NOTE ON THE GENUS ANISOTHYRIS, CONRAD, WITH A DESCRIPTION OF A NEW SPECIES.

BY W. H. DALL.

The shells described by Mr. Conrad, Prof. Gabb and Mr. H. Woodward, of which a large proportion come under the above designation, are, from the laminated colored clays of the Amazon Valley, identical, according to Prof. Orton, with the "Drift" of Prof. Agassiz. They are from Pebas, near the mouth of the Ambiyacu; and Pichana on the south side of the Marañon, and are also reported from other localities. While further information in relation to their stratigraphical position would seem desirable, from any point of view they form a very interesting group. The authors above mentioned unite in regarding them as mostly brackish water forms; some of them undoubtedly are, but on the whole I am inclined to the belief that the fauna was more strictly marine than it has been regarded, and that the intermixture of fresh water and land shells may have been due to their having been washed into the estuary in which the marine forms were indigenous. This view receives some confirmation from Mr. Woodward's remarks in reference to A. tenuis. Many of the genera, judging from their recent representatives, are exclusively marine, as far as we know, and there are none of them, except Hemisinus and Bulimus, which may not have lived in unadulterated sea water. Some of them are types of which we have no recent representatives, and on these we can make no decisive observations. The aspect of the shells, the well preserved colors, epidermis, and even remains of the cartilage, show conclusively that they are of very late geological age, and I am of the opinion that they cannot be older than Pliocene, and are perhaps later. In this supposition I am supported by older and much more experienced paleontologists.

Genus CORBULA, Brug.

Corbula, Brug., Enc. Meth. Pl. ccxxx, 1792. Lam., Hist. An. s. Vert. v. p. 494, 1818.



DESCRIPTIONS OF SIXTY NEW FORMS OF MOLLUSKS FROM THE WEST COAST OF NORTH AMERICA AND THE NORTH PACIFIC OCEAN, WITH NOTES ON OTHERS ALREADY DESCRIBED.

BY W. H. DALL.

The shells described in this paper are from many different

sources, of which two deserve special mention.

While acting as Chief of the Scientific Corps of the Western Union Telegraph Expedition, in 1865-6, I obtained leave of absence for three weeks, and proceeded to the town of Monterev, some ninety miles south of San Francisco, on the coast of This was in the month of January. During my California. stay, I devoted my entire time to the examination of the Mollusk fauna of that locality, which is very rich and varied. results of much arduous labor (I was unable to dredge), in which I was most kindly seconded by Dr. C. A. Canfield, of Monterey, may be found briefly summed up in the Proceedings of the California Academy of Sciences.* I prepared at that time a faunal catalogue of the shells of Monterey, with notes on habitats, and on such species as appeared to be undescribed. Copies of this MS. were sent to Dr. J. G. Cooper, R. E. C. Stearns, Esq., the late Dr. A. A. Gould, Dr. P. P. Carpenter, Dr. Wm. Stimpson, and Mr. Geo. W. Tryon, Jr., for examination and corrections or suggestions, in March, 1866.

Being called away by duties which took me to the confines of the Arctic Circle, I thought it best, in view of the fact that we were almost entirely without books or typically named shells in California, to defer the publication of this paper until my return, Meanwhile, the types of my collections were sent to Dr. P. Carpenter, of Montreal, the most eminent authority on the Mollusks of the West Coast of America, for his examination. Subsequent study has shown the wisdom of this course, several of the species having been incorrectly determined for want of types.

tata, Cpr. It is much larger and differently colored from angulata, and the carina in that species is near the middle of the whorl, the grooves are much stronger and the ribs reach the suture, which is not as deep as in the aleutica. In crebricostata the whorls are not so much angulated, the ribs pass from the suture to the lower end of the whorl, and the mouth is narrower and longer. The shell is also much more slender and smaller. These comparisons have been made with the typical specimens.

MANGELIA FUNEBRALE, n. s.

