March 11, 1924. 1,486,485

J. H. FRISSELL

SHRIMP CATCHING DEVICE

Filed Jan. 19, 1921

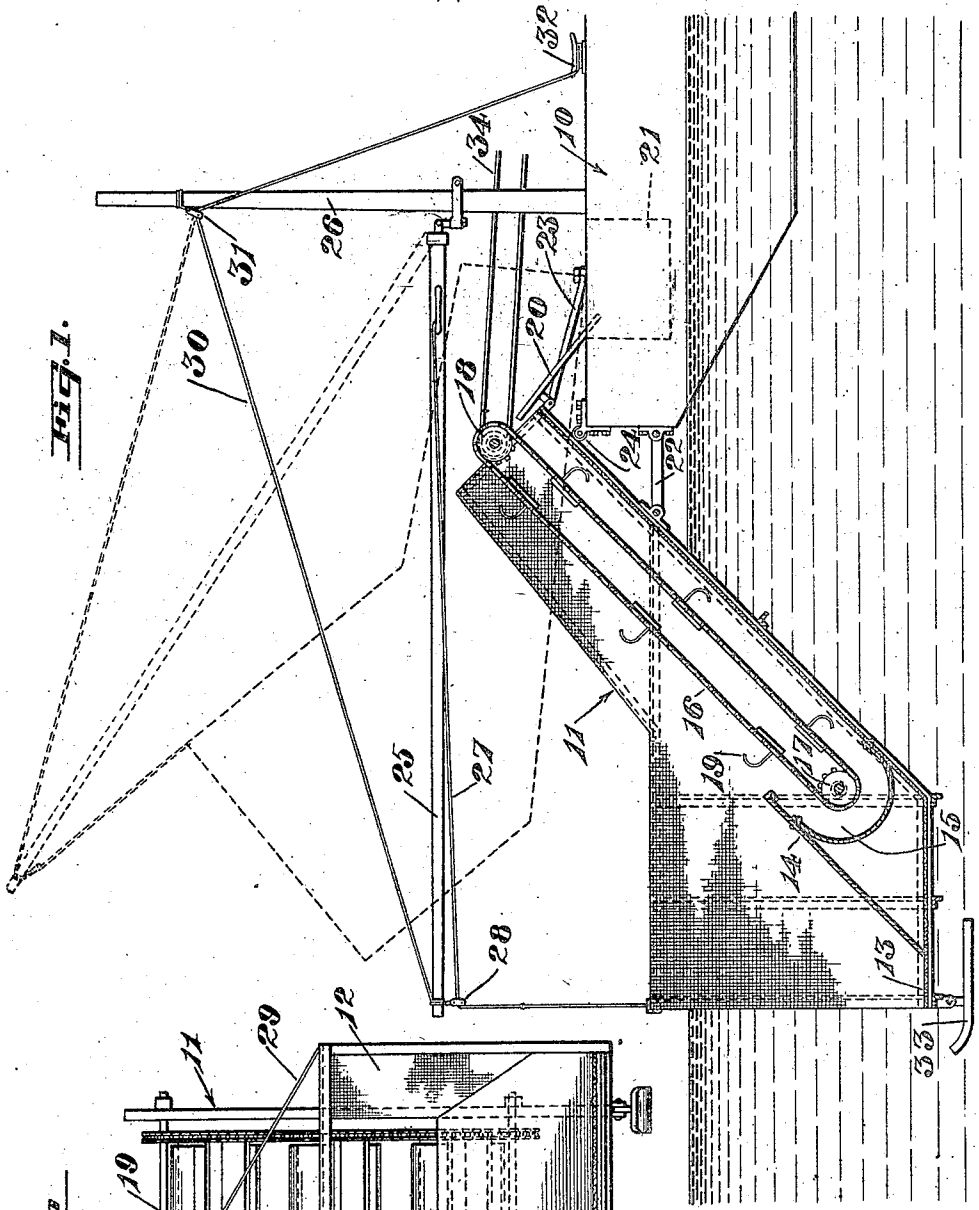


Fig. 1.

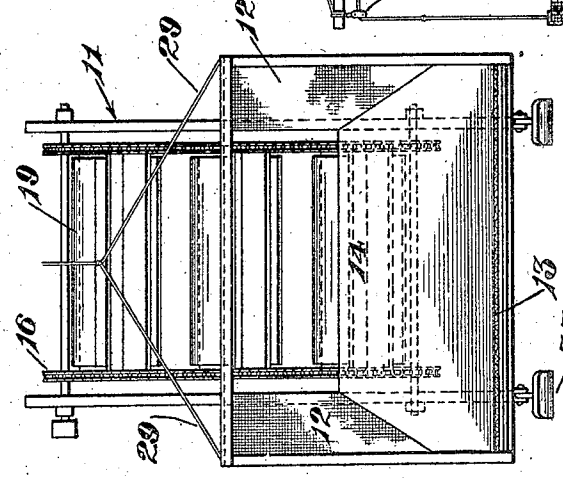


Fig. 2.

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Patented Mar. 11, 1924. 1,486,485

UNITED STATES PATENT OFFICE.

JOHN H. FRISSELL, OF OAKLAND, CALIFORNIA.

SHRIMP-CATCHING DEVICE.

Application filed January 19, 1921. Serial No. 438,368.

