Feb. 17, 1925. 1,526,797

L. W. KROEGER

REFRIGERATOR

Filed Aug. 24, 1921

Fig. 1.

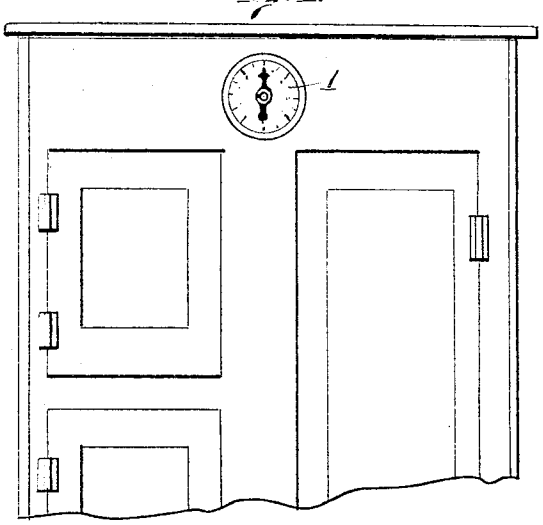


Fig. 2.

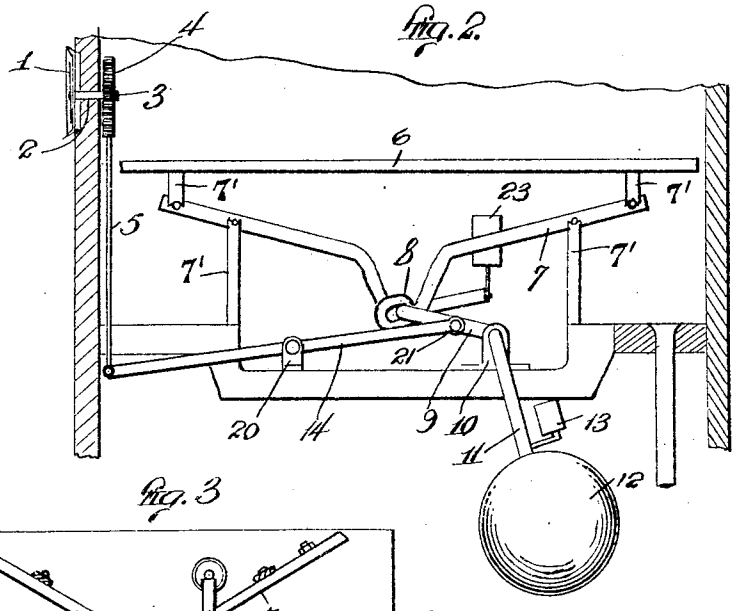
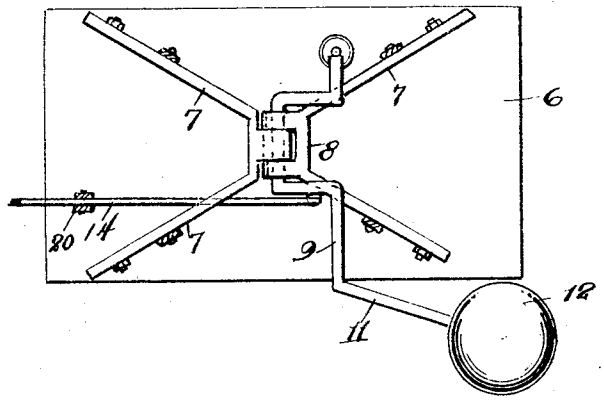


Fig. 3



INVENTOR

Louis W. Kroeger

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UNITED STATES PATENT OFFICE.

LOUIS W. KROEGER, OF DAVENPORT, IOWA.

REFRIGERATOR.

Application filed August 24, 1921. Serial No. 494,822.

To all whom it may concern:

Be it known that I, LOUIS W. KROEGER a citizen of the United States, residing at Davenport, in the county of Scott and State of Iowa, have invented certain new and useful Improvements in Refrigerators, of which the following is a specification.

