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NOTE ON A SUPPOSED NEW SPECIES OF LYTOCERAS FROM THE CRETACEOUS ROCKS AT DENMAN ISLAND, IN THE STRAIT OF GEORGIA.

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In 1871 Mr. James Richardson, then of the Geological Survey of Canada, collected a fragment of the inner whorls of an Ammonite with numerous slender and finely costulate volutions, a wide, open umbilicus, and rounded venter, from the Cretaceous rocks at Norris Rock, south of Hornby Island, in the Strait of Georgia. This specimen was described by the writer, referred with a query to *Ammonites Jukesii*, Sharpe, and figured, in the second part of the first volume of "Mesozoic Fossils," published in 1879. The type and only known specimen of *A. Jukesii*, it may be mentioned, is a mere fragment from the "hard Chalk of the county of Londonderry," Ireland, described and figured by Sharpe in his monograph of the Cephalopoda of the Chalk, published by the Palæontographical Society of London in 1853.

Much larger, more perfect and beautifully preserved specimens of the same shell as the specimen from Norris Rock, were collected at Denman Island, near Hornby Island, four in 1892 and three in 1895, by Mr. Walter Harvey, who also obtained a characteristic fragment at Hornby Island in 1892. Three of these specimens from Denman Island are now in the Museum of the Survey, and two of them were described by the writer, under the name Lytoceras Jukesii (Sharpe), and figured, in a paper "On some Fossils from the Nanaimo group of the Vancouver Cretaceous," published in the Transactions of the Royal Society of Canada for 1895. When this paper was written, the writer had not seen the first part of Dr. Kossmat's memoir on the Chalk formation of Southern India, published at Vienna in 1894, in which the supposed A. Jukesii from Norris Rock is placed among the synonyms of Lytoceras (Gaudryceras) Kayei (Forbes.) On receiving a copy of this publication, it seemed to the writer that the large and fine specimens from Denman Island that had been referred to L. Jukesii present several points of difference from the L. Kayei, as therein figured, and one of the best of the Denman Island specimens was sent to Dr. Kossmat, for comparison with the Indian species. The conclusions arrived at on this point by Dr. Kossmat, after this comparison had been made, and as embodied in a letter to the writer, dated March 9th, 1896, are as follows:

"Your Lytoceras Jukesii must be distinguished from L. Kayei, as you already supposed. "Specimens that are not full grown (as that figured in Mesozoic Fossils, vol. 1, pt. 2, pl. 13) agree remarkably well with all the Valudayur specimens seen by me, and it would be quite difficult to distinguish them. "But, in the adult state, the Denman Island specimens are quite different. "The body chamber of L. Kayei, as shown in Plate 3, fig. 2, of my publication. is ornamented with very delicate striæ, even thinner than in the inner whorls, and of almost silky appearance ; whereas, on your L. Jukesii the ribs of the last volution become very strong and sharp, and are separated by broad intervals. "There is no doubt that such specimens are very similar to Lyloceras (Gaudryceras) Jukesii, Sharpe, but considering the incompleteness of Sharpe's type specimen, their identification with it will always be disputable. "Judging from the figure and description of Sharpe's specimen, the ribs of the type of L. Jukesii, in middle stages of growth, are sharper, somewhat more distant, and not so strongly curved forward on the sides; the increase of the whorl in thickness is more rapid, and the whorls are perhaps less numerous. "I think that it will be best to give a new name to the fine specimens from Denman Island. "Their septa are typical Gaudryceras septa, with descending auxiliary lobes."

The writer, accordingly, begs to propose for these specimens, which have already been described somewhat in detail and figured, the provisional name of *Lytoceras* (*Gaudryceras*) Denmanense.

Ottawa, April 16th, 1901.



Whiteaves, Joseph Frederick. 1901. "Note on a supposed new Species of Lytoceras from the Cretaceous Rocks at Denman Island, in the Strait of Georgia." *The Ottawa naturalist* 15(2), 31–32.

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