

King on a waterworn surface of the beach, partially covered by the shingle, and many details of the structure have doubtless been removed since it was first exposed to the action of the elements. The outline of the hypostoma is rather faint on the specimen, but the excellent photograph made by Miss Bentley brings it out clearly. The forks are rather short and far apart, and the anterior portion is narrow, so that the general form of the hypostoma is more like that of *Isotelus harrisi* than *I. gigas*. The total length is 75 mm., the greatest width, 65 mm.; length of the body portion, 53 mm., width, 50 mm.

The transverse furrows are the impressions left by the gnathobases of the basal joints of the legs. These gnathobases were evidently long and very heavy, but the specimen has been so abraded that all details are obscured. The first six pairs of impressions are longer and deeper than the four behind. The first eight pairs seem to belong to the thoracic appendages, while the last two belong to the pygidium. From the posterior tips of the hypostoma to the first gnathobases of which traces are present there is a distance of about 22 mm. without impressions. In *Isotelus gigas* the hypostoma normally extends back to the posterior margin of the cephalon, so that it seems that in this specimen the impressions of the first two pairs of gnathobases under the thorax may not have been preserved. In that case, the six pairs of strong impressions may represent the last six pairs of thoracic segments, and the pygidium might begin with the first of the fainter ones.

Two specimens of *Isotelus*, somewhat similarly preserved, have been figured. One is Billings' specimen from the Trenton at Ottawa, and the other was described by Mickleborough and by Walcott from a specimen found near Cincinnati. Both of these specimens, however, show the trilobite itself, as well as the impression. Both show the long heavy gnathobases of the coxopodites, and it becomes evident that, as the coxopodites are attached directly under the dorsal furrows, the increase in the width of the thoracic lobe, which is so marked a feature in *Isotelus*, is due to the great development of these gnathobases. The writer believes that this impression on the ripple-marked sand of the Chazy gives a clue to the development of the gnathobases. Apparently *Isotelus* was a bottom crawler, and the gnathobases may have served as ambulatory appendages. In both the specimens of *Isotelus* mentioned above as retaining the appendages, the gnathobase of a thoracic appendage is nearly as long as the remainder of the appendage, and being a single rod, and not jointed, is much more useful as a lever. On all the specimens known, the gnathobases are strongly developed on the thorax, and only feebly so on the pygidium. Beecher found