

he found that its bed had been excavated, and the outline of its shores determined. But perhaps the inhabitants of the lake itself occupied him even more than its conformation or its surrounding features. Not only for its own novelty and variety, but for its bearing on the geographical distribution of animals, the fauna of this great sheet of fresh water interested him deeply. On this journey he saw at Niagara for the first time a living gar-pike, the only representative among modern fishes of the fossil type of *Lepidosteus*. From this type he had learned more perhaps than from any other, of the relations between the past and the present fishes. When a student of nineteen years of age, his first sight of a stuffed skin of a gar-pike in the Museum of Karlsruhe told him that it stood alone among living fishes. Its true alliance with the *Lepidosteus* of the early geological ages became clear to him only later in his study of the fossil fishes. He then detected the reptilian character of the type, and saw that from the articulation of the vertebræ the head must have moved more freely on the trunk than that of any fish of our days. To his great delight, when the first living specimen of the gar-pike, or modern *Lepidosteus*,