

found in the rivulets at the foot of the volcanos. These fishes belong to a genus separated from *Silurus*.\*

*Order 2.*—This Order begins with two genera, the species of which have been supposed to breathe by lungs only, no traces of gills having yet been discovered in any individual belonging to them. Cuvier thinks that they cast them sooner than the salamanders. One of these is a large animal,† being more than a yard in length; it was discovered by Dr. Garden, in South Carolina: like the *Proteus*, its eyes are covered with a thick tunic, and its toes have no claws. The other,‡ found in New York, comes near the salamanders, and has been called by American writers the *giant* salamander. Both are found in fresh-water lakes, and similar places.

I have mentioned, on a former occasion, a salamander that lays her eggs singly on the leaves of *Persicaria*, which she doubles down over them,§ and which are kept folded by means of the glue that envelopes the egg. Dr. Rusconi, to whom we are indebted for this history, observed the whole progress and development of this animal, from its embryo state in the egg. It is at first opaque, formed of a soft homogeneous substance. Almost as soon as it has escaped from its envelope, it becomes gradually transparent, so that the successive developments, both of its internal and external organs, may be discerned—the heart, and its systole and diastole; the stomach, its form and position; the intestinal canal, which at first extends in a straight line, from one end of the abdomen to the other, and then begins to undulate, and ends by forming many convolutions: next may be seen

\* *Pimelodus*. Humboldt names the species in question *P. Cyclopus*.  
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† *Amphiuma* means.

‡ *Menopoma*.

§ See above, p. 193.