

## WALLOON COAL MINE

The Walloon coal mine, the property of Scott Smith and A. Meston, M. L. A., is situated about 30 miles from Brisbane, and lies back half a mile from the Walloon Railway Station, on the Southern and Western line, or seven miles beyond Ipswich. The coal was first discovered by Mr. Smith in 1877, during the long drought, when all the waterholes in the creek which runs through the property had dried up. In the bottom of a deep hole the coal seam cropped out, and there the prospecting shaft was put down, and finally a tunnel driven in from the bed of the creek and, about a couple of hundred tons of coal taken out. But wet weather returning put a sudden stop to the workings, as the creek came down and filled up the drive. Then a tunnel was put down about 50 yards back from the creek, and from that tunnel the mine is now being worked. For some time there was great trouble from water, as the old drive had been unwisely left open, and the water followed the coal seam through into the workings in the new drive.

The mine was then the property of Smith and Levinge, whose partnership was dissolved about four months ago, and Mr. Meston entered as the junior partner with Mr. Smith.

At first the water was drawn up by a water waggon, which caused a great deal of expense and trouble. Within the last three months there have been considerable improvements. The mouth of the old drive is filled up, a strong dam constructed across the creek with stuff from the mine, and the creek entirely turned, so that no more water enters from there. Messrs. Smith and Meston have also put down a first-class special steam pump equal to 3,500 gallons per hour. This pump, which was procured from R. R. Smellie and Co., works magnificently, throwing a steady three-inch stream of water, and does fully what is claimed for her. She is worked by steam carried through an inch pipe brought 280 feet from the steam boiler at the mouth of the drive, the exhaust steam being taken up the air shaft thus giving a fine current of fresh air. The mine is no longer troubled with water, in fact it is remarkably dry, there not being a drop of water in any of the rooms or the levels, and nearly all that enters the mine comes from near the surface. from the gravel bed of an old creek. The pump has only an hour's pumping in thirty-six hours, so that it is lying idle most of the time, and when the surface water is puddled back, as it will be, there will not be above an hour's pumping in three days. The air shaft is 55 feet deep, and so far there is no scarcity of fresh air. The main drive is laid with railway rails, which give a solid and permanent track.

Very little work has been done so far; in fact the mine is only, beginning, and the owners are getting it into a condition that any quantity of coal can be turned out when wanted. At present they are extending the main drive to open out fresh levels at a greater depth, as the coal is wonderfully, improving the deeper it goes. From the mouth of the drive to the first level the descent is steep, but from there the coal is only dipping about one in fifteen. The main drive is 6 feet high and 6 feet wide, which makes the working comfortable. The levels and air drives are a little over 5 feet, so that there is plenty of room. The roof of the main drive is so substantial that no timber is required for props.

There are two seams of coal, each 2 feet wide, and both are fully worked. The coal, which differs entirely from that of the Ipswich mines, is very easily mined, the seam dropping itself when undermined and falling in a shower with a rattle like road metal, it is so hard and clean. There is hardly any slack, and no amount of knocking about will reduce the coal to less pieces than road metal. It is so clean that the smooth face of the seam would not mark a white handkerchief, and the miners come up as clean as they go down. A fourteen horse engine does all the work, the haulage being done with an inch wire rope wound on a 3 feet 6 drum.

The formation is peculiar, 14 feet of clay overlying the first rock, which is of the nature of bath-brick, and will whiten a hearth like pipeclay. This changes into a sandstone, the total thickness being about 14 feet. Under this are the "coal metals," about 8 feet thick, and then the first seam of coal, between which and the second is a band of pure white fireclay. The floor of the mine consists of 18 inches of hard fireclay, and next to that comes a seam of 2 feet more coal of splendid quality, thus showing 6 feet of coal, but this seam is not

worked so far, as the drives would have to be over 10 feet high if it were taken out. The boring rod has been down into a seam close below that again, and the proprietors hopefully believe there is a huge seam further down. However, they may be satisfied there are 6 feet of coal available, and as there are nearly 200 acres in the property they are not likely to work it out this century. In another month the mine will have the new levels open, and then a thousand tons per week could be turned out as easily as fifty tons, it only being a question of miners. So far the trade has not exceeded a hundred tons per week, as the owners have not been anxious to push the sales until they reached deeper and better coal.

The Brisbane Gas Company use the coal largely and it is also used by the gas companies of Ipswich and Toowoomba. For gas purposes it ranks far higher than the other coals, being of the nature of the best cannel coal, the only defect hitherto has been that it declined to coke, but the proprietors believe the coal from the new levels will coke well.

Considerable quantities are sent to Brisbane for household use, and we can say from personal experience that this coal is equal if not superior as fuel for cooking-stoves or heating-grates to any produced in the mother country.

