No. 629,683. Patented July 25, 1899.

# E. HICKS.

## AUTOMATIC ALARM FOR DRIP PANS.

(Application filed May 6, 1899.)

(No Model.)

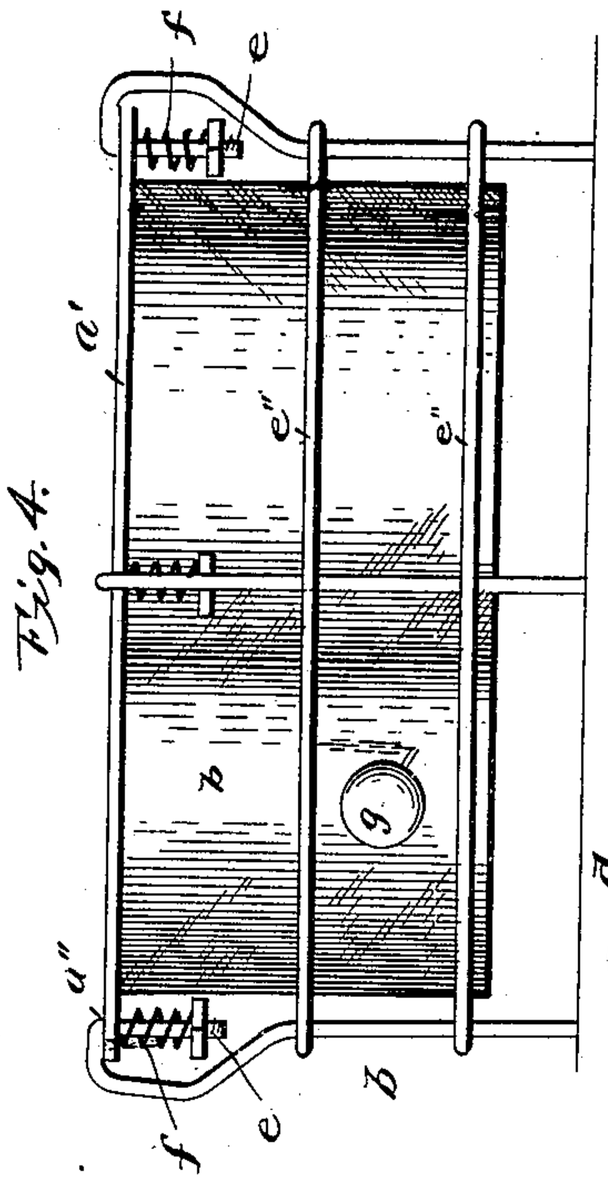

Fig. 4.

