

(No Model.)

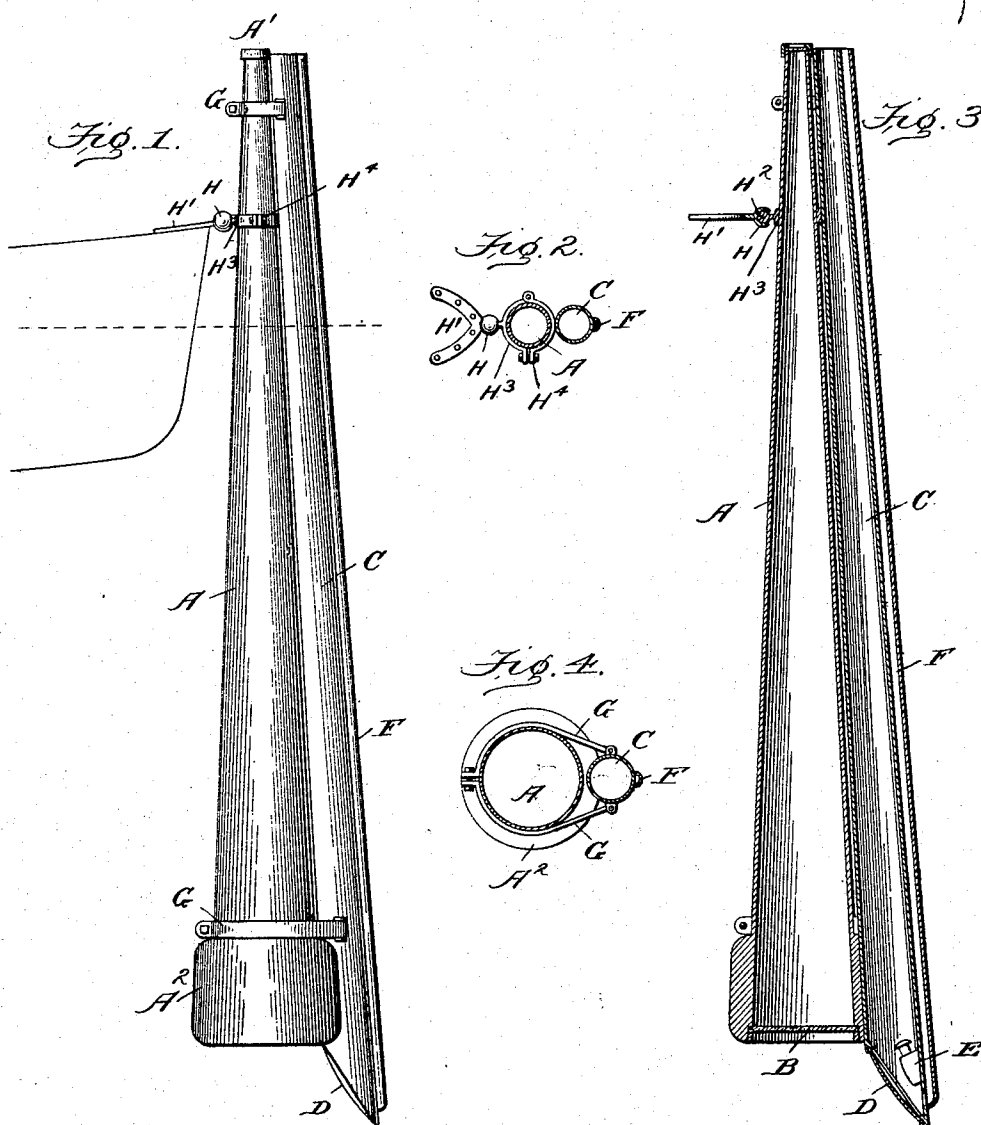
E. L. HUBBARD.

DEVICE FOR INSPECTING BOTTOMS OF STREAMS, &c.

No. 572,803.

Patented Dec. 8, 1896.

T2653



WITNESSES:

Edmund L. Bradford.
 Ralph Wornelle.

