tained seventeen genera of Sauroid Fishes. Their only living representatives are the genus Lepidosteus,\* or bony Pike (Pl. 27<sup>a</sup>, Fig. 1.), and the genus Polypterus (Agass. Poiss. Foss. Vol. 2. Tab. C.), the former containing five species, and the latter two. Both these genera are found only in fresh waters, the Lepidosteus in the rivers of North America, and the Polypterus in the Nile, and the waters of Senegal.<sup>†</sup>

The teeth of the Sauroid Fishes are striated longitudinally towards the base, and have a hollow cone within. (See Pl.  $27^{n}$ , 2, 3, 4; and Pl. 27. 9, 10, 11, 12, 13, 14.) The bones of the palate also are furnished with a large apparatus of teeth.<sup>‡</sup>

\* Lepidosteus Agassiz-Lepisosteus Lacépède.

+ The bones of the skull, in Sauroid Fishes, are united by closer sutures than those of common Fishes. The vertebræ articulate with the spinous processes by sutures, like the vertebræ of Saurians; the ribs also articulate with the extremities of the spinous processes. The caudal vertebræ have distinct chevron bones, and the general condition of the skeleton is stronger and more solid than in other Fishes: the air-bladder also is bifid and cellular, approaching to the character of lungs, and in the throat there is a glottis, as in Sirens and Salamanders, and many Saurians.—See Report of Proceedings of Zool. Soc. London, October, 1834.

<sup>‡</sup> The object of the extensive apparatus of teeth, over the whole interior of the mouth of many of the most voracious Fishes, appears not to be for mastication, but to enable them to hold fast, and swallow the slippery bodies of other Fishes that form their prey. No one who has handled a living Trout or Eel can fail to appreciate duly the importance of the apparatus in question.

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