

O'Meara, in his article on the Diatoms collected at Kerguelen.¹ The name which I have suggested can accordingly only be applied in the event of some important distinctions being ultimately determined between the two types referred to.

Actinocyclus (?) *denticulatus*, n. sp. (Plate IV. fig. 5.)

Granulis radiatim ordinatis, medio æqualibus, ad marginem minutissimis et stipatis; denticulorum corona submarginali; pseudonodulo minimo margini proximo. In mari Arafura, et fossilis ad Richmond in Virginia.

Great difficulty has been experienced in arriving at the generic determination of the present form. This has arisen from the very minute size of the pseudo-nodule, which could only be recognised after very careful examination, being found, unlike what occurs in other species, in the immediate vicinity of the margin. Yet this peculiarity cannot be regarded as sufficient to regard it as not intramarginal, so that the generic definition is not infringed. It is also to be noted, although not an essential character, that the disc is not divided into equal parts by radiating lines. The granules are of moderate size and arranged in a radiating manner, but they become minute and crowded near the margin. There is a submarginal corona of denticules—a circumstance which has suggested the specific name that has been applied. The organism was found in the Arafura Sea, and it has been observed in a fossilised condition at Richmond, Virginia.

Actinocyclus (?) *anceps*, n. sp. (Plate IV. fig. 1.)

Valvis granulatis; granuli æquales ad centrum nullo certo ordine, hinc fasciculatim distributi; pseudonodulus minimus et ad marginem attingens. In mari Japonico.

The same difficulties as were encountered in the last case, have recurred here in so far as the determination of the genus is concerned, namely, (1.) the small size of the pseudo-nodule which is placed close to the margin, and (2.) the absence of radiating lines dividing the disc into equal compartments. The granules are of equal size and disposed in a fasciculate manner except in the central area, where they are irregular. This organism was found in the Sea of Japan.

Actinocyclus punctulatus, n. sp. (Plate XVI. fig. 3.)

Punctulorum lineis ab area umbilicali hyalina circum radiantibus, et in strias exeuntibus, nonnullis denticulis distinctioribus ad marginem distributis; pseudonodulo a margine paulisper secedente. Ut supra.

This beautiful Diatom approaches the *Actinocyclus pruinosus*, above described, in

¹ *Journ. Linn. Soc. Lond.* (Botany), vol. xv. No. 82, p. 58, pl. i. fig. 7.