crenulated to a degree shown only in pronounced development in this genus.

The pygidium is short and stout with a short blunt axis bearing four defined rings but eight axial sulci can be counted. Of the pleural ribs but two can be counted and these are flat and sulcate.

This completely developed Phacops is in itself indication of either Devonic age or a very late stage of Siluric. In the Mississippian Siluric no such form presenting fully matured cephalic features is known. The species, however, shows in the sulcate pygidial ribs index of early phylogenetic stage. It can not be identified with the Helderbergian and Oriskany P. l o g a n i which is found in the Percé rock and at Joli, but approaches thereto.

2 The second species of Phacops is known only from its cephalon which is of a singular and unusual type. In this the first furrows of the glabella are faint without entering the dorsal furrows and are like a pair of eyebrows, defining obscure round lobes, behind which the second lobes are also round and better defined, while the third lobes are obscure. The eyes are small and with few lenses, the cheeks broad, flat and dalmanitiform, running out into short flat spines at the angles.

The aspect of the species is that of immaturity with reference to the development of the genus Phacops and presents the combination with features pertaining to Dalmanites which is indicial of the passage forms from the latter to the former. The aspect of this cranidium is shown in some early Devonic forms such as P. (D.) t u m i l o b u s Clarke from the Amazonas but without association with cheeks of notable Dalmanites type.

One of these forms of Phacops indicating late age is counterbalanced by the somewhat earlier expression of the other and this combination is verified by the presence of Bumastus and Calymmene.

We must call the horizon late Siluric but are disposed to make it so late as to be an almost final stage in the passage from the lower limestones into those of the Percé massive or lowest lower Devonic.

The Cap Blanc limestones appear then from the evidence before us to be a downthrown mass representing a part of the series shown more continuously in the sea wall at Percé, and indeed such part as