

relatively greater length of the neck. *Pachypleura* (or *Neusticosaurus*) has no front teeth such as characterize the form now described, and there are differences in the limbs. *Dactylosaurus* is also excluded from comparison both by its short, stout, cervical vertebræ, and by the absence of an epicondylar foramen in the humerus. Dr. Dames' study of the subject leads him to conclude, that all the Triassic *Nothosaurus*-like reptiles may well be comprised within a single family, that of Nothosauridæ; while the remarkable Mesosauridæ ought not to be regarded as very closely related.

A. S. W.

IV.—ON THE MEXICAN METEORITES, WITH ESPECIAL REGARD TO THE SUPPOSED OCCURRENCE OF WIDE-SPREAD METEORITIC SHOWERS. By L. FLETCHER, M.A., F.R.S., with maps of the region. Mineralogical Magazine, Vol. IX. No. 42, pp. 91–180.

IN this most important contribution to Meteoritic Literature, Mr. Fletcher first points out that the "prevalent belief in wide-spread meteoritic showers" is "as regards the desert of Atacama, based on insufficient evidence," and then goes on to make observations, from which it would appear that he includes Mexico in this statement. Mr. Fletcher notes the Meteoritic falls actually observed (only seven in number); the localities in which Meteoritic masses have been found; the distribution in each locality; the transportation of masses; the natural or artificial dispersion of masses belonging to a single type; and the facts which seem to him to prove that many of the masses probably belong to a single fall. Numerous other points are also carefully considered and the history of each known mass is treated in detail, the actual locality being shown on the maps appended. Although dealing with the Meteoritic falls in a limited district, this paper throws a great light on the general subject and will be found most instructive to all those who are interested in cosmical phenomena.

REVIEWS.

I.—DR. RISTORI ON FOSSIL ITALIAN APES.

RISTORI, G. LE SCIMMIE FOSSILI ITALIANE. Boll. Com. Geol. Vol. VII. Nos. 5–8 (1890).

IN this communication the author affords us some important and interesting information as to the affinities of the fossil Ape from the Miocene of Monte Bamboli known as *Orcopithecus bambolii*. This Ape was originally described by Gervais on the evidence of an imperfect lower jaw of an immature individual; and was then regarded as being a true anthropoid. Quite recently, however, Dr. Max Schlosser came to the conclusion that the genus has nothing to do with that group, but was very closely allied to *Cynocephalus*.

Dr. Ristori now describes and figures a number of imperfect jaws, and considers that while there are undoubtedly some signs of affinity with the *Cercopithecida*, as represented by *Semnopithecus* and

Cynocephalus, yet there are others of fully equal importance connecting it with the *Simiidae*, the characters being, indeed, so equally balanced that the author appears to be undecided to which family it should be referred. Among the characters allying *Oreopithecus* to the inferior apes are the great length of the dental series, and the elongation of the last molars—especially those of the lower jaw. On the other hand, anthropoid affinities are displayed in the shortness of the face, the rounding of the chin, and the contour of the molars, in which the tubercles are arranged diagonally, and do not exhibit the complete cross-crests of the *Simiidae*. The species was of somewhat larger size than a Gibbon; and it appears highly probably that the author is right in considering this interesting form as one of the ancestors of the existing anthropoid Apes.

The remainder of the paper is devoted to the consideration of *Semnopithecus monspessulanus* and *Macacus (Inuus) florentinus* of the Pliocene of the Val d'Arno. The latter was originally described by Cocchi as the type of a distinct genus, under the name of *Aulaxinus*; and it appears that Dr. Forsyth Major's *Macacus ausonianus* is merely a synonym of this form.

We are much interested to learn that this memoir is one of a series intended to illustrate the whole of the Mammalian fauna of the Italian Tertiaries, if the necessary funds are supplied by the Government. The importance of such a series cannot be overestimated, not only to the students of Italian palæontology, but likewise to those of other countries—and more especially England. We therefore most earnestly hope that the Italian Government will be induced to afford the supplies necessary to continue this most important work, which we feel sure will be well carried out under the direction of Professor Stoppani.

R. L.

II.—DR. K. A. VON ZITTEL'S HANDBOOK OF PALÆONTOLOGY.

HANDBUCH DER PALÆONTOLOGIE—PALÆOZOOLOGIE, BAND III. LIEF. 4.

By KARL A. VON ZITTEL. pp. 633–900, woodcut figs. 561–719.
(R. Oldenbourg, Munich and Leipzig, 1890.)

THE fourth part of the third volume of this work, relating to Palæozoology, has just been issued, and extends to the end of the section Aves. The index and title-page of vol. iii. are also added, and there is a short list of Corrigenda, chiefly in connexion with the class Pisces. The Order Crocodilia occupies the first fifty pages, and is regarded as comprising the three suborders of Parasuchia, Pseudosuchia, and Eusuchia; the second being founded for the reception of the remarkable Triassic genera *Aetosaurus*, *Typtothorax*, and *Dyoplax*, while the third includes both the Eusuchia and Mesosuchia of Huxley's classification. Few of the illustrations are new, but the selection of published figures is such as to render Dr. von Zittel's account the most completely illustrated synopsis of the order that has hitherto appeared. The number of genera with appended queries shows how much scope for investigation still remains for any one able to undertake an extended review of available