ounces of gold, valued at £289,319, out of which £44,892 was paid the owner of the property - Mr. Hugh Glass. At this level (450 feet) a zone of impoverishment was entered; the reef became brecciated, and, operations proving unpayable, it was, in the year 1874, abandoned. Six years later it was again leased, and an attempt made to pick up the continuation of the previously worked shoot. For two years the company laboured unsuccessfully, the reef proving pockety and the output unsatisfactory. Towards the end of 1882, rather than again close down the mine, it was decided to let blocks 300 feet by 300 feet to parties of tributers.

This plan proved successful, and rich gold was struck in what is known as Bruhn's shaft, between 800 and 1000 feet south from the main shaft, and worked to a depth of 300 feet, where the stone again became comparatively unproductive. From this shoot it is said £291,750 worth of gold was obtained, and £118,534 paid in dividends.

In 1887 the company was reformed, an amount of English capital being called in. Up to 1893 operations continued successfully, dividends to the amount of £28,275 being paid. Since that year, however, the reef has proved unpayable to the company, although tributers working in various parts of the mine occasionally strike payable patches. The total amount of gold won to date is put down at over 170,000 ounces.

The reef is a true fissure one, and occupies a line of faulting. It is worked out in the upper levels, but where it can be seen in the lower it dips to the west at an angle of 60° to 70°, cutting transversely the enclosing rocks which dip to the east at about 75°. It carries a fine regular, polished, and occasionally striated western (head) wall, which is sometimes conformable to the line of stratification, but generally trends 3° more to the west. It has no actual eastern wall.

In the upper workings the reef is said to have been taken out in places for a width of over 100 feet; in the lower levels it varies from 2 feet to 50 feet. In structure it is variable, being in some places lamellar, and in others subcrystalline or amorphous. The laminated portions have proved the most productive. In parts the quartz is highly mineralized with chlorite, galena, pyrites - iron, copper and arsenical - felspar, and occasionally mica, the two first-named being looked upon as favorable indications. The decomposition of the sulphides mentioned produces much ferruginous ooze which coats the walls, and forms stalactites on the roof of the drives.

An interesting feature of the mine is the dislocation of the reef between the 460-foot and 580-foot levels. As before stated, the rich shoot was continuous from the surface to the 460-foot level, where the stone became much fractured and the returns from it unprofitable. In the absence of particulars as to the characteristics of the reef in the upper workings, it is impossible to say just what has happened here, but it would appear that the upper portion of the reef has been thrust to the westward a distance of about 60 feet. The cause of this shift is uncertain, but may possibly be a fault which is seen 270 feet west of the shaft at the 460 foot level. The trend of this fault is coincident with that of the strata, the dip is to the south at a low angle, and the underlie (hade is top the east at 45°. To allow of its intersecting the reef between the 460-foot and 580-foot levels its hade would have had to become much flatter. Its continuation after crossing the line of reef is probably that fault shown at 87 feet west of the shaft at the 580-foot level. The cause of the dislocation was not, I think, also the cause of the loss of gold. This I would ascribe to the fact of the reefs truncating the strata and thus perhaps passing out of favorable into unfavorable ground. The pitch of the shoots of gold is to the south at an angle of about 45°, and the

underlie to the east at a high angle. [55]

01.01.1900□The Frederick the Great have been prospecting, while tributors have been engaged at various levels with only moderate results. [56]

01.1900□Frederick the Great, Sebastian: 43ozs obtained from 127 tons of stone; 60 head of stamps; 394 acres. [53]

02.1900□Frederick the Great, Sebastian: 91ozs 5dwt obtained from 306 tons of stone; 60 head of stamps; 394 acres. [53]

03.1900□Frederick the Great, Sebastian: 45ozs 17dwt obtained from 261 tons of stone; 60 head of stamps; 394 acres. [53]

04.1900□Frederick the Great, Sebastian: 106ozs 1dwt obtained from 415 tons of stone; 60 head of stamps; 394 acres. [53]

05.1900□Frederick the Great, Sebastian: 30ozs 8dwt obtained from 53 tons of stone; 60 head of stamps; 394 acres. [53]

06.1900□Frederick the Great, Sebastian: 114ozs obtained from 119 tons of stone; 60 head of stamps; 394 acres. [53]

07.1900□Frederick the Great, Sebastian: 110ozs 17dwt obtained from 300 tons of stone; 60 head of stamps; 394 acres. [53]

□08.1900□Frederick the Great, Sebastian: 69ozs obtained from 280 tons of stone; 60 head of stamps; 394 acres. [53]

□09.1900□Frederick the Great, Sebastian: 115ozs 9dwt obtained from 224 tons of stone; 60 head of stamps; 394 acres. [53]

□10.1900□Frederick the Great, Sebastian: 304ozs 3dwt obtained from 405 tons of stone; 60 head of stamps; 394 acres. [53]

□11.1900□Frederick the Great, Sebastian: 145ozs 16dwt obtained from 273 tons of stone; 60 head of stamps; 394 acres. [53]

