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CRETACEOUS AND TERTIARY FOSSILS.

BY W. M. GABB.

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1869.

O. VESPERTINA, Con.

- Ostrea vespertina*, Con.; Jour. Phil. Acad., 2 Ser., Vol. 2, p. 300.
O. vespertina, Con.; P. R. R. Rep., Vol. 5, p. 325, pl. 5, fig. 36, 38.
 Pliocene, Colorado Desert, Santa Barbara.

O. HEERMANNI, Con.

- Ostrea Heermonni*, Con.; Proc. Phil. Acad., 1855, p. 267.
O. Heermanni, Con.; P. R. R. Rep., Vol. 5, p. 326.
 Pliocene, Colorado Desert.

O. TITAN, Con.

- Ostrea Titan*, Con.; P. R. R. Rep., Vol. 6, p. 72, pl. 4, fig. 17; pl. 5, fig. 17 *a*.
 Miocene, Kirker's Pass, South of Mount Diablo, Walnut Creek, Estrella, San
 Luis Obispo, Ojai Ranch, Cuyama R. Cañon, Tulare Valley, and through-
 out the Coast Range wherever the Upper Miocene is found.

TAMIOSOMA, Con. T. GREGARIA, Con.

- Tamiosoma gregaria*, Con.; Proc. Phil. Acad., 1856, p. 315.
Tamiosoma gregaria, Con.; P. R. R. Rep., Vol. 6, p. 72, pl. 4, fig. 18.
Balanus Estrellanus, Con.; P. R. R. Rep., Vol. 7, p. 195, pl. 8, fig. 1.
Radiolites gregaria, Con.; Proc. Phil. Acad., 1864, p. 214.
Tamiosoma gregaria, Gabb; Pal. Cal., Vol. 2, p. 61, pl. 18, fig. 22, *a, b, c, d*
 Miocene, Estrella, Santa Marguerita Ranch, Tulare Valley.

POLYZOA.

CELLEPORA, Fabr., Auct. C. CALIFORNIENSIS, G. & H.

- Cellepora Californiensis*, Gabb & Horn.; Jour. Phil. Acad., 1862, p. 130, fig. 12.
 Post-Pliocene, Santa Barbara. Living.*

* All the Polyzoa in this list are from the Post-Pliocene marl of Santa Barbara. Most of them, if not all, have been found living on the coast, and I have made extensive collections of the recent Pacific forms, which, to my great regret, I have not been able to study, partly for want of time, and partly because my eyes will not permit the use of the microscope. My friend, Dr. S. B. Howell, Secretary of the Philadelphia Academy of Natural Sciences, has kindly undertaken the work, and I trust that his results will be as useful as the subject is interesting. I have retained here the Orbignyian generic names and classification, simply as a matter

C. BELLEROPHON, G. & H.

C. bellerophon, G. & H., *op. cit.*, p. 132, fig. 13.

REPTESCHARELLA, d'Orb. R. HEERMANNII, G. & H.

R. Heermannii, G. & H.; *op. cit.*, p. 137, fig. 20.

R. PLANA, G. & H.

R. plana, G. & H.; *op. cit.*, p. 137, fig. 21.

PHIDOLOPORA, G. & H. P. LABIATA, G. & H.

Phidolopora labiata, G. & H.; *op. cit.*, p. 138, fig. 21.

REPTOPORINA, d'Orb. R. EUSTOMATA, G. & H.

R. eustomata, G. & H.; *op. cit.*, p. 144, fig. 26.

REPTESCHARELLINA, d'Orb. R. DISPARILIS, G. & H.

R. disparilis, G. & H.; *op. cit.*, p. 147, fig. 29.

? R. HEERMANNII, G. & H.

? *R. Heermannii*, G. & H.; *op. cit.*, p. 147, fig. 30.

R. CORNUTA, G. & H.

R. cornuta, G. & H.; *op. cit.*, p. 147, fig. 31.

SIPHONELLA, Hagen. S. MULTIPORA, G. & H.

S. multipora, G. & H.; *op. cit.*, p. 154, fig. 38.

MEMBRANIPORA, Blainv. M. CALIFORNICA, G. & H.

M. Californica, G. & H.; *op. cit.*, p. 160, fig. 46.

of convenience; though I am satisfied that that author's divisions are eminently artificial. A more extensive acquaintance with the subject, based on a study of living as well as fossil forms, has satisfied me of the fallacy of his system, founded on partial characters derived from the skeletons alone.

M. BARBARENSIS, G. & H.

M. Barbarensis, G. & H.; *op. cit.*, p. 160, fig. 47.

IDMONEA, Lamx. I. CALIFORNICA, Con.

Idmonea Californica, Con.; Proc. Phil. Acad., 1855, p. 441.
Id., G. & H.; *op. cit.*, p. 168, fig. 56.

SEMITUBIGERA, d'Orb. S. TUBA, G. & H.

S. tuba, G. & H.; *op. cit.*, p. 169, fig. 57.

ENTALOPHORA, Lamx. E. PUNCTULATA, G. & H.

E. punctulata, G. & H.; *op. cit.*, p. 171, fig. 61.

LICHENOPORA, Defr. L. CALIFORNICA, Con.

L. Californica, Con.; Proc. Phil. Acad., 1855, p. 441.
Id., G. & H.; *op. cit.*, p. 176, fig. 68.

RADIATA.

CLYPEASTER, Lam. C. GABBII, Rém.

Clypeaster Gabbii, Rém.; Proc. Cal. Acad., 1863, p. 53.
Id., Gabb; Pal. Cal., Vol. 2, p. 12, fig. 64, 64 a.
Miocene, San Pablo, Martinez, Walnut Creek, and vicinity of Mount Diablo.

ECHINARACHNIUS, Van Phels. E. BREWERIANUS, Rém.

E. Brewerianus, Rém.; *loc. cit.*, 1863, p. 53.
Id., Gabb; Pal. Cal., Vol. 2, pl. 12, fig. 65.
Miocene, Walnut Creek.

SCUTELLA, Lam. S. GIBBSII, Rém.

Scutella Gibbsii, Rém.; *loc. cit.*, p. 13.
Id., Gabb; Pal. Cal., Vol. 2, pl. 13, fig. 66.
Miocene, near Buena Vista Lake.