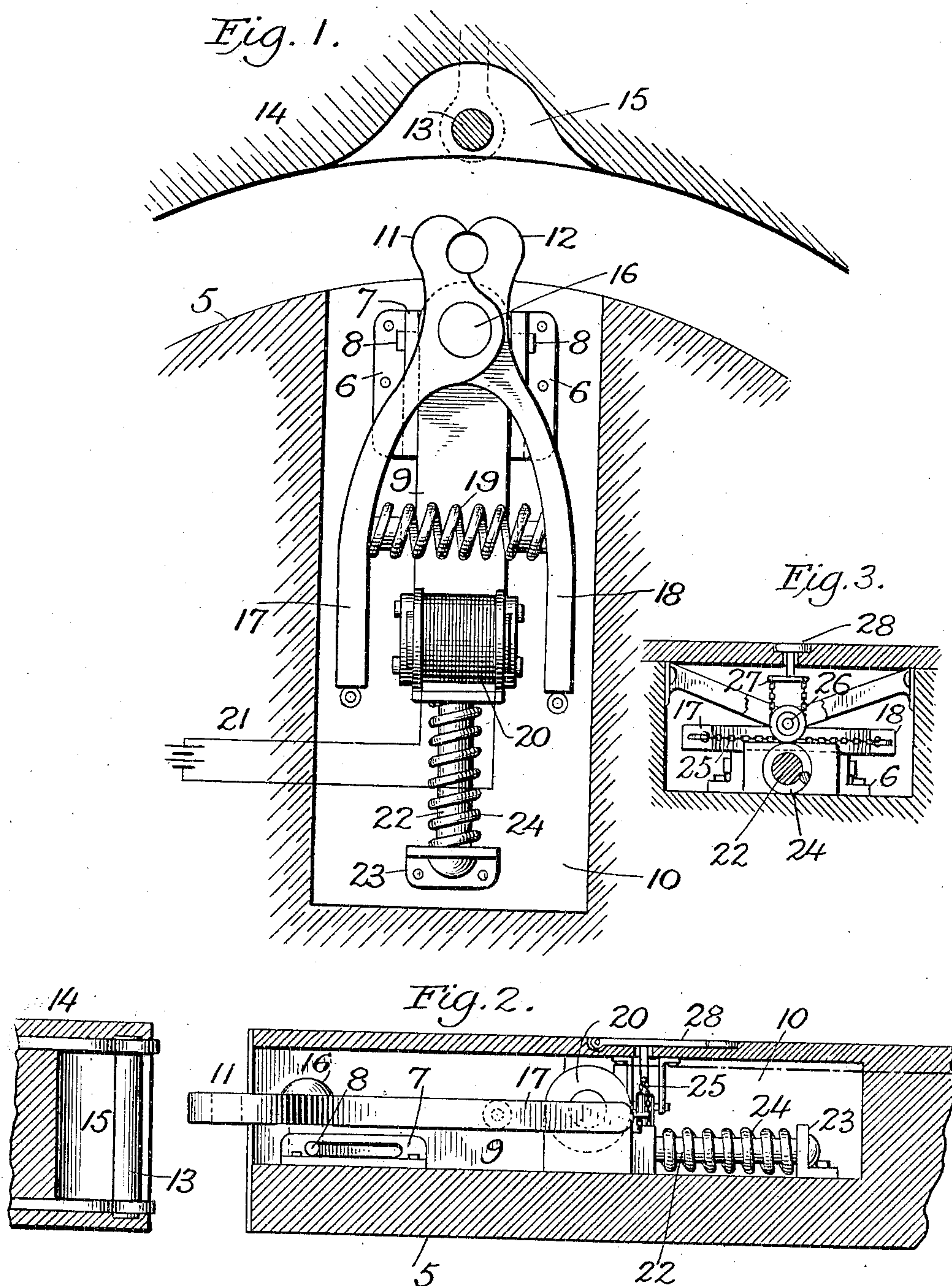


No. 843,458.

PATENTED FEB. 5, 1907.

