

## Short Reviews

*All about Fish and other Denizens of the Seas and Rivers.* By W. S. Berridge. Pp. 254 + 63 plates. (London, Bombay and Sydney: George G. Harrap and Co., Ltd., 1933.) 7s. 6d. net.

MR. BERRIDGE fills his pages with a large amount of interesting information concerning marine animals. There are chapters on fish in general, fish that make nests, the food of fish, luminous fish, electric fish, goldfish, and many other animals including invertebrates such as oysters and cockles, lobsters and shrimps, corals and sponges. The book is amusing and the original photographs are good, sometimes very good, but it is a pity that they do not match the text, for when reading about a basking-shark or a sea-serpent we find pictures of goldfish, and a remora illustrates the remarks on oysters.

Much that is instructive is included in the accounts of the habits and peculiarities of marine animals, some of world-wide distribution. However, there are a few statements which might be altered to advantage. For example, one would certainly infer from the author's notes that *Noctiluca* is rare off British coasts when in reality it is common but erratic in its appearances, and although it is extremely important as a light-giving organism, there are many other minute members of the plankton which may cause phosphorescence, or luminescence, in the sea. Again, the British squid may breed in almost any month of the year and not in May and June only, and the pea-crab, which is stated to be fairly common off the Irish coast, may be found in mussels on almost any suitable bed.

*Mimicry.* By Prof. G. D. Hale Carpenter. With a Section on its Genetic Aspect by E. B. Ford. (Methuen's Monographs on Biological Subjects.) Pp. ix + 134. (London: Methuen and Co., Ltd., 1933.) 3s. 6d. net.

THIS little book is intended to present the theory of mimicry as developed by natural selection. All those who accept the theory and delight in finding new proofs for it will welcome the book, since the author has produced a clear and concise summary of the main facts and arguments in its favour. On the other hand, the treatment accorded to criticisms of the theory is very inadequate, and some of the most serious objections to it are dismissed in a few words; while the opinions of some well-known critics of the theory cannot be found in the text, and their works do not appear in the list of references. The latter is very complete with regard to some authors but it is surprising not to see in it any works except in English. This may create an impression that the mimicry theory has no followers and supporters outside Great Britain. Actually, this is not so, and it would strengthen the case of mimicry if at least the outstanding Continental and American contributions to it were quoted.

*Causality: a Law of Nature or a Maxim of the Naturalist? Lecture delivered at the Royal York Hotel, Toronto, on May 14th, 1932, much enlarged.* By Dr. Ludwik Silberstein. Pp. viii + 159. (London: Macmillan and Co., Ltd., 1933.) 4s. 6d. net.

As a forceful defence of the principle of determinism in Nature, as against the current interpretations of the new physical theories, this book needs careful thought. The author believes that the menace to determinism is rather premature and marks only a provisional stage in the re-shaping of the foundations of physical science. A correct interpretation of the principle of causality would show that Nature is not necessarily left to chance. This interpretation consists in considering the principle of causality as a maxim of the naturalist rather than a law of Nature. In this heuristic capacity, the principle is used to supplement, with other fragments of Nature, every incomplete system encountered, until it is amplified to a complete, undisturbed whole. T. G.

*Geschlechtsgebundene und geschlechtskontrollierte Vererbung.* By Björn Föyn. (Handbuch der Vererbungswissenschaft, herausgegeben von E. Baur und M. Hartmann, Band 1, Lief. 17.) Pp. iv + 122. (Berlin: Gebrüder Borntraeger, 1932.) 25.20 gold marks.

THIS is a summary of recent knowledge of sex-linked and sex-controlled, or sex-limited, inheritance, including the recent genetical and cytological studies of sex-linked inheritance in *Abrazas*, *Drosophila*, *Sciara* and *Phytodecta* among insects; *Lebistes* and *Aplocheilus* among fishes; and *Melandrium* among plants. Each case is carefully elucidated, with a free use of illustrations. Many other animals are considered in the special part, and there is a brief statement concerning the sex-chromosomes and sex-linked inheritance in man. A bibliography of twenty pages completes a very useful summary of this field of heredity.

*The Aquarium.* By E. G. Boulenger. Pp. 71. (London: Poultry World, Ltd., 1933.) 1s. 6d. net.

THOSE who wish to keep a fresh-water aquarium would do well to provide themselves with this little book, which contains a large amount of useful information. First comes the making of the aquarium and the plants which are most suitable for it; following this there are chapters on goldfish, cold-water fish and tropical fish, with notes on the habits, food and proper treatment of each species. These notes are interesting and amusing, and one can learn much from such a short survey. The illustrations, figuring most of the best-known aquarium fish, are by Mr. L. R. Brightwell, who always imparts an individuality to every creature he draws.