

some volcanic rocks of mesozoic age on the Iltasyouco River and Tigutlat or Tsehouts Lake, in the coast range of British Columbia. These fossils were reported on by the writer in 1878, in the Report of Progress of the Geological Survey for 1876-77, in which the Ammonites were determined by Professor Hyatt. Among them there is an Ammonite from Tigutlat Lake that Hyatt referred to *Stephanoceras Humphreysianum*, and that the writer identified with *Olcostephanus Loganianus* of the Queen Charlotte Islands in 1884, and figured under that name on Plate XXIII, fig. 1, of the first volume of "Mesozoic Fossils" published by the Canadian Survey. It has long been obvious, however, that this Ammonite can no longer be safely identified with either of the species named, and it would now seem that it probably indicates a previously unnamed species of *Stepheoceras*, which it will be convenient to designate as *S. Pluto*. It seems to differ from the typical *O. Loganianus* chiefly in its much wider and more open umbilicus.

On the evidence of specimens recently collected in Alaska, Dr. Stanton regards the two species of Ammonite from the Queen Charlotte Islands which the writer described and figured in the first volume of "Mesozoic Fossils" under the names *Perisphinctes Carlottensis* and *Olcostephanus Loganianus*, as of Jurassic rather than Cretaceous age, and refers them both to *Stephanoceras*, Waagen.\* If this view be correct these two species, also, may possibly be referable to *Stepheoceras*, but the sutural line of both is unknown, and their exact generic position is still uncertain.

In August, 1904, Dr. R. W. Ells and Mr. R. A. A. Johnston, of the Geological Survey staff, collected a few specimens of a large Ammonite, which is by far the most typical and distinct species of *Stepheoceras* that has yet been found in Canada, from a small outlier of compact and readily weathering limestone on the side of a mountain about a mile and a half north of a point in the road midway between Nicola and Coutlee, in the Yale district of British Columbia.

These specimens are two casts of the interior of most of the septate portion of the shell, and eight fragments.

The larger of these two casts was originally about eighteen or nineteen inches in its maximum diameter, but a piece of the anterior end of it has been mislaid, and the specimen is now only fourteen inches across.

The smaller cast is about eight inches in its greatest diameter, and has most of the two outer whorls exposed on one side.

Neither of these casts show any evidence of septation, but

\* In Bulletin of the Geological Society of America, June, 1905, vol. 16, p. 402.