OF

ZOOLOGICAL LITERATURE.

MAMMALIA

BY

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A. Separate Publications.

OWEN, R. On the Anatomy of Vertebrates. Vol. III. Mam-

mals. London, 1868, 8vo, pp. 915.

We have given a notice of this work in Zool. Record, iii. p. 1. It is concluded with the present (third) volume, which contains the anatomy of the soft parts of mammals. The last chapter is devoted to an examination of the questions of homology and teleology, of the relations of existing to extinct species, of their development, and of the origin of life,—questions which had occupied for years the thoughts of French biologists and of the author.

DARWIN, CH. The Variation of Animals and Plants under Domestication. London, 1868, 8vo. Vol. I. pp. 411; Vol. II.

pp. 486.

The author states that the object of his work is to give in the first volume, under the head of each species, only such facts as he has been able to collect or observe showing the amount and nature of the changes which animals and plants have undergone whilst under man's dominion, or which bear on the general principles of variation. He does not intend to describe all the numerous races of animals domesticated by man, except in one case only, namely in that of the domestic pigeon. The second

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volume is devoted to general considerations founded on the materials treated of in the first; the causes and laws of variability are discussed, inheritance and its laws, crossing, sterility from a changed condition of life and close interbreeding—and the coefficient selection by man, methodical or unconscious. Finding that these subjects, as well as the several modes of reproduction, stand in some sort of relation to each other, and ought to be connected by a tangible method, Mr. Darwin advances the hypothesis of "Pangenesis," which implies that the whole organization, in the sense of every separate atom or unit, reproduces itself.

It will be evident from these remarks that the work before us would be more properly referred to in a record on general zoology than in one on Mammalia. Nevertheless, although it is written with reference to a particular theory, the mammalogist will find such an amount of facts relating to the domesticated Mammalia, gathered in a connected form, that especially the first volume will prove to be of the highest interest and most instructive even to specialists, the more so as the author states the facts favourable or opposed to his theory with equal impartiality. We cannot enter into the details of his accounts of the several species within the narrow limits of this notice, the author omitting nothing in the history, geographical distribution, zoological and anatomical characters of each animal and its races which could throw light upon its origin; and we must be satisfied to mention here that he concludes that dogs, cats, pigs, oxen, sheep, and goats have descended from several wild species, whilst horses, asses, and rabbits are each derived from a single species only.