(No Model.)

E. E. SWETT & A. RASMUSSEN.

DREDGING DEVICE.

No. 434,099. Patented Aug. 12, 1890.

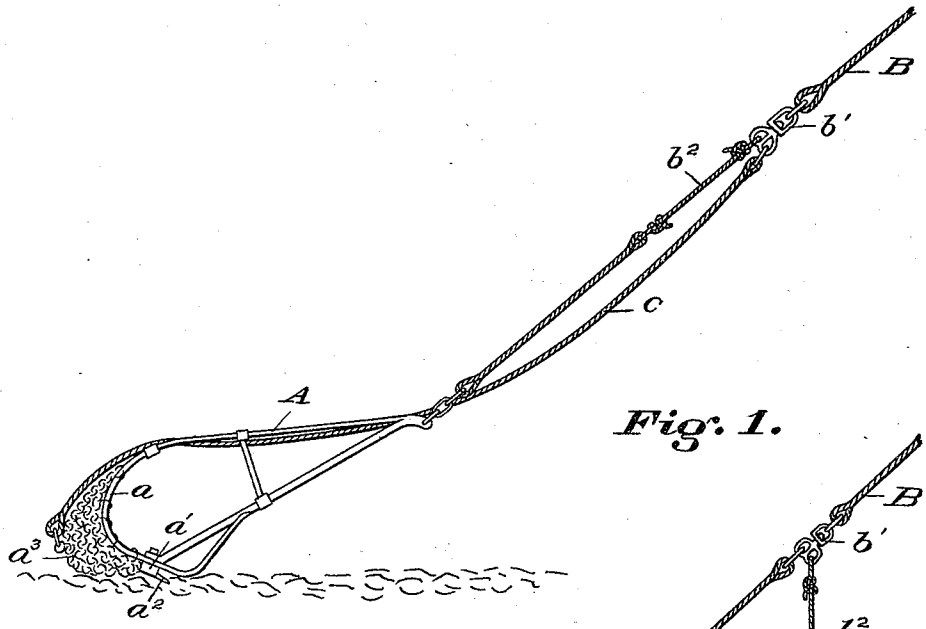


Fig. 1.

