

the mine. The smelting house already built consists of a stone building of about 100 feet in length, and 36 feet in breadth, and is calculated to contain four furnaces, three for the ore in its different stages, and one for refining. As yet there have been put up only two of these furnaces, but the refining furnace will be completed during the winter, in time to refine all the Blister Copper made prior to the opening of the navigation. Next spring the other ore furnace will be built, and the house enlarged to contain three more, which will be put up during the summer. These it is calculated will be sufficient for the present. In the course of two or three years, however, I hope that a much larger number will be required. A large furnace in a separate building has also been put up for calcining the ore. All the furnaces appear to do their work well, and to the satisfaction of Mr. Davies, the head smelter. He also speaks very highly of the quality of the copper, and states that when refined, it will equal the best in the market. Owing to the late period at which the calciner was finished, and other causes, it will be impossible to get the third ore furnace built this winter, and consequently the quantity of copper ready for market in June will be materially decreased; but until the furnaces have been at work some time, it is difficult to make a correct estimate of what we shall have.

The cost of the smelting works entered in the accounts, amounts to £3,463 13s. and includes the castings for the remainder of the furnaces, and a large stock of fire bricks as well as the coal wharf, railways, and expense of levelling the coal bed, which was considerable. With the exception of two tons of Blister Copper made in summer, there was no ore smelted prior to the 15th of December, owing to the calciner not being ready, but since it has been going, all the furnaces have been regularly at work, the calciner extracting the sulphur, No. 2 furnace melting the ore, and No. 1 roasting and making copper. We have now about twelve tons of the latter ready to be refined, besides a stock of calcined ore, coarse and white metal, with some regulus. Mr. Davies speaks confidently of the short time required to bring this ore into metal after the first melting, and the low cost of the process. But whatever the