wheel, under a head of 208ft., the water-race being about one mile and a half in length. During the year 341 tons of stone was crushed, which yielded 114oz. gold, representing a value of £459 2s. 10d. Calls have been made during the same period to the extent of £1,800.

Merrijigs.—The Merrijigs and A1 Mines, as well as the Golden Lead, are in a sandstone formation which has small strings, veins, and leaders of quartz through it, many of which contain gold. In such a formation one would expect to find the auriferous leaders run for a much longer distance than large lodes, and generally these small leaders are far richer than the larger bodies of stone. The Merrijigs Hill may be said to be of such a formation, at least, near the surface, that it is not likely that large lodes of payable auriferous quartz will be found, but there is likely to be a considerable quantity of gold got from the leaders and veins of quartz traversing the sandstone. In the A1, during the past year, there was 20 tons of stone crushed, which yielded 196oz. of gold, from No. 1 party of tributers, and, from No. 2 party, 22 tons of stone was crushed, which gave a return of 181oz. gold. It was said that good returns were being got from leaders in the Merrijigs Mine, but no battery returns have been forwarded to prove this to be the case.

Big River.—This is likely to be a large quartz-reefing district. There is an auriferous belt of great width at this place, and in all probability rich gold-bearing stone will be found for a long way further on than the present workings. The peculiar feature about this place is that the country-rock is greatly crushed up and contorted, showing that it has been subjected at some period to great pressure, while, as far as can be seen in the Big River Mine, the only one in this district which has yet been opened to any depth, the lodes or blocks of auriferous stone come in and cut out against a clean face of slate, leaving but little indication where to pick it up again. There are, however, heads and joints in the rocks showing the direction of displacement, which, no doubt, will in the future be better studied when prospecting for a new make of stone. The Big River is about nineteen miles south of Reefton, and about six miles south of any quartz-workings on the same belt of country. The Cumberland and Golden Lead may be said to be nearest to the Big River Mine. There is a long stretch of country here where very little prospecting has ever been done, but assuredly payable lodes will yet be found, as well as to the south of the Big River. The widest belt of the Reefton slates, where the auriferous lodes are found in the district, is from the Alexander River, which is a branch of the main Grey, to the mouth of Rainy Creek, on the Inangahua River; and almost in the centre of the belt is the coal formation, from which fuel can be obtained for the generation of steam-power to work mining machinery. There is a great field in this direction for prospecting, but it requires to be opened up by roads beyond the Big River to afford facilities for men to get into the country. The country here is not only densely timbered, but intersected by deep precipitous gorges, difficult to cross, and altogether too rough and broken for the transport of provisions, tools, and materials, to enable men to carry on mining operations.

At the Big River Mine, workings were carried on for two or three years before a pack-track was constructed, but the work done was more of a shepherding character than anything else. On the completion of the pack-track, crushing machinery was conveyed out from Reefton and erected; and although the yield from the first block of stone, from which a great deal of gold was expected, was very disappointing, nevertheless of late years this mine has proved the existence of rich lodes in the district; the mine was looked on by many of the early shareholders as a worthless property. The present workings in the mine are confined to the No. 3 and No. 5 or bottom level. The latter is 750ft. below the surface. An adit-level was put in from the face of the hill for a distance of 670ft. to the shaft, which comes from the surface and cuts this level at 200ft. deep. On No. 3 level the workings are on a block of stone which was found in the No. 2 level. It is about 100ft. in length, and varies in thickness from 2ft. to 12ft. in the length of the block. It is broken with large junks of mullock or country-rock. The stopes, at the time of my visit, were up for about 21ft. above the level. On the bottom level the block of stone is about 45ft. in length, being 8ft. at one end and 12ft. at the other in thickness. The course of the block is in an easterly and westerly direction, having an underlie of about 55° and striking easterly. The lode is stoped for about 50ft. on this block. The block on the upper level has a north-easterly and south-westerly direction, with an underlie of about 45°, and does not appear to have any connection with the block on the bottom level. Gold is seen freely in the face of the stopes. It is generally considered that whenever blocks of stone are struck in this mine they will yield close on 2oz. gold to the ton. The difficulty has heretofore been the finding of the blocks, as they cut out as quickly as they make, leaving very little trace of where to look for another, and a good deal of time and labour is bestowed in prospecting for new blocks of stone as the others are worked out.

The crushing-battery is situated about 45 chains from the mine, and connected with the latter by an aërial tramway. The battery, consisting of ten heads and six berdans, is driven by a Pelton water-wheel. The water-race for supplying the motive-power is only about half a mile in length. The winding at the mine is done by an overshot reversible water-wheel 40ft. in diameter; but the supply of water is very limited. It has to be stored up at night to enable winding to be done during the day. Then the manager informed me that the winding is too slow, and that the company intended to get a steam winding-engine. During the year ending the 31st March last there was 2,073 tons of quartz crushed from this mine, which yielded 3,043oz. gold.

St. George.—The only other mine where any operations are carried on in the Big River district is at the St. George, about two miles and a half further southward from the Big River Mine. At the time of my visit to this locality some trenching was done on the surface. A leader carrying gold was found here during the last year, from 3in. to 8in. in thickness, and from 16 tons of stone that had been crushed prior to my visit, yielded, on an average, 2oz. 7dwt. of gold per ton. There are only two men employed in this mine, and very little can be said respecting it until more work is done.

Burke's Creek.—There is one tailings plant erected here by John Dawson and party to work the tailings that came down the creek from the Ajax and Golden Fleece Mines in the early