No. 632,238. Patented Sept. 5, 1899.

B. J. CHRISTENSEN.

DEVICE FOR MOORING BOATS.

(Application filed Jan. 26, 1899.)

(No Model.)

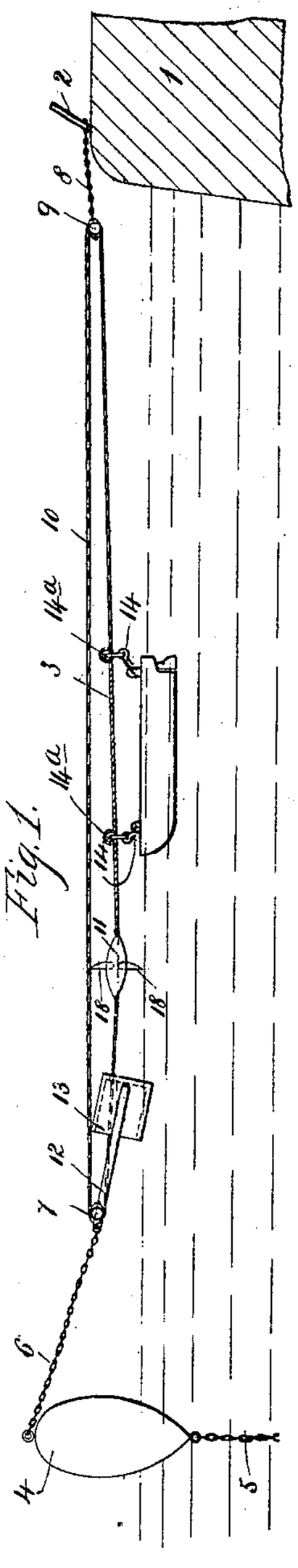

Fig. 1.

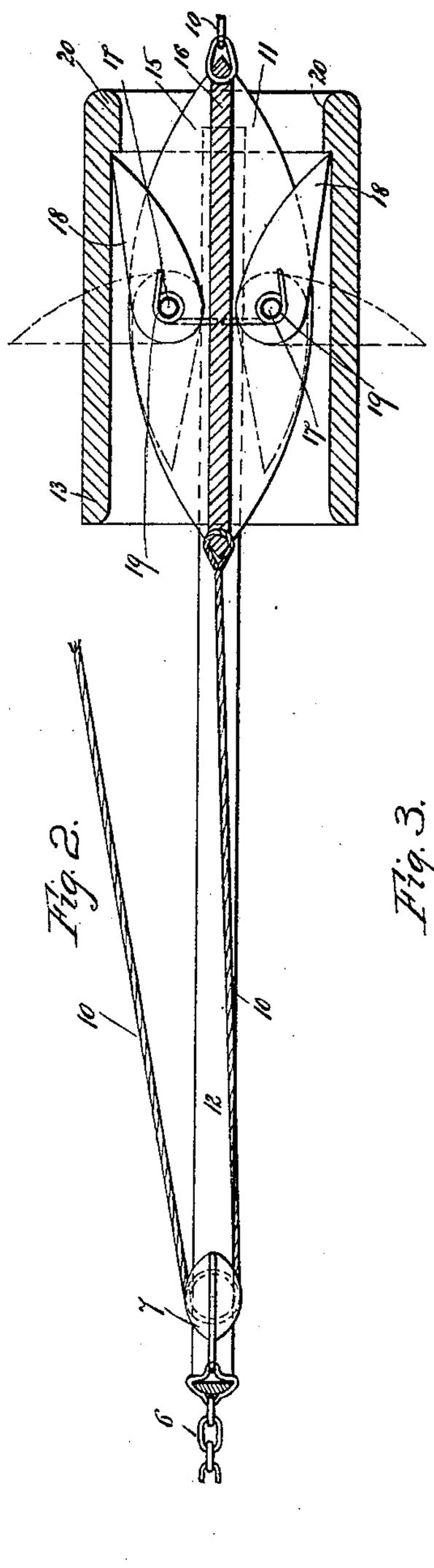

Fig. 2.