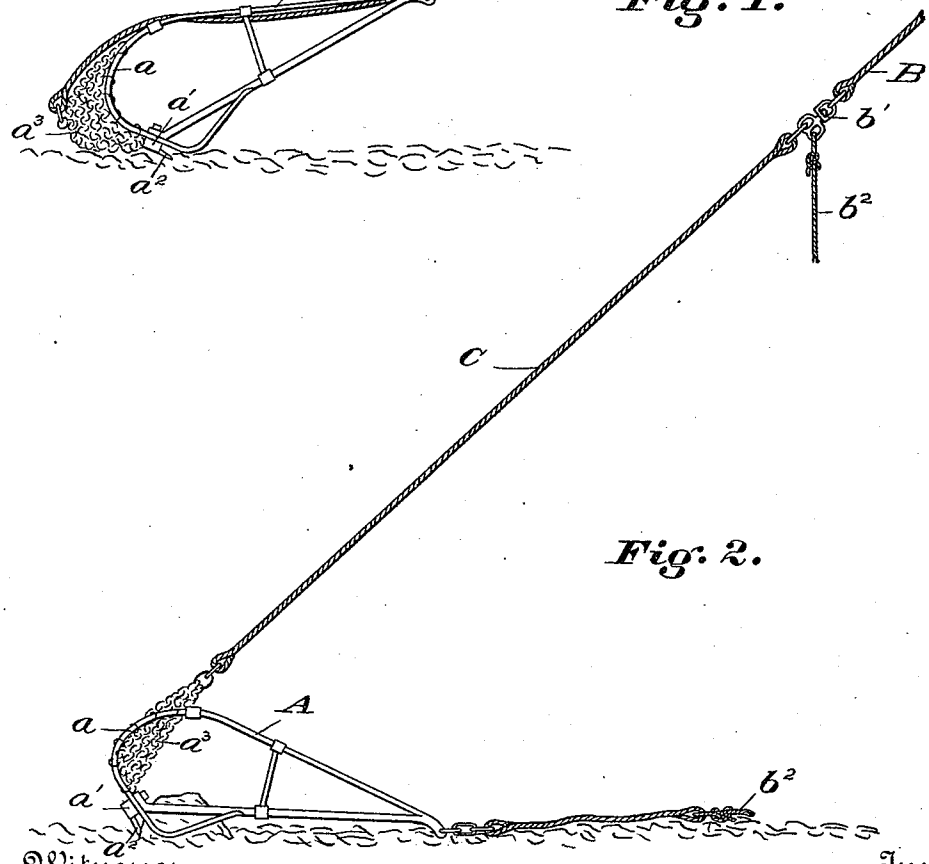


Fig. 2.

Witnesses

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UNITED STATES PATENT OFFICE.

EDWARD E. SWETT AND ANTON RASMUSSEN, OF BALTIMORE, MARYLAND.

DREDGING DEVICE.

SPECIFICATION forming part of Letters Patent No. 434,099, dated August 12, 1890.

Application filed May 2, 1890. Serial No. 350,271. (No model.)

To all whom it may concern:

Be it known that we, EDWARD E. SWETT and ANTON RASMUSSEN, of the city of Baltimore, and State of Maryland, have invented a new and useful Improvement in Dredging Devices, of which the following is a full specification.

Figure 1 of the accompanying drawings illustrates the dredge as it is hauled along. Fig. 2 shows the dredge with the main line broken and caught by the trip-line in the act of turning the dredge over.

A is the frame-work of an ordinary dredge, such as is used for dredging oysters. This frame-work is usually of iron rods or bars joined at the top and spreading out at the bottom and terminating in a rounded form, as shown at *a*. A stout rod or bar *a'* crosses the front of the device, and is usually provided with the teeth a^2. It is this part of the device which drags and catches oysters, clams, or other things for which the apparatus is used, and behind this bar is fastened or secured the bag a^3, in position that the matter scraped up by the teeth is thrown backward and caught by the bag until it is filled, when it is hoisted upon a boat or vessel (not shown in the drawings) by the main line B and emptied. It is then returned to the water and the operation is repeated until a load is obtained.

During the operation in the manner above described it frequently happens that the dredge comes in contact with a rock or other obstruction, when the main line would break and the dredge be lost were there not some means for releasing the dredge from the obstruction, and this is done by making use of a trip-line, (shown in the drawings at C,) which line is usually attached to the rear part of the bag, so that when pulled the bag will be turned over, emptied, and the dredge released from the obstruction. The only method with which we are acquainted for using this trip-line is to attach it to a buoy which floats near the vessel and is pulled along by the vessel by means of a rope which attaches the buoy and vessel to each other, and when the main line breaks the buoy is hauled to the vessel, the trip-line is caught, and all hands are summoned to haul on the trip-line by hand until the dredge is released, hauled aboard, repaired, and again dropped. This requires a great deal of time, and when the accidents are frequent makes a great expense. By the use of our apparatus this labor and expense are avoided. The main line B is wound, as usual, upon the spool or windlass of the vessel, and to this main line we attach the swivel-joint *b'* to prevent twisting of the lines, which is provided with apertures or other means for securing the main line and the trip-line, which extend below the swivel. The main line is attached to the top or neck of the dredge by a ring or other suitable connection, and the trip-line hanging loosely passes behind the dredge and is attached to the bag or tooth-bar. The main line B is broken at a point shown in the drawings, and the ends joined together by a becket, as b^2, which is usually constructed of several twists of spun yarn or other suitable material strong enough to stand the strain of ordinary dredging work, but weak enough to give way before the main line is broken. Now when this becket breaks the upper end of the dredge falls forward, the trip-line becomes an extension of the main line, the movement of the vessel overturns and empties the dredge, and by winding upon the spool the dredge is brought aboard, a new becket supplied, and the dredge returned to the water.

What we claim is—

In a dredging device, the combination of the main line secured to the dredge and provided with a becket, as b^2, and a trip-line secured at one end to a suitable part of the dredge to overturn it when hauled, and at the other end to the main line so as to be caught thereby when the becket is parted.

EDWARD E. SWETT.
ANTON RASMUSSEN.

Witnesses:
LOUIS LAUGREHR,
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