Subfam. 6. Grypiscina.

Arciform cartilages present; no ribs (?); mandibular teeth developed.
Genus Grypiscus, Neotropia.

Section C. No tongue; maxillary teeth present or absent.

Division I. No maxillary teeth.

Fam. XV. Pipidæ.

A tympanum and an entirely bony cavum tympani; eustachian tubes united, with a single oral opening; transverse processes of sacral vertebra dilated; no parotoids; no tongue; atlas and second vertebra confluent; vast cartilaginous xiphoid and great arciform cartilages.

Genus Pipa, Neotropical region.

Division II. Maxillary teeth.

Fam. XVI. Dactylethridæ.

A tympanum and an entirely bony cavum tympani; eustachian tubes united, with a single oral opening; transverse processes of sacral vertebra dilated; no parotoids; no tongue; atlas and second vertebra distinct; coccyx and sacrum confluent; moderate cartilaginous xiphoid, and no arciform cartilages; yet coracoid and pre-coracoid very widely diverging.

Genus Dactylethra, Ethiopian region.


Genus Oreonympha.

Gen. Char.—Bill longer than the head, stout, and with a somewhat downward curvature; wings large and sickle-shaped; tail ample and forked; tarsi clothed nearly to the toes, which are of moderate size; the hinder toe and nail rather shorter than the middle toe and nail.

Notwithstanding the length and stoutness of the bill, I consider this form to be nearly allied both to Oxypogon and Ramphomicron. It has the same kind of brilliant gular streak, a similar laxity of plumage, and soft flexible tail-feathers.

Oreonympha nobilis.

Bill and legs black; crown blue, with a streak of black down the centre; on the throat a lengthened streak of brilliant feathers, of which those nearest the bill are green, those which succeed are red-
dish purple, and those at the tip purplish blue, the whole being bordered on each side with black; sides of the neck and chest greyish white; abdomen, flanks, and under tail-coverts mottled white, grey, and light brown; back of the neck and upper surface bronzy brown; wings purplish brown; outer tail-feather on each side white, with a longitudinal streak of bronzy brown at the tip of the inner web; the next on each side the same, but the bronzy mark of greater extent; the central feathers entirely bronze, as in *Oxyrhynchus*.

Total length 6 inches, bill 1 1/2, wing 3 1/2, tail 3, tarsi 1/4.

Remark.—This remarkably large and handsome species was discovered by Mr. H. Whitely at Tinta in Peru, at an elevation of 11,500 feet.

3. On the Fishes of Orissa.


Having during the last few months been employed in conducting an inquiry into the present state of some of the freshwater fisheries on the eastern coast of India, I propose in the following paper giving a list of such species of fishes as I obtained in the province of Orissa. This portion of Bengal is comprised in one Commissionership, commencing in the south at the Chilka lake, and terminating at Jellapore in the north. I have also included a few species from the Cossye at Midnapore.

My investigations occupied December 1868 and the following month, and were instituted into the condition of every river which empties itself into the sea, also into the condition of many tanks, and the fisheries at the mouth of the Balasore river. Although I was not so fortunate as to obtain many species new to science, I was much gratified in procuring several of Hamilton Buchanan's and McClelland's fish whose existence has been doubted, or which have been referred to different species or genera or even renamed.

Before commencing the list I may remark upon the interesting fact that at last I have been a witness to fish being exhumed alive from beneath the mud of an Indian tank. On January 18, I was out fishing a tank, when I mentioned to an intelligent native official my wish to see fish exhumed from the mud of tanks. He remarked that the *Labyrinthici, Ophiocephalidae*, and *Rhimohobdellidae*, besides the *Saccobranchus* and *Clarias*, invariably retire into the mud of tanks when the water dries up, but denied that the Carps ever did so. Pointing to a neighbouring tank which was almost dry, he observed that we could at once make the examination. I promised a reward to whoever would let me see him exhume fish, and we adjourned to the spot.

The tank was about one acre in extent, and had not above 4 inches depth of water at its centre, whilst its circumference was sufficiently dried up to walk upon. The soil was a thick, consistent, bluish clay, and I refused to allow any one to go nearer the water than 30 paces. Six coolies set to work, and in less than five minutes