

A. H. HOLMES.
 DRIP PAN ALARM.
 APPLICATION FILED SEPT. 5, 1912.

1,064,221.

Patented June 10, 1913.

Fig. 1.

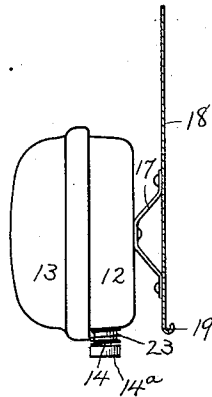


Fig. 2.

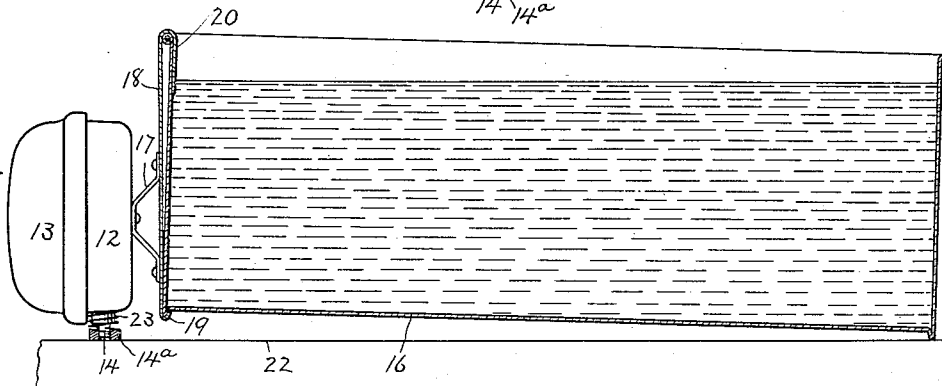
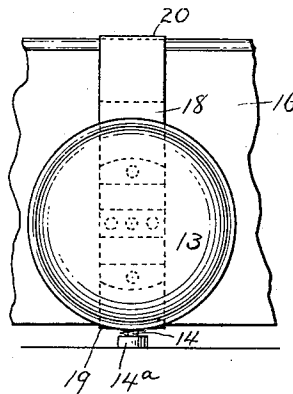


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

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DRIP-PAN ALARM.

1,064,221.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ALBERT H. HOLMES, a citizen of the United States, residing at Malden, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Drip-Pan Alarms, of which the following is a specification.

This invention relates to alarms employed in connection with receptacles for water formed by the melting of ice in refrigerators, and it has for its object to provide a simple and effective alarm adapted to be quickly and conveniently attached to an ordinary drip-pan, and to give an alarm when a predetermined weight of water accumulates in the drip-pan.

The invention consists of the improvements which I will now proceed to describe and claim.

Figure 1 represents a side elevation of an alarm embodying my invention, the attaching member hereinafter referred to being shown in section, and ready to be fashioned at its upper end to engage the upper edge of a drip-pan. Fig. 2 represents a view similar to Fig. 1, showing the alarm attached to a drip-pan, the upper end of the attaching member being fashioned. Fig. 3 represents a front view of the alarm, and a portion of the pan with which it is engaged.

The same letters of reference indicate the same parts in all the figures.

In carrying out my invention, I utilize a spring-operated alarm of well-known construction. Said alarm comprises a fixed casing portion 12 and a resonant portion or bell 13 which is rotatively connected with the casing portion, and, when rotated in one direction, winds up a driving spring contained in the casing portion. Said spring forms a part of a mechanism adapted to operate a hammer which strikes the bell when the mechanism is released. A push-piece 14 is normally projected yieldingly from one side of the casing 12, and normally prevents the hammer-operating mechanism from acting, said mechanism operating only when the push-piece is pressed inwardly. For convenience, I term the structure characterized as above stated, a bell, the same constituting a well-known article which is sold on the open market, and requires no further description.