Shell reddish black, small, slender, acuminate; whorls seven or eight, rather rounded; aperture elongate, narrow; canal short, slightly recurved. Inner lip and columella smooth; sinus almost imperceptible. Sculpture consisting of fine rounded grooves about fifteen in number on the last whorl, rather stronger on the convexity of the whorls, separated by evenly rounded ridges about twice as broad as the grooves. These are crossed by rounded, regular, longitudinal ribs, about twelve in the last whorl obsolete on the anterior end of the whorl; suture impressed, not deep.

Lon. .46, Lat. .16 in. Defl. 30°.

Habitat, Sitka, Alaska Territory, one specimen; F. Bischoff, of the Scientific Corps of the W. U. Telegraph Expedition.

After a careful comparison with types I find no species at all resembling this from the Upper Californian coast. I refer it to Mangelia with some doubt, as that and allied genera stand sadly in need of careful revision and definition.

DAPHNELLA FUSCOLIGATA, n. s.

Clathurella? indet. Dall, MSS., 1866.

Shell fusiform, slender, solid, of four or five whorls; spire half as long as the shell, aperture the same; the latter narrow, with no perceptible sinus, and a short open canal; columella and outer lip smooth. Sculpture consisting of strong, revolving, elevated lines, six on the last whorl, crossed by strong, regular, longitudinal costæ of about the same size, twelve on the last whorl. These ridges are remarkably uniform, and their intersections produce a very conspicuously regular reticulation. The longitudinal ridges are, perhaps, a little thicker on the convexity of the whorls than above and below. General coloration white, with a reddish brown band between the suture and the first revolving ridge, another between and including the third and fourth ridges, the other revolving ridges being dotted with brown be-

tween their intersections with the costæ. These intersections, especially on the last whorl, appear somewhat nodulous.

Lon. ·29, lat. ·13 in. Defl. 30°.

This pretty little species belongs in the same group with "mitromorpha," aspera and filosa. The sculpture differs from D. filosa, and it is larger than and differently colored from D. aspera, which otherwise somewhat resembles it, but is much more acuminate at both ends, and more slender.

Habitat, Monterey, two specimens dead on beach; Dall, 1866.

CLATHURELLA, Cpr.

Clathurella, Cpr.; Maz. Cat. p. 399, 1857.

— Defrancia Millet 1826, not of Bronn, 1825.

(Defrancia, Bronn = Pelagia, Lamx., 1821, not of Pèron & Leuseur 1809, nor Quoy & Gaim., 1832.)

The acceptation of the generic name Clathurella depends primarily upon the stability of the genus Pelagia of Peron and Leuseur. I have been recently informed that this genus was not accepted by naturalists. If this be the case, Pelagia, Lamouroux, would stand, to the exclusion of Defrancia, (Bronn) which would in turn supersede Clathurella, for the present genius. As I have not had opportunity of verifying this information, for the present I prefer to retain the term Clathurella.

CLATHURELLA CANFIELDI, n. s. pl. 15, fig

Shell solid, elongated, turrited, of five or six whorls; apex pointed, nucleus small, hyaline, of one whorl, smooth, subsequent whorls more or less shouldered or carinated above, or rounded, suture impressed rather deep. Aperture less than half and more than a third as long as the shell, rather narrow; outer lip thickened, very effuse, internally ridged with from three to six elevated lines terminating in tooth-like nodules. Canal short, rather wide. Sinus somewhat below the suture, deep and prominent with the portion between it and the suture, forming a toothlike projection on the upper part of the inner lip. Columella smooth in the young, with from one to four crenulations or nodules in the adult, near the anterior end. Upper portion smooth. Sculpture consisting of revolving rounded even ridges, sixteen or less on the last whorl, crossed on the upper part of the whorl by numerous indistinct longitudinal plications, which vanish on the lower half of the whorl. One of the revolving ridges near the suture is sometimes stronger than the rest, giving a carinated shouldered or tabulate appearance to the upper portion of the whorls. Color yellowish white with three purplish