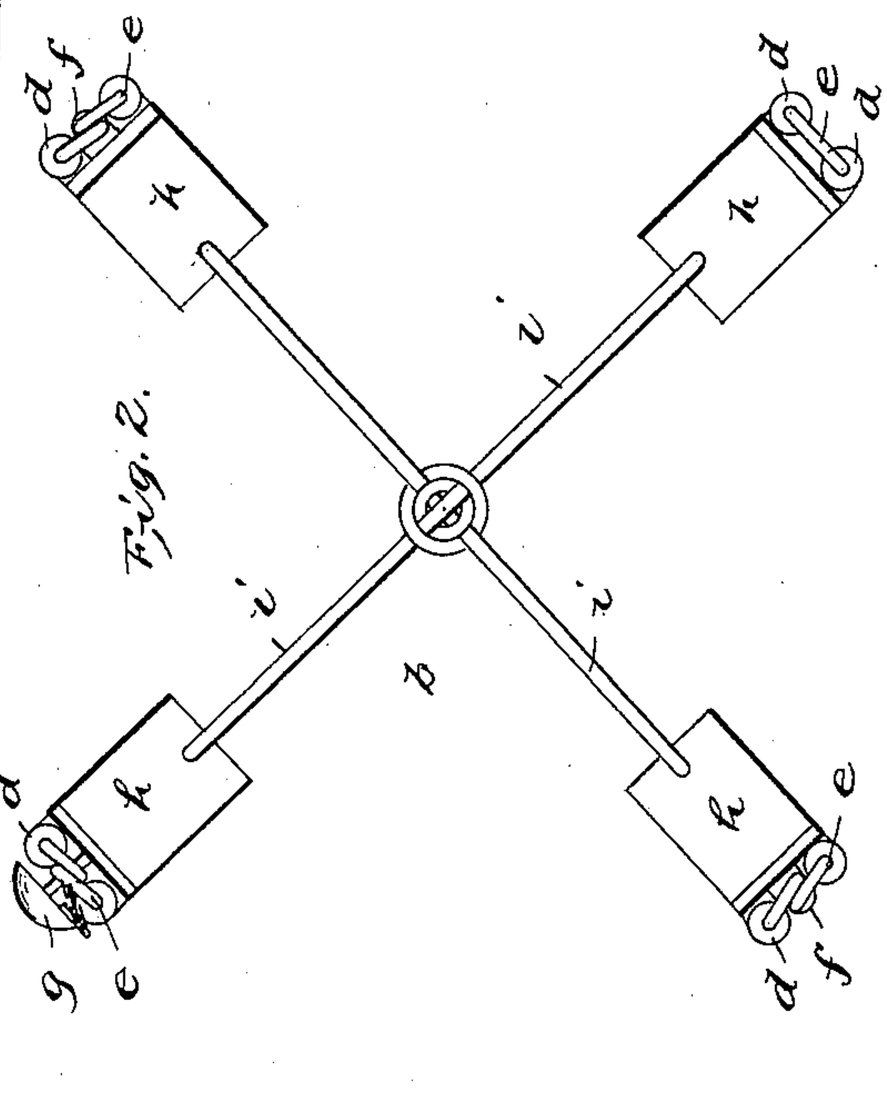

Fig. 2.



Fig. 1.

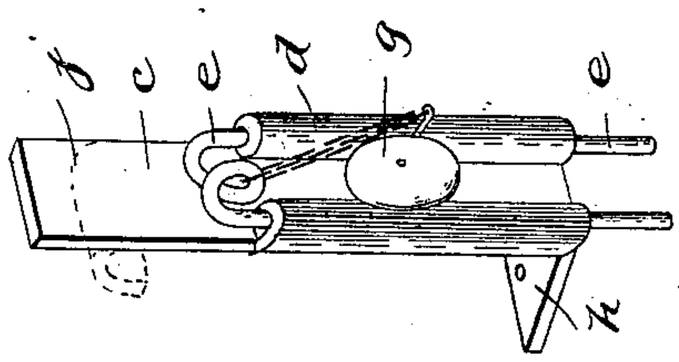

Fig. 3.

Witnesses
C. M. Werle
A. B. Degges

Inventor
per Ernest Hicks
Attorney

# UNITED STATES PATENT OFFICE.

EVERETT HICKS, OF BELLEVILLE, NEW JERSEY.

## AUTOMATIC ALARM FOR DRIP-PANS.

SPECIFICATION forming part of Letters Patent No. 629,683, dated July 25, 1899.

Application filed May 6, 1899. Serial No. 715,840. (No model.)

*To all whom it may concern:*

Be it known that I, EVERETT HICKS, a citizen of the United States, residing at Belleville, in the county of Essex and State of New Jersey, have invented new and useful Improvements in Automatic Alarms for Drip-Pans, of which the following is a specification.

This invention relates to certain new and useful improvements in automatic drip-pan alarms, and has for its objects simplicity, durability, and cheapness of construction, rapidity and accuracy of operation, and composed of a minimum number of parts.

A further object of the invention is to provide an automatic alarm for drip-pans which will sound for a sufficient length of time when the pan is full and needs to be emptied.

A further object of the invention is to provide a drip-pan carrying its own alarm and one that can be used independently and moved from place to place and always being complete.

Another object is to provide a frame adjustable and adapted to receive any size pan.

A further object is to provide an automatic alarm for drip-pans, for ice-boxes, or the like so arranged and constructed as to be sounded by the weight of water therein.

The invention consists of certain novel features of construction and in combination of parts, more fully described hereinafter and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a drip-pan, showing my invention in operative position. Fig. 2 is a top plan view of the frame or support, the pan being removed. Fig. 3 is a detail perspective view of one of the clamps of the frame carrying the alarm, and Fig. 4 is a side elevation of a somewhat-modified form of pan and support.

Referring by letters to the drawings, *a* is a drip-pan of any approved design carried by the frame or support *b*, having any number of legs, preferably four, which consist of the L-shaped metal strips *c*, having the ways *d*, in which the supporting pieces or yokes *e* move vertically when there is weight in the pan.

