If the conclusions herein expressed in the interpretation of the abdominal appendages of *Asaphus megistos* are correct, then the mark of doubt in No. 5 of Woodward's homological table may be removed.

Prof. E. Van Beneden, of Belgium, believes the *Limuli* are not Crustaceans, and, from a study of their embryology, concludes that they cannot be separated from scorpions and other arachnida. This view, in which he is not alone, if correct, would carry the Trilobites out of the class of Crustacea.

Dr. Packard, in his excellent work on the "Development of *Limulus polyphemus*," places the Xiphosura and Eurypterida as suborders under the order Merostomata, which is followed by Trilobita as a separate order. This view is accepted by Dr. Lockwood and Mr. C. D. Walcott. It remains for zoologists to place whatever value may attach to the fact of the appendages of Trilobites subserving the purposes of *branchial* organs, of *manducation*, and of *locomotion*, either ambulatory or natatory.

NOTICES OF MEMOIRS.

The Geological Committee of Russia.

THE recent arrival in this country of the first Reports of the Geological Committee of Russia furnishes some information regarding that body. It was instituted in 1882 by order of H.I.M. the Czar, under the Ministry of the Domains of the Empire, their centre being the Institute of Mines, St. Petersburg. The Committee has been formed for the purpose of studying systematically the geological constitution of Russia and for the construction of a detailed geological map of the Empire.

Besides the 8vo., Reports referred to, Memoirs will be published in 4to. illustrated by plates and maps, the first volume of which is now in the press. The Committee are desirous of exchanging these with the geological publications of other countries.

The staff consisted when established of a Director, three Senior Geologists, three Junior Geologists, and a Curator.

The first volume of Nos. 1—6 of volume 2 of the Reports are unfortunately for many English Geologists printed in the Russian language, but the Committee propose to give a *précis* in French or German of their Memoirs as published. Besides the proceedings of the committee meetings, the Reports contain papers, mostly of a preliminary character, on work done in the field in 1882. They are as follows:—

In vol. 1, A. Karpensky, On the Origin of the Iron Ore of the Donetz Basin. In vol. 2, Nos. 1—6, P. Kroloff, Preliminary Account of Geological Investigations made in the Government of Perm; Th. Chernesheff, Account of Investigations on the Western Slope of the Urals; A. Shtookenberg, On Geological Investigations made in the Government of Perm; S. Neketen, On the Palæozoic Geology of Sheet 58 of the General Geological Map of European Russia (scale 10 miles = 1 English inch), containing Yaroslave, Rostof, Koliazin,

Vesegonsk and Poshekon; S. Neketen, Observations on the Use of the terms diluvium, alluvium and eluvium; V. Domger, Geological Investigations made in the Ekaterenoslav Government, etc.; E. Shmalgaozen, Observations on *Araucarites rhodeanus*, Goepp.; A. Krasnopolsky, On Geological Investigations on the Western Slope of the Urals; F. Schmidt, Preliminary Account of Investigations on the Baltic Iron-ore Deposits; A. Michalsky, On Geological Observations made in the Kyleletz Government; and P. Armashevesky, Account of Investigations made in the Poltava Government.

W. R. J.

REVIEWS.

Dr. Reusch's Discovery of Silurian Fossils in the Highly Altered Rocks of Bergen Peninsula in Norway.

Die fossilien führenden krystallinischen Schiefer von Bergen in Norwegen von Dr. Hans H. Reusch. Autorisirte Deutsche Ausgabe von R. Baldauf. (Leipzig, 1883.)

THE announcement of the discovery by Dr. Reusch of Silurian fossils in highly altered rocks has excited so much interest that a German edition of the work in which the details of the discovery are recorded will be heartily welcomed. The work in question consists of 134 octavo pages. It is illustrated by a coloured geological map and section, and by 92 excellent woodcuts. Whatever opinion the reader may form as to the correctness of some of the author's conclusions, he will readily admit that the work is a most valuable contribution to the literature of a branch of geological science which is at present very little understood.

After some general remarks on the geology of Norway, and on the difficulties which the field geologist has to contend with in consequence of the climate of the country and the sparseness of its population, the author proceeds to describe in greater detail the geological structure of the Bergen peninsula. The highest part of the peninsula lies to the east and attains in the Gulfjeld an elevation of 986 metres. It is composed of saussurite-gabbro and greenstone (?) and forms a zone of country which extends in the northern part in a north and south, and in the southern part in a north-east and south-east direction. To the south and east of this zone occur the crystalline schists which, in the neighbourhood of Osören, a town on the south coast of the Bergen peninsula, contain Silurian fossils. They comprise conglomerate, sandstone, micaceous clay-slate (Thonglimmerschiefer), with crystalline limestone, talc-mica-schist, hornblende-schist, gneiss, etc. Rocks of the same series occur at Trengereid in the north-eastern part of the peninsula, and probably also at Bergen, but the author has not discovered fossils in the latter locality. That part of the peninsula which lies between the area occupied by the Bergen schists and the zone of saussurite-gabbro is denominated by the author the Ulriken gneiss district. The dominant rock is gneiss in many varieties; sometimes fine-grained