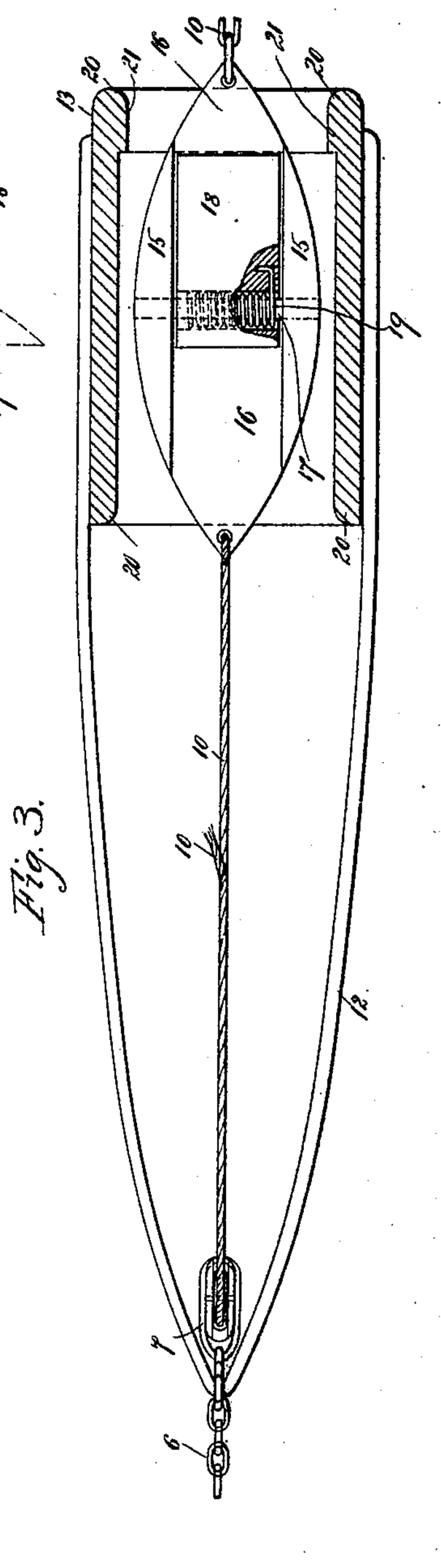

Fig. 3.

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DEVICE FOR MOORING BOATS.

SPECIFICATION forming part of Letters Patent No. 632,238, dated September 5, 1899.

Application filed January 26, 1899. Serial No. 703,424. (No model.)

To all whom it may concern:

Be it known that I, BERNHARD J. CHRISTENSEN, a citizen of the United States, residing at New York, (Brooklyn,) in the county of Kings and State of New York, have invented certain new and useful Improvements in Devices for Mooring Boats, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to devices for mooring boats, and has more particular reference to devices of this class by means of which a boat may be moved to its moorings by a person upon a bank, wharf, ship, or other distant landing-place and may be under the control of a person at such place; also whereby the boat may be locked at its moorings, so that it shall be impossible for wind or wave to drag it toward the point from which it was moored, and also may be unlocked from its moored position and withdrawn therefrom.

By my device it is possible to moor boats away from dangerous shores and still control them from said shore, avoiding the necessity of employing another boat when mooring or fetching the same.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is side elevation of my device, illustrating the method of using the same. Fig. 2 is a sectional side elevation of my device, and Fig. 3 a plan view thereof, partly broken away.

In the drawings forming part of this specification, 1 is a section of a bank or shore of a body of water, or it may represent a wharf, dock, or other similar structure, and secured thereto is a suitable spike or post 2; or the post 2 may be secured to a building or any suitable support and represents the point from which a boat 3 is to be moored and controlled, and a float 4, anchored at any desired and suitable point away from the post 2 by means of a cable 5 and anchor, (not shown,) constitutes the anchorage of the boat 3. A chain or other stout connection 6 is secured at one end to the float 4 and bears at the other end a pulley 7. A similar chain 8 is secured to the post 2 at one end and bears a pulley 9 at the other end. Through these pulleys is operatively passed an endless rope or cable 10, in connection with which the boat 3 and floating locking device 11, about to be described, are adapted to be placed, as shown in Fig. 1. A yoke-shaped frame 12 is connected at its apex with the chain 6 between the pulley 7 and the float 4, connected with the ends thereof. A cylindrical casing 13 is mounted between the end portions of the members of the frame 12 and is designed to house and operate in connection with the locking device 11. The casing 13 is preferably of wood or other buoyant material, and the rope 10 passes normally therethrough, and the locking device 11 is secured thereto, and the boat 3 is also adapted to be secured to the rope 10 in proximity to the locking device 11 by means of spring-locks 14, secured at either end of the boat 3, which are adapted to engage loops 14^a in the rope 10. It is evident that if the rope 10 be at any point moved longitudinally through the pulleys 7 and 9 it will correspondingly move the locking device 11 and boat 3, while the frame 12 and casing 13 will remain unaffected by such movement.

