

hopeite but quite subordinate to the spencerite. The mineral has not been observed in good crystals but rather in fan-shaped aggregates similar to those frequently shown by calamine. These aggregates appear to be built up of crystals in which a partial parallelism of the crystals is preserved, the macropinacoids of the different individuals being more or less common to all the crystals of the aggregate. Occasionally small crystals prismatic in habit occur more or less detached, but they are valuable for measurement only, with a view to determining the mineral as parahopeite. The characteristic forms are the prisms (110) and ($\bar{1}\bar{1}0$) and the macropinacoid which is usually large but corroded. The principal terminal faces are the pyramid ($\bar{1}\bar{1}1$) and the base (001) which is usually represented by a pair of faces due to the characteristic twinning which is polysynthetic with (100) as twinning plane and composition face. In general the habit of the parahopeite from British Columbia is the same as that from Rhodesia.

PHYSICAL PROPERTIES

Parahopeite has a brilliant vitreous lustre. It scratches calcite readily when the striations are made parallel to the shorter diagonal of the cleavage rhombohedron but when attempts are made to scratch calcite parallel to the longer diagonal of the rhomb the striations are very indistinct. Its hardness may therefore be regarded as about 3.5. The specific gravity was determined by means of heavy solutions and by the pycnometer. The former method gave 3.22 while the latter gave 3.236. A determination made by heavy solution on material from Rhodesia showed that the mineral from the type locality has a specific gravity of 3.21. All these values are somewhat lower than those previously published for parahopeite.

Like the mineral from Rhodesia the Canadian parahopeite shows a perfect cleavage parallel to the brachypinacoid. If crystals be crushed between two glass plates a multitude