

bichromate. At the manufactory, the ore in fine powder is simply ignited in a reverberatory furnace, with about 80 per cent. of calcined potash, and little or no saltpetre. The resulting mixture yields, on lixiviation with water, a solution of neutral chromate of potash, which separates as a granular salt on evaporation. It is redissolved, and the solution is treated with a certain quantity of sulphuric acid, when crystallized bichromate of potash is obtained. The sulphuric acid is manufactured in the same establishment. One hundred parts of ore yield about thirty-seven of bichromate, so that the ore used must contain only about twenty per cent. of chromic oxide.

The nickel mines of Espedal, which are now abandoned, furnished an ore much of the same character as those of Ertelien in Ringerike, described in the first part of this paper. The mode of treatment was also similar.

The rocks of the two areas just described, offer, as we have seen, very considerable lithological differences. Those of the northern region do not appear to present any striking resemblances with the Canadian rocks, but the region about Troughjem strongly resembles that of the Eastern Townships of Canada, and agrees with it in the very points in which it differs from the mica schist region of Tromsø and Senjen. Among these are the predominance of clay slates, the presence of serpentines, with chromic iron, and the occurrence of ores of copper disseminated in the schists. These rocks of Eastern Canada have been traced from the line of the state of Vermont, for 140 miles north-eastward to the Chaudière River, and thence, at intervals, as far as Gaspé. As described in the Reports of the Geological Survey, they consist in great part of mica schists, passing into a gneiss, sometimes granitoid, on the one hand, and into clay slates on the other. Roofing slates are abundant in this series, and beds of steatite and chlorite slate are not uncommon. Quartzites, sometimes conglomerate, are met with, and limestones, which are very often magnesian, and weather of a reddish or brownish color from the presence of iron or manganese. They are sometimes replaced by carbonate of magnesia. Beds of serpentine are an important feature in this series; they are often mingled with limestone, dolomite or magnesite, and always impregnated with chrome and nickel. These serpentines are sometimes associated with diallage and with feldspathic rocks, which constitute varieties of diorite and diabase. These same rocks are traced southwards