## AGE CLASSIFICATION OF THE ROCKS OF THE REGION

The following table gives the classification of the rocks, according to their age relations, employed in this report and on the accompanying maps:---

## Pielstocene

**GLACIAL AND RECENT** 

Bouider ciay, sand and gravei.

Granite, gabbro, diabase, basait.

Paleozoic **ORDOVICIAN** 

Biac' River limestone and basai sandstone.

(Great unconformity)

Pre-Cambrian

**POST-HASTINGS INTRUSIVES** 

(Intrusive contact)

HASTINGS (TEMISKAMING?) SERIES Congiomerate, greywacké, quartzite, siate, thin

beds of crystalline limestone, and the metamorphosed equivalents of these rocks.

(Unconformity)

LAURENTIAN

Gneissold granite and syenite.

(Intrusive contact)

**ORENVILLE SERIES** 

Crystalline limestone, iron formation, slate, quartzite, greywacké, iargely altered to various schists and gneisses.

**KEEWATIN COMPLEX** 

Green schists, pillow iavas, basic gneiss and other rocks.

## COMPARISON WITH NORTHERN AND NORTHEASTERN ONTARIO

From the preceding table it will be seen that the geology of southeastern Ontario is much like that of the northeastern part of the Province, e.g., Cobait and surrounding region, distant two hundred miles or more. The Keewatin is present in large volume in both regions, but the Grenville sediments have a much greater thickness in the southeastern than in the northeastern region, owing to greater erosion in the latter. The Laurentian in one region possesses similar features to those of the other. The Hastings series in character and relations appears to be comparable to the Temiskaming series of the region surrounding Cobalt. The later granite, Moira, resembles in character and relations the Lorrain granite of Cobalt. The post-Hastings basic intrusives, marked on the maps as being doubtfully of Keweenawan age, are more altered or decomposed than the Nipissing diabase of Cobait, and may be of about the same age as the iamprophyre dikes of Cobalt and the pillow lavas, post-Sudbury series, of Sudbury. Fragmental rocks, comparable in age with the rocks to which the name Cobalt is applied, have not been recognized in the southeastern region.

The two regions are separated by a territory which is underlain chiefly by granite and granite gneiss, and in which pre-Cambrian sediments later in age than the Grenville series are not known to occur.

Following the nomenciature usually employed in the description of fragmental rocks next younger than the Laurentian, both the Hastings and Temiskaming series might be called, provisionally, Lower Huronian.

In the appendix to this report is given a comparative table of the age relations of the pre-Cambrian rocks of all the areas in Ontario that have been mapped systematically.