of insertion of each filament the perforated plate is traversed by a short canal lined with an epithelial layer, and afterwards dividing into several branchial vessels. Between the filaments the plates, the structure of which is analogous to that of the skin, have numerous hairs. The branchial vessels of the two plates all open into a wide and very short canal, which opens into the dorsal vessel.

In a future communication I will summarize my observations on the vascular and generative systems, the segmental organs, and the embryogeny of this worm.—*Comptes Rendus*, April 11, 1881, p. 926.

The Bears of the Cavern of Lherm. By M. H. FILHOL.

As is well known, the bone-cave of Lherm, in the Ariège, has furnished numerous remains of animals, including *Ursus spelæus*, *Felis spelæa*, *Hyæna spelæa*, *Rhinoceros*, *Cervus*, &c. The most frequent of these is the first-named species, *Ursus spelæus*, of which not less than one hundred crania have been obtained. M. Filhol remarks that these numerous crania prove the great fixity of character of this species, and that *Ursus spelæus* in its most modified forms has nothing to do with the existing *Ursus arctos*. M. Marty has recently found two skulls of bears different from any previously met with. One of these, a perfect skull, measuring along its lower surface 35 centim. from the incisive margin to the occipital foramen, has six teeth behind the canine, as in existing Bears, instead of three as in *Ursus spelæus*, and the form and proportions of those organs are as in *Ursus arctos*. This applies to the other characters of the skull; and M. Filhol identifies the animal with the living Brown Bear, which, he considers, cannot have descended from *Ursus spelæus*, but must have originated in some distant region, perhaps North America, and gradually advanced to take the place of the great Cave-Bear in these countries.

The second specimen consists of the anterior parts of a bear's head, also differing from those hitherto found in caves. In the upper jaw it had four teeth behind the canine, and the first premolar was preceded by a free space of 15 millim. Consequently the face was very short, but at the same time it was remarkably widened. Its transverse diameter behind the carnassial tooth is 10·3 centim. The anterior nasal aperture measures 64 millim. across and 51 millim. from front to back. In all other bears the antero-posterior diameter is the larger. The forehead was depressed and almost horizontally continuous with the nasal bones. Its elevation above the palatine arch at a point answering to the postorbital apophyses is only 10·8 centim.; in the *Ursus arctos* above mentioned this measurement gives 11·8 centim., and in *Ursus spelæus* 18·3 centim. The width of the forehead between the apices of the postorbital apophyses is 13·9 centim., or only a few millimetres less than in the largest crania of *Ursus spelæus*. These characters lead M. Filhol to regard this skull as representing a new species of bear; and he proposes to name it *Ursus Gaudryi*.

M. Marty has also found in the cavern of Lherm the femur of a fossil lion 46 centim. long.—*Comptes Rendus*, April 11, 1881, p. 929.

Filhol, H. 1881. "The bears of the cavern of Lherm." *The Annals and magazine of natural history; zoology, botany, and geology* 7, 428–428.

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