

Q. The low percentage of copper has made it difficult to realize a benefit, so far as devoted to copper alone?—Yes; the sulphur was wasted for a good many years and is still wasted. The great value of the sulphur has only been appreciated since the value of the sulphur deposit in the Tarsis mines of Spain has been established. It is admitted now, in the United States, that the sulphuric acid manufactured from it is as good as that produced from any sulphur mine.

Q. What use is now being made of the sulphur in these mines, and how is it being utilized?—The sulphur of the Orford mine and of the Messrs. Nicholls is sent immediately to New York, where it is utilized in making sulphuric acid.

Q. Why?—Because there is greater encouragement there for its manufacture. It is taken from the mine in its raw state and taken to the United States to be utilized there in the manufacture of sulphuric acid.

Q. Has there been an enormous expenditure of money in Ascot that is now perfectly idle on account of these ores being sent out in their raw state?—Yes; the works of the Orford company are now lying idle.

Q. If the manufacture of sulphuric acid and of agricultural fertilizers were encouraged in this country, would it have the effect of keeping all that manufacture in this country?—Yes.

By Mr. Ferguson :

Q. What proportion of that ore is refused when they get it in New York?—The constituent parts are sulphur, copper and iron. They take out about 3 per cent. of copper and about 40 to 42 per cent. of sulphur, and the balance is iron, which may or may not be utilized; that is, you get 3 per cent. of copper, 35 to 42 per cent. of sulphur, 30 per cent. of iron and the rest is earthy matter, fully 20 per cent. of waste.

Q. Is that iron of any great value?—No; it is comparative waste as well.

Q. Then they pay freight on this waste in order to get it there to make sulphuric acid?—Yes.

By Mr. Baker :

Q. Do you mean to say that there is 20 per cent. of earthy matter?—Silica is included in this 20 per cent. which is also included as waste.

Q. And freight is paid on that as well?—Yes.

Q. Is not some of this so-called waste of merchantable value?—Twenty per cent. of it is lost altogether, but 30 per cent. of it is of merchantable value, sometimes.

By the Chairman :

Q. When the sulphuric acid is manufactured we get it back into the country and pay freight and duty on it, I suppose?—They pay freight and import duty on it into the United States, and we pay freight and duty on it to get it back.

Q. What is the value, do you think, of these Orford smelting works that are now standing idle?—From \$100,000 to \$150,000.

Q. As a practical mining man, will you state to the Committee what value do you think the country is getting, if any, from the work of the Geological Survey of Canada, in so far as applied to mines?—I am not aware that it is of any value whatever.

Q. Do mining men, like yourself, attribute any value or importance to it?—No; we scarcely know there is such a thing, from a mineralogical and metallurgical point of view.

Q. In what way do you think the Geological Survey might be of practical value to the mining industries of the country?—It would be impossible, of course, to keep the public fully informed upon it, but they should know whether we have any mines or not.

Q. Would not mineral statistics be of great importance?—Yes; mineral statistics and maps of the mines, and general information as to the natural laws regulating and governing deposits, which is the most important feature of it. The veins in traversing the earth meet cross veins; when they meet cross veins the great point is to know what is the effect, because, if I go and expend money in an opposite direction from where I should find the vein, there is so much lost. In these mines where they