

made equally aspiring, on a small scale; and, lastly, a most delicate third dish, in the fine fry, which completes this curious division and subdivision of a single carp. It may be well to note that carp should never be boiled.

THE TENCH.—The tench, although ever associated with the carp, differs widely in its habits, as while the one is most capricious in its feeding, the other is to be taken without any great amount of skill by the rod full nine months in the year; and generally through mild winters, when the carp is proof against every temptation and is said only to bite while the broad-bean is in blossom. The flesh of the tench is very firm and admirably adapted for stewing, its skin being pronounced by epicures to possess a savor comparable in its excellence to nothing else. The simple secret of how to prevent the breaking of the tender skin of the tench is known to very few cooks. It is, however, merely by placing the fish in boiling fat and just turning it in the pan; and if for boiling, then taking it out, laying it in a cloth in boiling water until it is done sufficiently. Served with a sauce made of the young leaves of the field sorrel, it is a most appetizing dish.

65.—REPORT OF AN EXAMINATION OF THE SHAD FISHERIES IN GEORGETOWN, S. C.

By **Lieut. W. M. WOOD, U. S. N.**

After leaving Fernandina, Fla., I proceeded in this vessel to Georgetown, S. C., to investigate the shad fisheries there, and have the honor to submit the following report:

We arrived there on the afternoon of the 5th instant. The shad season was found to be about over, and most of the fishermen had quit.

I was fortunate enough to find Mr. E. Barnes still in town. Mr. Barnes is the largest owner of nets, and buys and ships all the fish caught in the vicinity. Accompanied by him, I took the launch and went up the Waccamaw and Pedee Rivers. I also went up the Black River, a tributary of the Pedee, but only on the two former rivers and Winyah Bay, into which they empty, is any fishing done.

On account of the character of the bottom and banks no seine-hauling is carried on, and the fishing is entirely by gill-nets. This year about thirty nets were fished, averaging 150 fathoms long, $5\frac{1}{2}$ to $5\frac{1}{4}$ inch mesh, and 16 to 18 feet deep. They are not allowed to reach the bottom on account of snags. The average catch this year was about 800 shad per net.

Many of the gillers live in flat-boats moored at convenient localities. Mr. Barnes's flat is at the junction of Jericho Creek and the Waccamaw. He fishes three nets, employing 9 men, viz, a superintendent, two men for each net, a cook and a marketman, who carries the fish in a small boat to town, 10 miles below.

Mr. Barnes says they catch very few ripe fish of either sex, but take a good many "down-runners," or spent fish. He believes all the fish go long distances above the highest fisheries, which are only a short distance from salt water, to spawn.

On the headwaters of these rivers, owing to the natural difficulties and the absence of market facilities, the only shad caught are taken with bow-nets and short pieces of gill-nets, as on the Saint Mary's, and only used for home consumption.

A great many shad are taken in Winyah Bay before they leave salt water. The best of the season here is February and March. On the day of my visit to Mr. Barnes's flat, the 7th instant, his total catch was 3 shad, and he quit fishing that day. He was paying 30 cents each, at first hand, for the fish he bought, and I see by the quotations in the Star of the 8th instant that they are being sold in Washington at \$25 to \$32 per hundred.

It is possible that some little work might be done here before the opening of the season farther north. There would certainly be more chance of success than in Florida, so far as my experience goes. I do not think much can be done where the catch of shad is taken by gill-nets, especially as fished in Southern rivers. As a rule, comparatively few shad are taken at a drift, and of these the proportion of males and females is rarely equally divided. Still more rarely are the two sexes in the proper condition for spawning. Especially is this true when by force of circumstances these nets are only fished in the long, deep reaches of the river, and never allowed to fish *near the bottom*. Consequently it seems to me most of the fish taken are those running up or down from the spawning-beds near the headwaters, where they cannot be caught, except in limited numbers, by the bow-net, &c.

We left Georgetown on the evening of the 7th instant, arrived off the Chesapeake early on the morning of the 9th, touched at Norfolk for a couple of hours, and then proceeded to Washington, D. C., arriving on the evening of this date at 6.20.

WASHINGTON, D. C., April 10, 1884.

66.—PROPOSED INTRODUCTION OF HAWAIIAN MULLET INTO THE UNITED STATES.

By Hon. JOHN F. MILLER, U. S. S.

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

The Hawaiian mullet is a very good food fish, not equal to our black bass, shad, Spanish mackerel, pompano, and any other American fishes of the best sorts, but a fairly good fish, which grows rapidly to perhaps a pound in weight and is comparatively free from objectionable bones. It inhabits the salt water in the harbor of Honolulu, and is propagated