H. L. HAWKINS.

BULKHEAD HOIST.

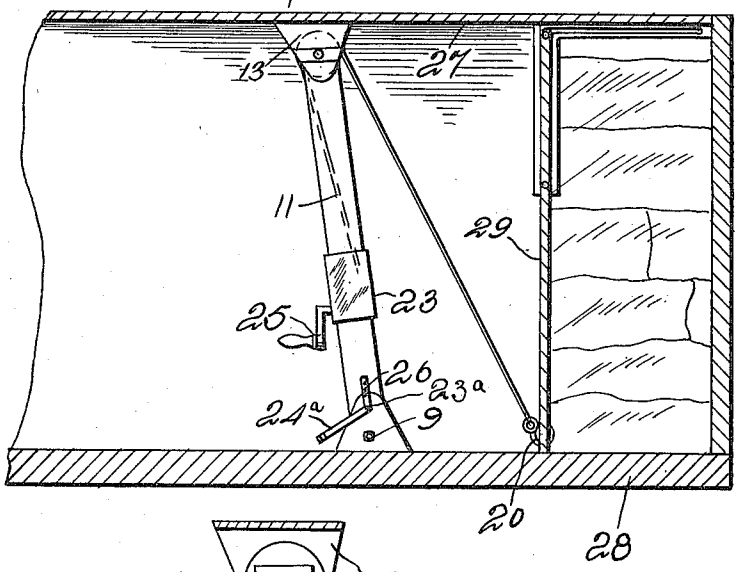
APPLICATION FILED JULY 20, 1914.

1,148,382.

Patented July 27, 1915.

2 SHEETS—SHEET 1.

FIG. 1.



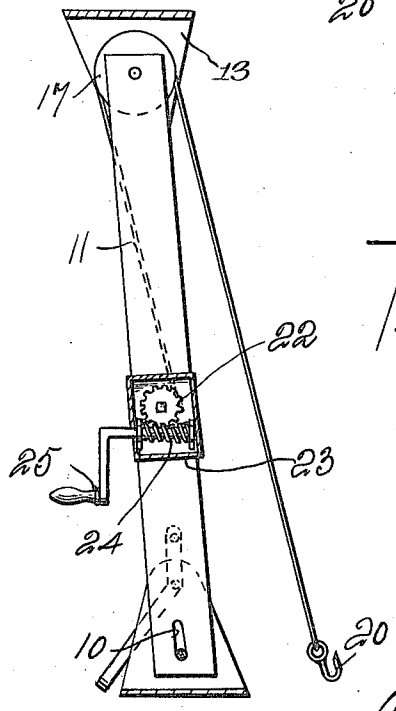


FIG. 2.

Witnesses

P. F. Peihmeyer.

Inventor

H. L. Hawkins.

By A. Randolph Jr.,

Attorney

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

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2 SHEETS—SHEET 2.

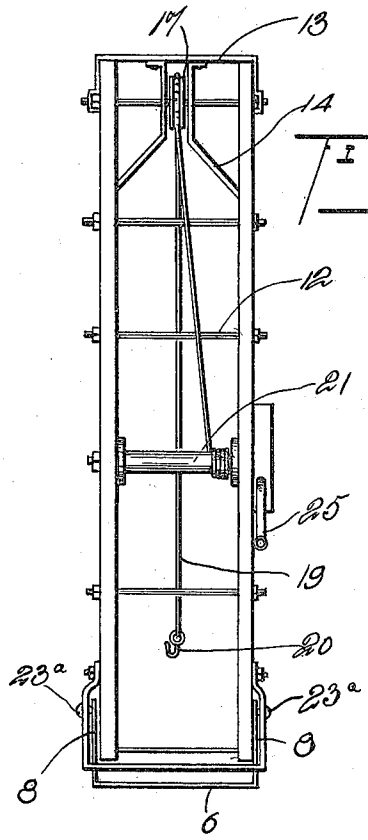


FIG. 3.