The floating locking device 11 is preferably oval or egg-shaped in form and is chambered longitudinally, as shown in Fig. 2, forming side portions 15 and a longitudinal partition 16. (Shown in Figs. 2 and 3.) Mounted in the side portions 15 and transversely of said device 11 and spanning the chambered portions thereof at each side of the partition 16 is a shaft 17, and revolubly mounted upon each of said shafts 17 is a fluke or catch 18, which is preferably fin-shaped and tapering toward its outer end. Each of said flukes 18 is revoluble upon its shaft 17, and around each shaft 17 is coiled a spring 19, the fluke 18 being bored large enough to inclose the same, and one end of the spring 18 is secured in the partition 16 and the other end in the fluke 18 and normally holds the fluke 18 in a rectangular position with relation to the partition 16. The cylindrical casing 13 is rounded at its end portions 20 and provided interiorly at the end portion thereof next adjacent the locking device 11, as shown in Fig. 1, with an annular bead or shoulder 21.

The boat 3 may be a common row-boat, tender, fisherman's boat, yacht, or of any form and description whatsoever in the class of small boats, and the operation of my device

will be evident from the foregoing description, taken in connection with the accompanying drawings and the following statement thereof.

If the rope 10 be so manipulated through the pulleys 7 and 9 as to bring the loops 14ª up to the shore, wharf, or other landing-place 1, the boat 3 may be fastened thereto by the spring-hooks 14. By again manipulating the rope 10 the boat 3 may be drawn from the landing-place 1 toward the float 4, and when this operation has taken place to such an extent that the floating locking device 11 is drawn by the rope 10 against the cylindrical casing 13 the flukes 18 thereof will be depressed by the rounded end portions of the casing 13 and the locking device 11 will pass into said casing, the flukes 18 assuming the positions shown in Fig. 2 in full lines and engaging the shoulder 20, which prevents the withdrawal of the locking device 11 through the end of the casing 13 by which it entered, and the boat 3 is held firmly in position should wave or wind tend to drag it from its moorings toward the landing-place 1. To unlock the locking device 11 from the casing 13, it is only necessary to so manipulate the rope 10 as to draw the device 11 out of the casing 13 toward the pulley 7, when the flukes 18 thereof will at once assume their normal vertical positions, due to the springs 17. If the rope 10 be then reversely manipulated, the device 11 will be drawn through the casing 13, the flukes 18 being depressed and passing unarrested through the casing 13, and the boat may be moved to the landing-place 1. It is evident that the boat 3 cannot approach more closely to the float 4 than to a point or position predetermined by the length of the chain 6, as the device 11, coming in contact with the pulley 7, would prevent further motion of the boat 3 in the direction of the float 4.

In attaching the locking device 11 to the rope 10 it is in practice found preferable to divide said rope and secure the ends thereof to the ends of the locking device 11, as shown in Fig. 2. If desired a lock or other fastening device may be secured to the lengths of the rope 10 in proximity to the pulley 9, so as to prevent tampering with the device.

It will be seen that many changes may be made in the construction and operation of my device without departing from the spirit of my invention or sacrificing any of the advantages thereof, and I claim all such as come within the scope of my invention.

Having fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a device of the class described, a support, a rope or line longitudinally movably suspended thereby, a frame secured to said support, a cylindrical casing secured to said frame, said rope passing through said casing, a locking device secured to said rope and comprising a body portion provided with longitudinal chambers and spring-pressed flukes pivotally secured to said body portion in said chambers, one end of said cylindrical casing being provided with an interior annular shoulder, said locking device being adapted to enter said cylindrical casing and the flukes being adapted to engage said annular shoulder, to lock said line, substantially as shown and described.

2. A device of the class described, comprising a support, a pulley connected therewith a supplemental support and a pulley connected therewith, an endless rope or line passed operatively through said pulleys and to which a boat is adapted to be secured, a locking device secured to said rope or line, and a cylindrical casing secured to said supplemental support and with which said locking device is adapted to operate, said rope or line passing through the said cylindrical casing, substantially as shown and described.

3. In a device of the class described, two supports separated by a predetermined distance, an endless rope or line longitudinally movably suspended by and between said supports, and to which a boat is adapted to be secured, locking devices secured to said rope, and devices secured to one of said supports and adapted to operatively engage said locking device whereby said boat is secured against movement in one direction, said line furnishing means for disengaging said devices, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 23d day of January, 1899.

BERNHARD J. CHRISTENSEN.

Witnesses:
E. B. ABELSEN,
WILLIAM R. LEE.