

posals of a name without figures or description by which congeneric forms could be included within it is not sufficient to warrant our use of the name *Atops* in place of *Ptychoparia*.

Formation and locality.—Middle Cambrian. Reynold's Inn, seven miles north of Union Village, Washington County, New York; in the conglomerate limestones on the ridge east of the city of Troy, New York; also, in conglomerate limestones of Bic Harbor, below Quebec, on the St. Lawrence River, Canada.

PTYCHOPARIA SUBCORONATA H. & W.

Plate xxviii, fig. 4.

Conocephalites subcoronatus Hall & Whitfield, 1877. Geol. Expl. Fortieth Par., vol. iv, p. 237, pl. ii, fig. 1.

Original description.—"Glabella short, conical, with straight lateral margins, regularly converging from the base upward to the rather squarely truncated summit; height above the occipital furrow scarcely exceeding the breadth of the base, and the width at the summit equal to about two-thirds of the height; marked by three pairs of very oblique, subequally distant, and moderately distinct transverse furrows. Occipital furrow narrow and well marked; ring distinct, widest and somewhat pointed on the center of the posterior margin.

"Fixed cheeks wide, separated from the glabella by distinct dorsal furrows, prominent and rounded between the glabella and eye-lobe, almost equaling the convexity of the glabella; ocular ridges slender and curved. Frontal limb wide and concave, destitute of a thickened marginal rim, as long as the glabella, and obscurely trilobed from an extension of the dorsal furrows, forming a convex, boss-like area in front of the glabella, which is divided transversely by a double depressed line, or narrow fillet, midway of the limb and parallel with the anterior margin of the head. Eye-lobes about half as long as the glabella, obliquely situated, and separated from the fixed cheek by a deeply-depressed ocular sinus.

"Facial suture cutting the anterior border on a line with the front angle of the eye, which it reaches by a broad convex curvature, giving rounded lateral margins to the frontal limb; posterior to the eye it is directed outward, the actual course not determined. Posterior lateral limbs not seen. Surface of the crust in front of the glabella strongly striated.

"The species is only known by the glabella and fixed cheeks. The specimens are all minute, but readily recognized by the peculiar formed boss in front of the glabella."

This species is associated with *Olenoides quadriceps* in the same pieces of rock. Its nearest allies are *P. Prospectensis* and *P. ? Linnarssoni* (Monographs U. S. Geol. Survey, vol. viii, pp. 46-48). They all have a cylindro-conical glabella, with a rounded boss on the frontal limb; rather