M. G. DUCROW.

LOADING AND UNLOADING APPARATUS.

APPLICATION FILED JAN. 28, 1908.

916,281.

Patented Mar. 23, 1909.

2 SHEETS—SHEET 1.

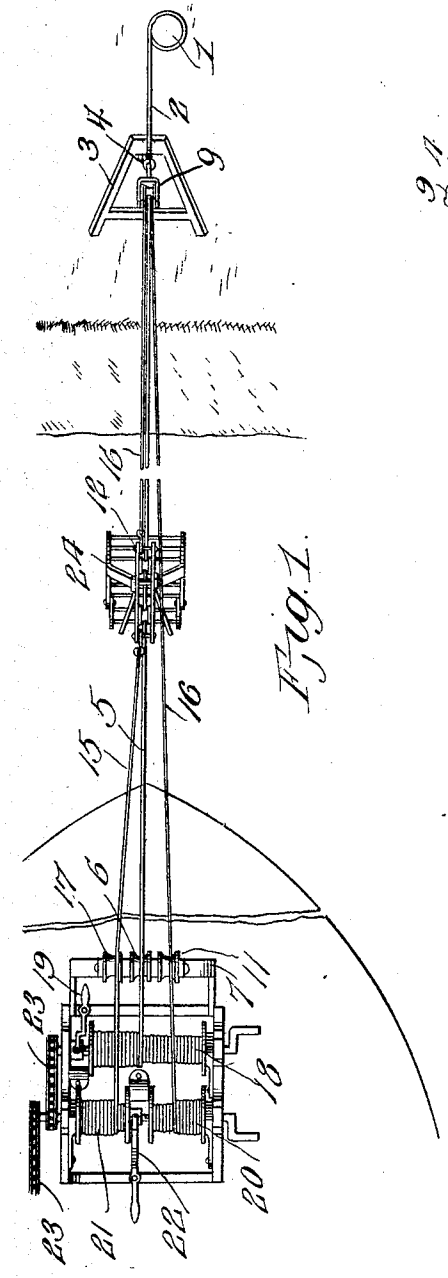


Fig. 1.

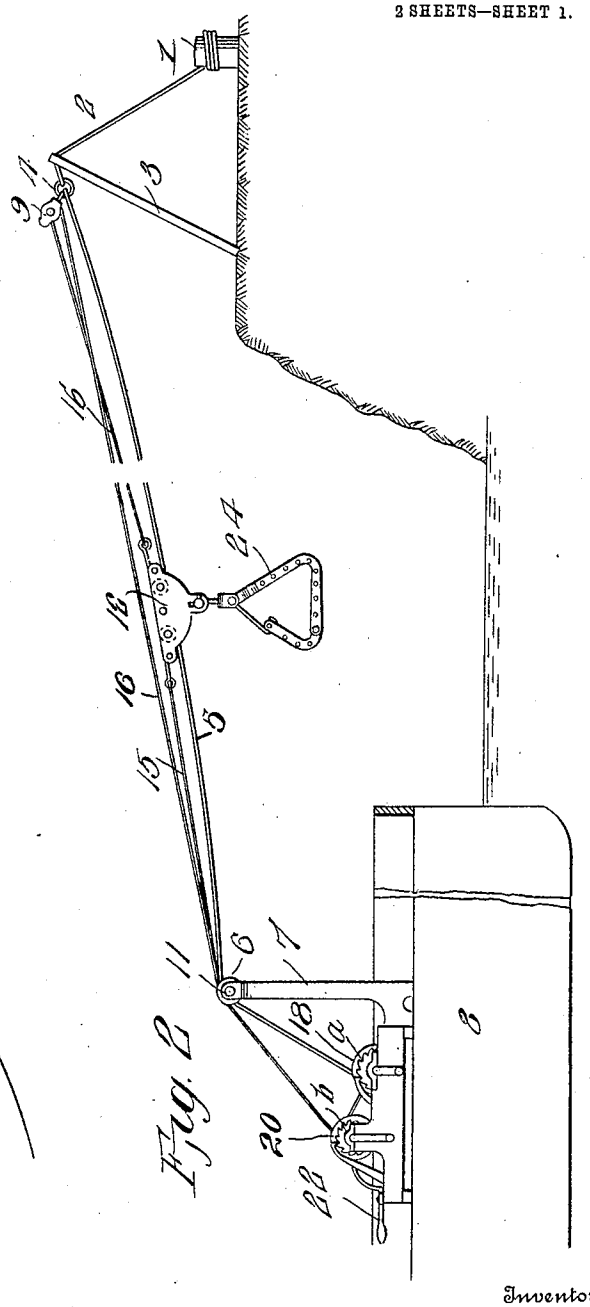


Fig. 2.

