having a bell-mouth of 4ft. 6in. at the top; at the bottom of the pipe or column is fixed a nozzle 3⅜in. in diameter, to drive the hurdy-gurdy wheel. The manner in which the several mines on the field are connected with the battery are deserving of notice. It is by a series of self-acting inclines and tramways, following a contour line along the side of the range. The first incline is about 15 chains in length, and at the upper end it is connected with points and crossings with a single line of tramway, which follows alongside of the range for about 68 chains. On this portion of the tramway it is intended to use a locomotive engine, which has been specially constructed for the purpose, and is now lying at the side of the Thames River; but the sharp curves, and short distance that the locomotive could be worked on, will debar it working more economically than the present method, which is with horses; besides, the sharp curves would render it liable to have more accidents. From the end of this tramway is another incline 25 chains in length, and thence another tramway along the side of the range for about a mile, thence another incline for 18 chains, and thence another tramway alongside of range in a northerly direction as far as the Premier Mine, and in a southerly direction for about 12 chains. The reason of the tramway being brought on the several levels is to have it well under the quartz workings, and adjacent to the principal mines that were taken up when it was first laid out. These mines are now connected to it with shoots and hoppers. The whole of the inclines and tramways are constructed with iron rails. The inclines, at the time of my visit, were not working so satisfactorily as they might have been: the brakes and gearing were so placed that it required two men to work each incline, whereas they ought to be so fixed that one man is sufficient. The charge for conveying the quartz from the mines to the battery was at first 2s. 6d. per ton, but this has been raised since to 4s. 6d.; and the charge for crushing 10s. per ton: making the total cost of 14s. 6d. per ton after the quartz is placed in the hopper—the value of about 5¼dwts. of gold. The construction of this tramway by the Piako County Council and Mines Department, and likewise the enterprising manner in which Messrs. Firth and Clark have erected crushing machinery, has given this field such a start as no other field in the colony ever had, and it is now gratifying to find that it has the appearance of proving a good field for mining ventures; but it will yet have to be further developed, and the reefs tested to a much greater depth, before its permanence can be established. The total quantity of quartz crushed from all the mines on this field up to the 31st March last (as taken from the Mining Inspector's report) is 4,316 tons, yielding 4,546oz. 11dwt. 12gr. of gold; and the number of quartz miners employed is 160. There are 585 acres held by the different companies and private-claim holders, at a yearly rental of £1,847.

Karangahake.—Very little work has been done on this field since my last visit. There are no new claims at work, and in those that are opened there is scarcely any work done, with the exception of the Hauraki Company's mine. There seems to be a great apathy displayed in prospecting, and probably may continue so until the various mines at Te Aroha are thoroughly tested. The claims on this field are badly held, so to speak. A large amount of money is required to develop the mines, and they are mostly held by working men, who have not sufficient capital to open them out properly, and they place too high a value on their shares to induce men of capital to join and assist them. It seems to be a country where quartz-reefs are likely to be found all the way along the range to Te Aroha; but it is questionable if the reefs here are a continuation of the Te Aroha reefs, although they are in the same line of country: both the quartz and the gold seem to be of slightly different character, and I did not observe the hard flinty substance in the Te Aroha reefs that is found alongside the quartz lode in the Hauraki Company's mine. This mine is connected by a wire tramway with the crushing battery at the junction of the Ohinemuri River and the Waitawheta Creek, but the quartz yet obtained is of a poor quality. The Golden Crown Company have done very little work in their mine during the year: the stone is of a payable nature on the outcrop near the surface, and some very rich specimens have been found; but following their reef into the hill it gets more broken, and has the appearance of a slip from the main range, and until further prospecting is done and the reef traced into a solid country it cannot be said to have a permanent appearance. There is a quartz-lode extending from the Hauraki Company's mine, across the top of the mountain near the trig. station, and can be traced for a considerable distance; but no prospecting is done here beyond what has been done by the Dubbo Company, which is very little. The County Council has constructed a road, with subsidy from the Mines Department, from the crushing battery at Waitawheta Creek to the Martha Claim, a distance of about two and a half miles; it is 8 feet wide in the solid, and formed with grades not steeper than 1 in 10 up to the Hauraki Company's mine, and thence along the face of the range on a grade of 1 in 19. This will give facilities to the several claims to have their quartz tested at the battery, but, when once they are proved to be payable, a crushing battery will have to be erected further up the Waitawheta Creek before the mines can be economically worked. The continuation of the road from the Martha Claim towards Te Aroha is now in course of construction, being likewise subsidized by the Mines Department. It was thought most advisable to construct this portion 4 feet wide in the solid on easy grades, so that it could be widened into a dray-road at a future time if required. By constructing a narrow horse-track it will afford facilities to get the whole of the field prospected, as provisions and tools, &c., can be easily brought on the ground.*

Owharoa.—The mines here continue to be profitably worked: the facilities there are for getting out the stone and crushing makes a small percentage of gold pay. The claims and crushing battery are alongside the main road that leads up the Ohinemuri River.

Waihi.—This field was first opened in 1879, and several claims have been worked; but at the present time there are only two claims on the field, one of which—the Martha Extended Company—is paying fair dividends. There is a large body of stone which is worked in an open face, and has

* Mr. Atkin has kindly forwarded me information that a fresh discovery of gold has been made in the Ohinemuri District, at Ratakuhu, by Mr. Hunt, the discoverer of the famous Shotover Claim at the Thames. It was supposed to be 4oz. to 5oz. stone, but on crushing five tons of it the yield was a little over 1oz. per ton. The quartz-lode varies from 1ft. to 3ft. in thickness, and, as it is in a very rough and broken country, no idea can yet be formed of its extent or real value.