INVENTOR
 Edmund L. Hubbard

BY R. H. Lacy
 ATTORNEYS

EDWARD L. HUBBARD, OF BALTIMORE, MARYLAND.

DEVICE FOR INSPECTING BOTTOMS OF STREAMS, &c.

SPECIFICATION forming part of Letters Patent No. 572,803, dated December 8, 1896.

Application filed May 1, 1896. Serial No. 589,859. (No model.)

To all whom it may concern:

Be it known that I, EDWARD L. HUBBARD, of Baltimore, in the State of Maryland, have invented an Improved Device for Inspecting the Bottoms of Streams, &c., of which the following is a specification.

This invention is an improved device to be used for sighting or viewing the bottom of a stream or body of water.

The object of the invention is to provide a portable device which can be carried about by an oysterman and used by him to locate by sight the oysters upon the bed or bottom.

It is well known that oysters grow in clusters, and very frequently the tongman spends the greater portion of his time locating the clusters or beds.

Now the main object of my invention is to avoid this searching in the dark and provide the tongman with a means for searching the bottom with the eye; and the invention consists in certain details of construction and novelties of combination and arrangement, all of which will be fully described hereinafter and pointed out in the claim.

In the drawings forming a part of this specification, Figure 1 shows the invention in use. Fig. 2 is a detail view of the device; Fig. 3, a longitudinal sectional view. Fig. 4 shows details of construction.

In carrying out my invention I employ a sighting-tube A, made, preferably, of cast-iron, and wider at the bottom than at the top, said top in practice being only large enough to receive the sight-piece A'. The lower portion is made thicker, as shown at A², for the purpose of increasing the weight at that end in order to sink the tube, the bottom being lightly closed by a plate of glass B. The tube thus constructed will sink into the water a definite distance, and the bottom will rest a short distance above the bottom of the stream or body of water, say one or two feet. By placing the eyes to the sight-piece the bottom can be clearly seen and everything upon the bottom, such as oysters, crabs, &c.

For water which is ordinarily clear this device will be sufficient, but for muddy water and in cloudy weather it will be necessary to provide a light attachment, and this I accomplish by the employment of a second tube

C, which projects some distance below the end of the tube A, and in the end of said tube I arrange a refracting-lens D, said lens being arranged at an angle, as clearly shown, to throw the light across the end of the tube A.

The light E is lowered into tube C down to the bottom, and in case an oil-lamp is employed a tube F will be attached to the tube C at a point near the end, and will supply the necessary air to support combustion.

The lamp and air tube are connected in any suitable manner, and the lamp-tube is attached to the main tube A by means of a suitable clasp G.

In practice this device is made about ten or twelve feet in length, but if desired it can be made longer and constructed with screw-joint sections.

The device is attached to the prow of the boat when in use, and in order to permit of a free and easy movement I employ a ball-and-socket connection between said boat and tube, the socket H being formed upon a plate H', attached to the boat, while the ball H² is formed upon a plate H³, which has a clamping-arm H⁴, adapted to embrace and secure the tube, said arm being held by a binding-screw H⁴.

By means of the clamping-arm the tube can be adjusted as desired, and by means of the ball-and-socket joint the tube can be swung up or down, right or left, as desired. Now for the purpose of locating the oysters the tube is lowered and the eyes placed at the sight-piece while the boat is slowly propelled. Wherever oysters are found a suitable buoy or other device can be used to mark the spot for later operation.

In setting out oysters my invention is also of great use, as it enables the planter to see whether the oysters are piled or whether they are upon the proper bottom.

There are also many other uses and advantages which will be apparent to every one skilled in the art to which it pertains.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

A metallic tube heavy at the bottom, and closed with plate-glass, a second tube C, attached to the said main tube A, one side thereof

extending below the said main tube, a glass plate situated in the lower, inclined end of the said tube C, a lamp E situated in the bottom of said tube C, an air-tube F for supplying air to the said lamp, means for attaching said device to the bow of a boat or other vessel, substantially as set forth.

In testimony whereof I affix my signature in the presence of two witnesses.

EDWARD L. HUBBARD.

Witnesses:

EMMA NEUWILLER,
CARLISLE L. HUBBARD.