

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 tinctoria, 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 tinctoria*, *Muricea 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.

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A GONAD PARASITE OF THE STARFISH

CÉPÈDE in 1910¹ 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 1935² 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.

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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.*, 5^e Serie, 3, 1910.

² J. Piatt, Fisheries Service Bulletin No. 247, U. S. Department of Commerce, 1935.

determine the genus; but from the recognizable fragments found, it appears to be a member of the Hadrosauridae, a "duck-billed" or Trachodont-like form.

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NOTICE OF PROPOSED SUSPENSION OF RULES OF NOMENCLATURE IN THE CASE OF BOHADSCH, 1761

THE undersigned invites the attention of the zoologi-

cal profession to the fact that application has been made to the International Commission on Nomenclature to suspend the Rules in Bohadsch 1761, "De Quibusdam Animalibus Marinis" and its translation 1776, on the ground that the application of the rules in these cases will produce greater confusion than uniformity.

Zoologists interested in this case, for or against suspension, are invited to present their views to the commission.

C. W. STILES,
Acting Secretary

SCIENTIFIC BOOKS

THE DIARY OF ROBERT HOOKE

The Diary of Robert Hooke, M.A., M.D., F.R.S. 1672-1680. Transcribed from the original in the possession of the Corporation of the City of London (Guildhall Library). Edited by HENRY W. ROBINSON, librarian of the Royal Society, and WALTER ADAMS, B.A. With a Foreword by SIR FREDERICK GOWLAND HOPKINS, O.M., president of the Royal Society. pp. xxviii + 527, 8 pls., 3 figs. in text. Taylor and Francis, London, 1935. 21 shillings.

THIS diary was published within a few days of the tercentenary of the birth of its famous writer, who lived in a time fertile in intellectual developments and who himself was a part of the illumination of that brilliant period in the history of scientific accomplishments of the English people.

Robert Hooke (1635-1703) had unusual inventiveness and mechanical skill and was an observer of unusual accuracy and power of interpretation. He also had a penchant for experimentation and utilized his inventive faculties in the perfecting of scientific instruments. He writes quaintly of the construction of such instruments and their subsequent use in observations on nature, as follows: "I design alwayes to make them follow each other in turn, and as 'twere to interweave them, being apart but like the Warp or Woof before contexture, unfit either to clothe or adorn the Body of Philosophy."

His inventions include the spring balance in watches, the anchor escapement, the wheel barometer, the improvements in the air pump, the telescope and the microscope. He formulated Hooke's Law in mechanics, namely, that strain is proportional to the stress producing it within elastic limits. He introduced freezing-point as zero on the scale of the thermometer. He discovered the two stars in Orion's belt. His "Micrographia" revealed the cellular structure of plants, and to him is due the first glimmer of the cell theory, although he did not state this generaliza-

tion or realize what his own accurate figures fore shadowed. His theories of light and of combustion were in line with modern hypotheses. Sir F. G. Hopkins in his "Foreword" supports the view that had Hooke known more mathematics he even might have forestalled Newton in his understanding of universal gravitation. Hooke's mind was analytical and his clarity of thinking placed his "Micrographia" and his "Cutlerian Lectures" among the foremost classics of scientific literature.

Leeuwenhoek was an industrious amateur, whose indomitable curiosity fired his zeal and whose pride urged him into undeserved notoriety. His discoveries were assembled higgledy-piggledy, without significant relations, and his secrets were guarded jealously. Hooke, on the other hand, associated himself with other brilliant minds, and his "Micrographia" reflects the powers both of analysis and of synthesis. He was not revealing an *arcantum* but was writing a logical account of a new field of knowledge.

The recognition which Hooke received at the hands of his associates is indicative of his intellectual power and of the confidence of his colleagues in his skill and judgment. In 1662, the second year after the foundation of the Royal Society of London, he was made its "Curator of Experiments," a post held throughout his life. This led to his contributing continuously to the meetings of the society. In 1663 he was made a fellow, and, succeeding Oldenburg in 1677, he was its secretary to 1682. He edited the society's "Philosophical Collections." The "Diary" was given in 1708 to Richard Waller, who then was secretary of the Royal Society, and who appended this note:

Memorandum: Mr. Dillon the husband of Dr. Hookes Neice who was Administratrix to Dr. Hook who dyed without a Will gave mee this MSS about December in the year 1708. he having found it amongst Dr. Hooks Remains. to whome and to his Wife I am obliged for all the papers I had put into my hands of that great genius