

In my memorandum of 20th August last, at which time the further grant of £250 had not been drawn on, I estimated that the sum of £500 would still be required to complete the exploration, and I now recommend that the sum of £250 (being the balance of that estimate) be placed at the disposal of the Company. This amount, together with the balance of the sums already granted as above, will make a total of £385 Os. 6d. available for completing the exploration by the vertical drift.

15th July, 1874.

I have the honor to report, in continuation of my letter of 5th May, relative to the Collingwood Coal Mine, that the uprise which I referred to was completed on the 30th ultimo, and that the work assisted by the Government may be considered as finished. The uprise was continued for 61 feet 2 inches from the floor of the drive, and was then continued for 12 feet 8 inches further by a drill-hole, making a total of 73 feet 10 inches. I inspected the mine on the 11th ultimo, at which time all the coal seams which have been found had been cut either in the tunnel or the uprise, the work done since having exposed no other seams.

The tunnel was begun in September, 1872, and although every possible diligence has been used in the work, it has been much delayed, owing to the excessive hardness of the rock and the wet nature of the ground. The work has explored the same vertical thickness of strata that would have required a shaft of more than 600 feet in depth, had that method been adopted, and equal to a horizontal distance of 1,088 feet, 600 feet of which is by the tunnel, and the remainder by the uprise, which explored strata equal to a further length of tunnel of 488 feet. The total cost of the work has been £1,912 13s. 6d., of which the General Government has contributed £945 19s., the Provincial Government £250, and the Collingwood Coal Mining Company £716 14s. 6d., as shown in the enclosed statement by the legal manager. The total thickness of coal which has been cut is 16 feet 2 inches, in nine seams, four of which will probably be worked, either alone or in conjunction with ironstone layers, with which they are in contact. Comparing this with the coal seen outside, the result of the exploration must be considered as favourable, and showing an increase in the amount of coal as the measures are followed into the hill; the total thickness outside having been 10 feet of coal, in six seams, of which only two were workable. Coal might now be worked from two of the seams, marked C and D on the accompanying plan; but, unfortunately, the Company's tramway and other appliances for the conveyance of the coal to the shipping port have fallen out of repair, and a considerable expenditure will be necessary to restore them. Had it not been for this circumstance, the Company might have been selling coal since Christmas last. A recent survey has shown that it would be better to make a fresh line to the Ruatanawha, where there is deep water, and where the wharf would not be exposed to the floods in the Aorere River, than to attempt to reconstruct the old line. The cost of this reconstruction is estimated at about £1,500, and until it is done, the mine must stand idle. The quality of the coal from this mine is thoroughly established for ocean-going steamers, gas manufacture, and domestic use; and if it were once again in the market, there is reason to believe that a Company which has been formed for working the extensive iron deposits which occur in this district, would soon commence operations.

Pakawau.

The work in this district has been chiefly undertaken with the view of discovering outcrops of coal in the gullies north of the Collingwood mine, where the formation approaches the sea level, and any seams found would be worked under advantageous circumstances. The total expense of this exploration has been £71 6s. 7d. The work has been done under the supervision of Mr. Marshall, working manager for the Collingwood Coal Company, his services having been placed at my disposal for the purpose by the Company. Pakawau is seven miles north of the Collingwood Mine, and the coal formation, as fully described in previous reports, is continuous between the two places; but as the range is traversed at Pakawau by a valley almost at the sea level, the coal seams may be expected to be found there in a favourable position for working.

About fourteen years since, several shafts were sunk in this part of the district, but they were nearly all in the bottom of the valley, where the strata are much disturbed by slips and faults, which cause great irregularity in the distribution of the seams. The only exception was one on the south side of the valley, where, in Watts's shaft, it was reported that a 4-foot seam of clean coal has been struck. I therefore had this shaft cleaned out, with the following results, as reported by Mr. Marshall:—

“At a depth of 26 feet I found a seam of coal 1 foot thick, but so tender that it would not bear the slightest carriage. Underneath this there is a seam of fireclay, mixed with coal, 18 inches thick, which makes a formation altogether of 2½ feet.

“The shaft is 43 feet in depth from the strike board, and has been sunk upon a fault showing a 4-foot down-throw to the north. At the bottom of the shaft there is 3½ feet of coal and slate, which I do not think would pay to take out. I next went into the old workings, a down-set which Mr. Watts had put in, and after pumping out the water, and getting to the face, which is 70 feet from the outcrop, I found no improvement. There is a formation of a 3-foot seam, showing 20 inches of clean coal, but so mixed with slate that it would not pay to work. I next went to the landslip, about 250 yards towards the mouth of the valley from the old workings, where I discovered a seam of coal. The formation is 2 feet, with two bands of clean coal, measuring 10 inches each. I have driven 16 feet in it to the dip, the dip being 1 in 4, and underlays the seam that Mr. Watts worked. This seam crops out about 50 feet above where a level could be put in with safety from the creek in time of floods. If this seam increased to 2 feet to the dip it would pay to work, being easily mined, and a small amount of capital would put it in working order.”

These results being favourable, Mr. Marshall was directed to proceed with the search in the gullies on the south side of the gorge, and to employ two men for the purpose. His further report was as follows:—“According to your instructions, I have prospected the gorge at the level of the old plum-bago workings, and the thickest seam of coal I found there measured 1 foot 2 inches, clean, and of good quality. I next examined nine gullies emptying into the Pakawau Stream and rising to the south, and found seams of coal from 6 to 8 inches thick. I searched in the gullies rising to the north,