

drift-covered that but few exposures are to be seen. On the 4th range, along the road between the village of Rawdon and Ste. Julienne, a few small exposures of limestone protrude through the drift on lots 13 and 15, associated with quartzite and gneiss, which may be a continuation of this limestone to the south, and are so represented on the map. If so, the limestone band is greatly diminished in size to the south.

THE ANORTHOSITE INTRUSIONS.

As has been mentioned above, about one-half of the Laurentian corner of the sheet is occupied by intrusions of anorthosite. Four separate occurrences are represented on the map, but the two larger are really portions of the same intrusion, known as the Morin anorthosite mass, and unite to the north.

Anorthosite
intrusions.

This anorthosite is a basic rock belonging to the family of the gabbros, but characterized by the great preponderance of one constituent, namely, the plagioclase felspar, which is so abundant that it often makes up the entire rock. The other constituents are monoclinic and rhombic pyroxenes and ilmenite. No olivine has been found in any of the areas on this sheet. The rock is usually coarse in grain, its structure being especially well seen on the large weathered *roche moutonnée* surfaces. In its normal condition the rock has a granitoid structure and is deep violet, almost black, on a fresh fracture. The anorthosite in that portion of the area occupying the extreme northwest corner of the sheet, in the townships of Morin and Wexford, as exposed along the road and railway between Ste. Adèle and Ste. Agathe, shows these characters. The same is true of much of the anorthosite beyond the limits of the sheet to the north. The rest of the Morin anorthosite embraced within the limits of the sheet, represents peripheral portions of the mass and consequently shows in a marked manner the effects of the great pressure to which the whole area was subjected before the deposition of the Potsdam. The first effect of this pressure is the production of a brecciated structure in the anorthosite, especially well seen on large weathered surfaces about Ste. Marguerite and elsewhere in the eastern part of the township of Wexford. This brecciated structure is produced by the partial granulation of the rock, the resulting rock consisting of fragments of plagioclase or of the other constituents of the rock, embedded in a species of ground-mass made up of smaller grains derived from the breaking-down of the larger individuals. The brecciation being accompanied by a movement of the rock in some definite direction, develops a streaked or irregular banded structure. A very remarkable fact in connection with the

Morin anor-
thosite.

Effects of
pressure.