

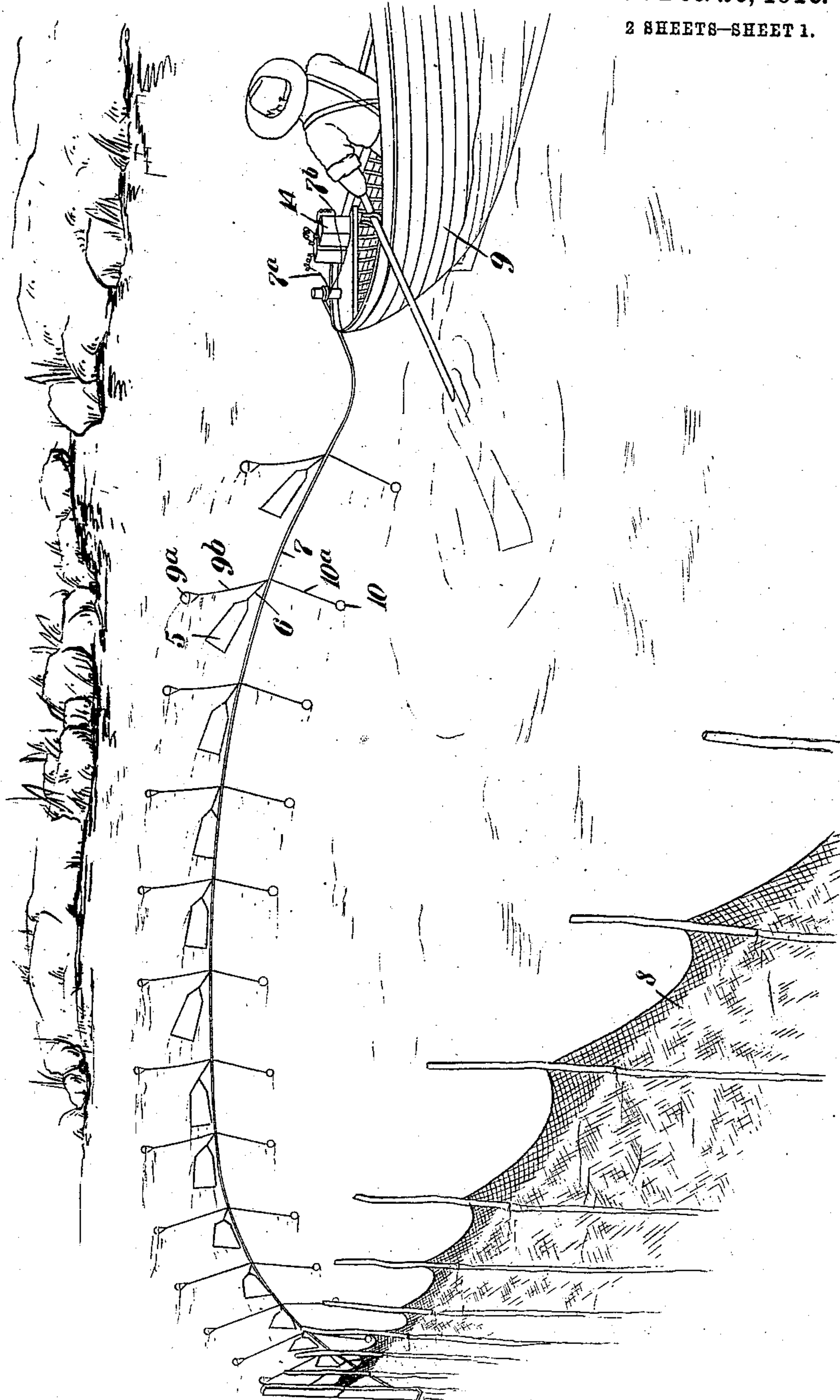
C. K. FREER.
 DEVICE FOR DRIVING FISHES.
 APPLICATION FILED JULY 20, 1909.

978,872.

Patented Dec. 20, 1910.