This invention relates to improvements in refrigerators and more particularly to an apparatus adapted to be installed in a refrigerator whereby the ice within the refrigerator may be weighed to indicate on a dial the quantity of ice in the refrigerator at all times.

Another object of the invention is to provide a device of this character which will be automatic in its operation and which will permit the person using the refrigerator to accurately determine the quantity of ice within the ice box.

Other objects will appear upon consideration of the following detail description and accompanying drawings, wherein:—

Figure 1 is a fragmentary front elevation of the box constructed in accordance with my invention,

Figure 2 is an enlarged cross section through the same, and

Figure 3 is a plan view of a portion of the scale mechanism.

Referring to the drawing by numerals, the refrigerator may be of any desired dimensions and it should be understood that the apparatus will be adapted to be installed in any type of refrigerator. A circular dial 1 is mounted in the front of the refrigerator and the dial is graduated to indicate pounds and is equipped with a movable hand on a transversely extending shaft 2, which has a gear 3 on its inner end. This gear meshes with a rack bar 4 on the end of an operating rod 5 which is reciprocated by the mechanism within the upper portion of the refrigerator. A platform 6 is provided within the ice box to receive the ice which is placed within the refrigerator and this platform is supported on a frame 7 including diverging arms having a common center and joined together at a point beneath the platform 6 as indicated at 8. The platform 6 and the frame 7 are mounted on rigid supporting posts 7′, said posts pivotally engaging the frame 7 intermediate its ends. A bell crank lever 9 is journaled in bearings 10 and is connected to the portion 8 of the frame work so that a downward pressure of the platform will cause a swinging movement of the crank. One of the arms 7 has an elongated opening in its end where it is pivoted to the other arm and where it engages the bell crank lever 9, to permit end movement of said arms with relation to each other when the same swing on an arc from the lower bearing posts 7′. An extended end of the crank forms an arm 11 to receive a balancing weight 12 so that the scales may be properly balanced. An adjustable smaller weight 13 is provided which is adapted to be moved toward or away from the main weight 12 to obtain the proper balance. An operating lever 14 is pivotally mounted on the pivot member 20 and one end of this lever is connected to the bell crank lever 9 as indicated at 21. The opposite end of the lever is connected to the lower end of the operating rod 5. Thus it will be seen that when the apparatus is in use, the cake of ice will be placed upon the platform 6 whereupon the pressure of the ice will cause the framework to move downwardly, thus actuating the bell crank lever for moving the lever 14 whereby the operating rod 5 will move to actuate the shaft 2, thus turning the hand on the dial 1 accurately indicating the quantity of ice within the refrigerator.

A suitable device may be installed to offset the sudden jar or pressure occasioned by placing a heavy cake of ice on the platform 6, and in the present instance, this device consists of a cylinder 23 having a piston connected to a piston rod 24 by an arm 25 to one end of the bell crank lever, thus causing a gradual movement of the mechanism when the ice is placed on the platform. A waste pipe 26 is shown mounted in the bottom of the ice compartment at one side of same. In order that the waste water may be diverted from entering the depression in the bottom of the ice compartment, a rim 27 is positioned around the standards 7′, as is clearly shown in Figure 2.

Minor changes may be made in the details of construction without departing from the spirit of the invention or the scope of the claim hereunto appended.

What is claimed is:—

In combination with a refrigerator having an indicator on the exterior of the same, of a platform within said refrigerator for receiving a quantity of ice, a pair of V-

shaped levers pivoted together at their apex and having their outer ends pivotally connected to said platform, upright supports pivotally engaging each arm of said V-shaped levers between their pivoted ends, a bell crank lever connected to said V-shaped levers at the point where their apexes are pivoted together, and an operating lever connected to said bell crank for operating the indicator.

In testimony whereof, I have affixed my signature in the presence of two witnesses.

LOUIS W. KROEGER.

Witnesses:
NOAH PERRY,
CHAS. J. KROEGER.