E. J. BROPHY.

DRIP ALARM DEVICE FOR REFRIGERATORS.

APPLICATION FILED NOV. 18, 1908.

969,153. Patented Sept. 6, 1910.

Fig. 1.

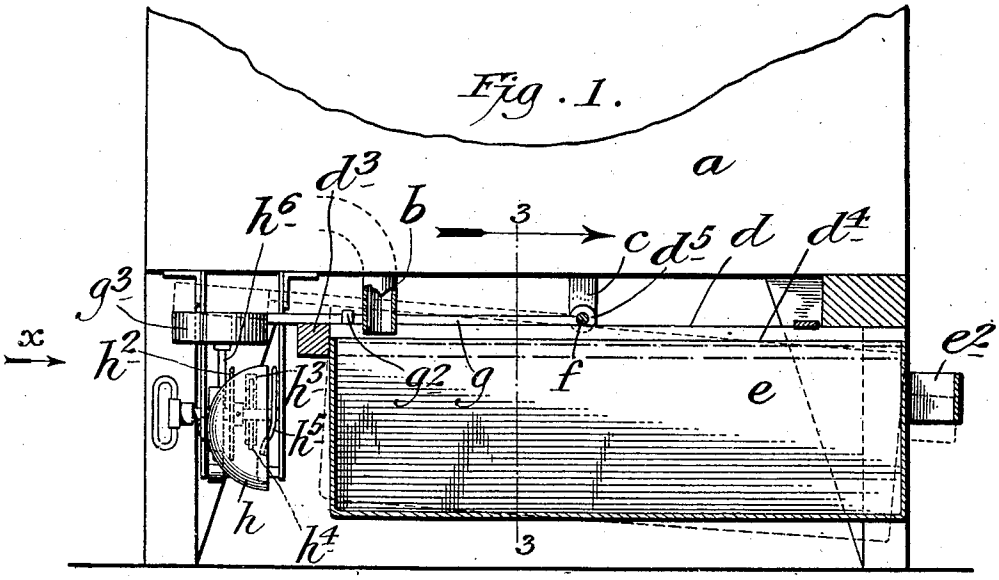


Fig. 2.

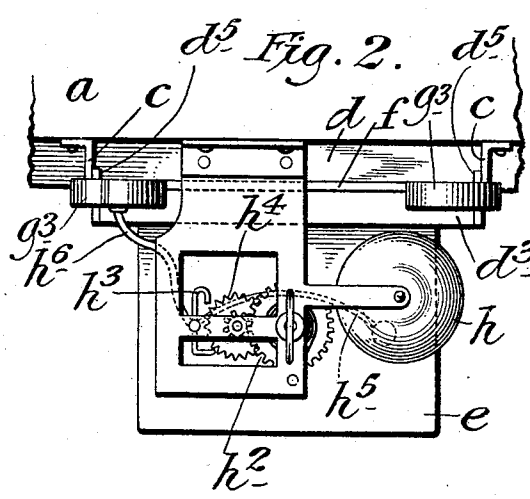
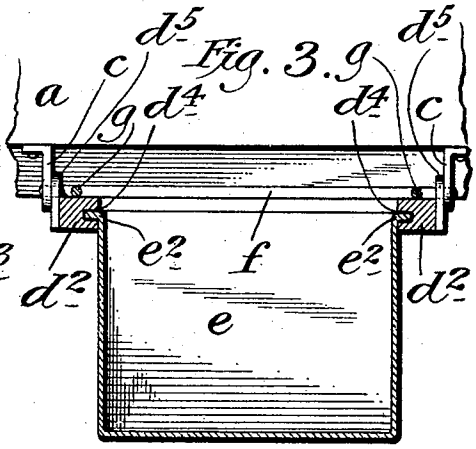


Fig. 3.



WITNESSES

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DRIP-ALARM DEVICE FOR REFRIGERATORS.

969,153. Specification of Letters Patent. Patented Sept. 6, 1910.

Application filed November 18, 1908. Serial No. 463,241.

To all whom it may concern:

Be it known that I, EDWARD J. BROPHY, a citizen of the United States, and residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Drip-Alarm Devices for Refrigerators, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to refrigerators, and it consists in applying a drip pan to the bottom of an ordinary refrigerator into which drip water is conveyed from the ice receptacle, and an alarm device adapted to be operated by the drip pan receptacle when the water rises therein to a predetermined point.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which;—

Figure 1 is a side view of the bottom part of an ordinary refrigerator provided with my improvement, part of the construction being in section, Fig. 2 a rear end view looking in the direction of the arrow *x* of Fig. 1, and;—Fig. 3 a vertical section on the line 3—3 of Fig. 1.

