## 216 BULLETIN OF THE UNITED STATES FISH COMMISSION.

The calico bass will be an excellent addition to our waters, for not only is it very hardy but also very fertile; besides, its rapid growth and the good quality of its flesh make it an altogether desirable species. It will be very serviceable, also, as food for the *Salmonidæ*, on account of its remarkable fecundity. Its introduction into waters already stocked will cause no inconvenience, for, although it is predaceous, the calico bass has a mouth so small that it can seize only little animals, worms, small crustaceans, etc.

M. Bertrand, desirous of propagating this very interesting species, placed again this year at the disposition of the members of the National Acclimatization Society some of the young. These young fishes will be delivered about the month of April.

## 54.--A HYBRID BETWEEN THE LAKE TROUT AND BROOK TROUT. By TARLETON H. BEAN.

The Pennsylvania Fish Commission has been experimenting for some years, at the Corry Station, with hybrids between the lake trout, Salvelinus namayeush, and the brook trout, Salvelinus fontinalis. Λ very brief account of the experiments is to be found in the report of Some fine specimens of these artificially that commission for 1886. produced hybrids have been received by the U.S. Fish Commission. A large one measuring about 20 inches in length is apparently a male as the lower jaw has a small cartilaginous tip. The end of the maxilla extends behind the eye a distance nearly equal to the length of the The scales are larger than in the brook trout and about equal snout. in size to those of the lake trout. The caudal is deeply forked, about as deeply as that of the lake trout. In shape the hybrid is similar to the lake trout, as, also in the general pattern of coloration; but the very numerous spots on the sides are somewhat smaller and a pale lemon in color instead of whitish. The spots below the middle line of the body have a center of orange. The pectorals, ventrals, anal, and the lower lobe of the caudal have a broad white edge. The ventrals and anal are a pale vermilion orange. The outer half of the upper surface of the pectorals is dusky. There is a narrow black line limiting the white of the ventrals and a similar trace bounds the white of the anal. The ground color of the sides is greenish-olive. The sides of the head have numerous spots of lemon-yellow, some of them larger than the largest of those on the sides. The lips are yellowish flesh colored; the eye is golden, with a dusky border; the top of the head and back have some scattered vermiculations like those of the brook trout, but much less developed and not so plentiful. The caudal and dorsals are spotted with lemon-yellow, like the sides.

A smaller one, supposed to be a male, has the back slightly elevated as in old male brook trout, but its caudal is forked and it has the large scales and peculiar coloration of the hybrid.