On the fauna of the Permo-Triassic of the Volga-Dvina variegated beds*

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A report appeared as a preliminary notice about discoveries made by the author in the summer of this year in the outcrops of the multicolored beds along the Vetluga and Sharzenga rivers. According to the available remains of heads it is possible to establish here the presence of at least three different families of labyrinthodonts.

One of them is represented by a rather small (14 cm long) skull in excellent preservation and by two large skulls of this same type, all found on the Sharzenga River.

According to the general configuration, this skull is very much like the genus *Trematosaurus*. The similarity is emphasized by the design of the mucus canals and also by the prevomers extending far to the rear and joining with the very narrow processes cultiformis of the parasphenoid. However, the presence of the following characteristics makes a new form in the highly peculiar group that is distinguished from the family Trematosauridae:

(1) the head is more flattened.

(2) The rather larger orbits lie toward the rear from the middle of the head and very near to the midline.

(3) The pterygoid appears as the palatine.

(4) The hind portion ["edge"] of the parasphenoid extends only up to the base of the caudal muscles.

(5) The front nerves of the foramen are not divided by a partition.

(6) On the prevomer there is a whole cuneiform row of teeth.

Of the other distinctions, also of interest is the shagreen-sculptured surface of the pterygoid. The flatness of the head and position of the orbits indicate an evident adaptation to a terrestrial mode of life.

A comparison of the new form with all the known representatives of Rhachitomi and Stereospondyli shows that the nearest relatives to it will be only the families Trematosauridae and Mastodonsauridae, which are really the most related even among themselves. The new form in certain features shows greater primitiveness than both of these families. Being guided by these considerations, it is impossible not to work out a new form into an individual genus, for which I propose the name *Benthosaurus*. It is extremely probable that it will be fitting to isolate it into a separate family.

In conclusion it is necessary to point out that according to all the characteristics (absence of paroccipital with a caudal surface, reduction of the nerve branch of the pterygoid, etc.), *Benthosaurus* is related to the Stereospondyli, but the complete absence of stereospondyl vertebrae in the collected material, in connection with the presence of

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parts of rhachitomous vertebrae, does not exclude the possibility that *Benthosaurus* will prove to be a Rhachitomi. The interest in the discovery for this reason is still on the increase, if we remember that in *Mastodonsaurus* the vertebrae have rhachitomous elements. In such a case *Benthosaurus* shows a descent from Rhachitomi to the Stereospondyli at the stage where the characteristics of both were united in one form.