

and then burst, all around those thinner parts of the fin that are traversed by the caudal rays, — wholly mucoidal, as shown by this test, in their texture, and which yield to the boiling water, as if formed of isinglass. They finally dissolve, and drop away, with the surrounding cuticular integument; and then there only remains, as the insoluble framework of the whole, the bodies of the vertebræ, with their neural and hæmal processes. The tail has now lost much of its ichthyic character, and has acquired, instead, a considerable degree of resemblance to the reptilian tail, as exemplified in the saurians. I have introduced into the wood-cut, for the purpose of comparison, the tail of the ichthyosaurus, (*b.*) It consists, like the other, of a series of gradually diminishing vertebræ, and must have also supported, says Professor Owen, a propelling fin, placed vertically, as in the shark, which, however, from its perishable nature, has in every instance disappeared in the earth, as that of the dog-fish disappears in the boiling water. It will be seen that its processes are comparatively smaller than those of the fish, and that the bodies of its vertebræ are shorter and bulkier; but there is at least a general correspondence of the parts; and were the tail of the crocodile, of which the vertebral bodies are slender and the processes large, to be substituted for that of the enaliosaur here, the correspondence would be more marked still. After thus *developing* the tail of the reptile out of that of the fish, — as the cauldron-bearing Irish magician of the tale developed young ladies out of old women, — simply by *boiling*, let the reader proceed to a second stage of the experiment, and see whether he may not be able still further to develop the reptilian tail so obtained, into that of the mammal, by *burning*. Let him spread it out on a piece of iron hoop, and thrust it into the fire; and then, after exposure for some time to a red heat has