*f* are springs carried by oppositely-located yokes *e* and attached to the L-shaped metal strips *c*, holding the two yieldingly together.

*g* is an alarm of any well-known design, such as an automatically continuous ringing bell or buzzer, carried by one of the L-shaped strips, the operating-lever of which being attached to a yoke or support *e*, the other metal strips *c* and yokes *e* being merely for support and guiding purposes.

The lateral arms *h* of the L-shaped strips *c* are rigidly secured together by braces *i* and secured at their intersection, making a strong and rigid frame for the reception of the pan, which after being placed on the lateral arms *h* is clamped in position by means of the upright arms *j* of the L-shaped metal strips, being bent over and into the pan at their tops.

In the modified form, Fig. 4, a somewhat different method of carrying out my idea is shown, in which *a* is the pan, having an annular outwardly-extending flange *a'*, provided with a sufficient number of holes or openings *a''* to receive the upper ends of the legs or supports *e*, which are rigidly held in an upright position by a series of rings *e''*, with which they are integral. The upper ends of these legs or supports are flared outwardly and bent U-shaped to pass through the openings *a''* of the flange *a'* from above and provided with screw-threads and nuts $e^3$, which form supports for the coil-springs *f*, which are interposed between said nuts and the flange *a'*, forming a support therefor, the tension of the springs holding the pan suspended against the weight of the water until it is nearly filled. *g* is an alarm carried by the pan, the operating-lever being attached to the frame or one of the rings *e''*, and adapted to be sounded when the pan reaches nearly to its lowest downward point.

In operation the device is exceedingly simple and is as follows: The yokes or supports *e*, fitted into the ways *d* of the L-shaped metal strips *c*, are held yieldingly together by the springs *f*. The operating-lever of the alarm, carried by one of the metal strips *c*, is attached to the top of the yoke *e*, the lateral arms *h* being secured together by the stays *i*. The pan is then set down on the lateral arms *h* of the supporting-strips *c*, and the upright portion *j* is bent over into the pan, clamping it rigidly in the support on the lateral arms *h*, and the whole device may be moved around

at will. Now that the pan and support are secured together it is placed under the outlet or drip of a refrigerator or the like to receive the flow. The springs *f* carrying the metal strips *c*, and they in turn carrying the pan *a*, it will be readily seen that the said pan is entirely supported by the yokes *e* through the medium of the springs *f*, which are sufficiently strong to hold the pan out of engagement with the alarm until it is nearly full, when the weight of the water expands the springs and the pan *a* and strips *c* descend until the alarm, which is carried by said strips, is sounded by reason of the operating-lever being raised through its connection with the yoke *e*, which is stationary, and the alarm sounds for a stated period, giving notice of the danger of an overflow. The pan is then emptied, the supporting-frame not being in the way, and returned to its place. In the modified form the alarm is carried by the pan and the operating-lever thereof is attached to the stationary frame, the pan being supported on the springs *f* by reason of the flange and is held in its highest upward position by the tension of said springs, which are supported by the adjustable nuts, until the weight of water overcomes their tension and lowers the pan until the alarm connection is made taut and the alarm sounded, as before described.

It is evident that various slight changes might be made in the forms, arrangements, and construction of the parts described without departing from the spirit and scope of my invention. Hence I do not wish to limit myself to the exact construction herein set forth, but consider myself entitled to all such changes as fall within the spirit of my invention.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. An automatic alarm for drip-pans comprising the frame or support, legs therefor, a pan carried thereby, the support vertically movable on said legs, and an alarm adapted to be sounded by the descent of the pan, substantially as described.

2. In a drip-pan alarm the combination of the frame, a pan carried by said frame, legs vertically movable in said frame, springs connecting said frame and legs, and an alarm adapted to be sounded when the tension of the springs is overcome by the weight of water in the pan, substantially as described.

3. An alarm for drip-pans comprising a frame, springs carried by said frame, a pan suspended from said springs, an alarm carried by said frame and adapted to be sounded when the tension of the springs is overcome, substantially as described.

4. An alarm for drip-pans comprising the adjustable frame having legs, springs carried by said legs, said frame carried by said springs, a pan carried by said frame, and an alarm carried by said frame adapted to be operated by the descent of the pan against the tension of said springs, substantially as described.

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

EVERETT HICKS.

Witnesses:

H. JAY LA TAUCHERIE,

E. C. DUFFY.