

but it appears to conform to the ordinary type, though the longitudinal muscular layer is comparatively thin. The softening of the nerve-cords seems to have rendered their area diffuse.

Syllis ramosa agrees with Grube's "stolones"¹ in having no proper pharynx and proventriculus. The entire animal and its branches seem to be devoid of such, and yet the structure of the greater part of it is more in keeping with the ordinary type seen in *Syllis*. The large eyes of the female buds correspond with those in the "stolones."

Several species from the Philippines are described by Grube, in which an alternation of long and short dorsal cirri occur. Thus, for example, *Syllis lycochætus*,² from Samboangan, has long cirri of forty or fifty segments, and shorter with about half the number; while *Syllis flaccida*³ has from twenty-five to thirty joints in the shorter cirri, and from forty to fifty-five in the longer.

The only known marine forms in which gemmation occurred were those in which the posterior segments of certain forms gave off buds in linear series. Thus amongst the Derostome Rhabdocœla Dugès found in southern France a form which he termed *Catenula*, characterised by its linear budding. Two marine examples of the same genus were procured by Schmarda, one from South Africa and the other from New South Wales. The species from the Cape forms a chain of several individuals. Oscar Schmidt,⁴ again, in the same group has described the linear division of a *Microstomum*, and similar gemmation also occurs in *Stenostomum*. Amongst the Annelids it is more than a century since O. F. Müller observed the budding of *Nais proboscidea*. He mentions two varieties of this fission, viz., first, in which the last segment sprouts forth into a number of body-rings, the posterior being the oldest, and the anterior the youngest as well as the smallest. The second kind occurs when the body has attained forty segments, for then a division begins in the middle, two bodies of twenty segments each being formed; and Max Schultze⁵ and others have subsequently extended our information on this subject. The former maintained that the separation took place, not between two rings as O. F. Müller stated, but in the middle of a segment. He also found that when the parent-stock had been reduced to twelve or fourteen segments the budding process ceased. The former author also mentioned the division of *Chatogaster vermicularis*; and this habit in the same genus has further been elucidated by Gruithuisen, von Baer, Ehrenberg, D'Udekem, O. Schmidt, and Ray Lankester. O. F. Müller also pointed out the fissiparous condition in *Syllis prolifera*, in which a similar new body was attached to the old, apparently in the form of a tail. De Quatrefages⁶ met with a similar species on the coast of Brittany, and, like Müller, he found that the buds alone showed the sexual elements. Milne-Edwards⁷ described the same features in *Myrianida*, from Sicily, in which a new

¹ Annelidenfauna d. Philippinen, p. 110.

² *Ibid.*, p. 117.

³ *Ibid.*, p. 118.

⁴ Neue Beiträge zur Naturgesch., &c., Rhabdocœlen Strudelwürmer, 1848, p. 57.

⁵ *Archiv f. Naturgesch.*, 1849, pp. 293-304.

⁶ *Ann. d. Sci. Nat.*, sér. 3, t. i. p. 22, 1844.

⁷ *Ibid.*, t. iii. p. 17, 1845.