

(which is not co-extensive with Gray's *Onchidella*); whether this generic distinction can really be made must be left doubtful for the present.

The Onchidiadæ unite the characters of the Steganobranchiata, the Nudibranchiata, and the Stylommatophorous Pulmonata. They are, like the first two groups, generally marine. In having a ciliated furrow on the right side, they resemble the Steganobranchiata. In the general form of the body they are not unlike *Doris*. The central nervous system closely resembles that of the Pulmonata; still, the pedal ganglia are separated, as in the Nudibranchs; and the retractors of the rhinophoria also resemble those of this latter group. They are, however, more especially related to the *Stylommatophorous Pulmonata*, like them possessing rhinophoria (Ophthalmophoria) and a foot gland. In spite of its modification, the nervous system is fundamentally similar, the gastro-oesophageal ganglia being also absent. They have also the uropulmonary system of the Pulmonata, and resemble them further in the structure of the genital system; a *spermatocyst* is *always absent*. The *blood gland*, so commonly present in the Dorididæ, is also *absent*.

With regard to the phylogenetic development of the Onchidiadæ, it seems likely that they have really nothing to do with the Nudibranchiata. A number of intermediate forms, however, connect them with the Pulmonata, and it seems more reasonable to suppose that they descend from the *Stylommatophorous Pulmonata* (Nephropneusta, v. Jhering), with which group they agree so closely in anatomical structure, and from which they do not deviate too much in development. They seem, in short, to be Pulmonata which have become adapted to an amphibious or marine life.¹

Onchidium, Buchanan.

Onchidium melanopneumon, n. sp. (Pl. IV. figs. 25-27; Pl. V. figs. 1-27; Pl. VI. figs. 5-18, 20, 21).

Species *Onchidio tongano* magnopere affinis, colore dorsi obscuro (atro vel cæruleo-atro?), pulmone aterrimo.

Habitat.—Pacific (Fiji Islands).

Only one specimen was taken in shallow water at Kandavu, in the Fiji Islands, August 1874, and was preserved in alcohol. The length of the animal was 6.5 cm., its breadth 4 cm., and its height 2.5 cm.; the breadth of the mantle edge about 1 cm., of the foot about 2.1 cm.; the free anterior margin of the foot projects about 4 mm., the tail is 6 mm. long, the head 17 mm. broad, the length of the rhinophoria 5 mm., the diam. of the pneumostome-papilla 5.5 mm.

¹ Brock, in his critical review of the memoir of J. Joyeux Laffuie (Biolog. Centralblatt., Bd. iii., 12, 1883, p. 370-374), regards the Onchidia as Nudibranchiata, allied to them by their organisation as well as by ontogeny. The Memoir of Dr. Brock did not come to hand before this sheet had been printed, but I still regard his opinion as erroneous.