and the simple loop characteristic of *Aplidium* and *Amaroucium*. Consequently I question the great value of the intestinal twist as a diagnostic character, and I feel inclined rather to put my trust in a combination of characters, which are :—The separation of thorax, abdomen, and post-abdomen, and the somewhat lateral position of the latter, the twisting of the intestine, and the smooth-walled stomach. In regard to the last-named character, on which I would lay some stress, Savigny figures a perfectly smooth stomach in all his species of *Polyclinum*, and all the species which I have examined, and which seem to me to belong to this genus, have the stomach-wall smooth and free from all folds or irregular thickenings, an unusual condition in the Polyclinidæ. Consequently I have come to consider this simple type of stomach as one of the most important if not the primary characteristic of the genus *Polyclinum*.

Giard subdivided the genus, according to the condition of the systems, into (1) Aurantium, in which they are compound, and (2) Polyclinum proper, in which they are simple. According to this classification, all of the Challenger species, with the exception of Polyclinum pyriformis, would probably be placed under Aurantium, but, as it is exceedingly difficult, if not indeed impossible in some cases, to determine with certainty the condition of the systems in specimens preserved in alcohol, I have considered it best for the present to regard Polyclinum and Aurantium as forming one group. When the species described below come to be examined afterwards in the living condition, those of them with compound and irregular systems can, if their investigator confirms my suspicions as to their condition, be transferred to the genus Aurantium, leaving Polyclinum pyriformis as the sole representative of Polyclinum in the Challenger collection.

The new species may be distinguished by the following characters :---

