admit of the grizzly and rock-breakers being placed above the ore-bins. These are placed in a wing of the main building, between each battery of thirty heads of stamps, the distance between these batteries being 28 ft. The ore as brought from the mine is dumped on to the grizzlies, and what does not pass through the bars goes down to the rock-breakers, and, after being operated on by them, passes into the same hopper where the fine material going through between the bars of the grizzly falls; and in the bottom of these hoppers there are ore-gates, underneath which side-tipping trucks are placed, and, when filled, are hoisted up in cages to a platform on a level with the top of the ore-bins by a hydraulic lift, two lines of rails being placed on the top of the bins on which the trucks run to empty the ore where required. There are two rock-breakers, 16 in. by 10 in. face, of the Blake Marsden type; these are driven by a separate Pelton water-wheel. Each battery of five stamps is fitted with an incline table 5 ft. 6 in. wide and 10 ft. long, covered with copper-plate electroplated, and coated with quicksilver, and the pulp from the tables passes on to two concentrators of the improved Frue design; and if the gangue, after passing over these concentrators, proves sufficiently rich it will be lifted by elevators into vats, and treated with a cyanide solution. The concentrates will also be treated either with or without roasting by cyanide solutions, as may be found the most economical. The plant of twenty-one berdans which was in the old mill is to be re-erected, and will be used if found desirable, and the cyanide plant which will be erected at first will consist of three leaching-vats 20 ft. in diameter and 5 ft. in depth, three sumps 15 ft. in diameter and 5 ft. in depth, one solution-tank, one dissolving-tank and air-pump and vacuum boiler, a centrifugal solution-pump, and two zinc-extractors, with all the necessary appliances of a fully-equipped cyanide plant. The building and everything is so arranged that additional vats can be added as required. The whole of this mill, with all the machinery, is to be driven by Pelton wheels, being supplied with water from the county main. A Pelton wheel is to be provided for each battery of thirty heads of stamps, one for driving the concentrates, and another for the berdans, elevators, and pumps. In order to provide for the mill being kept continuously at work, a steam-engine is being erected for use when a sufficient supply of water is not available, or as an auxiliary power whenever required. The engine is one of Davey, Paxman, and Company's right-hand tandem compound horizontal engines, the high-pressure cylinder being 17½ in. in diameter and the low-pressure 20 in. in diameter, provided with automatic expansion gear, special governor and jet-condenser, and air-pump with indiarubber valves. This engine has a stroke of 2 ft. 8 in., and will run at a speed of seventy-five revolutions per minute. It will be capable of giving about 240 indicated horse-power. The engine will be set on a concrete foundation, constructed between the two batteries of thirty heads of stamps. An intermediate shaft will be provided to couple on to the counter-shafts for driving the batteries, and by this means can be connected whenever auxiliary power is required. The steam for the engine is to be supplied by two of Babcock and Wilcox patent water-tube boilers, the steam-drums being 23 ft. long by 3 ft. in diameter, and will be worked up to the pressure of 120 lb. per square inch.

Moanataiari Extended Mine (Area, 27 acres).—Driving on several reefs was carried on in the surface levels, and 15 tons of quartz when crushed yielded 3 oz. 2 dwt. of gold; value, £8 3s. 6d. Six men were employed.

Freedom Mine (Area, 6 acres and 7 perches).—A small party of owners work this ground, but no quartz was crushed.

Orlando Mine (Area, 15 acres).—Operations were carried on by the Orlando Gold-mining Company. One hundred tons of quartz was crushed, yielding 35 oz. of gold; value, £92 3s. 6d. Six men were employed.

New Whau Mine (Area, 47 acres).—Operations were confined to clearing out the Middle Star old adit-level and some of the upper levels, and sinking a winze on a reef to a depth of 80 ft. No quartz was crushed. Nine men were employed.

Moanataiari North (Area, 12 acres 2 roods).—A parcel of 15 tons of quartz yielded 1 oz. 5 dwt. Two men were employed.

New Alburnia Mine (Area, 54 acres 2 roods).—This mine was taken over in October last by the New Alburnia Gold-mining Company, Limited (an English company), previous to which time the old colonial company carried on operations. The following extracts from the report of Mr. Robert James, the general manager, to the London directors will show the nature of the works, and gives a correct description of the mine:—

The property has a splendid reputation. For many years the ground was worked under the old Cornish system of tribute—*i.e.*, a party of miners would take a portion of ground and undertake to pay the company a royalty in the form of a percentage of the mill proceeds of gold or bullion, the company, as a matter of course, being protected and their interests watched by their own agents. I have spoken to a number of miners who in times past did very well out of their tribute work on Alburnia ground, and they all have at the present time a great opinion of the property, and entertain a very high opinion of its future capabilities. It will be asked, "Is it not possible at the present time to procure men to take up ground under tribute?" It is not, for many reasons, the most important of which is that the whole of the property has been honeycombed with previous shallow surface-workings, and a tributer would require to expend a considerable sum of money ere reaching a point that would admit of him exploring virgin ground. The reef—one of many traversing the property—which seems to have produced most gold in the period referred to is the one known as Dixon's, although a large quantity of gold seems to have been obtained from the Sons of Freedom, Star of the South, and Success reefs. There is not the slightest doubt but that the property has been a very highly productive one, and the record of its returns rather under than over estimated. In October, upon my taking over the management for the London company, the workings consisted of a shaft 365 ft. in depth. From this shaft four levels were driven; the three upper levels were practically closed with *débris*, and the only work being carried on was from the No. 4 or bottom level. Here the ends were being driven east and west—the east drive was in about 200 ft. and the west 170 ft.