red flesh and are delicious eating. The growth of this fish in a place where it gets good food is rapid, for in the period of seven years it passes from a weight of 8 grams to 8 kilograms [\frac{2}{7} ounce to 17\frac{2}{3} pounds, about], increasing a thousand fold, but after reaching this size it increases much more slowly. We often see very large specimens, with the head much rounded in front and with blunt noses. A race with large scales has been produced, some individuals of which have the skin bare in places; and some are entirely scaleless. These varieties are called Queen Carp, Mirror Carp, Leather Carp, &c.

The carp is not very voracious, but it lives upon spawn, insects, and many vegetable and animal substances that it finds in the mud. When the carp is lean its head seems to be very large in comparison with its body.

The small carp are not good eating, but the large ones are plump and their flesh is firm and delicate when they are caught in living water. The Rhine carp and those of Montreuil-sur-Mer are highly esteemed, while those of the Lot River pass as excellent. In the Saône River these fish are of very good quality, while the rapid and clear waters of the Moselle and the Loire furnish carp that are little sought.

M. Bienne, of the fish-cultural establishment at Hüningen, found on December 15, in the Lake of Constance, carp whose eggs and milt were fully matured. Can this indicate that this fish spawns twice a year?

Paris, November 28, 1885.

## 66.-THE PREPARATION AND COOKING OF CARP.

## By ALFRED DOLGE.

[From a letter to Prof. S. F. Baird.]

In very many cases the carp is taken from muddy, half stagnant water of a high temperature, and is immediately killed, and then cooked after a fashion. Such a fish is utterly unfit to eat, and is apt to make the partakers of the meal sick. Now imagine a carp taken out of such water and transported to market, or even not eaten until the next day. Yet this is what is very often done, and the outcome of it is the general verdict that carp is worthless as a table fish. In Germany the professional fisherman does not bring pond carp for sale to market until they have been in big boxes for from two to three weeks in running riverwater, so as to be rid of the muddy taste which they acquire in ponds. Any clear running water will do it. Then they are put into big tubs, brought to market in good shape, swimming around, and the purchaser picks out his fish and brings it home alive, where it is killed when wanted for the table. Such a fish when properly cooked is really a delicacy. I usually have a great many visitors at the time when I

begin to fish my ponds, and they are all astonished at the fine qualities of the carp. Even those who had eaten, or tried to eat, them before, and were disgusted, become enthusiastic. The difference is owing to the treatment the fish receive, and to some extent, of course, to the cooking. Thinking they may be of interest, I add here some of the methods according to which my carp are cooked:

CARP IN BEER, OR POLISH CARP.—Bleed a large live carp at the throat, catch the blood in vinegar; scale, wash and clean inside. Cut into halves, and these into large pieces. Take a deep pot, cover the bottom with sliced onions, some mixed ground spice, and a few cloves. Put the split head and pieces with back fins in first, the fins to point toward the bottom. Now take a piece of rye bread or Boston brown bread or roasted white bread without rind, some salt, one small piece of sugar, some slices of lemon, and some bay leaves. Put all on top of Pour in a little vinegar and white beer and lager beer (or new ale and porter), each in half parts, until the liquor covers the fish Have a good strong fire and begin to boil, taking care, by shaking the pot once in a while, that the fish does not burn on the bottom. When nearly done take for four pounds of fish about 1 pound of butter, roast it brown with a spoonful of flour, mix up with the blood and vinegar, and put on the fish. Taste the sauce to see if it is sufficiently sweet, sour, and salty, three qualities which it must have, and cook the fish until done. Serve with potatoes in their skins.

Blue Boiled Carp.—Be careful not to remove any scales or coating. Split the carp along the back, clean inside, and pour cold or boiling vinegar over it until covered. When the outside has turned nicely blue, put it on the stove with cold water, into which put salt, onions, one or two bay leaves, and some cloves. Take the carp from the fire as soon as it boils up well, and set it aside in a warm place. Serve with either melted butter mixed with parsley chopped, or ground horseradish mixed with vinegar, sugar, and salt.

BAKED CARP.—Cut the carp into pieces or halves. Clean well, but leave the scales on. Cover with salt, lemon juice, sliced onions, pepper, and parsley. After it has lain thus one hour, dry the carp, roll it in eggs and cracker dust, and bake slowly in butter. Serve with lemon and potatoes boiled or baked.

Pickled carp.—Clean the carp outside and in; split it the whole length; cut it in pieces; wash, and cook it in water with salt, spice, onions, and a few bay leaves. After it is cooked let it get cold in the pot. When cold remove and put it into a drainer or sieve to dry off. Now pick to pieces, taking out all bones; mix with sauce rémolade or a sauce consisting of Worcestershire sauce, vinegar, sugar, salt, ground black pepper, olive oil, and yellow mustard, according to taste; all well beaten and mixed, olive oil and vinegar being in preponderance, Serve with capers, olives, and mixed pickles.

DOLGEVILLE, N. Y., September 17, 1886,