

small amount of iron having been obtained on analysis. A cargo of about 8 tons from Teny Cape, examined in England gave an average of 91·5 per cent peroxide of manganese, and less than one per cent of iron. A second cargo of one hundred and twenty tons gave in England 89 per cent peroxide of manganese. The quantity of ore raised at Teny Cape up to the present time is estimated at about 1000 tons, of an average value of from £8 to £9 sterling per ton. A few tons have been raised at other localities, among which Onslow has furnished a portion of excellent quality.

MINERAL PAINTS.—Very extensive deposits of hydrated oxide of iron often mixed with hydrated oxide of manganese, are found in different localities. Some of these have been rather extensively employed as mineral paints and found to answer admirably both for buildings and vessels. Several colours and qualities are shewn, and very instructive sets of specimens from Onslow and Chester, illustrate the production of these substances from rocks containing carbonates of lime and protoxide of iron and manganese, and occasionally pyrites: by the weathering of these rocks, very fine numbers of various colours are found to result.

NATIVE COPPER.—This is represented by specimens from three localities on the Bay of Fundy, where it occurs in trap rock, sometimes in a zeolitic matrix, in masses which are occasionally of several pounds weight; it is reported that at one place it occurs in a thick bed with ore of copper. Systematic operations carried on for a short time at one place produced about three hundred weight of the metal, and what is considered to be the same deposit is being worked at about a mile inland from the original scene of operations on the shore of the Bay of Fundy. I have found a small amount of silver in some of the copper from this region.

ORES OF COPPER.—Of these a variety is exhibited, ^{some} ~~none~~ of them being very rich. The ore from Tatamagouche, which is rich vitreous ore in sandstone has paid expenses on small operations. The ore from Five Islands is cuprififerous oxide of iron, samples of which I have found to yield about six per cent of copper; the deposit is thought to be considerable. The ore from Lochaber is copper pyrites, mixed with iron pyrites, containing in some samples nine per cent of copper, in picked samples considerably more; it has hitherto been found in boulders but lately it has been reported as discovered in a vein. The ore at Cheticamp, Cape Breton, is Chrysocolla, which is found in a vein about 5 inches in thickness: operations have been carried on to some extent, but are, I believe suspended. On the whole little encouragement has so far been found in copper mining, for although very rich ores exist, some of which are in very curious association with "lignite," (in a sample of one of these I found 40 per cent of copper,) no large quantity of them has yet been met with: indications, however, are considered promising in several localities.

ORES OF SILVER AND LEAD.—Galena is represented from several localities, in some of them it is not believed to be in quantity. At Gay's River, however, in Colchester County, where it is disseminated in limestone, an engineer has reported his belief in the existence of an immense deposit, which could be easily washed from its matrix so as to yield a high percentage of lead containing sometimes as much as 11·5 oz. of Silver to the ton of Lead. At Baddeck, in Cape Breton, galena occurs