

ice along the base of the diorite cliffs which here forms the north side of the valley of Beaver Creek. A search was made, with the result of finding exactly similar strata in place, forming a small band completely enclosed in the intrusive mass and extending completely across lot 13 as well as a short distance east and west into the adjacent lots. Detailed examination revealed much more extended exposures on the hills to the northward of Gilmour Station, situated chiefly on lots 11 and 12 in the XVIIIth concession.

The so-called conglomerates may be included under two great classes.

1. Those which have a matrix of limestone or dolomite.
2. Those in which a greyish, sometimes almost black micaceous rock, forms the cementing material.

The limestones breccias may likewise be subdivided into two classes (*a*) those which readily show their origin as dynamic breccias and (*b*) those which more closely resemble ordinary conglomerates and may, following Van Hise, be called pseudo-conglomerates. (See Plate VII, Fig. 1 and 2.) Both varieties of these calcareous fragmentals are abundantly represented and are as would be expected most frequently to be met with at or near the line of junction with the intrusive granites, gneisses and greenstones, these places representing areas or zones of extreme disturbance.

In regard to the material constituting the supposed pebbles they likewise admit of a two-fold division:

(*a*) Those which are formed by the breaking apart of what were once fairly continuous bands of the rusty-weathering or greyish gneiss, already mentioned as so frequently and intimately associated with these crystalline limestones and dolomites.

(*b*) Those in which a series of approximately parallel dykes of intrusive material, chiefly granite, diorite and amphibolite have suffered the necessary deformation and dislocation.

The class first mentioned (*a*) are doubtless the most abundantly represented in this district, and a great many of the exposures show almost at first sight their origin as autoclastic