

The genus *Ctenophyllia* Dana (= *Meandrina* Lamarck, 1801, + *Pectinia* (pars) Oken, 1815, + *Meandrina* (pars) Lamarck, 1816, + *Ctenophyllia* Milne-Edwards & Haime, 1848, + *Pectinia* Milne-Edwards & Haime, 1851 and 1857) was proposed for four species, *C. pectinata*, *C. quadrata*, *C. pachyphylla* and *C. profunda*. Dana explicitly states that the septa are 'entire or nearly so.' He also says, "This group appears to be related to the Euphyllia and has been placed in the same subfamily with them." Dana was absolutely correct in his characterization and in his understanding of the systematic relations of the genus. The *Ctenophyllia*, perhaps *quadrata*, of Whitfield differs utterly from Dana's genus *Ctenophyllia*, and according to nearly every modern student of zoophytes it would not be placed in the same family.

It can be seen, by examining the plates, that the valleys and collines of the central portion of the colony are directly continuous with those of the surrounding portion. The differences consist in the absence of pali, and in the larger collines and larger valleys in the central portion. The specimen merely shows the variation which may take place within a single colony.

The second paper is entitled, 'Some Observations on Corals from the Bahamas, with a Description of a New Species,' *Bull. Amer. Mus. Nat. Hist.*, Vol. XIV., Art. XVIII., pp. 223, 224, pls. XXXIII., XXXIV. (date, July 29, 1901).

The 'new species' described is named *Diploria geographica*. It is merely a form of the very abundant *Diploria labyrinthiformis* (Linn.) emend. Esper (= *Diploria cerebriformis* (Lamarck)). The only difference is in its possessing more angular gyrations than are common in *D. labyrinthiformis*.

These two papers are reviewed because, in my opinion, such errors should be corrected as soon as possible.

T. WAYLAND VAUGHAN.

SMITHSONIAN INSTITUTION,

WASHINGTON, D. C., Sept. 11, 1901.

TWO UNKNOWN WORKS OF RAFINESQUE.

BIBLIOGRAPHY does not indicate that Rafinesque ever published a work entitled 'Florula Lexingtoniensis,' or, in fact, it does not seem known that such a work was even contem-

plated by him. There has been discovered in the herbarium of the Academy of Natural Sciences of Philadelphia a single signature of a work with the above title, consisting of pages 73-80 inclusive, and marked K. As the number of pages would indicate, it is a quarto, though of small size.

Perhaps this intended work met the fate of the 'Western Minerva,' another of Rafinesque's Lexington attempts in literature, which, with the exception of three copies, was suppressed by the printer, because, it is said, the amount of his bill was not forthcoming. It is odd, in any event, that no mention of a 'Florula Lexingtoniensis' was made in Rafinesque's other writings.

Another of Rafinesque's works of which no record seems to have been made is the 'American Florist,' of which at least two parts appeared, as there are two copies of the second part in the library of the above-mentioned institution. This 'Second Series' is also entitled 'Eighteen Figures of Handsome American and Garden Flowers.' By C. S. Rafinesque, Philadelphia, 1832.' It is a large sheet, measuring from border to border 21½ by 17½ inches, bearing illustrations of *Arctium latifolium*, *Poteria sanguisorba*, *Betonica officinalis*, *Pyrus malus*, *Bryonia alba*, *Barbarea alliaria*, *Clinopodium vulgare*, *Chrysanthemum leucanthemum*, *Fraxinus quadrangularis*, *Agrostema githago*, *Melissa officinalis*, *Saxifraga granularis*, *Spartium scoparium*, *Bupleurum rotundifolium*, *Primula farinosa*, *Alchemilla alpina*, *Hedera helix*, *Cardamine pratensis*. The illustrations are much like those in his 'Medical Botany,' but are printed in black ink. They bear numbers 19-36, the first series, no doubt, holding numbers 1-18.

WILLIAM J. FOX.

ACADEMY OF NATURAL SCIENCES,
PHILADELPHIA, PA.

