

connected with menageries; while many of such notes are valuable clues to their mode of life in a state of nature.

A subject in which Mr. Bartlett took especial interest is that of hybrids; and to him, amongst others, belongs the credit of showing that sterility is by no means such a general attribute of the products of crossing as has been supposed. The chapter on hybridisation is, therefore, worthy of the best attention of naturalists.

R. L.

Wild Life at Home. How to Study and Photograph it. By R. Kearton, F.Z.S. Pp. xv + 188. (London: Cassell and Co., Ltd., 1898.)

THIS delightful book, by the author of the well-known "With Nature and a Camera," deserves a wide popularity. It should be of value in spreading the love of the "bloodless and harmless sport," of which Mr. Kearton writes so enthusiastically. The beautifully reproduced photographs are in themselves more than justification for the addition of the volume to the numerous bird-books already in existence, and the careful and practical instructions which are given to the reader, to enable him to secure similar trophies to those illustrated, will tempt many nature-lovers to follow in the footsteps of Mr. Kearton and his brother, Mr. C. Kearton, who has provided the photographs. In addition to illustrations and notes on birds, the volume contains chapters, with striking pictures, on mammals, insects, and other forms of life.

A Pocket Dictionary of Electrical Words, Terms and Phrases. By Edwin J. Houston, Ph.D. Pp. iv + 945. (London: Swan Sonnenschein and Co., 1898.)

THE growth of the terminology of electrical science has been so rapid, that the new terms and phrases coined since the publication of the last edition of the author's larger dictionary, exceed in number those which were originally in use. This necessitated a re-casting of the previous work; and to avoid the production of a cumbersome volume, the greatest attention has been paid to conciseness of expression, with the result that this handy little epitome has been produced. It is even now too large for a pocket dictionary, and it would perhaps have been better to have reduced the bulk by omitting many of the words which are familiar enough to need no explanation.

Ricettario Industriale. By I. Ghersi. Pp. 562. (Milan: Ulrico Hoepli, 1899.)

This book, which is one of the latest additions to the well-known series of "Manuali Hoepli," contains some 940 recipes used in the arts. Among these there are many which will be of value to scientific workers. Of the subjects treated, the following are a few of the more important:—Coloration, plating and cleaning of metals; paper, celluloid, cements, ebonite, matches, preservation of fruit, flowers, eggs, &c.; bleaching, ink, oils, perfumes, soap, varnishes, ivory, glass, wine. So far as we are able to judge, the recipes given are practical and up to date.

Deutscher Botaniker-Kalender für 1899. By P. Sydow. Pp. 198. (Berlin: Gebrüder Borntraeger.)

THE dates of the births or deaths of distinguished botanists, mostly natives of Germany, are indicated in this pocket diary for 1899. In addition, the rules of nomenclature followed by officers in the Imperial botanical gardens and museums of Berlin are given; and there are lists of works on cryptogamic plants, of botanical gardens in Germany and elsewhere, botanical and natural history museums and collections, and an alphabetical list of the officers in botanical museums and great herbariums.

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LETTERS TO THE EDITOR.

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The Anthropological Expedition to Torres Straits.

THE members of the Cambridge Anthropological Expedition to Torres Straits have now completed their investigations in the Straits. Dr. Rivers and Mr. Wilkin have left for England, while the other members of the expedition have proceeded to Borneo to study the anthropology of the Baram district of Sarawak. The health of the party has been excellent.

The natives of Murray Island were studied with most detail, as, owing to their isolation, they have been less modified by contact with alien races. Some of the party stayed about four months on the island, while others had only a couple of months, owing to a trip having been made to the mainland of New Guinea.

The New Guinea contingent visited the coast tribes between Kerepunu and the Mekeo district, and several excursions were made for short distances inland. There was not enough time spent at any spot for a thorough investigation of the natives, but a considerable amount of information was obtained in most of the branches of anthropology with which the expedition is concerned, which will prove of value for purposes of comparison.

The researches on the Murray islanders were fairly thorough, and will form a basis for comparison with the other islanders and allied peoples. Over a month was spent in Mabuig (Jervis Island) by all the party, with the exception of Messrs. Myers and MacDougall, who had previously started for Borneo. Although the time spent in Mabuig was short, a satisfactory amount of work was accomplished owing to the conditions being favourable. Observations were also made on several other islands in Torres Straits and in Kiwai, which is situated in the mouth of the Fly River.

A large number of photographs have been taken, and considerable collections have been made, which are now on their way to Cambridge.

A. C. HADDON.

Thursday Island, November 7.

Transference of Heat in Cooled Metals.

SEVERAL observers¹ have noticed a rise of temperature at the cooler end of a bar of metal when the hot end was suddenly cooled. As this would be a most surprising effect, and as Johns Hopkins University has been mentioned in connection with the subject, Dr. H. A. Rowland has requested me to examine the matter.

Iron and steel bars of about one-half inch diameter were used, and iron-copper thermo-electric couples were soldered to the cooler end and the side. A reflecting galvanometer was used that gave a deflection of 1 mm. per 0°·05 C. The end of the bar was heated by a Bunsen compound burner, or in a muffle furnace with a blast lamp. The hot end of the bar was cooled either with blocks of ice or by plunging into ice water.

After errors, due to jarring the galvanometer, and to changes in the magnetic field of the galvanometer, caused by motion of the bar, had been eliminated, even under the most trying conditions no effect was observed. The temperature of the cooler portion of the bar did not increase when the hot end was suddenly quenched.

The most severe test imposed included the sudden quenching in ice water of the end of the bar, three inches of which was above the red heat. The thermo-couple then was only nine inches from the glowing end of the bar.

The galvanometer, of course, showed the usual slow change of temperature due to conduction. There was then a comparatively long time after quenching before any change of temperature was indicated, and then the change was only a reduction of temperature.

CARL KINSLEY.

Johns Hopkins University Physical Laboratory,
Baltimore, U.S.A., December 9.

¹ NATURE, June 30, 1898 (observed by M. Bourget in Paris, 1898); September 1, 1898 (observed by Mr. Bartlett in Cavendish Laboratory, 1899); October 20, 1898 (observed by Mr. Stone in Johns Hopkins Laboratory, 1898).