

quite recent examples of many species of reptiles, fish, and the lower animals, the true characters of which, in many cases, were but imperfectly known, from their having been described from often badly-preserved specimens.

The value of such a work will be readily granted, and the energy of the Victorian Government will be duly appreciated by those of us in the mother country who know the difficulty there would be in our obtaining Government sanction for the publication of like descriptions of the animal inhabitants of these islands.

Of all the forms described and figured in these decades, the originals are preserved in the National Museum at Victoria. The first volume was completed with the tenth decade in 1885, and it forms a large octavo volume of 100 plates and over 200 pages, with a classified index. Since then, Decades 11 to 15 have been published, bringing the date to last year.

On this important work, which we fear is not so well known in this country as it ought to be, we venture to make the following remarks. Of the century of plates forming Vol. I., fifty-four are illustrative of vertebrate forms, and forty-six of invertebrate ones. Of these latter no less than twenty-eight are exclusively of Polyzoa, which seems to us a somewhat unfair treatment of the other groups. We cannot object to it on the score of the advancement of science, but we think we justly may, so far as the usefulness and interest of these decades are for the public. Another criticism, and we have done: the references to where the species have been described are for the most part useless. For example, to the species figured on the rooth plate, *Goniocidaris tubaria* (Lam.), where we find "*Cidarites tubaria* (Lamk.), Anim. sans Vert.," there is not another word added, and this reference is not only defective but erroneous. This is a subject that ought to be attended to: we do not demand a full and detailed synonymy, but would, in such a publication, be content with just such information as would enable a student to see where the generic and the specific names adopted by the author were to be found first described; and to give this, few would be better qualified than Prof. McCoy.

With scarcely an exception, the plates have been exceedingly well executed; those on insects by A. Bartholomew demand a special word of praise, and the same artist has also done full justice to the fishes and the Mollusca, the plates representing the "tuberculated argonaut" being nearly perfect. Another artist whose work we may allude to is Dr. Wild, well known in connection with the *Challenger* Expedition; among the drawings executed by him, that of the Australian fur seal, a group with the adult male, female, and a cub, is worthy of praise.

The descriptive details vary, as might be expected, in interest; sometimes we have most interesting and full accounts of the life-history of the species, as notably in the cases of the fur seals just referred to, of the case moths (*Metura*), the bell frog, the great cicada, and others too numerous to mention; and were our space unlimited we would gladly show how all-sided is the information to be gained from these decades. The following will serve as an example. A common moth, first described from New South Wales by Lewin as *Phalænooides glycine*, from the larvæ feeding on the leaves of a leguminous plant

(*Glycine bimaculata*), is equally common in the colony of Victoria, but there the larvæ fed on *Gnaphalium luteoalbum*, a common weed. Since the planting of vineyards this moth has increased in enormous numbers, and the larvæ have completely abandoned their original food, and now devour only the leaves of the grape vine, on which the moth multiplies beyond measure. It is a puzzle how the female moth was guided to deposit her eggs on a plant of so different a character from that which she had been accustomed to, and which must have been to her unknown. The injury done to the vineyards of Victoria by this insect is enormous, and would seem, in spite of many remedies, to be increasing. Insectivorous birds will not eat the marauding larvæ; and children, who might keep down the plague by hand picking, must, by law, attend their schools.

We hope to again notice these decades on the completion of the second volume. In the meanwhile we have said enough to call our readers' attention to the value and interest of the information which they contain; and we congratulate Prof. McCoy and the Victorian Government on their publication. E. P. W.

OUR BOOK SHELF.

Technological Dictionary. In 3 vols. English-German-French, French-German-English, German-French-English. Third Edition. (London: Trübner and Co., 1888.)

THE inventions and discoveries of the present century have introduced a very considerable number of new words into the various languages of the world, but more especially into the European languages. As these words do not occur in ordinary dictionaries, special dictionaries embodying them are necessary to a great number of persons. Thus, to facilitate communication in commercial transactions between one country and another, and to enable students of science and technology to profitably consult works written in languages other than their own, they are indispensable. As regards the three principal languages of Europe, this want is supplied by the work before us, the third edition of which has recently been completed by the publication of French-German-English, and German-French-English volumes. The third edition of the English-German-French volume was published in 1878. The first edition dates as far back as 1852, and since then the work has been thoroughly revised and new matter added.

The work embraces the terms employed in the arts and sciences, engineering, architecture of every description, navigation, astronomy, meteorology, mining, artillery, &c. In addition to the terms relating to the various appliances, processes, and substances, there are also those applied to the different orders of people concerned with them, from the "doffer" of the spinning mill to an "Admiral of the Fleet." Teachers of scientific and technological subjects will also find the equivalents of the great majority of the terms they find it necessary to employ, the names of chemicals and minerals included. The work is wonderfully comprehensive, and the arrangement is all that could be desired.

The best authorities have been consulted, and tedious processes adopted, with the view of obtaining indisputable accuracy, and this has practically been accomplished. No effort has been spared to make the work deserving of the important place in literature which it should naturally occupy, and no recommendation of ours is necessary. It certainly ought to be available for reference in all libraries of any importance. A. F.