To all whom it may concern:

Be it known that I, JOHN H. FRISSELL, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented new and useful Improvements in Shrimp-Catching Devices, of which the following is a specification.

This invention relates to a fishing apparatus, and particularly pertains to means for catching shrimp.

It is the principal object of the present invention to provide a shrimp catching apparatus adapted to be mounted on a boat, and to continuously operate as the boat moves to catch and elevate shrimp from the water into the boat, said structure being so designed as to be readily drawn from its operative position and stored upon the boat for immediate use.

The present invention contemplates the use of a cage structure having a forward opened end which is adjustably submerged in the water, and within which structure an elevator mechanism is provided to lift the shrimps from the bottom of the cage to a point on the deck.

The invention is illustrated by way of example in the accompanying drawings, in which:

Figure 1 is a fragmentary view in section and elevation showing the present invention as applied to the end of a boat.

Fig. 2 is a view in end elevation showing the details of construction of the invention.

Referring more particularly to the drawings, 10 indicates a boat or other suitable floating vessel. Supported at the forward end of the boat is the shrimp catching device 11, with which the present invention is concerned. This structure comprises a cage having sides 12 and a floor 13, all of which members are formed with a rigid frame work over which reticulated material is stretched. The floor 13 has an inclined portion adapted to form the floor of a chute communicating with the boat at a point above the water. The side walls 12 flare outwardly along the horizontal length of the floor and then extend parallel up the inclined floor portion. A trap board 14 is disposed across the flared outer end of the cage, and is set at an incline to form a compartment 15, into which the shrimps may fall, and from which they may be carried by the elevator chain 16. This chain passes around a drum 17, positioned within the compartment 15, and also a drum 18 mounted at the upper end of the trough portion of the cage. The conveyor 16 is formed with a plurality of buckets 19, adapted to engage the mass of shrimps and pile them onto the conveyor belt, after which they will be thrown off as the conveyor passes over the drum 18. A receiving platform 20 will then catch the shrimps and conduct them into a compartment 21 in the boat.

The cage is movably supported relative to the boat by a link 22, one end of which is suitably pivoted to the prow of the boat, the other being pivoted to the bottom of the cage, as shown in Fig. 1. The length of this link and the point of its pivotal connection is such as to permit the cage to swing upwardly and rearwardly over the rail of the boat when not desired. Removable brace members 23 act to hold the cage in its operative position. Supporting rollers 24 are secured to the rail of the boat, and tend to support the cage as it is moved into and out of position for operation. The outer end of the cage is supported by a boom 25, suitably pivoted to a mast 26. A hoisting rope 27 is led over a pulley 28 at the end of the mast, and its outer ends made to form sling members 29, secured to the forward end of the cage. The boom may be raised and lowered by a rope 30 led over a pulley 31 at the top of the mast and suitably secured to a cleat 32.

In order to prevent damage to the structure in the event that shoals are encountered, shoes 33 are pivotally secured beneath the forward edge of the cage and would tend to ride over these shoals and lift the cage.

In operation of the present invention the structure is normally set up as indicated by dotted lines in Fig. 1. When the fishing grounds are reached the boom is lowered. This will cause the cage 11 to swing forwardly and downwardly over the rollers 24, after which the cable 27 may be adjusted to place the mouth and floor of the cage in their proper working positions. The boat may then be driven forwardly, at which time the shrimps will be forced up over the member 14, and will then fall into the trap compartment 15. Movement of the conveyor by suitable driving means 34 will act to elevate the shrimps into the boat.

It will thus be seen that the device here disclosed is of simple construction and operation, and may be readily moved out of and

into position for commercially catching shrimps in large quantities and small cost.

While I have shown the preferred form of my invention as now known to me, it will be understood that various changes might be made in the combination, construction, and arrangement of parts by those skilled in the art, without departing from the spirit of the invention, as claimed.

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

1. A device of the character described, comprising a cage member formed of reticulated material, the front and rear ends of said cage being open, a semi-cylindrical trap member formed in the cage, an inclined trap board associated with the trap and adapted to direct the shrimps within the trap, and a conveyor having one end positioned within and concentric with the trap and to elevate the shrimps from the trap through the rear end of the cage.

2. An apparatus of the character described, comprising a boat hull, a cage member formed of reticulated material, the ends of said cage being open, a chute formed as a part of the cage and angularly disposed in relation thereto, a semi-cylindrical trap formed within the cage, an inclined trap associated with the trap and adapted to direct the shrimps within the trap, a conveyor mechanism interposed between the boat hull and the trap and having its lowermost end positioned concentric with the trap, buckets on said conveyor, and link means for adjustably supporting the cage and chute in its operative position.

3. An apparatus of the character described comprising a cage formed of reticulated material, the said cage formed of parallel top and floor sections, a chute formed as an extension of the cage and extending angularly therefrom the said cage having open ends, a semi-cylindrical trap disposed within the cage, an inclined trap board connected to the floor of the cage at a point adjacent the mouth thereof and extending and connecting to the semi-cylindrical trap, the open portion of said trap being angularly disposed in relation to the floor of the cage, and a conveyor mechanism for elevating the shrimps from the trap through the chute, the lower end of said conveyor being arranged concentric with the trap.

JOHN H. FRISSELL.