2 SHEETS—SHEET 1.

Fig. 1.



WITNESSES

Walton Harrison
 Walton Harrison

INVENTOR

Charles K. Freer

BY

Mumma & Co.
 ATTORNEYS

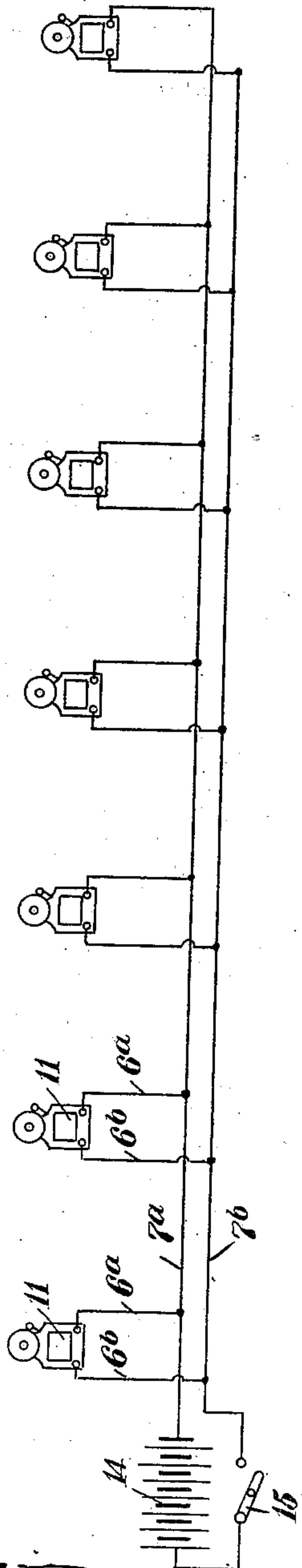
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Fig. 2.



WITNESSES

W. B. Harrison
Walton Harrison

Fig. 3.