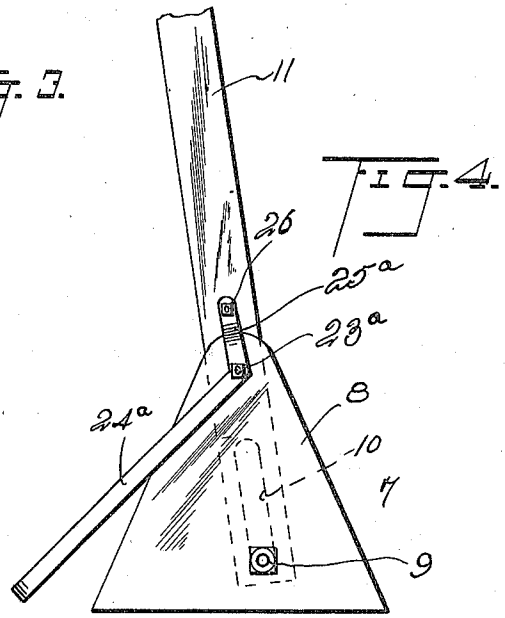


FIG. 4.

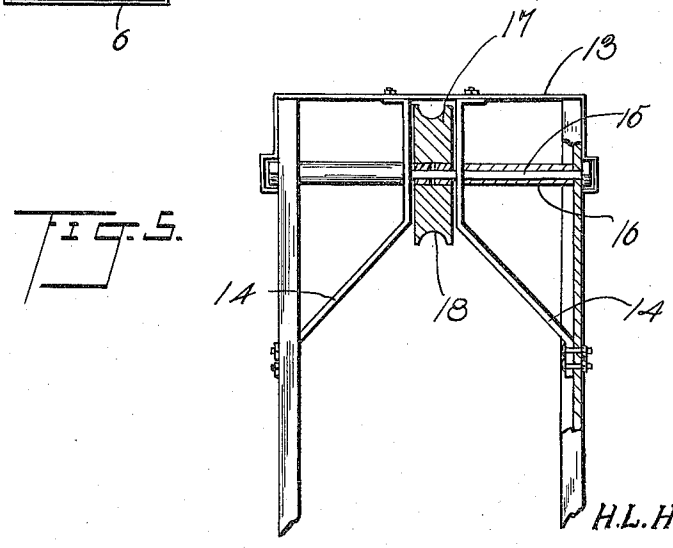


FIG. 5.

Witnesses

F. F. Reinhardt.

Inventor

H. L. Hawkins.

By A. Randolph Jr. Attorney

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HOMER L. HAWKINS, OF SANTA BARBARA, CALIFORNIA.

BULKHEAD-HOIST.

1,148,382. Specification of Letters Patent. Patented July 27, 1915.

Application filed July 20, 1914. Serial No. 852,112.

To all whom it may concern:

Be it known that I, HOMER L. HAWKINS, a citizen of the United States, residing at Santa Barbara, in the county of Santa Barbara and State of California, have invented certain new and useful Improvements in Bulkhead-Hoists; and I do hereby 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.

This invention relates to hoisting devices and more particularly to a device of this character especially designed for lifting the bulk heads in railway refrigerator cars.

Another object is the provision of a device of this character of light and durable construction which may be conveniently moved from place to place by one man.

Another object is the provision of a hoisting device embodying a base member adjustably supporting the frame structure of the hoisting device, whereby the latter may be raised and engaged against the ceiling of the car or other compartment in which the device is located.

With these and other objects in view, the invention consists in the novel construction, arrangement, and formation of parts as will be hereinafter specifically described, claimed and illustrated in the accompanying drawings, in which:

Figure 1 represents a fragmental sectional view through a refrigerator car of ordinary construction, showing the hoisting device operatively positioned therein. Fig. 2 represents an enlarged side elevation, partly broken away, of the hoisting device. Fig. 3 represents a front elevation thereof. Fig. 4 represents an enlarged detail view, partly broken away, of the lower portion of the hoisting device. Fig. 5 represents an enlarged front elevation, partly broken away, of the upper portion of the frame of the hoisting device.