Doubts were entertained about the use of this coal for steam purposes, the opinion being that it would burn too rapidly, but this opinion was based on some samples which never ought to have left the mine at all.

To obtain a thorough impartially opinion Mr. Meston wrote to the Commissioner for Railways asking him to have it tested on the locomotives, and Mr. Herbert kindly ordered the test to be made. The result was eminently satisfactory. We annex Mr. Horniblow's report which proves beyond all question the high character of the coal for steam purposes. It has been tested on one of the river steamers, and the engineer says "he can get up steam in half the time that he can with Newcastle coal." It was also said to contain a great deal of ash, but the following table proves that it contains less than any of the other coals. The others mentioned are the samples tested last year in the trials for the railway contract and the Walloon sample is that tested last week.

	Coal consumed.				Ash.		
	cwt	qrs	lbs		cwt	qrs	lbs
<b>Waterstown</b> ...	<b>46</b>	<b>2</b>	<b>6</b>	...	<b>7</b>	<b>1</b>	<b>0</b>
<b>Aberdare</b> ...	<b>42</b>	<b>3</b>	<b>11</b>	...	<b>7</b>	<b>3</b>	<b>1</b>
<b>Tivoli</b> ...	<b>42</b>	<b>1</b>	<b>11</b>	...	<b>6</b>	<b>3</b>	<b>15</b>
<b>Rosewood</b> ...	<b>52</b>	<b>1</b>	<b>16</b>	...	<b>16</b>	<b>0</b>	<b>20</b>
<b>Brydon and Co.</b> ...	<b>54</b>	<b>0</b>	<b>1</b>	...	<b>7</b>	<b>3</b>	<b>14</b>
<b>Smith and Meston</b> ...	<b>46</b>	<b>0</b>	<b>0</b>	...	<b>5</b>	<b>0</b>	<b>8</b>

No trace of a clinker is ever to be seen.

We are assured by Mr. Meston that even the coal sent for trial was not a fair sample, as it was taken from the main drive in the extension, and he says the miners cannot take it out there so clean as in the rooms.

This is the coal which Mr. McIlwraith believed to be eminently adapted for export, and it certainly is, for exposure has no effect, and it is so hard and entirely free from slack that it would bear exportation with little or no alteration.

On the Premier's visit to this mine before he left for home, he expressed himself very much surprised and very much pleased both with the size of the seam and the quality of the coal. The owners have unbounded faith in it, as well they may have, and believe a line to deep water would ensure them an extensive trade. Arrangements are being made to have it thoroughly tested on the ocean-going steamers; but until there are better facilities for getting the coal to the shipping, even the steamer trade must be limited, for it will have to be brought down by rail to Ipswich, emptied into the punts, and punted down to Brisbane, the expense of carting, railway carriage, and puntage being, of course, a serious damper on the balance sheet. The railway freight from Walloon to Brisbane is half-a-crown per ton. The coal for house use and the Gasworks is sent down by rail, and carted from the railway station.

When a line to deep water is made, Messrs. Smith and Meston intend connecting the pit with the railway by half a mile of a line, so as to save the expense and knocking about incidental to carting.

The proprietors will welcome any one who desires to have a look at the workings, and everything is open to inspection. The mine is in perfect working order, and a visit will well repay the visitor. The property is very, prettily situated, and altogether is a valuable possession, with a splendid prospect.

Southern and Western Railway  
Locomotive Department,  
Ipswich, November 18, 1879.

“MEMO - TESTING WALLOON COAL”

As instructed by you, I have the honour to report having made two tests of the Walloon coal from the pit of Messrs. Smith and Meston-1st. By special coal trains on the 12th inst.; 2nd. By ordinary mixed trains between Brisbane and Toowoomba on the 14th and 15th instant. I enclose a table of the tests giving the same information that the railway store-keeper did, after coal tests in March of this year, so that a comparison as to consumption, load, &c., may be made.

I also attach reports from drivers Mill and Jackson.

I went with the coal train from Ipswich to Toowoomba and back, and also rode on Jackson's engine, from Ipswich to Gatton, and, from personal observation can say that both engines had always an abundance of steam; the coal will also stand heavy pulling, without more ashes than usual going through into the smoke-box. The load of coal train over both Liverpool, and, Main Ranges was very heavy, owing to the loaded coal trucks having absorbed a quantity of water in some heavy thunderstorms. You will notice that the consumption is slightly higher than the average of trials in March last, but this would be remedied a little when the men get accustomed to fire the class of coal which is quite different from that now in use.

I am so well satisfied with the trials, that I should like to see about 100 tons sent to Toowoomba for a thorough test on the locomotives in that district.”

(Signed) H. HORNIBLOW, Locomotive Superintendent.