APPENDIX.

the *huro* or black bass of Lake Huron, the *lucio perca* or pike perch, the *seranus* or groupa, the *centropristes* or sea bass, the *grystes* or black bass, the *centrarchus* or rock bass—two genera generally confounded—the *pomotis* or sun-fish, and several others so rare in our waters that they are omitted.

The second family of the spine-rayed order is the *triglida*, which is similar to the *percida*, except that the cheeks are mailed as it were by the suborbitals being greatly extended and articulated with the fore gill-cover. It includes the *trigla prionotus* and *dactylopterus* or gurnard and flying-fish; the *cottus*, sculpin or bull-head; the *hemitripterus*, also known as sculpin; and the *gasterosteus* or stickleback; besides many genera that are rare.

The third family is the scienidæ, which have no teeth in the palatines or vomer, but have scales on the base of the vertical fins; otherwise they resemble the perch family. They comprise the *leiostomus* or Lafayette, the *otolithus* or weak fish, the *corvina* or lake sheepshead and branded drum or red-fish of the South, the *umbrina* or king-fish, the *pogonias* or salt-water drum.

The fourth family is the *sparidæ*, which has no spines or denticulations on the gill-covers, and no teeth on the palate, but has large scales. It includes the *sargus* or salt-water sheepshead and sandporgee, and the *pagrus* or common porgee.

The next family that frequents our waters is the scombride, which has no spines or denticulations on the gill-covers, and no scales on the vertical fins; the scales are small. It includes the scomber or mackerel proper, the thynnus or tunny, the pelamys or bonito, the trichiurus or ribbon fish, the xiphias or sword-fish, the naucrates or pilot-fish, the corant or yellow mackerel, the seriole or rudderfish, the tempoten or blue-fish, the rhombus or harvest-fish.

The next family is the atherinide, represented by the silversides or sand-smelts; and the next the mugilide. It has minute teeth, entire and large scales extending over the head, and comprises the mugil or mullet proper. The next family is the gobide, which have an elongated body, small scales or none, the spines of the dorsal flexible, and the ventrals, when present, before the pectorals, and it includes the gunnellus or butter-tish, the zoarces or eel-pout; and the next the lophide, which usually have no scales, but coasionally spiny plates in lieu of them, and have the carpal bones elongated to support the pectorals. The lophius proper is the sea-devil or fishingfrog, a rapacious creature, well known on our coast by various names, and the batrachus, the well-known toad-fish.

The last of the spine-rayed families is the *labrida*, which have fleshy lips **covering** the jaws, toothless tongue and palate, three pharyngeals, two above and one beneath, furnished with teeth, sharp or flattened, and an oblong, scaly body. This family comprises the *etenolabrus* or bergall, otherwise chogset or cunner, and the *tautoga*, tautog or black-fish.