Family LYCONIDÆ.

Body terminating in a long compressed tapering tail, covered with small scales. A continuous dorsal fin occupies the back to the extremity of the tail, but a division into two portions may be considered to be indicated by the prolongation of some of the anterior dorsal rays; anal long, extending from the vent to the end of the tail; no caudal; ventrals thoracic, composed of several rays. Pseudobranchiæ present; four gills; seven branchiostegals.

I am obliged to propose a distinct family for the new genus described below, as it differs in certain characters from the Macruridæ, by which this latter family has hitherto seemed to be well defined. It may be considered to be a more generalised type than the Macruridæ.

Lyconus, n. gen.

Head and body compressed, the former composed of thin bones, but with narrow muciferous channels, except on the top between the eyes; trunk as long as or longer than the head; eye large; snout short; cleft of the mouth wide, terminal, both jaws armed with a series of widely set teeth unequal in size; two in front of the upper jaw being canine-like but not so large as those of the lower jaw; vomer with a single canine-like tooth on each side. Scales very small, cycloid, deciduous. Gill-membranes not united. Barbel none.

Lyconus pinnatus, n. sp. (Pl. XLII. fig. C).

Head compressed, as deep as it is long, without snout. The interorbital space is rather flat, narrower than the round eye, which lies immediately below the upper profile; its diameter is one-third of the length of the head and rather longer than the snout. The mouth ascends obliquely forwards, and extends behind the middle of the orbit; the jaws are even in front. The teeth are but few in number, and besides the two long lateral fangs there are only three shorter ones developed in the lower jaw. Opercular bones very thin, and the infraorbitals narrow, separating the maxilla from the eye by a narrow space only.

The distance of the vent from the root of the ventrals is rather more than the length of the head. The tail tapers into an exceedingly fine filament.

The dorsal fin commences above the base of the pectoral, and is composed of very delicate simple rays; there is no break in its continuity, but some of its anterior rays, perhaps three or four, are much prolonged, but as this portion is injured, no more precise information can be given. The anal fin commences immediately behind the vent, and its rays are considerably shorter than those of the dorsal. The pectoral has a narrow base, and is obliquely directed upwards; it consists of thirteen rays, and is exceedingly elongate, the middle rays extending far beyond the vent.