

botanist had to study the outline, nervation, and microscopic structure of a leaf. Like the great French naturalist, he had to construct a new science at the very outset of his great work.

The Miocene formations of Switzerland are called *Molasse* (from

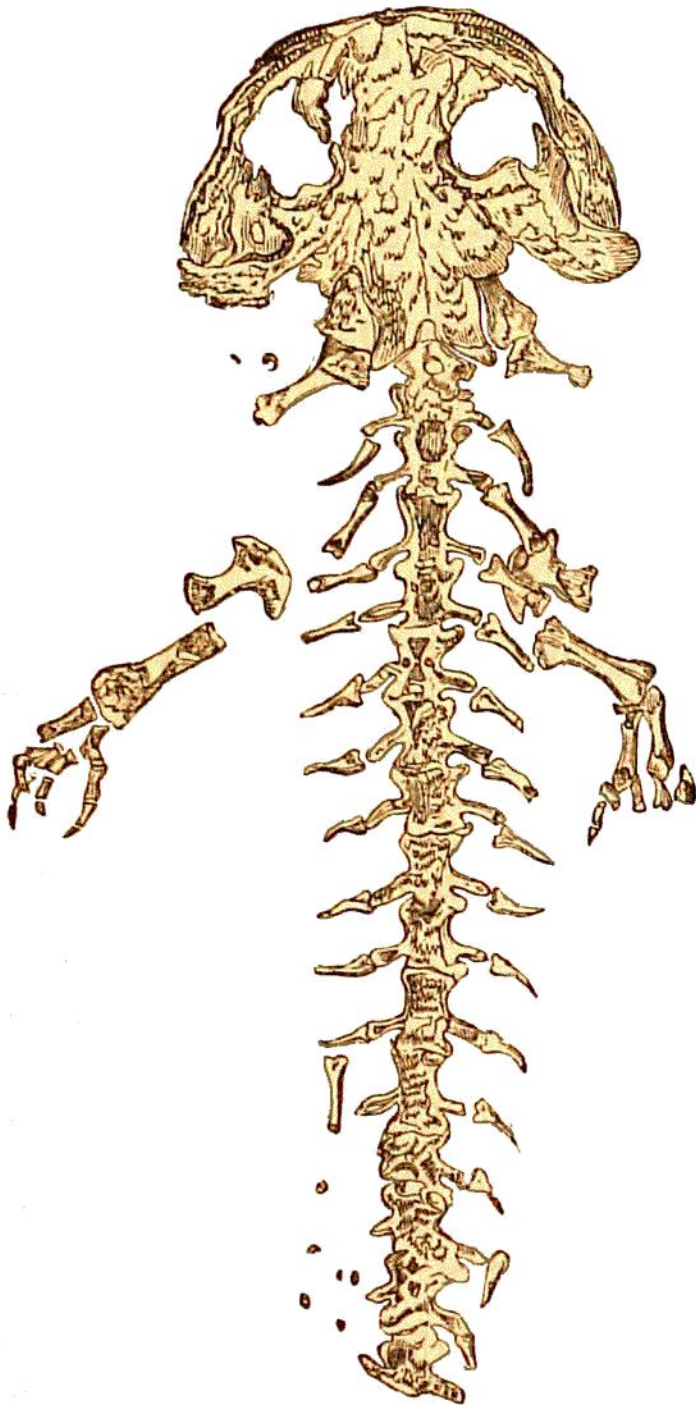


Fig. 158.—*Andrias Scheuchzeri*.

the French *mol*, soft), a term which is applied to a *soft*, incoherent, greenish sandstone, occupying the country between the Alps and the Jura, and they may be divided into lower, middle, and upper Miocene; the middle one is marine, the other two being fresh-water formations. The upper fresh-water Molasse is best seen at *Eningen*, in the Rhine valley, where, according to Sir Roderick Murchison, it ranges ten miles east and west from *Berlingen*, on the right bank, to *Waugen* and to *Eningen*, near *Stein*, on the left bank. In this formation Professor Heer enumerates twenty-one beds. No. 1, a bluish-grey marl seven feet thick, without organic remains, resting on No. 2, limestone, with fossil plants, including leaves of poplar, cinnamon, and pond-weed (*Potamogeton*). No. 3, bituminous rock, with —*astodon angustidens*. No. 5, two or three inches thick, containing fossil Fishes. No. 9, the stone in which the skeleton of the great Salamander *Andrias Scheuchzeri* (Fig. 158) was found. Below this, other

strata with Fishes, Tortoises, the great Salamander, as before, with fresh-water Mussels, and plants. In No. 16, Sir R. Murchison obtained the fossil fox of *Eningen*, *Galacynus Eningensis* (Owen).