

on account of the side lobes being strongly arched. The crust is entirely removed from the thorax, and is only present in traces on the head-shield and pygidium. The latter, like that on *A. platycephalus* (= *Isoletus gigas*), is destitute of segment-markings except in faint traces on the surface below the crust, and the axis is but slightly pronounced. The body-axis, with eight segments, is about as broad as each of the side lobes, or perhaps a little broader—agreeing also, in this respect, with *A. platycephalus*. The pleuræ curve *backwards* (or towards the caudal extremity) at their points; and on each pleura—at about one-third of the distance from the point to the axial furrow, and close to the upper margin—there is a *small but deeply indented pit*. Unfortunately, the stone is broken away for a short space along the outer side of each axial furrow, so that the grooving on the pleuræ (if any be present) is not seen. The outer halves of the pleuræ (speaking always as to the surface under the crust) are however, quite free from any traces of a furrow. If ever present, accordingly, the furrows could only have extended a short distance from the axial groove. The surface of the head-shield is much destroyed, but the lower end of the facial suture is seen to correspond with that of *A. platycephalus*; and the genal extremities terminate in very slightly rounded angles. The usual asaphus-striæ are shewn on the margin of the shell, on both the head shield and pygidium.



OUTER EXTREMITIES OF THREE PLEURÆ OF *Asaphus Hincksi*.

Asaphus Hincksi differs thus from *A. platycephalus* by the peculiar and strongly marked indentations on the pleuræ; and by the ends of the pleuræ curving backwards instead of forwards, and terminating in well-developed points. In *A. platycephalus* they curve forwards, and are rounded off in conformity with the rounded genal angles of the head-shield. The annexed tabular distribution of the four species of *Asaphus* occurring in Canada, brings out these points of difference more distinctly.

Caudal shield with segment furrows	{ Head-angles terminating in long points.— <i>A. Canadensis</i> . Head angles rounded.— <i>A. Halli</i> .
Caudal shield smooth.	{ Pleuræ curving forwards.— <i>A. platycephalus</i> . Pleuræ curving backwards.— <i>A. Hincksi</i> .