RECENT ZOO-PALEONTOLOGY.

THE present summer has been rich in paleontological discoveries. The most notable event is the discovery of the body of a frozen mammoth which is now being conveyed to St. Petersburg. Expeditions in this country have been sent out from many of the larger museums, and Professor Von Zittel has sent one of

his assistants, Dr. Broili, with Mr. Charles H. Sternberg, the well-known collector, into the Permian of Texas. The Natural History Museums of London have conducted explorations both in Egypt and in Greece. In the latter country Dr. A. Smith Woodward has been working in the Lower Pliocene of Pikermi, and has secured 47 boxes of valuable fossils, including horses, rhinoceroses and, of still greater rarity, another specimen of the hyracoid, *Pliohyrax*.

Mr. Charles W. Andrews, of the British Museum of Natural History, went on several expeditions into the Nile desert, accompanying the geological survey of Egypt. A year previous he had reported the existence of fossil mammals of undoubted Oligocene age; during the present expedition he made the most important discovery of early and generalized Proboscidea, especially of a small mastodon-like animal, with both premolar and molar teeth in place. Older beds were found to contain a primitive *Dinotherium*. Since the oldest *Dinotherium* and *Mastodon* of Europe are of Miocene age, this discovery not only carries the proboscidean phylum further back, but is strongly in favor of the theory of the African origin of this order. Africa has long been the dark continent of paleontology, and one of the results of English occupation will undoubtedly be a succession of paleontological discoveries of the greatest interest.

The special explorations for fossil horses by the American Museum have been completely successful. The Texas expedition in July secured eight skulls of *Protohippus* with portions of the skeletons associated. They are all in a hard matrix and somewhat crushed. The Colorado expedition has secured a complete skeleton, in a perfect state of preservation, of the large Upper Miocene or Loup Fork horse. This *Anchitherium* is the first complete skeleton of a horse of this period which has been found in this country. The explorations in the same region seem to demonstrate that there were four distinct types of horses, almost contemporaneous. It has been reported also that the Carnegie Museum secured some very complete horse skeletons, but these prove to belong to *Merycochoerus*, an oreodont.

Another discovery of importance, by the Texas party of the American Museum, is the nearly complete shell of the armored edentate *Glyptodon*, four feet in length, together with two feet of the armored tail and parts of the skeleton within the shell. Hitherto *Glyptodon* has only been known from teeth, recorded by Cope from southern Texas, in 1888, and by Leidy from Florida in 1889. The present specimen is almost identical in its elaborate shell-pattern with the Pampean glyptodons.

The explorations for Dinosaurs in the Jurassic have also been very successful. Several discoveries have been reported by the Field Columbian Museum party in western Colorado. A Carnegie Museum party has been working in the sandstone of Marsh's old quarry near Cañon City, and has secured parts of the skeleton of *Morosaurus*, and a skull of *Stegosaurus*. The American Museum has continued its exploration of the Bone Cabin Quarry, in central Wyoming, resulting in the discovery of the skull of one of the large Sauropoda, also the skull of a large carnivorous Dinosaur, and parts of the skulls of two other Dinosaurs, besides a quantity of skeletal material.

The Triassic is still the least known period. Reports from Professor Lester F. Ward of the existence of vertebrate fossils in Arizona led to a party being sent out by the National Museum under the leadership of Professor Ward, assisted by Mr. Brown, of the American Museum, resulting in the discovery of remains both of Dinosaurs and of the primitive crocodile-like Belodons. The Dinosaurs appear to be related to the Stegosaurian division, according to the preliminary examination made by Mr. F. A. Lucas, and there is also a new genus of Belodon in the collection.

H. F. O.

September 9, 1901.

REPORTS OF FOREIGN MUSEUMS.

THE report of the Australian Museum, Sydney, N. S. Wales, for 1899, shows that institution to be doing good work, although hampered by the smallness of its appropriation. Owing to what the curator terms a 'miserable appropriation' for the purchase of specimens, the growth of the collections has been principally