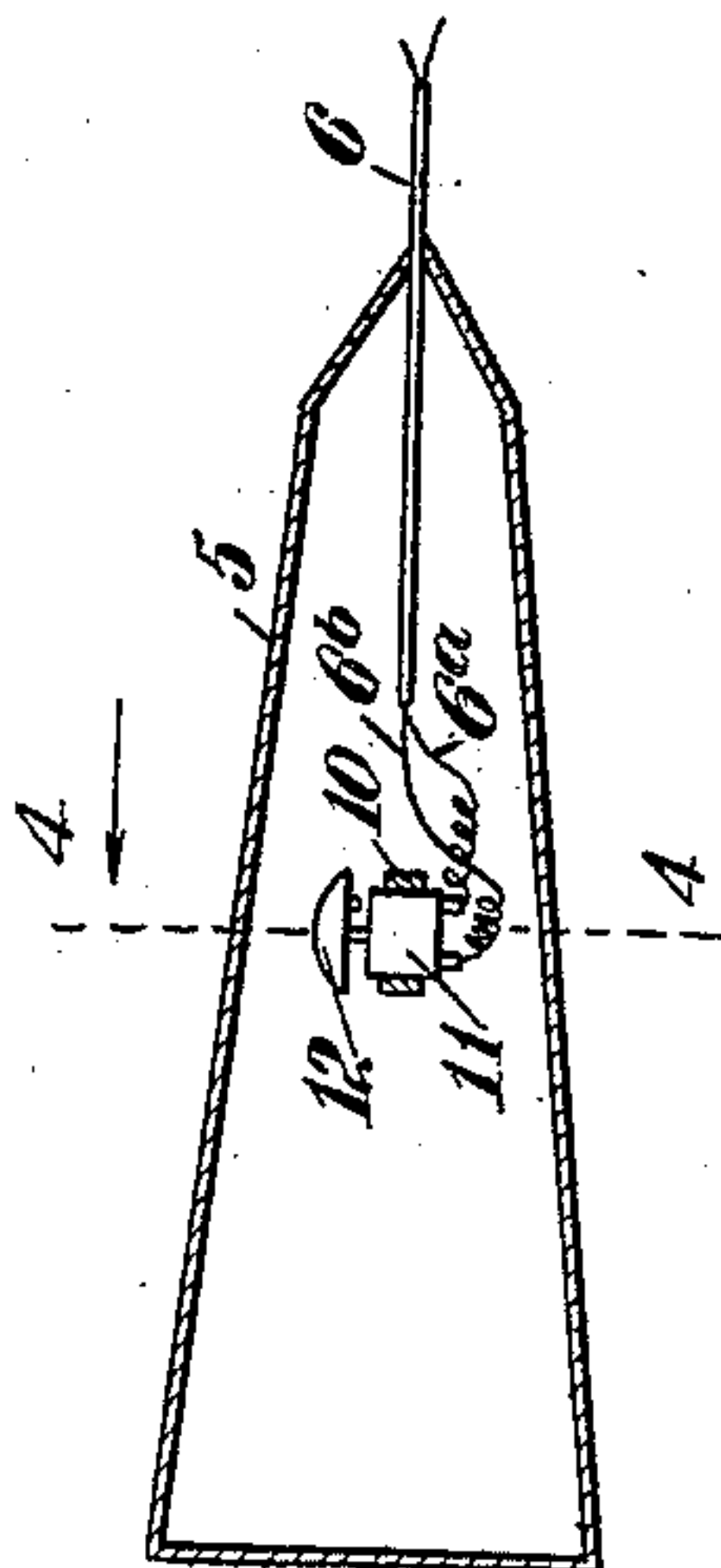
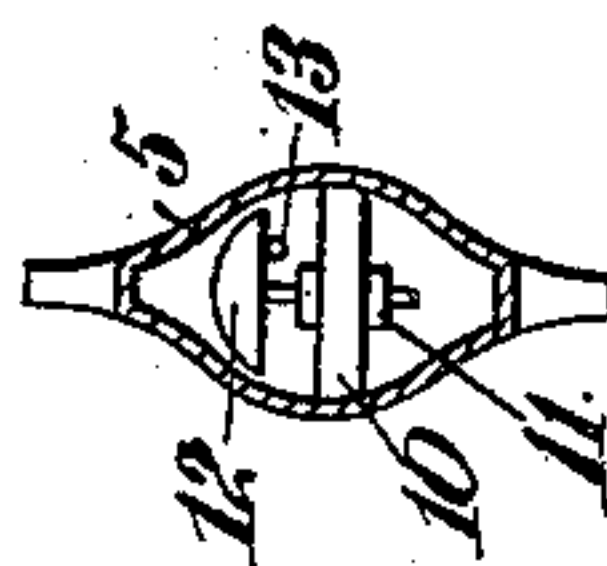


Fig. 4.



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UNITED STATES PATENT OFFICE.

CHARLES K. FREER, OF SANDUSKY, OHIO.

DEVICE FOR DRIVING FISHES.

978,872.

Specification of Letters Patent.

Patented Dec. 20, 1910.

Application filed July 20, 1909. Serial No. 508,606.

To all whom it may concern:

Be it known that I, CHARLES K. FREER, a citizen of the United States, and a resident of Sandusky, in the county of Erie and State of Ohio, have invented a new and Improved Device for Driving Fishes, of which the following is a full, clear, and exact description.

My invention relates to devices for driving fishes and is to some extent in the nature of a subaqueous alarm.

More particularly stated, my invention comprehends a number of buoys to be connected with a seine or the like, and containing alarms which are controllable electrically from a predetermined point, in order to frighten the fishes and drive them into a predetermined position or along a definite path.

While my invention may be made and used in various ways, I show for convenience only my preferred form of the mechanism, it being understood that reasonable variations may be made from this form without departing from the spirit of my invention.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective showing a seine equipped with my device, the latter being controllable electrically from the boat appearing in the figure; Fig. 2 is a diagram of the wiring from the battery to the various buoys carried by the seine; Fig. 3 is a detail showing in vertical section one of the buoys; and Fig. 4 is a section on the line 4—4 of Fig. 3, looking in the direction of the arrow and showing how the electric bell is mounted within the buoy.

