No. 689,642. Patented Dec. 24, 1901.

R. D. FANNON.

HOISTING DEVICE.

(Application filed Aug. 26, 1901.)

(No Model.) 2 Sheets—Sheet 1.

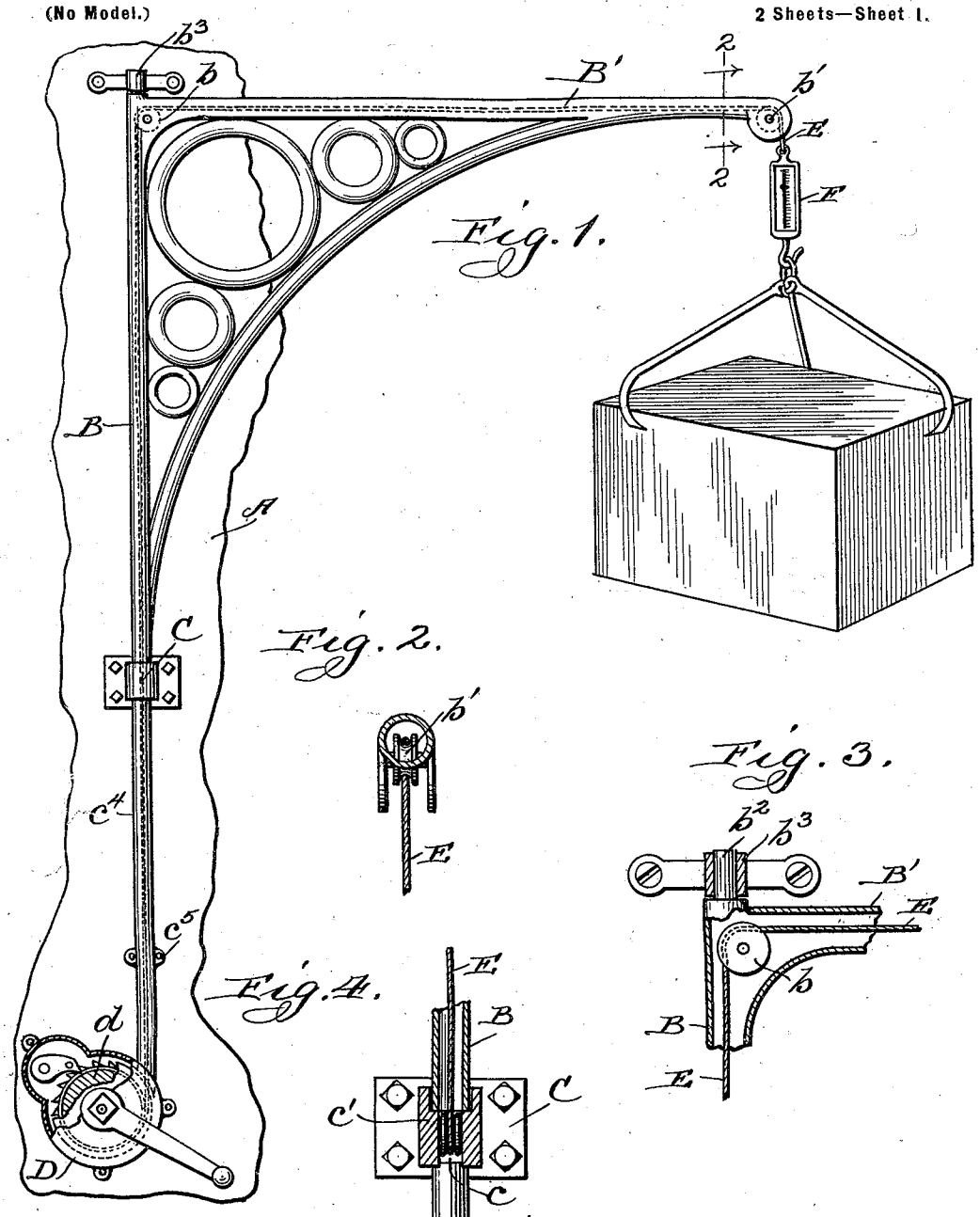


Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

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Fig. 5

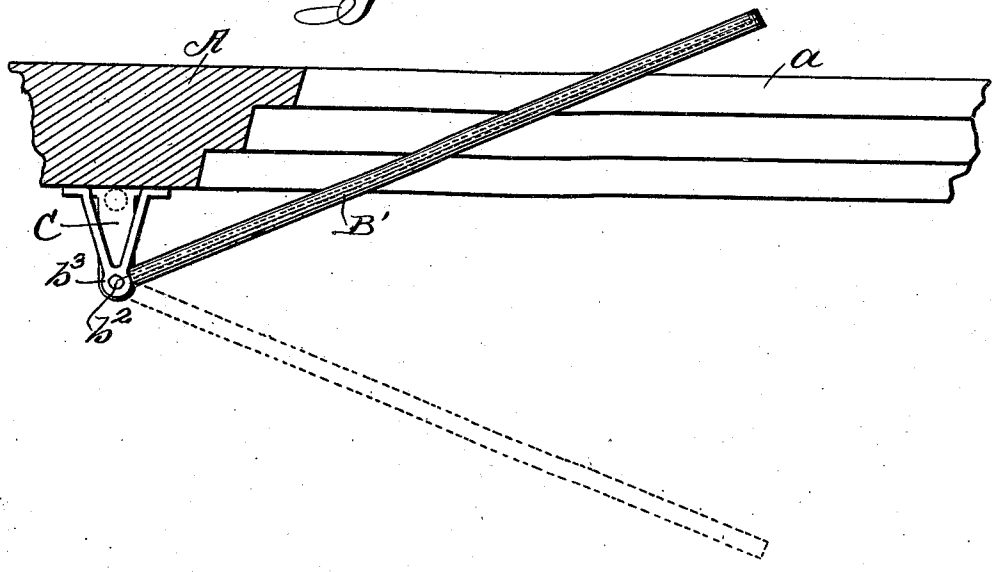


Fig. 6.

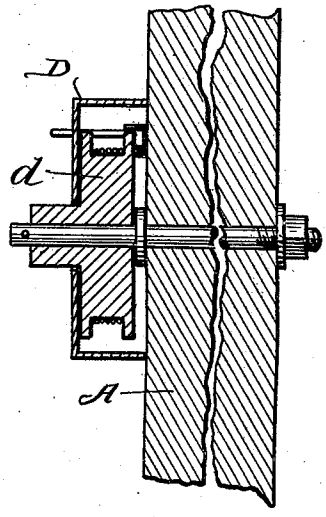
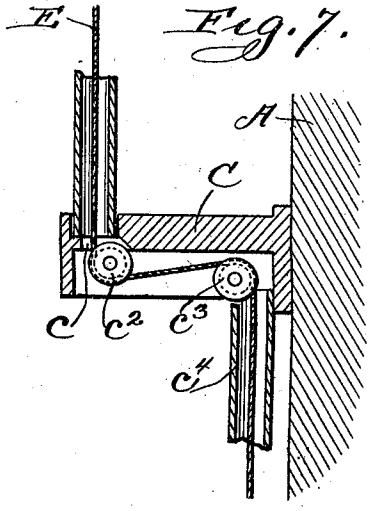


Fig. 7.



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UNITED STATES PATENT OFFICE.

ROBERT D. FANNON, OF OAKPARK, ILLINOIS, ASSIGNOR TO DELOS DUNTON, OF CARPENTERSVILLE, ILLINOIS.

HOISTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 689,642, dated December 24, 1901.

Application filed August 26, 1901. Serial No. 73,335. (No model.)

To all whom it may concern:

Be it known that I, ROBERT D. FANNON, a citizen of the United States, residing at Oakpark, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Refrigerator Hoisting Devices; 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.

My invention relates to hoisting devices, and particularly to a device of this character which is adapted to be made as an attachment to a refrigerator or ice-box for the purpose of affording convenient and easy means for hoisting cakes of ice to the upper doors thereof.

In stores and factories where large refrigerators or ice-boxes are employed the ice is usually stored in an upper compartment the door of which is located some eight or ten feet above the floor, and as the ice is usually packed in this upper compartment in large cakes it is difficult to handle the same and place the ice therein with reasonable speed and without danger to the operator.

