

25. *Homeward Bound Quartz-mine* (16th December).—From the chamber described in my March report last year a shaft is now down 100ft., leaving 175ft. sinking to be done by the present contractors. It is generally thought that 600ft. will have to be sunk to reach the level where the reef is likely to be found. There is a winding steam-engine of eighteen horse-power fitted in the chamber, and which is driven by compressed air supplied by an air-compressor at the mouth of the tunnel, the air being conveyed along the tunnel through gas-pipes. The air-compressor plant is worked by a small turbine wheel, but as there is sometimes a scarcity of water to do the work, it is intended shortly to add a steam-engine to their surface-plant to do the turbine's work in dry weather. The whole plant works well, and is a great improvement on the winding-plant similarly fixed in the Welcome chamber. The top of the ladder-shaft did not appear to me quite safe, so I asked for some alterations to be made.

26. *Lone Star Quartz-mine*.—Very little more than prospecting has been done in this mine. A new tunnel is now being driven in search of the reef at a greater depth from the crown of the hill.

WESTPORT.

27. *Great Republic Quartz-mine* (22nd November).—This mine is being energetically worked by three shifts of eight men each. The country is remarkably loose and broken, as also the stone, which is in detached blocks of a few yards in length and most difficult to follow. The mine requires the most careful timbering, which is not easily done with the class of timber at hand. Good suitable timber is not to be got in the immediate vicinity of the mine. The battery crushes about 30 tons of stone per week. No explosives are used in the mine, as the quartz and slate rock is removed with a pick as quickly as gravel from an ordinary open cutting. The workings are not overhead. No weekly report kept.

LYELL.

28. *United Alpine Quartz-mine* (27th January).—The timbering throughout the workings shows careful management, for which this mine is noted. Some of the working-faces are still wet and dirty, and not at all pleasant to pass through on inspection. The stone now being taken out is very poor. No. 7 Tunnel is now driven 1,020ft., which is reckoned about half the distance to where the reef should be found. It is now evident this important work cannot be completed within the next twelve months, and it is generally regretted that so much time (about ten months) has been lost by the company in having entertained an offer of a dynamo to work the air-compressor at the mouth of the tunnel, and thence the rock-drill at the end of the tunnel. After much time had been lost, and many delays, the dynamo was eventually fixed up at the battery, but after repeated trials it failed to do the work. No more time could be wasted by the company in experimenting, so the air-compressor was at once removed from the tunnel mouth to the battery, where it was working for the first time on the day of my visit, and doing good work. The compressed air is conveyed to the tunnel through gas-pipes. The speedy completion of this tunnel is considered of great importance to the district, as the labour employed by this mine is the main stay of the town. It is calculated that the level of No. 7 Tunnel will give 300ft. of backs up to the present workings, and from 300ft. to 400ft. along the line of reef, which would give employment to thirty or forty men for four years. The mine is working three shifts, giving employment to between twenty and thirty men. The general rules of the Mining Act are carefully carried out.

29. *Tyrconnel Quartz-mine*.—(28th January). A party of six tributers are following up a small leader near the surface of the hill. The formation is very loose and broken, and very wet and dirty to work in. The timbering requires great attention to keep the workings open, and the tunnel, though short and near the surface, shows that there must be great weight on it. Extra timber in the main-level was promised to be put in at once in the worst places. No plan of the mine kept.

30. *Maruia Quartz-mine*.—This mine is being worked by four men who are following up a small leader of 3in. thick. This leader has been traced down into the old workings of the Tyrconnel Mine. The stopes are remarkably dry and systematically worked, and is the neatest piece of quartz-mining on the Coast. The timbering and filling in of the old workings is most carefully done. The leader is only from 2in. to 3in. thick. The air is good. No plan of mine kept.

31. *United Italy Quartz-mine*.—I did not visit this mine, as I learned there were only two men there prospecting.

OWEN.

32. *Enterprise Quartz-mine*.—(31st January).—There are two shifts of eight men each working in No. 1 and No. 2 Levels; the latter intersects the reef at 114ft., where the stone is 38ft. thick. No. 3 Tunnel has been driven 260ft., which is supposed to be near the line of reef. A shaft has been sunk from No. 2 Level to within a few feet of the end of No. 3 Tunnel, down which all the stone from the present workings is dumped, and from thence conveyed to the battery, which is only a few yards from the mouth of the tunnel. The tunnels are well and neatly timbered and the ventilation good. The battery of ten stampers is driven by a pelton wheel, on which there is a pressure of 62ft., obtained from a race only 32 chains in length, having a never failing supply of water from the Owen River. There is not a quartz-mine on the Coast possessing the same facilities for making a poor reef pay. The battery is working, and appears to be getting through a large quantity of stone, which, I was informed by the manager would pay at a yield of 4dwt. to the ton; no plan yet made of the mine; no copy of Act; no weekly report kept at the mine. The manager promised to attend to these matters.

33. *Wakatu Quartz-mine* (1st February).—This mine is situate on the south side of Mount Owen, and is about 3,000ft. above sea-level. I examined the workings in the several levels opened, and find the country very loose and broken. The reef did not appear to me to be continuous for