A number of buoys 5, each having substantially an oar shape, are connected by ancillary cables 6 with a main cable 7, this main cable being movable relatively to a net 8 and controllable from a boat 9. Each buoy 5 is thicker through its middle than through its top or bottom, as indicated in Fig. 4. Extending crosswise through the middle of each buoy 5 are two supporting rods 10, and disposed intermediate the latter and sustained by the same is an electric bell 11, provided with a gong 12 and clapper 13.

The buoys are so shaped and ballasted as to retain their respective vertical positions, as indicated in Fig. 4.

A battery 14 is carried upon the boat 9 and extending from this battery are wires 7^a, 7^b, which are incorporated in the main cable 7. Each ancillary cable 6 contains a pair of wires 6^a, 6^b leading to the particular electric bell 11 associated with the particular buoy. At 15 is a switch whereby the circuit is completed in multiple through all of the bells. The floats 9^a support the main cable 7 by aid of lanyards 9^b. Weights 10 depend from the main cable by aid of lanyards 10^a. The ancillary cables 6 serve the double purpose of dragging the buoys through the water and of enabling the bells contained in the buoys to be energized.

The operation of my device is as follows: The parts being assembled and connected up as indicated in Figs. 1 and 2, the operator moves the boat 9 around at will so as to drag the various buoys 5 in a predetermined direction. This may be done, for instance, by moving the boat in a circle so that the various buoys sweep over a given area, all in the general direction of the net 8 into which the fishes are to be driven. Whenever the operator wishes to sound the alarm for the purpose of frightening the fishes, he closes the switch 15 over for a moment, or for any longer time desired. Moreover, he does this either intermittently or continuously, according to the immediate purpose he has in view. Each time the switch 15 is closed the following circuit is completed: battery 14, wire 7^a, the various wires 6^a in multiple, the various electric bells 11, the various wires 6^b in multiple to the wire 7^b, thence back to battery 14. This energizes all of the bells which, being of the so-called "continuous ring" type, each sounds a continuous alarm so long as the circuit is completed. The fishes being thus frightened are driven into the net or wherever desired in the water.

While for convenience I show the buoys 5 as of a general oar-like form, I do not limit myself thereby, as obviously they may be of any other form desired. Neither do I limit myself to the particular construction otherwise, as variations may be made therein without departing from the spirit of my invention; neither do I limit myself to the em-

ployment of bells, because obviously other forms of alarm may be substituted for the latter.

Having thus described my invention, I
5 claim as new and desire to secure by Letters
Patent:

1. The combination of a buoy made hollow and having substantially an oar shape, supporting bars mounted within said buoy
10 and extending crosswise thereof, said supporting bars being below the center of gravity of said buoy, an electric bell mounted upon said supporting bars, and means for energizing said electric bell while said buoy
15 is afloat.

2. The combination of a longitudinal flexible member, a plurality of floating bodies connected therewith for supporting said flexible member in a substantially horizontal
20 position at a predetermined level below the surface of the water, a plurality of buoys connected with said member and adapted to be dragged through the water, and a plu-

rality of weights connected with said member for preventing the same from rising to
25 the surface of the water.

3. A device of the character described, comprising a plurality of floats for resting upon the surface of the water, a line located below said floats and supported by aid of
30 the buoyancy thereof, a plurality of substantially oar-shaped buoys connected with said line and disposed below the level of said floats, weights for preventing said
35 buoys from rising to the surface of the water, a plurality of alarms carried by said buoys, and means controllable at will for energizing said alarms simultaneously.

In testimony whereof I have signed my name to this specification in the presence of
40 two subscribing witnesses.

CHARLES K. FREER.

Witnesses:

W. B. STARBIRD,
ROLAND WAGNER.