associated with it is highly desirable before it can be stated that nectar at present 'goes to waste.'

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Durham, N. H.,
December 6, 1904.

ANENT GIZZARDS.

Professor Eastman* expresses his willingness 'to consign to birds the exclusive enjoyment of gizzards and feathers'; but this seems hardly fair to certain fishes. According to Günther† in the well-known gray mullets (*Mugil*) "the second portion of the stomach reminds one of the stomach of birds; it * * * is globular, and surrounded by an exceedingly strong muscle. This muscle is not divided into two as in birds, but [is] of great thickness in the whole circumference of the stomach, all the muscular fasciculi being circularly arranged. The internal cavity of this stomach is rather small, and coated with a tough epithelium * * *. A low circular valve forms a pylorus." Certainly one can not carp at Drs. Jordan and Evermann‡ for referring to this apparatus as 'gizzard-like,' with which adjective Mr. Barnum Brown contented himself when writing of the plesiosaurs.

The food of the mullets is said§ to consist 'chiefly of the organic substances mixed with mud or sand,' of which they 'take in a quantity.' However, it must also be set down that 'in order to prevent larger bodies from passing into the stomach * * * these fishes have the organs of the pharynx modified into a filtering apparatus' so that 'stomach stones' if present, can never be large. At all events (to state the obvious conclusion) if two such widely separated vertebrates as *Gallus* and *Mugil* have independently evolved gizzard-like modifications of the stomach, why should a similar possibility be denied *à priori* to all reptiles? But whether plesiosaurs were 'lithophagi' or lotus eaters Herodotus saith not.

W. K. Gregory.
American Museum of Natural History.

* Science, N. S., Vol. XX., October 7, 1904, p. 466.

† 'An Introduction to the Study of Fishes,' p. 503.

‡ 'The Fishes of North and Middle America,' Part I., p. 809.

§ Günther, *op. cit.*, p. 502.

NOTE ON THREE VERY LARGE BEAKED WHALES FROM THE NORTH PACIFIC.

To the Editor of Science: Early in November last, I received a letter from President D. S. Jordan, of the Leland Stanford, Jr., University, enclosing a communication from Mr. J. H. Ring, of Ferndale, Humboldt County, California, relative to the stranding of a whale about forty-one feet long near that place. Mr. Ring's letter was accompanied by photographs which made it evident that the animal was one of the ziphioid or beaked whales, of extraordinary size and not in a very good state of preservation. I have recently received additional information from Mr. Ring which makes it certain that the whale belongs to the genus *Berardius*. This genus was first recognized as belonging to the fauna of the North Pacific by Dr. Stejneger, who found a skull on Bering Island in 1882, and, believing it to represent a new species, gave it the name of *Berardius bairdii*. Whether the Ferndale specimen is of that species can not be determined until the skull has been examined.

The specimen is notable as being, so far as I am aware, the first of the genus reported from the Pacific coast of the United States, and further as being the largest beaked whale of which there is any record. In Mr. Ring's second letter, he informed me that he had remeasured the whale and found it to be 43½ feet long. The largest *Berardius* previously known was the type of *B. arnuxii* of New Zealand, which was 32 feet long.

Two large beaked whales were found on the coast of St. George Island, Pribilof Group, Alaska, in June, 1903, by Mr. James Judge, the resident treasury agent. One of these, a female, was reported by Mr. Judge as being 40 feet 2 inches long, and hence only a little smaller than the Ferndale whale. The other specimen, a male, was 25 feet 5 inches long. It is not certain that these Pribilof whales are of the genus *Berardius*, though the in-