

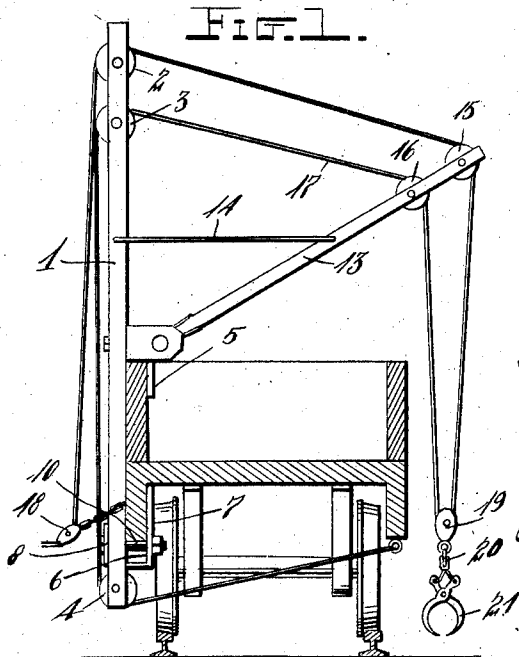
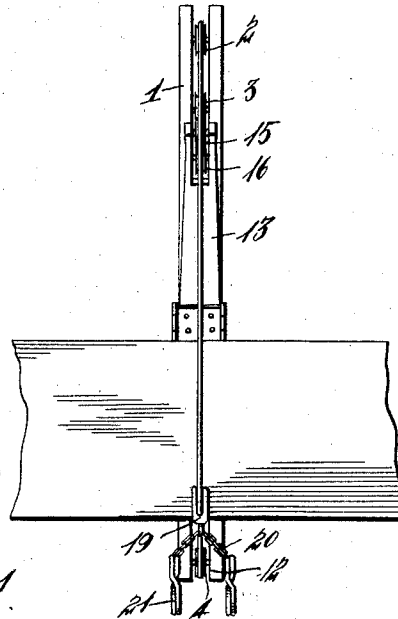
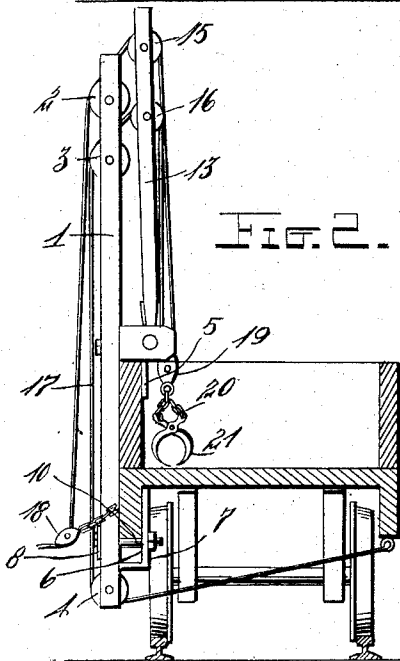
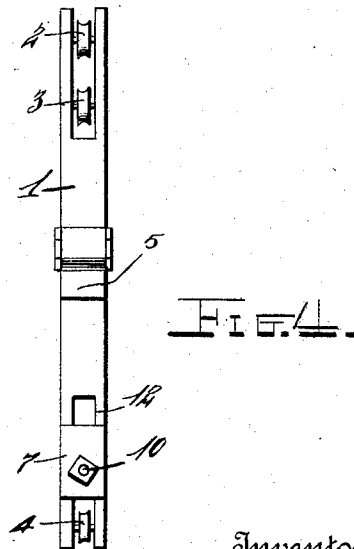
No. 866,393.

PATENTED SEPT. 17, 1907.

R. SHAW.

LOADING DEVICE.

APPLICATION FILED SEPT. 7, 1906.



Witnesses

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UNITED STATES PATENT OFFICE.

ROBERT SHAW, OF WARSAW, INDIANA.

LOADING DEVICE.

No. 866,393.

Specification of Letters Patent.

Patented Sept. 17, 1907.

Application filed September 7, 1906. Serial No. 333,691.