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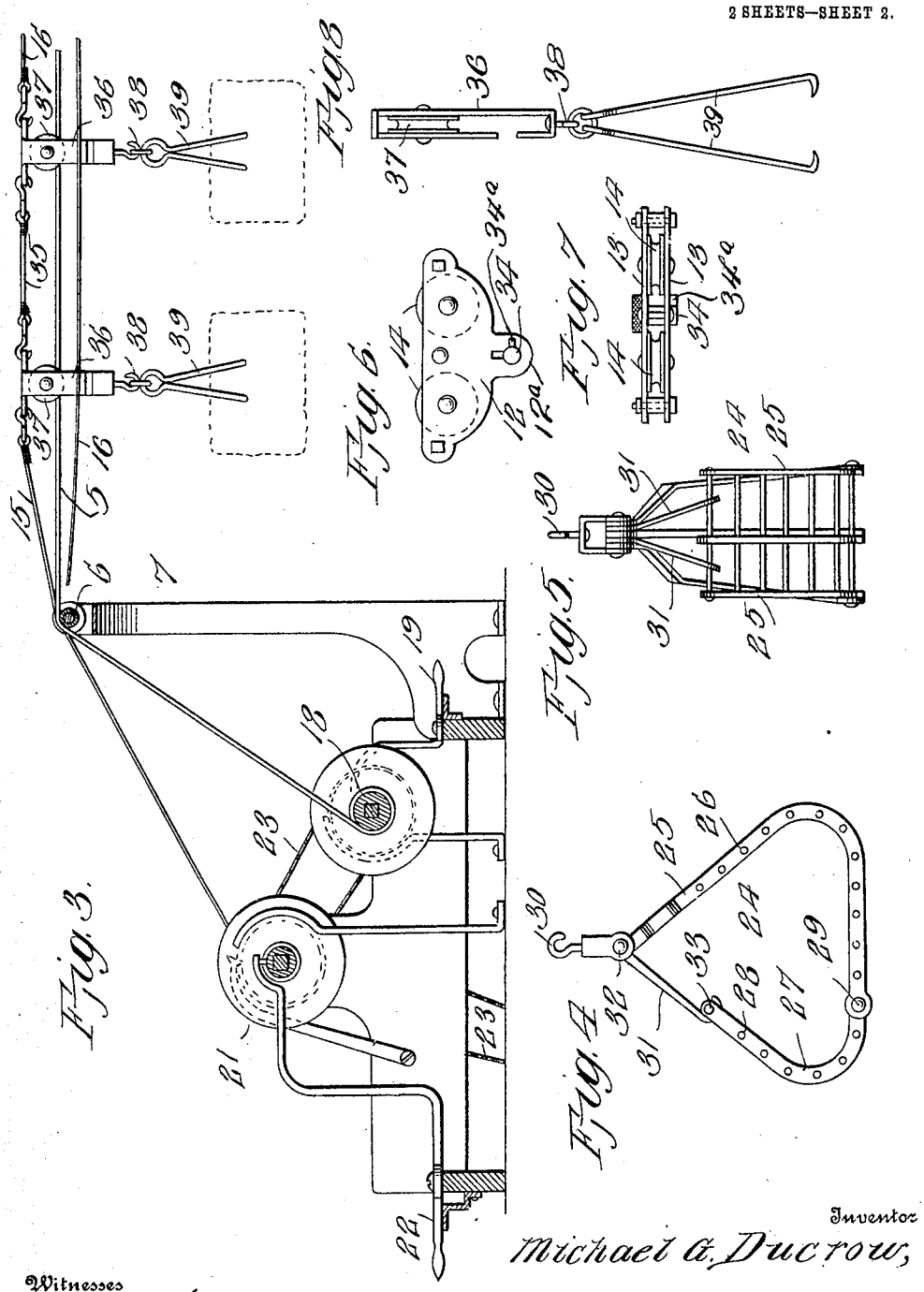
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UNITED STATES PATENT OFFICE.

MICHAEL G. DUCROW, OF NATCHEZ, MISSISSIPPI, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO DUCROW LOADING & UNLOADING MACHINE COMPANY, OF NATCHEZ, MISSISSIPPI, A CORPORATION OF MISSISSIPPI.

LOADING AND UNLOADING APPARATUS.

