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On the Miocene Alcyonaria of Algeria

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The remains of *Apyornis*, which M. Grandidier found mixed with these bones of *Hippopotamus*, consist of a fragment of an egg, a tibia 64 centimetres in length*, several fragments of still greater dimensions, a femur, and several vertebræ. The femur is remarkably robust; its diameter, measured at the narrowest point of the diaphysis, is equal to more than one-fourth of the length of the bone†. It is very probable that a profound study of these specimens will throw much light upon the natural affinities of the gigantic bird from which they are derived—a subject for the investigation of which materials have hitherto been wanting.

The same deposit contained other bones of birds, as well as various parts of the skeleton of a land-tortoise, which M. Grandidier regards as constituting a new species, and which he designates under the name of *Testudo abrupta*. This traveller has also found remains of crocodiles; and he is led to believe that all these animals were contemporaneous with the Dodo of the island of Mauritius.

These discoveries, so interesting as regards both geographical zoology and palæontology, are not the only results obtained by M. Grandidier since his return to Madagascar. He has found three new species of Lemuridæ, to which he has given the names of *Chirogalus Samati*, *C. gliroïdes*, and *C. adipicaudatus*, and a new species of tortoise (*Testudo desertorum*). Lastly, he has discovered, in sandy beds at Etséré, a magnificent carapace of an *Emys* (*E. gigantea*, A. Grand.), measuring 132 centimetres in length and 139 centimetres in width, besides several parts of the same animal.—*Comptes Rendus*, December 14, 1868, tome lxxvii. pp. 1165–1167.

On the Miocene Alcyonaria of Algeria. By A. POMEL.

The author states that the Miocene strata of Algeria contain the remains of examples of the three chief types of Gorgonidæ, *Corallium*, *Isis*, and *Gorgonia*. Of the former, many fragments occur which are undistinguishable from the *Corallium rubrum* of the neighbouring coast. Allied to this is a new generic type described as *Stolonia sahariensis*. It has a stony, creeping, stoloniform sclerobase; in other words, it is a *Cornularia* with the sclerobase of *Corallium*. The calyces, forming pits with a nearly smooth bottom near the ramifications of the stolons, have left traces of their eight gastric chambers as deep sinuses, separated by ridges indicating the origin of the

* M. Grandidier adds that the two condyles of the bone are not very prominent and are separated by a rather shallow groove, and that the crests of the antero-superior tuberosity are tolerably prominent. Length measured from the antero-superior tuberosity to the outer condyle 64 centimetres; minimum circumference 16 centimetres; length of the inferior extremity 13 centimetres.

† The upper extremity of this femur is partially broken; the air penetrates into it by an orifice situated above the condyles. Length from the head of the bone to the outer condyle 20 centimetres; minimum circumference $27\frac{1}{2}$ centimetres; length of the inferior extremity 19 centimetres.

mesenteriod laminae. The sclerobase is very delicate, and its surface is marked with striæ like those of red coral.

An Isidine coral is described under the name of *Melitea oranensis*. The remains are rootlets and calcareous joints, of various form, but presenting the form and structure of those of *Melitea*. The ramification was dichotomous.

A fragment of a sclerobasic axis of stony texture and formed of concentric layers is referred by the author to the genus *Gorgonella*, under the name of *G. ? anomala*.

Of the Pennatulidæ the author notices the following forms :— *Virgularia sahelensis* had a long, cylindrical, straight, and smooth style, showing a radiated structure; *Graphularia barbara* had a style differing from the type of the genus in wanting the longitudinal furrow; *Cœlographula subcompressa* is the type of a new genus having a fistulous style. The style is elongated, straight, nearly smooth, slightly compressed, convex on one surface, a little depressed at the edges of the opposite side, the middle of which has an obsolete ridge.

These species, except the last, are found in the vicinity of Oran, in beds named Sahelian by the author and synchronous with the Tor-tonian beds of the Italian geologists. *Cœlographula subcompressa* occurs in the Cartennian of Milianah, immediately below the Helvetian with *Ostrea crassissima*.—*Comptes Rendus*, November 9, 1868, p. 963.

Are Unios sensitive to Light? By C. A. WHITE.

Those who have studied the habits of *Unios* in their native element are of course well aware of their habit of burying themselves in the mud or sand, leaving only the posterior portion projecting, for the purpose of giving ingress and exit to the respiratory currents of water. The sensitiveness of the margins of the incumbent and excurrent orifices to the slightest touch is also well known; but during the past summer, while collecting mollusks in one of the rivers of Central Iowa, I became convinced that these, or adjacent parts, were also keenly sensitive to light.

Unios were found numerously occupying the position referred to, plying their currents industriously through their distended orifices; but whenever my shadow in the bright sunlight came suddenly upon them, they invariably closed their orifices quickly and completely. This was repeated a great many times, and upon the same individuals, to assure myself that it was not caused by any agitation of the water or movement of impurities in it that might produce irritation of the parts. It was evidently the interception of the sun's rays alone that caused them so suddenly to close their orifices; yet it is worthy of remark that they did not quickly close them if sunlight was suddenly admitted to them while respiring in the shade.

The question then arose in my mind as to the possibility that the parts were sensitive alone to the rays of heat from the sun and not