Anachis avara similis, 14 mature specimens.
Anachis obesa obesa, several specimens.
Anomia simplex, 3 mature specimens.
Arca occidentalis, 8 mature, 2 young specimens.
Arca transversa, 2 young specimens.
Cantharus tincta, 4 specimens.
Chiton sp., 3 specimens.
Clathrodrillia albinodonta, 3 mature specimens.
Clathrodrillia alesidota macilenta, 3 mature specimens.
Crepidula aculeata, 2 specimens.
Crepidula fornicata, 2 specimens with egg-masses.
Erato maugeria, 1 specimen.
Modiolaria lateralis, 2 specimens.
Murex pomum, 1 young specimen.
Murex rufus salleanus, 5 young specimens.
Ostrea virginica floridana, many young specimens.
Urosalpinx perrugatus, 3 mature, 5 young specimens.
Many barnacles.
Many worm-tubes, both limy and built of sand.
One small holothurian.
Two hydroid colonies with many small crustaceans (*Caprella*) among the branches.
Several small crabs and a number of other small crustaceans.
Several colonies of encrusting bryozoans.
Two small sponges.
One annelid worm.
One flat worm.
Egg-cases of *Cantharus tincta, Muricidea multangula* and *Anachis avara similis.*

Twenty-five different kinds of animal life, more than a hundred individuals of eight different phyla were living on an area approximating 55 or 60 square inches of the shell surface of one *Atrina.* Only creatures seen by the unaided eye are noted. The microscope would have revealed many more.

LOUISE M. PERRY
SANIBEL, FLORIDA

A GONAD PARASITE OF THE STARFISH

CÉPÈDE in 1910[1] described the astomate holotrichidan, *Orchitophyra stellarum,* from the testis of *Asterias rubens.* He remarked that this protozoan is confined to male starfish, where it causes castration. Piatt in 1935[2] has found this parasite in the testis of *Asterias forbesi* in Long Island Sound.

During the summers of 1934 and 1935 this protozoan was found in the ovaries of *Asterias vulgaris,* which were taken from the oyster beds in Malpeque Bay, Prince Edward Island. This is apparently the first record of this parasite infesting starfish ovaries. There was no obvious pathological condition of any of the infested ovaries examined, and the eggs therein contained appeared normal and were fertilizable. However, a histological examination of an infested ovary has not yet been carried out.

The incidence rate of this parasite, taken from a relatively small number of specimens and over a limited area, appears to be about 25 per cent. of the females. Cépède in his paper reported that only three starfish out of 6,000 examined were infested. The incidence rate observed by Piatt was about 9 per cent. of the males.

Cépède observed that although Orchitophyra is endoparasitic in the starfish, it is not injured by being placed in sea water. Cultures for starfish larvae, from eggs fertilized in the laboratory, were set up in 1934. The eggs used in one culture happened to be from an infested ovary. After a week's time, when the culture was discarded, Orchitophyra was active and apparently normal.

G. F. M. SMITH
UNIVERSITY OF TORONTO

THE FIRST RECORD OF A DINOSAUR FROM THE WEST COAST

ALTHOUGH the Cretaceous deposits of California are extensive and many thousand invertebrate fossils have been collected from these rocks, vertebrates of any kind are exceedingly rare. A few sharks' teeth and fish scales have been collected in this series; but evidence of the reptilian life, so common elsewhere, has been totally lacking until the present time. Some weeks ago, Mr. Allan Bennison, an astute high-school student, found a vertebra in an exposure of the Moreno Cretaceous near Gustin, Calif. Mr. Bennison had been collecting invertebrates in this area for some time, and realized that this find was important. It was forwarded to Dr. G. Dallas Hanna, of the California Academy of Sciences, San Francisco, who, in turn, brought it to the Museum of Paleontology, University of California. It proved to be a pre-sacral vertebra of a *Phythonomorpha,* probably of the *Platycarpus-Tylosaurus* group.

Mr. Bennison continued his work in this region, not content to rest after having turned up the first recognizable reptile from the California Cretaceous. In June, in the same Moreno formation (Upper Cretaceous), near Patterson, Calif., Bennison discovered the first specimen of the dinosauria from the West Coast Cretaceous. The material is very fragmentary and seems to represent only the hind quarters of the animal. There are twenty-seven vertebrae (caudal), parts of the foot and the ends of some of the posterior limb elements. There are over 500 fragments of bone, from which, it is hoped, enough may be "pieced" together to make an accurate determination of the form represented. It is, of course, not possible to definitely

[1] C. Cépède, *Arch. Zool. Exp. et Gen.,* 5e Serie, 3, 1910.
[2] J. Piatt, Fisheries Service Bulletin No. 247, U. S. Department of Commerce, 1935.