To all whom it may concern:

Be it known that I, ROBERT SHAW, a citizen of the United States, residing at Warsaw, in the county of Kosciusko and State of Indiana, have invented certain new and useful Improvements in Loading Devices; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

10 This invention relates to improvements in loading devices.

The object of the invention is to provide a device of this character, adapted to be applied to railway cars, or to wagons, whereby heavy material may be readily loaded into the same.

15 With the foregoing and other objects in view, the invention consists in the novel features of construction, combination, and arrangement of devices hereinafter described and claimed.

20 In the accompanying drawings,—Figure 1 is a cross sectional view through a car showing the loading device applied thereto; Fig. 2 is a similar view showing the parts in elevated position; Fig. 3 is a side view of a portion of a car with the parts in the position shown in Fig. 1; and Fig. 4 is a side view of the hoisting standard removed from the car.

Referring more particularly to the drawings, 1 denotes the standard of the hoisting device or loader, in the bifurcated upper end of which is revolubly mounted upper and lower guide pulleys 2, 3, and in the lower end of which is journaled a guide pulley 4. The standard 1 is adapted to be secured to the side of the car or wagon by means of an upper clamping plate or hook 5, and a lower clamping device 6, said lower clamping device comprising a pair of clamping plates 7 and 8, the plate 7 of which is provided with a right-angulantly bent lower end, adapted to be engaged with the inner side of the standard. The plate 8 is adapted to be engaged with the outer side of the standard 1 and through said plates 7 and 8 is inserted a clamping bolt 10, said bolt being also engaged with a slot 12, in the lower end of the standard, whereby the same and the plates 7 and 8, may be adjusted to clamp the standard into engagement with various sizes of cars or wagons.

45 Hingedly connected to the inner side of the standard 1 is a boom 13 adapted to swing over the body of the car or wagon, as shown in Fig. 1, and being limited in its outward movement by a chain or cable 14, attached thereto and to the standard 1. The outer end of the boom 13 is bifurcated and in said bifurcated outer end is journaled guide pulleys 15 and 16, over which and the pulleys 2, 3 and 4, in the standard 1, is arranged a hoisting cable 17, one end of which passes beneath the car and is secured thereto, as shown. The other end of the cable 17 after passing over the upper pulley 2 in the standard 1 is engaged with a pulley 18, loosely con-

nected to one side of the car, and from thence extends forwardly and is connected to an engine or other suitable power.

In the loop of the cable 17, formed by passing the same through pulleys 15 and 16 in the boom, is arranged a pulley 19, to which is secured the connecting chain 20 of a pair of grappling hooks 21, which are adapted to be engaged with the articles to be hoisted or loaded into the car or wagon.

65 In operation, the boom is lowered to an inclined position and the hoisting cable drawn downwardly over the pulleys in the end of said boom until the grappling hooks are in position to be engaged with the load to be hoisted, after which power is applied to the free end of the cable and the grappling hooks and load held thereby drawn upwardly until the pulley 19 comes into engagement with the end of the boom, after which a further pull on the hoisting cable will cause the boom to swing upwardly to a vertical position, as shown in Fig. 2 of the drawings, in which position the load on the chain will be raised above the body of the car and ready to be let down into its place therein by the slackening of the cable. A hoisting device of this character may be quickly attached to and detached from a car or wagon and when not in use may be conveniently carried therein in readiness to be set up in an operative position when desired.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention, as defined by the appended claims.

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

In a hoisting device of the character described, the combination with an upright or standard with a boom hinged thereto, means carried by the upright to connect it with a wagon body, a pair of guide pulleys at the upper end of the standard, a single guide pulley at the lower end thereof, a pair of guide pulleys carried by the outer end of the boom, a hoisting cable having one end suitably secured to the wagon body, thence passed around the pulley at the lower end of the standard, thence around the lowermost of the guide pulleys at the upper end of the standard, thence around the inner guide pulley of the boom, thence around the outer guide pulley of the boom, and thence around the uppermost guide pulley of the standard, and means on said cable to engage an object to be elevated.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ROBERT SHAW.

Witnesses:

WILLIAM S. ROGERS,
WILLIAM H. HARDMAN.