

labelled *C. Murchisoni*. In 1860 Mr. Salter thought that *C. elliptica* was only a badly-preserved variety of *C. inornata* (A. M. N. H. *l.c.*), but in the Catal. Cambr. Sil. Foss. p. 178, he recognized it as "quite distinct."

The above-mentioned three specimens supply the only evidence of an eye-spot in these British Ceratiocaridoid Phyllopods.¹ It is not only a generic character distinguishing them from *Ceratiocaris*, but an important family distinction, of which, for the present, we do not propose to estimate the value.

22. PHYSOCARIS VESICA, Salter.

1860. *Ceratiocaris (Physocaris) vesica*, Salter. Ann. Mag. N. H. ser. 3, vol. v. p. 159, woodcut fig.
 1865. *Ceratiocaris (Physocaris) vesica*, Salter and H. Woodward. Catal. Chart. Foss. Crust. p. 17, fig. 8.
 1867. *Ceratiocaris vesica*, Salter. In *Siluria*, 3rd (4th) edit. p. 517.
 1877. *Ceratiocaris (Physocaris) vesica*, H. Woodward. Cat. Brit. Foss. C. p. 72.
 1878. *Ceratiocaris vesica*, Huxley and Etheridge. Cat. C. S. Foss. p. 142.

Of this curious fossil Phyllopod, described carefully by Mr. Salter in 1860, only one specimen is known—namely, Ludlow Museum U. It differs slightly from Mr. Salter's figure, being larger, and showing an appearance of having been probably broken away to a little extent just above the front, so as to leave a notch and angle, which constitute the prominence in the woodcut figure. If continued over this notch, the outline of the shell would possibly be that of a broad oval; whereas now it is broadly and obliquely pyriform (25 × 20 mm.). The relative position of the animal is supposed to be indicated by the telson occupying the upper part of the abdominal appendages attached to the fossil. There are 8-9 segments in the abdomen, which appears to come out from the lower and hinder quarter of the carapace, and is very slender near its origin, but higher at its ultimate segment (5 mm. long); altogether 30 mm. The telson itself is 11 mm. long. One lateral spine (stylet), 7 mm., is present. The whole animal is about two inches long.

It was collected by the late Mr. Salwey in the Lower Ludlow at Leintwardine, and Mr. Salter at first registered it as *Ceratiocaris inflata*.

NOTICES OF MEMOIRS.

STUDIES IN THE DISTRICT OF THE BOHEMIAN CHALK FORMATION. THE WEISSENBERG AND MALNITZ SCHISTS. By Dr. ANTON FRITSCH, Prague.

STUDIEN IM GEBIETE DER BÖHMISCHEN KREIDEFORMATION. DIE WEISSENBERGER UND MALNITZER SCHICHTEN. Mit 155 Holzschnitten. DIE ISERSCHICHTEN. Mit 132 Textfiguren. Von Dr. ANTON FRICĀ. (Archiv der naturw. Landesdurchforschung von Böhmen, IV. Band, No. 1., V. Band, No. 2.)

IN these two memoirs Dr. Fritsch gives, in considerable detail, a petrographical and palæontological description of three of the

¹ The "ocular tubercles," mentioned in the footnote at p. 236, *Siluria*, 3rd (4th) edit. 1867, are doubtless really due to the presence of "teeth" within the valves.

eight divisions into which the Cretaceous series of Bohemia has been divided. Numerous profiles of sections and well-executed figures of the principal fossils accompany the text.

From a slight sketch of the Cretaceous strata as a whole, it seems to present the characters of a littoral or comparatively shallow-water deposit. Although no very close comparison can be made between it and the deeper-water deposits of the same formation in France and England, yet it has been ascertained that the Bohemian Cretaceous series corresponds only to the Cenomanian, Turonian and part of the Senonian, and therefore the Gault and the divisions of the Lower Cretaceous are absent below; and its highest zone is below that of *Belemnitella quadrata*. By Prof. Krejčí and the author, the Bohemian series has been divided, chiefly on palæontological grounds, into eight divisions, which, with the exception of the lowest, are of marine origin. The lowest or Perucer division consists of sandstones containing a rich Flora and some sparse remains of Vertebrates, Molluscs, and Insects. These beds rest unconformably on Silurian or Carboniferous strata, and are of Lower Cenomanian age. The division above, or Korycaner beds, are limestones, sandstones, and conglomerates, characterized by *Trigonia sulcataria*, *Pecten asper*, and *Ostræa diluviana*. Next above are the Weissenberg and Malnitzer beds, principally of sandstones—some glauconitic—of Turonian age. The former of these divisions contains numerous fish-remains, many of which are identical with those of the Chalk at Lewes; some of the other fossils present are also common to the French Craie Chloritée. The Iser, Teplitzer, Priesener and Chlomeker divisions are regarded as Senonian. From the first of these the author enumerates 175 species of fossils; the details of the latter yet remain to be worked out.

R E V I E W S.

MEMOIRS ON EXTINCT NORTH-AMERICAN VERTEBRATES, by Professor E. D. COPE, in the *American Naturalist*.¹ (Extinct Rhinoceroses and their Allies, Dec. 1879; Extinct Cats, Dec. 1880; Extinct Dogs, March, 1883; Permian Batrachia, Jan. 1884; The Creodonta, March and April, 1884; The Tertiary Marsupialia, July, 1884; The Condylarthra, Aug. and Sept. 1884; The Amblypoda, Dec. 1884 and Jan. 1885; The Lemuroidea and Insectivora, May, 1885.)

IN this valuable series of contributions to a knowledge of the marvellous extinct Vertebrate Fauna of North America, Prof. Cope informs us in a letter that he has intended to give a *résumé* in a somewhat popular form of work which either has been or will be published in fuller detail as opportunity occurs.

Before briefly noticing a few of the more interesting forms, we must premise that we are scarcely prepared to accept the extremely complex classification of the Mammalia which Prof. Cope propounds;

¹ We have only space to cite a few from this large series of memoirs.