

as depending on microscopical observation ; but not to use along with others a character manifestly connected with distinctive habits of life, would be to neglect means within our reach for determining natural affinities, and as knowledge on the subject has rapidly increased would no longer be thought of. Greater characters taken from the brain and the absence of placentation, separate the Opossums from the Carnivora, but their dentition establishes an important relation of analogy, giving these animals the same position in the nonplacentated or Lyencephalous sub-class, which the Carnivora hold in the Gyrencephalous and the Insectivora in the Lissancephalous. The objections or doubts of Mr. Woodward have not then any force which should prevent general attention to the structure of the Odontophore as an aid in classification.

I confess that I cannot see the advantage gained by giving names to the principal varieties in the disposal of the teeth as has been done by Troschel and Dr. J. E. Gray. Several of the varieties seem to me to be very slight modifications of each other ; none of them could of itself alone give character to a natural group of animals, and I cannot perceive that the new terms afford any real assistance in stating the facts concisely and intelligibly. Along with the peculiarities of the Odontophore must be noticed the form of the muscle in which it is contained, and the absence or presence, form and markings, of what have been called the buccal plates.

Important characters are also derived from the number of the tentacles, the position of the eyes, the form of the foot and other circumstances relating to the animal. It is to the proper combination and subordination of these characters, giving prominence to general form and habit in distinguishing families, and in doubtful cases placing the creature in the group to which, considering all the characters it seems to have the nearest affinity, that we must look for a good natural system. In the higher divisions we look for fewer but more important distinctive marks accompanied by a certain recognisable aspect of each group, and its expression of one of those tendencies of development, five of which have been pointed out as the sources of the leading differences under each general type.

I cannot help here desiring to commemorate the obligations of all who study the Mollusca to Dr. J. E. Gray of the British Museum, for his important services to this branch of Science, as indeed to all departments of Natural Science.