M. M. HOOS.
ANCHOR FOR FERRY BOATS.
APPLICATION FILED NOV. 10, 1906.



WITNESSES
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MARTIN M. HOOS, OF LONG ISLAND CITY, NEW YORK

ANCHOR FOR FERRY-BOATS.

No. 843,458.

Specification of Letters Patent.

Patented Feb. 5, 1907.

Application filed November 10, 1906. Serial No. 342,854.

To all whom it may concern:

Be it known that I, MARTIN M. HOOS, a citizen of the United States, and a resident of Long Island City, in the county of Queens and State of New York, have invented certain new and useful Improvements in Anchors for Ferry-Boats, of which the following is a specification.

My invention relates to ferry-boats, and more particularly to anchors or means for holding the same to the ferry-slips when they are at their landings, as will be more fully described in the following specification, set forth in the appended claims, and illustrated in the accompanying drawings, wherein the same reference characters are used in the several figures to designate like parts.

Figure 1 is a plan view of my device, showing it applied to the bow of a ferry-boat and part of the slip. Fig. 2 is a longitudinal section through Fig. 1. Fig. 3 is a view looking at the device from the rear.

The device is adapted to be applied to either end of a ferry-boat, so that when it enters the dock and comes in contact with the front thereof the device will become operative and attach itself to the slip and continue to hold until it is desired to leave the dock, when certain means are applied to release the boat, so that it may continue on its trip.

To the bow of a ferry-boat 5 is secured in any desired manner two or more slides 6, whose upright flanges 7 are slotted to receive pins 8, projecting from the sides of a block 9, which is adapted to slide along the bottom of a chamber 10, beneath the deck of the boat.

Pivoted on the upper face of the block 9 are two jaws 11 and 12, the forward ends of which are adapted to engage and hold a pin 13, carried by the ferry-slip 14 and passing through an opening 15 therein.

Back of the pivot-point 16 the jaws terminate in arms 17 and 18, having a spring 19 between them, so that they are forced apart, as shown in Fig. 1. These arms are broad enough to form armatures for the electromagnet 20, carried by the rear end of the block 9 and in an electric circuit 21. The rear end of the block 9 terminates with a rod

or stud 22, playing through a bracket 23 in that end of the chamber 10, and a spring 24 is under compression between the block 9 and the bracket 23, so that when the jaws strike the pin 13 or the ferry-slip they yield with the block 9 and do no damage, but open to clutch the pin.

In case any accident should happen to the circuit 21 I provide the jaws with an emergency means for opening them, which consists of the chains 25, attached to the ends of the arms 17 and 18 and, passing around a pulley 26, is secured to the depending arms 27 of a lever 28, which is pivoted in a recess in the deck of the boat, and in case that the magnet fails to operate the jaws the lever 28 is pulled from its recess and the ends 17 and 18 of the jaws are brought together, releasing the pin 13.

It is obvious that I do not confine myself to the exact construction of the details of the device as illustrated in the drawings, but may find it necessary to modify them in the construction and operation of the device.

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

1. In an anchor for ferry-boats the combination of a pair of jaws adapted to engage means on the dock or slip, means for forcing the jaws into engagement, and means for automatically opening the jaws to release them.

2. In an anchor for ferry-boats the combination of a yielding block attached to the boat, yielding jaws pivoted to the block, armatures connected with the jaws, an electromagnet between the armatures, and an electric circuit for the magnet.

3. In an anchor for ferry-boats the combination of slotted plates carried at the end of the boat, a block playing between the plates and having lateral pins which enter the slots, a spring at the rear of the block, a pair of jaws normally closed and pivoted to the block, and an electromagnet situated between the jaws and adapted to open them when energized.

4. In an anchor for ferry-boats the combination of a pin carried by the dock or slip, a sliding block carried by the boat and having

a spring at its rear end so that it will yield
when subjected to a blow, a pair of jaws piv-
oted to the block, a spring adapted to force
the jaws together, an electromagnet adapted
5 to open the jaws when energized, and an
electric circuit.

Signed at Long Island City, in the county

of Queens and State of New York, this 20th
day of October, A. D. 1906.

MARTIN M. HOOS.

Witnesses:

REUBEN H. RILEY,
LOUIS KAHL.