

proper hydraulic plant the venture is likely to become a good investment. The amount of capital expended up to the present time is about £1,500.

*Criffel.*

This field still continues to yield a fair quantity of gold for the number of miners employed, and taking into consideration the limited period for which mining can be carried on, which does not exceed six months in the year, the ground may be said to be tolerably rich. Halliday and party, the original prospectors, have done very well, not only by working the ground, but also in supplying water from their water-races to the other claimholders. All the workings are now carried on by hydraulic sluicing, and Halliday and party may be said to hold the whole of the available water-rights of any consequence there is on the field. Some two years ago they purchased Craig and party's water-race in addition to the one they constructed themselves to work their first claim, but neither of these water-races have been properly laid out, that is, they are not constructed on a uniform gradient, some places being very level while in other portions of the race there is a great fall; the consequence of this is that the races carry very little water even when the same is available. During the past year there has been about twenty-three miners employed on the field, and it is said that they have obtained about 1,200oz. of gold for the few months they have been able to work, which would be equal to about £180 per man.

*Arrowtown.*

There are still a few miners working in the bed of the Arrow River and its tributaries, making small wages. On the terraces there is always a little gold to be obtained when water can be got to work the ground. Traces of an ancient river-bed can be seen here and there on the terraces, three or four hundred feet above the present river-bed, which shows that a long period must have elapsed since this deposit was made. Thousands of years have rolled by since the first river deposits were made in this locality to admit of the gorge of the river between Macetown and Arrowtown being cut down some hundreds of feet in solid schist rock. Wherever a river deposit or a concentration of the drift has taken place by flowing streams, gold is almost certain to be obtained; but this occurs in many instances too high for water to be lifted from the beds of the present streams to work the ground. The country in this locality is also of a very rugged and broken character, that the construction of water-races becomes of an extremely costly nature; unless the ditch is cut well into the solid rock, and tunnels driven through the spurs, it becomes a great expense to keep them in repair, as has been the case with Messrs. Moody and Davis's water-race from Skipper's Creek to Londonderry Terrace. Judging from the appearance of the gravel-wash terraces on the Shotover side of the Arrow River, there is a large extent of ground which would pay for working if a good supply of water could be brought on to them from near the head of the Arrow River, an undertaking which would cost a considerable amount of money, but will no doubt be done some day.

*Davis and Moody's Claim.*—This is the largest undertaking in connection with working the auriferous-drifts there is in the district. A tunnel has been constructed in the solid rock on the left side of the river going from Arrowtown to Macetown, for a distance of about 950ft. The tunnel is 10ft. wide and 7ft. high, being paved in the bottom with stones so as to act as a sluice for saving gold and to take the whole of the water in the river at the same time. At the head of this tunnel a shaft was commenced in the solid rock to connect the tunnel with the surface of the bed of the river, and from this shaft a channel was to be cut to admit of the material being washed through the tunnel. A slip, which has blocked up the gorge of the river at this point, has raised the bed about 70ft. above the level of the tunnel; therefore the shaft was expected to have gone down 70ft. through solid rock. Instead of having solid rock all the way down, it was found that the action of the water had cut away the rock and left it overhanging at this point, consequently a portion of the shaft went through shingle, and at the time of my visit to the district it was not within 20ft. of the bottom. It was intended to have the shaft divided in two partitions, and to have gates, each 4ft. wide, so as to regulate the quantity of water and material passing into the tunnel; that is, in ordinary weather the whole of the water would pass through the tunnel, and during floods the gates would be shut down to such an extent as only to admit of a certain quantity of water to pass through, and the rest would bank up and go down the present course of the river over the falls. Mr. Miller, the manager and engineer, being away in Melbourne at the time of my visit, the gentleman in charge could give me little or no information as to when the work was likely to be completed. It has always been considered by those acquainted with mining in this river, that a heavy deposit of gold will be obtained between the head of this tunnel and Soho Creek, and several attempts have been made to try and sink paddocks and shafts in the bed of the river at this place, but none ever succeeded in getting down near the bottom on account of the heavy influx of water. It is to be hoped that the work will be successfully completed, and that the proprietors will be richly recompensed for all their outlay and their perseverance in combatting with the many unforeseen difficulties attending the bringing of their venture to a successful issue.

*Crown Terrace.*—Gold was discovered in land held by John William Baker as an agricultural lease, and some good claims have been secured. As soon as the holder of the lease knew of gold being discovered he wanted to exact certain royalties which the miners were not entitled to pay; and consequently a meeting was held and a memorial drawn up and forwarded to the Lake County Council on the 17th of October last, praying that the whole of the land in sections 9 and 10, Block X., Shotover District, might be resumed and the lease determined. After making the necessary inquiries respecting the land, the Hon. Minister of Mines gave Mr. Baker notice in January last that his agricultural lease would be determined, as the land was required for mining, and on the 16th of February the land was thrown open. Some of those who have claims on this terrace are doing very well; amongst those may be mentioned Messrs. Jenkins and party, who at the time of