

varies in width from 3 feet at the extreme ends to over 60 feet at the widest part of the chamber.

The ore is copper pyrites, and varies in copper contents from 2 to 30 per cent. The sulphur varies also according to the amount of copper and silica in the ore, some samples showing 48 per cent. and others only about 30 per cent. An analysis of an average sample of the whole deposit would show about 42 per cent. of sulphur, 4 per cent. of copper, also 3 ozs. of silver, and about 40 cents worth of gold per ton of 2000 lbs.

The ore is bi-sulphide, burns very freely, and is admirably adapted for making sulphuric acid.

The method of mining now in use was adopted to suit the peculiarities of the deposit, and differs from the ordinary plan of sinking shafts, driving drifts, sinking winzes, etc., in that two shafts are sunk in the ore body on the slope of the vein, about 175 feet apart, each of them carrying down from 40 to 50 feet in length of the vein, and the full width from foot to hanging wall; the shaft work in this way being practically underhand stoping. The shafts diverge from the same landing till the necessary distance between them is obtained; from this point a curve in one shaft allows of their running parallel to each other.

The reserves of ground opened up by this system of sinking consist of the body of ore between the two shafts about 125 feet in thickness or length, and the two bodies outside of the shafts, each from 50 to 75 feet in length.

The advantage claimed for this system of working is economy—first in sinking shafts, always an expensive part of mining work, but in this case costing it may be said absolutely nothing, as the ore can be obtained from the shaft work at as little cost as from any stope in the mine of the same character. Again, drifts are dispensed with except in special cases, such as connecting the shafts for ventilation, for exploratory purposes, or for some peculiarity of the formation, and winzes or rises are unknown except in the case of working around pillars.

The reserve ground is worked out by breast and underhand stopes; back stoping being resorted to and only possible from the exploratory or ventilating drifts.

The skip tracks are protected from the blasting operations by heavy timbers, lagged to the hanging wall and put in alongside the tracks and running parallel with them. These timbers are necessary in any case,