

## GARRETT'S FISHES OF THE PACIFIC

*Andrew Garrett's Fische der Südsee beschrieben und redigirt.* Von Albert C. L. G. Günther, Heft i. (Hamburg: L. Friederichsen & Co., 1873.)

THE house of Hr. Cesar Godeffroy & Co. of Hamburg have for several years employed scientific collectors in various parts of the Pacific to prepare and send home specimens of natural history. These have been stored up at Hamburg, in what is now a well-known scientific institution, the "Museum Godeffroy," under the care of an active superintendent, whose services have been engaged to take charge of and arrange the various objects thus accumulated. But not content with thus bringing the rarities of the Pacific within the grasp of European naturalists, Herr Godeffroy has obtained the assistance of some of the best known workers in Science for examination of these materials. The extensive collections of birds made for him by Dr. Edward Gräffe were submitted to the well-known ornithologists Drs. Finsch and Hartlaub of Bremen, and formed the basis of their excellent work on the "Birds of Central Polynesia," published a few years since. For the working out of the Polynesian Fishes, of which we believe, Herr Godeffroy's collection is still more complete, the co-operation of Dr. Günther of our National Museum, the most distinguished of living ichthyologists, has been obtained, and the book now before us contains the first-fruits of Dr. Günther's labours.

The brilliant colours which adorn many of the Polynesian fishes have been well known to travellers in those regions since the days of Cook, and have been frequently described in lively terms. Unfortunately, however, these colours entirely disappear in fishes preserved in spirit after the ordinary fashion, so that their beauty can only be appreciated by visitors to the distant seas which they inhabit. In order to exhibit these colours in the present work, Herr Godeffroy has acquired a large series of drawings, taken from living specimens, by Mr. Andrew Garrett, who has been many years resident in the Sandwich and Society Islands, and in other parts of Polynesia. Under these circumstances we may well anticipate the production of a first-rate work, more especially as the services of the unrivalled lithographic artist, Mr. G. H. Ford, have been secured to put the drawings on the stones.

Dr. Günther commences his work in systematic order with the Serranidæ, of which numerous brightly coloured forms inhabit the various Archipelagoes of the Pacific. Twenty splendid plates illustrate the letterpress, and it is only wonderful how they can be produced at so small a cost. Nine similar parts will complete the work, which bids fair to become one of the most perfect ichthyological monographs ever issued.

## OUR BOOK SHELF

*Manual of Comparative Anatomy and Physiology.* By S. M. Bradley, F.R.C.S. Second Edition. (Manchester: Cornish; London: Simpkin, Marshall and Co.)

ENCOURAGED by the success of an earlier and much smaller edition of this work, the author has entirely rewritten the new one. In so doing, we think that he could not have made a greater mistake, as the small size of the

original precluded the introduction of detail with which he is not acquainted, and so prevented his exposing his ignorance to the world at large. The impression which remains after the perusal of a few pages is, that the author, after reading rapidly through some one of the standard text-books on Zoology, wrote down his impressions as far as his memory served him. Faults of omission are not uncommon in text-books, especially when they are written by those who are not practically acquainted with their subject, but faults of commission are, fortunately, much less common. In the work before us there are several of the former, and they cannot all be laid down to want of space; for in the case of the Myriapoda, respecting the peculiarities of the main divisions of which the position of the legs is not referred to, two-thirds of the page on which they should have been found is left blank before the commencement of the following chapter. The faults of commission are so numerous that they admit of easy classification. There are those of sheer carelessness from inattentive reading, otherwise, how is it that we are told that the Dugong has six cervical vertebrae, and that the *Tragulinae*, or Musk Deer (!) have all the tarsal bones ankylosed. Others arise from a want of power to realise the meaning of the ordinary descriptions of well-known anatomical facts, as when it is indicated that the ventricles of the Crocodile's heart are not completely separated, and the marsupium, or pouch of the female Kangaroo in the male is everted, and supports the penis. Absolute and inexcusable errors it is difficult to explain, but among such we are told that the Nummulites are Cephalopoda; the Marsipobranchii have more than one nasal sac; that in the Lepidosiren the nasal canals are not open at both ends, and the vertebrae are ossified; and that in the Bear the clavicles are more developed than in other Carnivora, when they are in reality absent altogether. Peculiarities found in one division are omitted with regard to them, and referred to others entirely different, as when it is stated that among the Marsupialia "each oviduct in the female leads into a perfectly distinct uterus, which opens into a separate vagina, which is also the passage of the urine," and that in the male the vasa deferentia "open into a cloaca common to the urinary and generative secretions." These remarks apply to the Monotremata well enough, how is it they are omitted in speaking of them, and stated of their allies, which in these respects are quite differently constructed. We rarely remember to have seen a work so carelessly undertaken, and by so incompetent an author.

*Seventeenth Half-Yearly-Report of the Marlborough College Natural History Society for the Half-Year ending Midsummer, 1873.* (Marlborough: Perkins.)

ALTHOUGH the tone of the Preface to this Report is not quite so desponding as that of the previous one, still it contains a good deal of complaint. It seems to be the rule, for which we cannot see any reason, that members on entering the fifth form resign their membership. Is it because their schoolwork occupies all their time? or is it considered beneath the dignity of a fifth-form boy to belong to such a society? Probably no satisfactory reason could be assigned for the practice, therefore we hope it may not be continued. Another discouragement to the society has been the difficulty of getting papers except from a very few, who, after a time, "struck work," because they "felt that others ought to help in keeping up the interest of the meetings." We think the few workers would have been more likely to attain this end had they continued to prepare and read papers amid all discouragements; by this means, we think, they would be more likely "encourager les autres." We see no reason why the reading of papers should not be combined with the exhibition of objects and with discussions. Is not the Marlborough College Society too sensitive? From the reports of the field-work done and the collections