□12.1900□Frederick the Great, Sebastian: 120ozs 9dwt obtained from 332 tons of stone; 60 head of stamps; 394 acres. [53]

□01.1901□Frederick the Great, Sebastian: 149ozs 7dwt obtained from 309 tons of stone; 60 head of stamps; 394 acres. [53]

□02.1901□Frederick the Great, Sebastian: 156ozs 1dwt obtained from 336 tons of stone; 60 head of stamps; 394 acres. [53]

□03.1901□Frederick the Great, Sebastian: 190ozs 17dwt obtained from 431 tons of stone; 60 head of stamps; 394 acres. [53]

□04.1901□Frederick the Great, Sebastian: 108ozs 19dwt obtained from 488 tons of stone; 60 head of stamps; 394 acres. [53]

□05.1901□Frederick the Great, Sebastian: 97ozs 13dwt obtained from 356 tons of stone; 60 head of stamps; 394 acres. [53]

□06.1901□Frederick the Great, Sebastian: 74ozs 19dwt obtained from 403 tons of stone; 60 head of stamps; 394 acres. [53]

□07.1901□Frederick the Great, Sebastian: 117ozs 17dwt obtained from 340 tons of stone; 60 head of stamps; 394 acres. [53]

□08.1901□Frederick the Great, Sebastian: 88ozs 2dwt obtained from 292 tons of stone; 60 head of stamps; 394 acres. [53]

□09.1901□Frederick the Great, Sebastian: 64ozs 12dwt obtained from 445 tons of stone; 60 head of stamps; 394 acres. [53]

□10.1901□Frederick the Great, Sebastian: 95ozs 9dwt obtained from 264 tons of stone; 60 head of stamps; 394 acres. [53]

□11.1901□Frederick the Great, Sebastian: 15ozs obtained; 60 head of stamps; 394 acres. [53]

□12.1901□Frederick the Great, Sebastian: 17ozs 5dwt obtained from 218 tons of stone; 60 head of stamps; 394 acres. [53]

1902-1912□Today, huge mullock heaps still show at the site of the mines, and the charred remains of a huge battery can also be seen. Nearby are enormous heaps of slum and sand which have been further treated for their remaining gold by the cyanide process. The heap at the north end has huge box trees growing up through it, and was cyanided by John Evans and Arthur H Thomas about the years 1902 to 1911. The circular holes where the vats were, are still visible. Records of the gold assay tests made at the time, were recently discovered in the cellar of the old Whipstick Camp Hotel, which John Evans owned. [57]

□ 1905□Frederick the Great, Sebastian: The Frederick the Great Company was formed in the beginning of the year, and, having acquired the plant of the

old company, commenced operations by opening a shaft north of the old main shaft. It also overhauled and repaired the pumping and winding machinery at the main shaft, and since then has been busily engaged getting the water out. Sixteen men were employed. [58.119]

□ □Bruhn's Frederick the Great Consols: The Bruhn's Frederick the Great Consolidated Company holds a lease south of the Frederick the Great Company, and commenced operations this year by opening a main shaft 12 feet by 5 feet. It then erected a steam winch, poppet heads, boilers etc and sank the shaft 300 feet. Eleven men were employed. [58.119]

□ 1906 □Frederick the Great, Sebastian: The Frederick the Great Company, at Sebastian, have a shaft 900 feet deep; 24 men were at work. [58.127]

□ □Bruhn's Frederick the Great Consols: The Bruhn's Frederick the Great Company, at Sebastian, has sunk a shaft to a depth of 460 feet, and have employed 17 men. [58.127]

□ 1907 □Frederick the Great, Sebastian: 286ozs 16dwt obtained from 1765 tons of stone; making a total of 319ozs 2dwt from 2005 tons. [59]

□ □Two companies - the Bruhn's Frederick the Great Consolidated and the Frederick the Great - are working their mines. [59.146]

□ 1908 □Frederick the Great, Sebastian: 312ozs 10dwt obtained from 1934 tons of stone; making a total of 631ozs 2dwt from 3939 tons. [59]

□ 1909 □Frederick the Great, Sebastian: 281ozs obtained from 1355 tons of stone; making a total of 912ozs 12dwt from 5394 tons. [59]

Bruhn's Frederick the Great Consols: 1753ozs 16 dwt obtained from 4597 tons of stone; making 3953ozs 5dwt from 11,828 tons and £1000 in dividends. [59]

□ □The Frederick the Great Company is engaged in un-watering the shaft from the 580 feet to the 880 feet level. This work is slow, owing to the difficulties encountered with old skids and ladders that have dropped down the shaft. The water is particularly severe on iron, as the ladder rungs are completely eaten away, and also the nails and dogs to which they were suspended. This company has been granted a loan by the Government. [59.137]

□ □The Bruhn's Consolidated Company is making preparations to sink the shaft to a greater depth. [59.127]

□ 1910 □Frederick the Great, Sebastian: 10ozs 18dwt obtained from 50 tons of stone; making a total of 939ozs 2dwt from 5444 tons. [59]

