

genus, which he defined as being a disc with a large granulated centre, separated from a broad punctated limb by a circle of oblong cellules.

Among the Diatoms collected by the Challenger, a beautiful specimen of this genus has been found, but it does not exactly agree with all the characteristics indicated in the definition given by Ralfs. The disc is notably convex, and there is a central round space, covered with beautiful granules, which decrease in size as they approach the centre, and are at the same time disposed in excentric curves. Similar characteristics are to be found in *Brightwellia elaborata*, Grev.,<sup>1</sup> and *Brightwellia johnsoni*, Ralfs, MS.; but the *markedly round* form of the large cellules, which constitute the corona and divide the central from the outer part of the valve, readily differentiate our new frustule. The generic definition may accordingly be modified in the following manner:—Frustulum disciforme præstans partem centralem cellulosam a reliqua superficie punctulata vel granulata per coronam majorum cellularum divisam.

*Brightwellia murrayi*, n. sp. (Plate X. fig. 2.)

Forma rotunda, convexa; centro cellulis decrescentibus in lineas excentricas et concavas dispositas insigni; a lato margine radiatim granulato per coronam grandiuscularum rotundarum cellularum distincta.

This elegant disc is notably convex, and possesses a broad margin, which is covered with thickly disposed equal radiating rows of granules of medium size. The large central area is elegantly ornamented by pearl-like granules arranged in excentric curves, and decreasing in size as they approach the centre. The central part of the valve is separated from the peripheral by a corona of large round cellules, which serve to render the contrast between the two portions more conspicuous.

The specific name has been given in honour of Mr John Murray, the present Director of the Challenger Commission.

Porodiscus, Grev.

This genus is akin to that of *Coscinodiscus*, and was instituted by Greville<sup>2</sup> to embrace forms which agreed with the following definition:—"Frustules free, disciform, composed of two discs united by an intermediate ring-like zone; discs very convex, minutely radiato-cellulate or punctate, with a conspicuous central pseudo-opening or pore." No specimen of this interesting genus has hitherto been discovered, save in the well-known Barbados deposit in the United States of America; and it is therefore of the greatest importance that the frustule now to be recorded should have been found by the Challenger in a sounding made at the equator, as it goes to justify the belief that many, if not all,

<sup>1</sup> Greville, Descriptions of New and Rare Diatoms, *Micr. Journ.*, n. s., vol. i. p. 73, pl. ix. fig. 1.

<sup>2</sup> *Micr. Journ.*, n. s., vol. iii. p. 63.