

tons hewn for the year. A horse-whip is used to raise the coal from the pit. I had not time to call on Mr. Gerard at his station—I had, at a very late hour, a long ride before me to Springfield, over new country to me.

Acheron, Lake Coleridge (7th March).—Mr. Murchison told me that he had not taken out any coal from the mine during the past twelve months. The only coal taken from the seam is for his own use—a few tons for the year.

Whitecliffs, South Malvern (10th March).—I inspected all the working-faces and found the air-current not as good as it should be at the extreme end of the working-faces. Back a little from ends of the main headings I found the air-current very good, and a good current going up the upcast shaft. I had to find fault with the way the timber was being cheeked and fitted, as also the straggling way in which the sets of timber were placed throughout the workings. There appears to be no system, or a great want of knowledge of how to do the timbering in a shapely manner. The fiery part of the mine has been closed up. The manager appears very willing to do what is required when pointed out to him.

Mount Somers Coal-mine (12th January, 1892).—Since my previous visit I find that many of the large pillars have been split once, and in some places twice; I also find that much of the tops has been taken down in some places. The pillars and roof appear to stand very well so far, notwithstanding the great height of the bords. I did not see any of the places down. Mr. Harris, the present manager, has promised me not to do any hewing in the old pillars, as they are now as small as they can be to be safe. Mr. Harris proposes opening out a new block on the west side of the adit-mouth by opening a new adit at a higher level. A new adit is also to be put into a block on the east side of the old workings, and at a lower level.

South Brockley Coal-mine (10th March).—This is a new mine situate in the Malvern District, in the Wairiri Valley. The adit has now been driven 230 yards, and is thought to be within 30 yards of the 5ft. seam of good coal said to exist. In the 230 yards driven, several seams of coal have been passed through, measuring from 1ft. to 5ft. thick. Mr. W. Smart, the manager, says that the larger seams passed through are good marketable coal. I hope the coal ahead is better than any passed through, because I did not see any that I admired. A tramway is being laid 35 chains from the adit to a convenient place to load a traction-engine, by which means the coal is to be transported to Christchurch and many other places. The adit is timbered in many places to keep the roof up. There is considerable drainage in the tunnel, and by far too little fall to carry away the water. It is mud and standing water from end to end, and will always be so in my opinion.

OTAGO COAL-MINES.

Kurow, Kurow, W. B. Cairns (28th February).—The opening of this mine was close to the Warekuri Stream, and nearly on a level with the shingle-bed, but considered quite safe in ordinary floods. Last February (1892) flood was, however, an extraordinary one, and very much beyond anything of the kind ever before seen there. It covered the flat from terrace to terrace, and filled the mine so completely as to destroy all trace of its whereabouts. I do not think the same workings will be opened again. Mr. Wade (the owner) has now two men employed driving an adit-level on the west side of the creek to ascertain if there is any good coal there. I do not think the prospect promising.

Cairns's Warekuri Coal-mine (29th February).—W. B. Cairns is preparing to open his old mine on the Kurow Creek, which has been closed since the flood in February last. He is driving an adit-level into the hill to where he knows there is some solid ground. The adit is not in good standing ground, and therefore has to be timbered. The caps now in position are not strong enough, and I have instructed Mr. Cairns to put in more timber in order to keep the roof safe for the men passing in and out of the mine. He has promised to attend to this.

Warekuri Coal-mine (29th February).—This is a new mine being opened by Mr. Collins. An adit 75ft. long cut the seam in a nearly vertical position. It is said to be about 30ft. thick. The seam will be worked north and south like a quartz reef. The coal is solid, and the works are likely to stand well. The adit is timbered in places where the roof shows an inclination to flake. Mr. Collins has not a copy of the Coal-mines Act, but has promised to get one.

Kurow, James Phillips's Coal-mine (28th February).—This mine is situated on east side of the Kurow Creek, and the adit is not much above ordinary flood-level. The opening was reached by the February flood, and the mine filled. The amount of damage done to the workings cannot be ascertained till the water is pumped out, and I am doubtful if this will ever be done.

Prince Alfred No. 1 and No. 2 (1st March).—I examined all the workings from the one mine to the other—from the east adit to the west adit—both of which are still being worked. There appears to be very little good solid coal left in either of the mines. There are small blocks of good coal met with from time to time, but a great deal of driving through rubbish has to be done to find them, therefore much labour is lost in searching for marketable coal. The roof and floor are bad throughout the two mines, and, therefore, much timber has to be used to keep it open. I think the mine is nearly worked out. The air is good. A small shaft was sunk 40ft. deep in the old workings to see if a second seam existed, but no coal was found at that level. The shaft was then filled up. I saw some of the strata passed through, and am strongly of opinion that coal exists at a lower level.

St. Andrew's, Papakaio, Mine (1st March).—This mine is in first-class order, and well laid out for working. The adit is remarkably well timbered, and made secure. The workings are well ventilated, and very dry. The furnace and air-shaft are in good order. The Act is well observed.

Ngapara, Ngapara Mine (1st March).—I found all the workings in the same good order they were in on my previous visit. I noticed the roof in some of the leading headings has a tendency to chip upward into narrow channels to the sand and water overhead. These places have to be watched very closely, with timber at hand, in case of a "run," which would fill the workings all round the break. The workings are dry, and the air is good. The Act is well observed.