Bruhn's Frederick the Great Consols: 60ozs 18 dwt obtained from 197 tons of stone; making 4014ozs 1dwt from 12,025 tons and £1000 in dividends. [59]

□ □The Frederick the Great Company, at Sebastian, has received Government assistance. Driving on the course of the lode south is being done. There is more indication that payable gold will be met with at this level (880 feet). Some good prospects have already been obtained. At the 680 feet level fair stone has been met with. A rise has been commenced from the 780 feet level, and sinking a winze below the 680 feet level will be commenced to effect a connexion; when this is done stoping can be carried on. [59.134]

□ □The Bruhn's Consolidated Company has been doing a lot of prospecting during the year; a cross-cut at the 710 feet level is now in progress to cut the lode. [59.134]

□ 1911 □Frederick the Great, Sebastian: 1035ozs 4dwt obtained from 2815 tons of stone; making a total of 2004ozs 6dwt from 8259 tons. [59]

Bruhn's Frederick the Great Consols: 239ozs 19 dwt obtained from 719 tons of stone; making 4254ozs from 12,744 tons and £1000 in dividends. [59]

□ □Frederick the Great and Bruhn's Consolidated Companies are crushing low-grade ore. [59.145]

□ 1912 □Frederick the Great, Sebastian: 463ozs 10dwt obtained from 1739 tons of stone; making a total of 2467ozs 16dwt from 9998 tons. [59]

Bruhn's Frederick the Great Consols: 301ozs 18 dwt obtained from 627 tons of stone; making 4555ozs 18dwt from 13,371 tons and £1000 in dividends. [59]

□ □The Frederick the Great and Bruhn's Consolidated Companies, at Sebastian, not having succeeded in discovering anything of a payable nature, have suspended operations. [59.121]

□ 1913 □Bruhn's Frederick the Great Consols: 13ozs 15 dwt obtained from 94

tons of stone; making 4574ozs 15dwt from 13,477tons and £1000 in dividends. [59]

□□At Sebastian, in the Bruhn's Consolidated mine, intermittent work has been carried on by tributers but without anything of a satisfactory nature being discovered. [59.118]

□03.1915□The Bendigo Goldfield- Chances for Prospectors- Notable Features Described- There are many places worth trying in the large areas north of Eaglehawk, where rich stone has been mined . In the Whipstick and extending onwards to Raywood, Neilborough, Sebastian, Yarraberb, and Kamarooka, innumerable shafts denote former activity.

...Another mine with a great record is the Frederick the Great. Alluvial mining preceded work on the reef which for years made Sebastian a centre of great industrial activity. The reef was opened as far back as 1864. Records for the eight years of the pioneer workers show that 165,443 tons were milled for a gold yield of 73,375ozs, which realized £289,319. Working expenses and machinery accounted for £147,993, and the balance £44,892, was paid to the owner of the property, and £96,434divided amongst the members of the party. In 1880 a company was formed, and after two years of unprofitable work, tribute blocks of 300 feet square, were let as an experiment, and the subsidiary companies did well. The parent company received a royalty of 21 per cent on the gold won, and for years enjoyed great prosperity. The company and its tributers won £291,750 worth of gold, and paid in dividends £118,534, besides paying the executors of the Charlton estate a sum of £29,175 in royalty. In 1887 the company was reconstructed, and English capital was brought into it. After calling up £3900, a good start was made by paying in dividends £28,275. It is estimated that altogether 170,000ozs of gold were won from the ground. [60]

□09.1972□The Sebastian Gold Rush: The Frederick the Great lease included about 400 acres, covering 3,450 feet along the length (strike) of the reef . . .As up to 400 men worked at the Frederick the Great mine, needless to say that numerous hotels had been established, one only of which remains. Now returning to our abandoned Frederick the Great mine. In 1880, a second lease attempt failed to pick up the lost reef, and was given up after two years. In 1882, it was decided to let blocks 300 feet square to tributers. Bruhn's Tribute shaft, situated 1000 feet south of Frederick the Great shaft, worked the reef very successfully to 300 feet deep where the gold again petered out. This rich gold strike of Bruhn's produced £291,750 worth of gold, and paid 118,534 in dividends... In the year 1884, Bruhn's Tribute was the top producer of gold in the Bendigo field. It produced 11,872 ounce of gold, and paid £17,550 in dividends for that year. By 1887, the company had to be reformed with overseas capital, and up to 1893, a further £28,275 in dividends had been paid. After that, the reef became unpayable although it had yielded about 170,000 ounces of gold.

Additional notes. - .

a) There is a large dam among the sand heaps .and Robert Charlton would row across this "lake" every day from his house, to his Frederick the Great mine.

b) The present owner of the 400 acres on which the ruins of the Frederick the Great mine and the cyaniders' vats now stand, is a Miss B Donnellan.

c) Miss Donnellan now lives in what was once the mining office at the Frederick the Great mine.

f) Robert Charlton's name appears on plans of the land near the Eureka and Little Frederick the Great mines as early as 1869.

g) Robert Charlton worked at the Old Tom Diggings before his Sebastian venture. He came from New Zealand, where he was mining for gold. [57]