In the drawing forming part of this specification, I have shown at *a* the bottom part of an ordinary refrigerator which is provided with a drain pipe *b* which extends downwardly through the bottom of the refrigerator and up therethrough to the ice receptacle with which it communicates in the usual manner so as to form a drain for said receptacle.

Secured to the bottom of the refrigerator in transverse line are hangers *c* to which is pivoted a frame *d* comprising parallel side bars d^2 which range forwardly and backwardly, and a transverse rear end bar d^3, in which is mounted a sliding receptacle *e* made in the form of a drawer and provided at its front end with a handle e^2. The side bars d^2 of the frame *d* are provided with grooves d^4, and the drawer or receptacle *e* with side flanges e^2 movable in said grooves. The frame *d* is provided rearwardly of its central portion with ears d^5, and the drawer or receptacle *e* is suspended by means of a rod *f* passed through said ears and the hangers *c*, and these parts form a pivotal support for the drawer or receptacle *e*, the front end portion of which is longer than the rear end portion.

Connected with the rod *f* are parallel side rods *g* which range backwardly over the sides of the frame *d* and the drawer or receptacle *e*, and which pass through keepers g^2 secured to the sides of the frame *d*, and project rearwardly of said frame and are provided with weights g^3, and these weights and the rods *g* are so adjusted that they normally hold the drawer or receptacle *e* in a horizontal position as shown in full lines in Fig. 1.

Arranged rearwardly of the frame *d* and drawer or receptacle *e* and supported in any desired manner, is an alarm device comprising a gong *h*, a spring drum mechanism and train gear h^2 provided with a verge h^3 and verge wheel h^4, and connected with the verge h^3 is a hammer arm h^5 adapted to operate in connection with the gong *h*, and connected with the verge h^3 is a releasing arm h^6 which ranges backwardly and upwardly, and in the normal position of the parts shown in full lines in Fig. 1, one of the weights g^3 rests on the arm h^6 as shown in Fig. 2 and the alarm mechanism is locked against action.

As the drip water from the ice-box or receptacle of the refrigerator flows into the drawer or receptacle *e* it gradually rises in or fills said drawer or receptacle, and when the water reaches a predetermined height in said drawer or receptacle the front end portion thereof drops downwardly as indicated in dotted lines in Fig. 1, and in this operation the weight g^3 which normally rests on the arm h^6 of the alarm mechanism is raised and said arm is released and the alarm device is thrown into action, and will continue to act until the drawer or receptacle *e* is removed.

By means of my improvement, I provide a refrigerator with a removable drip pan drawer or other receptacle and an alarm mechanism adapted to be operated when a predetermined amount of water enters the receptacle; and my invention is not limited to the exact details of the construction herein described, and various changes therein and modifications thereof may be made, within the scope of the appended claims, without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention,

what I claim as new and desire to secure by Letters Patent, is:—

1. A drip alarm for refrigerators comprising a frame, means for pivoting said frame beneath the bottom of a refrigerator and whereby said frame is adapted to swing vertically, a drawer mounted in said frame and removable therefrom and forming a drip pan, said frame being adapted to be tilted when a predetermined amount of water enters said pan, a mechanical alarm device supported rearwardly of said frame beneath the refrigerator and provided with a releasing arm for normally holding said device out of operation, and devices connected with said frame and resting on said arm when said frame is in its normal position to hold the arm in locking position with respect to the alarm mechanism and released from said arm when said frame is tilted.

2. The combination with a refrigerator of a drip alarm apparatus comprising a frame pivoted to the bottom of the refrigerator and adapted to swing vertically, a drawer mounted in said frame and removable therefrom and forming a drip pan, said frame being adapted to be tilted when a predetermined amount of water enters said pan, a mechanical alarm device supported rearwardly of said frame beneath the refrigerator and provided with a releasing arm for normally holding said device out of operation, and devices connected with said frame and resting on said arm when said frame is in its normal position to hold the arm in locking position with respect to the alarm mechanism and released from said arm when said frame is tilted.

In testimony that I claim the foregoing as my invention I have signed my name in presence of the subscribing witnesses this 17th day of November 1908.

EDWARD J. BROPHY.

Witnesses:

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C. E. MULREANY.