

125.—MOVEMENTS OF MACKEREL.

By Capt. Z. L. TANNER.

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

I have just read Captain Martin's letter of September 1. We saw mackerel ten days later NE $\frac{1}{2}$ E, 129 miles from where Captain Plummer saw them, and in practically the same temperature, 69°, on the verge of the Gulf Stream. It is my impression that we saw the same school, as a movement of 13 miles per day would have placed them in our locality. We passed over the region referred to between the 2d and 5th inst., and on the latter date were at the spot where the mackerel were reported to have been on August 23.

STEAMER ALBATROSS, WOOD'S HOLL, MASS.,

September 7, 1883.

126.—SUCCESS IN PROPAGATING CALIFORNIA MOUNTAIN TROUT FROM EGGS BROUGHT TO MICHIGAN BY THE UNITED STATES FISH COMMISSION.

By MARTIN METCALF.

[From letters to Prof. S. F. Baird.]

I am now taking the eggs of the California mountain trout from fish reared from the ova furnished by the United States Commission three years ago the present month. I have individual fish of this species, reared from the eggs aforesaid, that will weigh hard on to 3½ pounds. Shall endeavor to-morrow to fertilize a few eggs with the milt of the Michigan grayling.

BATTLE CREEK, MICH., March 3, 1883.

I should take exception to the proposed expunging of the words "more vigorous"* as applied to the rainbow trout in comparison to what is called brook trout proper.

After an experience of four years with this variety, kept under like conditions, I can say that, *with me*, they are so much "more vigorous," hardy, voracious, and desirable every way for our Michigan streams, now denuded of forests, that the brook trout is not to be thought of in comparison.

During spawning time—that time of trial to all the salmonoids kept in comparative confinement—the California mountain trout thrive and

* The reference is to remarks of Livingston Stone, on pp. 11-12 of F. C. Bulletin, 1882, Vol. II, where he proposed "more hardy" as a better phrase than "more vigorous" when comparing California trout with brook trout.—C. W. S.