The object of my invention is to provide certain improvements in hoisting apparatus whereby the same may be employed as an attachment to the above-described class of ice-boxes or refrigerators and by which the large cakes of ice may be quickly and easily hoisted to the door of the upper compartment.

In the accompanying drawings, which form a part of this specification and which illustrate the embodiment of my invention, Figure 1 is a side elevation, partly in section, of my improved hoisting apparatus, shown in place upon the front of an ice-box or refrigerator of the class described. Fig. 2 is a sectional view on the line 2 2 of Fig. 1. Fig. 3 is a detail sectional view of the upper bracket and the upper end of the mast and arm. Fig. 4 is a part sectional and part front view of the mast and supporting-bracket. Fig. 5 is a top view of the mast and rotating arm attached to the refrigerator-casing and showing the position of the arm in full lines when the same is swung within the door of the refrigerator and its position in dotted lines when outside thereof. Fig. 6 is a sectional view of the winding-drum and casing, and Fig. 7 is a sectional view at right angles to Fig. 4.

In the drawings the reference-letter A represents the casing or woodwork of a suitable refrigerator or ice-box, such as is used in stores and factories and which is provided with a door or opening a at or near its top, leading into the ice-compartment. The mast B, having an outwardly-projecting arm B′, is suitably supported upon the front of the casing A, and these parts are made hollow for the passage of a suitable chain or cable, being provided with suitable guide-sheaves b and b'. The mast and arm communicate at their point of junction, as shown in Fig. 3, at which place the guide-sheave b is located. The mast is reduced at its upper end, as shown at b^2, and enters the bracket or sleeve b^3, which is suitably attached to the casing of the refrigerator.

The bracket C extends out from the face of the refrigerator, as shown in Fig. 7, and is provided with a perforation or passage c at or near its front end, the arrangement and disposition of the parts being such that the passage c and the sleeve b^3 are in vertical alinement. The opening c is enlarged near its upper end to form a shoulder c', providing a bearing for the lower end of the mast B, as clearly shown in Figs. 4 and 7. The bracket C is provided with a guide-sheave c^2, whose periphery is in line with the opening c and the interior of the mast B. The bracket is also provided with a second guide-sheave c^3 in the rear of the sheave c^2 and with a depending tube c^4 in line with the sheave c^3 and lying close to the face of the refrigerator. The tube c^4 leads into a casing D, which is provided with a suitable winding-drum d in its interior. The cable E is passed through the hollow arm and mast, running over the sheaves therein and down around the sheaves c^2 and c^3, in the manner shown in Fig. 7, from whence it leads down through the tube c^4 to the winding-drum, about which it is wound a number of times and to which it is suitably attached. The mast B is capable of rotation on the shoulder c' of the bracket C, by which means it may be swung from the position

shown in dotted lines in Fig. 5 within the opening of the ice-box or refrigerator, as shown in full lines in said figure. For convenience and economy the cable is provided at its free end with a suitable scale F and is of sufficient length to allow its free end to be drawn down to the level of the floor, at which point the hook upon its end may be attached to the ice-tongs. The winding-drum is then operated by a suitable crank, by which means the ice is hoisted to the desired level when the mast and arm are swung to bring the end of the arm and its load within the door or opening of the ice-box.

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

1. A hoisting apparatus comprising a top and bottom bracket in vertical alinement, the latter being provided with front and rear guide-sheaves, an opening above the front sheave having a shoulder, a hollow mast rotatably mounted on the shoulder and carrying a horizontal arm, a guide-tube below the rear sheave, and a winding-drum and cable.

2. A hoisting apparatus comprising a top and bottom bracket in vertical alinement, the latter having a shouldered opening near its front, a mast mounted to rotate on said shoulder and having a reduced upper end to fit the top bracket, a horizontal arm on the mast, guide-sheaves in the arm and at the junction of the arm and bracket, a guide-sheave on the bracket below the mast, a rear guide-sheave on the bracket, a housing below the rear sheave having a winding-drum, a guide-tube leading from the rear sheave to the housing, and a cable wound upon the drum and passing through the guide, bracket, mast and arm and about the sheaves.

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

ROBERT D. FANNON.

Witnesses:

ROBERT K. GUSTAFSON,

JOSIAH MCROBERTS.