

were subjected to pressures subsequent to their crystallization. The cracks and V-shaped breaks evident along the outer and convex curves of the crystals favor this view. Microscopical investigation would no doubt reveal the true nature of the origin of such features, whether they are constructive forms or forms of destruction. The Leaders of the Club merely wish to point out the occurrence of these curved crystals and urge upon the mineralogist or the student of geo-physics to study the phenomena observed at this locality. Biotite crystals also occur in the vein at Carp.

#### THE CHAZY AT ROCKCLIFF.

Close to the water's edge and along the base of the cliff fronting the Ottawa river at the Rockcliff terminus of the Ottawa Electric Railway, as well as below the Manor House or residence of Mr. T. C. Keefer, F.R.S.C., the Chazy formation is well developed. Its strata, as exhibited in the lower portion of the bluff, consist of comparatively coarse materials, more or less rounded grains of quartz cemented by a ferruginous paste or matrix of impurities in which clay, lime and magnesia appear to be the chief ingredients. Numerous fragments of *Lingula* occur in the coarser sandstone beds, and those best preserved appear to represent the species described by Mr. E. Billings as *Lingula Lyelli*, from the upper Ottawa extension of the Chazy near Pembroke, Ontario, about 100 miles from the City of Ottawa. These *Lingulae* are associated with numerous minute irregularly rounded black grains resembling those "phosphatic nodules" described by T. Sterry Hunt from the Chazy of different portions of Canada. At Hog's Back, near the Central Experimental Farm, where the Chazy formation is also developed and may be studied to advantage, the *Lingulae* found there, namely: *Lingula Belli*, Billings, and *Lingula Huronensis*, Billings, are likewise associated with phosphatic nodules, or concretions which are held to be of organic origin.

Besides these remains of *Lingula* and the phosphatic nodules, the Rockcliff strata have yielded during the past year an excellent series of slabs exhibiting interesting tracks and trails of marine organisms made upon the layers of the sea-mud of the ancient shore deposit or shallow water as they journeyed from place to place in search of food, etc. These trails are for the most part