Referring to the drawings in detail, wherein similar reference numerals designate corresponding parts throughout the several views, the numeral 6 indicates the web portion of a substantially U-shaped base designated generally by the numeral 7 and including the upstanding parallel ends 8. The base 7 is preferably formed of sheet metal of adequate thickness and the ends 8 thereof adjacent the web portion 6 are apertured to receive bolts 9 slidably received within elongated slots 10 formed in the lower extremities of the side members 11 of the main frame of the hoisting device which is preferably formed of channel iron, as illustrated, and is reinforced at intervals by spaced connecting bolts 12. At the top of the side member 11 of the frame an inverted U-shaped member 13 is secured by suitable bolts or other means extended through the free terminals thereof and braced with the side members 11 by the angular bracing bars 14 having apertures in their upper extremities rotatably receiving the shaft 15 on which bushings 16 are arranged between the bracing bars 14 and the side members 11 of the frame. A pulley 17 is rotatably mounted on the shaft 15 between the parallel portions of the bracing bars 14 and is provided with a suitable groove 18 adapted to receive the hoisting cable 19 carrying a hook 20 at one end and permanently secured at its opposite extremity to a winding drum 21 rotatably mounted between the side members 11 of the frame and carrying a gear wheel 22 at one end exteriorly of the frame structure mounted within a suitable housing 23 and meshing with a worm 24 formed with a hand crank 25 whereby the drum 21 may be rotated.

The web portion of the top U-shaped member 13 is prefererably arranged at an oblique angle to the frame structure, as clearly illustrated in Fig. 1, and the upper extremities of the bottom U-shaped member or base 7 are apertured to receive bolts 23^a pivotally supporting the lifting member 24^a which is substantially U-shaped and provided with angularly directed free ends 25^a.

The extremities of the angularly directed ends 25^a are pivotally connected at 26 to the adjacent portion of the side members 11 of the frame, whereby when the web portion of the U-shaped lifting member 24^a is depressed the frame structure is carried upwardly into engagement with the ceiling 26 of the car, the bolts 9 sliding within the slots 10 in the lower extremities of the side members 11 of the frame structure.

In use, the base 7 is arranged on the floor 28 of the car in proximity to the bulk head 29, and the frame structure is arranged at the angle, relative to the bulk head 29, illustrated in Fig. 1. The frame structure is subsequently elevated by depressing the lifting member 24^a, moving the top U-shaped mem-

ber 13 into firm engagement with the roof 27 of the car and thus effectively locking the hoisting device in position for operation. The hook 20 of the cable 19 is then engaged with the lower extremity of the door or bulk head 29 and the crank 25 manually or otherwise operated to wind the cable on the drum 21, thus raising the bulk head 29.

While I have here shown the hoisting device in use only in connection with the bulk heads of railway refrigerator cars, it will be understood that the same may be employed for various other purposes, as for instance, for loading the car and numerous other useful purposes.

What I claim is:

1. A hoisting device comprising a base, a pair of side members extending upwardly therefrom, a U-shaped member connecting the upper extremities of said side members, bracing bars connecting said side members and web portion of said U-shaped member, a shaft rotatably mounted in the upper extremity of said side members and through said bracing members, a pully rotatably mounted on said shaft between said bracing members, a winding drum rotatably mounted in said side members, means for rotating said winding drum, and a cable secured at one end to said winding drum and extending over said pulley.

2. A hoisting device comprising a base, a frame structure pivotally supported in said base including a pair of side members, and means connecting said side members at spaced intervals, means for moving said frame structure upwardly within said base member, a winding drum rotatably mounted in said frame structure, means for manually rotating said winding drum, a pulley rotatably mounted in the upper portion of said frame structure, and a cable secured at one end to said winding drum and extending upwardly over said pulley.

3. A hoisting device comprising a base member substantially U-shape in formation and having the free ends directed upwardly, a pair of side members having longitudinal slots in the lower extremities thereof, bolts secured in said U-shaped member and slidably positioned within said slots, a substantially U-shaped member pivotally secured to the upper extremities of said U-shaped member and having angularly directed ends pivotally secured to said side members, a winding drum rotatably mounted in said side members, a pulley rotatably mounted in upper portions of said side members, and a cable secured at one end to said winding drum and extending upwardly over said pulley.

4. A hoisting device comprising a base member, a frame pivotally mounted in said base member, means for raising said frame structure in said U-shaped member, a winding drum rotatably mounted in said frame structure, means for manually rotating said winding drum, a pulley rotatably mounted in the upper portions of said frame structure, and a cable secured at one end to said winding drum and extending upwardly over said pulley.

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

HOMER L. HAWKINS.

Witnesses:

JAMES L. HAWKINS,

PEARL HAWKINS VANCE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."