the different valves the ventral line and margin alternately were found sometimes to be provided with, but sometimes to be devoid of, a nodule; so that in such forms the superior valve has not the marginal nodule which exists in the inferior. This circumstance recalls what takes place in *Cocconeis* and *Achnanthes*, since in the former a central nodule, and in the latter a stauros, is to be found only on the inferior valve.

Since, then, the genus *Euodia*, Bail., was instituted prior to that of *Hemidiscus*, Wall., the name of the united genera must be *Euodia*, Bail., and its definition may be amended as follows:—Frustulum cellulosum vel granulatum; valvis lunatis; nodulo ventrali marginali in inferiori valva.

I have already had the opportunity of observing similar lunate valves while preparing a report on a sounding made in the Atlantic by the "Porcupine" in 1869. At that time I noted the occurrence of lunate valves with and without the central nodule, and possessing profiles and structural characteristics sufficiently distinct from those of *Hemidiscus cuneiformis*, Wall., by the absence of the marginal series of points and the much greater delicacy of the radiating granulation, to justify the establishment of a new species. I then had a presentiment, which has now been verified by actual observation, that the two lunate forms, the one with and the other without the nodule, should be indicated as the inferior and superior valves of the same species; and it may be well here to append the definition of the species then established which is reproduced on Plate XII. fig. 1, so as to rectify the generic name, and to note the presence of a nodule on the inferior valve:—

Euodia (Hemidiscus) inornata, Cstr.—Valvis lunatis; linea dorsali parabolica, ventrali late arcuata; punctulis vel denticulis marginalibus nullis; nodulo marginali in inferiori valva. In mari Atlantico Septentrionali et in Oceano Pacifico.

## Euodia recta, n. sp. (Plate XII. fig. 3.)

E maximis; linea dorsali late arcuata, ventrali recta; cellulis subradiantibus; apicibus acuto-rotundatis. In Oceano Atlantico meridionali.

Among the Euodiæ brought home by H.M.S. Challenger this form is distinguished by its singular outline and its large dimensions. It is  $132 \mu$  in diameter, and its straight ventral line resembles the chord of an arc formed by the curved dorsal margin. The extremities are acutely rounded, and the sculpturing is cellulate and subradiating.

The specific name of this Atlantic species has reference to the character of the ventral side.

## Euodia orbicularis, n. sp. (Plate XII. fig. 15.)

Forma minima, inflata; linea dorsali curvata, ventrali arcuata; apicibus obtusis; minimis punctulis conferta. In Oceano Atlantico meridionali.

<sup>&</sup>lt;sup>1</sup> Atti Accad. Pontif. d. nuov. Lincei, March 1871.

<sup>&</sup>lt;sup>2</sup> Micr. Journ., vol. viii. p. 42, pl. ii. figs 3 and 4.