

agrees with it in the very points in which it differs from the mica schist region of Tromsen 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 in the Green Mountains, through a large part of the United States. All of them find representatives in the Norwegian group around Trondheim, and in the Dovrefield.

This resemblance is still further traced in the metalliferous deposits of the two regions. In the Eastern Townships of Canada, copper sometimes occurs in the native state, in clay slate, but much more frequently in the form of yellow and variegated sulphurets, or of copper glance, disseminated in micaceous or chloritic slates, or in limestone. These deposits are of the nature of fahlbands. Those of Sutton and Ascott, especially the latter, have a strong resemblance to that of Rönneås. The copper ores of this region are generally subordinate to the stratification. The short and irregular veins of quartz and bitter-spar, which traverse these copper-bearing strata, sometimes however carry rich ores of copper, occasionally with gold.

Iron schists, which consist of scaly peroxyd of iron, intermingled with various proportions of quartz and chlorite, constitute important beds of iron ore in some parts of this series, as in the townships of Brome and Sutton, where they were formerly wrought to a small extent. These schists resemble the itabirite of Brazil.