

beam; their extreme flexibility, and the ease with which they glide through the waters, gives to their motions a character of facile progress which has no parallel, unless, perhaps, in the varied flight of the wing-swift swallow, amongst their analogues, the birds. How rapidly do they glide, and are lost to our sight by a mere stroke of their tail! at another time, less alarmed, how quietly do they suspend themselves, and cease all progressive motion, so that we can discover them to be alive only by the fan-like movement of their *pectoral* fins, an action which seems, in some sort connected with their respiration; for they move them, as I have observed, more rapidly, when, in sultry weather they seek the surface, and their muzzle emerges. These fins, the analogue, as has been before observed, of the hand or fore foot, except in a few instances, may be regarded as usually the first pair of oars that propel the vessel. Some fishes, in front of these, have another locomotive organ and weapon,\* not intended, however, for motion so much in the *water* as on the *earth*; this is a powerful, and, usually, serrated bone,† articulating with the shoulder bones, and is to be found in the Siluridans, with the exception of the electric species, which its Creator has fitted with other arms.

The second pair of fins, as they most commonly occur, are the *ventral*, but sometimes, where fishes have a large head, they are placed forwarder, and in general they are under the most bulky part of the body; by this arrangement we may gather that they are intended to counteract the force of gravity, as well as to act as oars. These fins are wanting in all the fishes called, on that account, *apodes*,

\* Fig. 1. a.

† The figure of the bone, fig. 2, was taken from one dug up at Blakenham parva Rectory, in Suffolk, in forming a manure heap, which Mr. Owen informed me belonged to a *Silurus*.