(see fig. 187) differs very slightly in the characters of its skeleton from Amphilectus edwardi, a species common in British seas, but whereas the habit of the other known species of the genus is either massive or simply ramose, that of the species from the Molucca Sea is altogether novel in its family, although it simulates somewhat Caulospongia, Kent, which has been placed among the Suberitidee, and Foliolina, Schmidt, a Renierid. A new species of Crella (Crella navicelligera) is remarkable for the extraordinary lateral extension of the shaft of its small anchorate spicule, giving it the general outline of those reproductive bodies of the Gregarinidæ known as 'pseudonavicellæ.' The Stations between the Cape and Kerguelen Island exhibit a rich fauna of European facies, among which may be mentioned a new Vomerula and a fine Gellius of extraordinarily delicate and vitreous character, recalling that of many Lyssacine Hexactinellida, and with the ends of the usually doubly-pointed skeletal spicule quite rounded off. Of the curious, probably almost cosmopolitau, genus Rhizochalina, immense examples, in which the body alone attains a diameter of 6 inches, were obtained in Bass Strait; they are evidently identical with a specimen from South Australia, described by Lamarck in 1815 under the name of Alcyonium putridosum, and are closely related to Desmacidon fistulosa. Bowerbank. A study of the genus Tedania, by hardening and staining the soft tissues, shows that its systematic position is with the Desmacidinidæ

rather than the Renieridæ. The long fine accrate spicules commonly occur in bundles, and evidently represent the 'trichites' of Esperia.

"In all, the collection contains about eighty species belonging to this family, of which upwards of thirty are new to science.

"The Renieridæ proper are not numerous. The difficulty of finding constant and distinctive generic and specific characters in this subdivision is well illustrated by the large series of Amorphina megalirrhaphis, Carter, from Kerguelen Island. Most of these speci-

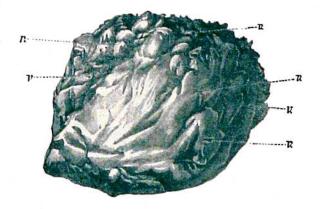


Fig. 188.—Amacphina magaticrhaphis, Carter, Variety with distinct dermal and primary skeletal fibres, and numerous vents (c), natural size, from the side. Christmas Harbour, Kerguelen Island, 60 fathoms.

mens, like the typical ones, have a rather pale brown colour and a glabrous surface, and consist of low irregularly-shaped masses; the only traces of skeletal fibre consist of some short strands apparently representing the primary or vertical fibres of other Renierids; however, the specimen figured (fig. 188), besides its definite, regularly lobate form and dark amber-brown coloration, possesses a very distinct set of primary fibres and a dermal reticulation like that of *Pellina*, with which genus it might have been placed if its relations to the other typically Amorphinoid specimens were not obvious. A *Pellina*, forming flat sheets of large size, occurs in 600 fathoms at the mouth of the Rio de la Plata,