No. 916,281. Specification of Letters Patent. Patented March 23, 1909.

Application filed January 28, 1908. Serial No. 413,073.

To all whom it may concern:

Be it known that I, MICHAEL G. DUCROW, a citizen of the United States of America, residing at Natchez, in the county of Adams and State of Mississippi, have invented new and useful Improvements in Loading and Unloading Apparatus, of which the following is a specification.

This invention relates to loading and unloading apparatus designed particularly for use in loading and unloading boats in places where the water is shallow, like some parts of the Mississippi river, and one of the principal objects of the invention is to provide a simple form of aerial railway which can be quickly set up and taken down and which is quick and efficient in operation.

Another object is to provide a device of the character referred to which will handle general freight quickly and convey it from the boat to the shore and from the shore to the boat.

These and other objects may be attained by means of the construction illustrated in the accompanying drawings, in which,—

Figure 1 is a plan view of loading and unloading apparatus made in accordance with my invention. Fig. 2 is a side elevation of the same. Fig. 3 is an enlarged sectional view of the winding mechanism and showing a modified form of carriage. Fig. 4 is a side elevation of the general merchandise carrier. Fig. 5 is an end view of the same. Fig. 6 is a side elevation of the traveling carriage. Fig. 7 is a plan view of the carriage. Fig. 8 is a side elevation of a cotton carrier.

Referring to the drawings for a more specific description of my invention, the numeral 1, Figs. 1 and 2, designates an anchor post driven into the ground, and connected to this post is a rope or cable 2, said rope or cable passing up over a buck support 3. The cable 2 is connected to a ring 4, and the main or trolley wire 5 is connected at one end to said ring and extends thence over a pulley 6 on a standard 7 secured to the deck of a boat 8, and from thence the trolley wire extends to a windlass or winding drum which will be hereinafter described. A pulley block 9 is connected to the ring 4, and passing through said pulley is an outboard cable 16, said cable extending over a grooved roller 11 on the standard 7 and from thence extends to the winding mechanism referred to. A carriage 12 comprising spaced plates 13 between which grooved pulleys 14 are connected to the inboard cable 15 at one end and to the outboard cable 16 at the opposite end, the cable 15 extending over a pulley 17 on the standard 7 and extending thence to the winding drum. The carriage 12 is provided with spaced depending bars 12^a in which are formed key-hole passages 12^b for a purpose to be hereinafter set forth.

The winding mechanism comprises a frame in which three separate drums are journaled, the drum 18 being utilized as the trolley cable drum, said drum being provided with a suitable brake lever 19, the drum 20 being utilized for the outboard cable 16, while the drum 21 is used for the inboard cable 15, said drums being also provided with a brake lever 22. The drums of this winding mechanism may be connected by chains 23 to a suitable engine or motor under the deck of the boat.

Suspended from the carriage 12 is a general merchandise carrier 24 comprising curved bars 25 and cross bars 26. A pivoted section 27 also provided with cross bars 28 is hinged at 29 to the main section of the carrier, and a suspending hook 30 is connected to the carrier at its upper end and a latch 31 pivoted upon the pin 32 is adapted to engage a cross bar 33 on the section 27. There may be two of the latches 31, as shown in Fig. 5.

In the lower end of the carriage 12 a removable key 34 extends transversely of the carriage, and suspended from the body of this key is the hook 30 of the carrier, and this key is provided with a stud 34^a which may be passed through the key-hole passages.

As thus far described the operation of my invention may be briefly described as follows: After the apparatus has been set up, as shown in Figs. 1 and 2, the carriage 12 is moved from the boat to the land or from the land to the boat by means of the cables 15 and 16. The drums may be provided with ratchet wheels *a*, *b* and suitable pawls for holding the drums in adjusted position.

As shown in Fig. 3, the carriage comprises a link 35 connected to carriages 36 having pulleys 37 to run upon the cable 5, and suspended from the hooks 38 are suitable grapples 39 for engaging a bale of cotton, hay or other similar material.

From the foregoing it will be obvious that

a loading and unloading apparatus made in accordance with my invention can be quickly set up and taken down and will operate quickly and efficiently for loading and unloading boats.

Having thus described the invention, what is claimed as new, is:—

An apparatus of the class described comprising a carriage having alining key-hole slots, a removable pin engaged in said slots, a carrier suspended from said pin, a trolley wire for said carriage, and means for moving the latter in opposite directions.

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

MICHAEL G. DUCROW.

Witnesses:
JAMES H. MCCLURE,
JOHN S. GRADY.