The casing portion 12 is adapted to be secured to a drip-pan 16 of ordinary construc-

tion, adapted to be placed under a refrigerator, the said casing portion being preferably provided with adjustable means adapted to detachably engage pans of different sizes and shapes.

In the preferred embodiment of my invention here shown, a bracket 17 is rigidly attached to the casing portion 12, and to said bracket is rigidly attached a flexible metal strip 18, having at one end a hooked ear 19 which is adjacent to the push-piece 14, the arrangement being such that when the strip 18 is in a vertical position, and the ear 19 is at the lower end of the strip, the push-piece 14 projects below the ear 19. Said ear is adapted to engage the lower edge of the pan 16, as shown by Fig. 2.

The upper end of the strip 18 is provided with a hooked ear 20, adapted to engage the upper edge of the pan. Said ear is preferably formed by bending the strip after the ear 19 has been seated on the lower edge of the pan, the strip when placed on the market, being of greater length than the height of the pan, so that its upper end portion may be bent by the purchaser to form the ear 20 at any distance from the ear 19 required by the height of the pan.

It will be seen that when the bell is attached to the pan, as shown by Fig. 2, the push-piece 14 constitutes a leg which projects below the bottom of the pan and is adapted to bear on a floor or other base 22, and yieldingly support one side of the pan slightly raised above said base, the pan being tilted. The usual mechanism within the bell normally projects the push-piece or leg with sufficient force to enable it to hold the pan in a tilted position until the pan is partially filled with water. The weight of the water eventually overcomes the force which projects the push-piece and causes it to yield and release the usual hammer-operating mechanism, so that the bell is sounded until the pan is removed from the base, or the operating spring runs down. The push-piece or leg 14 preferably includes a foot 14^a which is a nut engaged with the threaded body of the push-piece, and is vertically adjustable by rotation on said body. A spring 23 interposed between the foot 14^a and the casing portion 12, aids in yieldingly projecting the push-piece, the force of said spring being varied by adjusting the foot, so that the supporting power of the push-piece or leg may be adjusted. Provision is

thus made for varying the quantity of water required to depress the raised side of the pan and sound the bell.

I claim:

- 5 1. A drip-pan alarm comprising a spring-operated bell having an actuating push-piece projecting from its periphery and constituting a yielding leg, and means for attaching the bell to a pan, said leg project-
10 ing below the attaching means, and being adapted to bear on a supporting base and yieldingly support the adjacent portion of the pan raised above said base, the raised portion of the pan being depressible by an
15 accumulation of water therein. to cause the operation of the bell.
2. A drip-pan alarm comprising a spring-operated bell having an actuating push-but-
20 ton projecting from its periphery and constituting a yielding leg, and an attaching member secured rigidly to the bell casing, and having ears at its opposite ends adapted to engage the upper and lower edges of
25 a pan, the said leg projecting below the lower ear.
3. A drip-pan alarm comprising a spring-operated bell having an actuating push-but-
30 ton projecting from its periphery and constituting a yielding leg, and an attaching member composed of a flexible metal strip secured rigidly to the bell casing, and hav-
ing at its lower end an ear adapted to en-

gage the lower edge of a pan, its opposite end being adapted to be bent to form an ear
engaging the upper edge of the pan, the said
35 leg projecting below the lower end of the strip.

4. A drip-pan alarm comprising a spring-operated bell having an actuating push-
40 piece projecting from its periphery and constituting a yielding leg, means for attaching the bell to a pan, said leg projecting below the attaching means, and having means for
varying its resistance to displacement by
45 the weight of the pan and its contents.

5. A drip-pan alarm comprising a spring-operated bell having an actuating push-
50 piece projecting from its periphery and constituting a yielding leg, means for attaching the bell to a pan, said leg projecting below the attaching means, and having an adjust-
able foot, and a spring interposed between
said foot and the bell casing, and yieldingly
resisting displacement of the leg by the
weight of the pan and its contents, the force
55 of said spring being variable by adjustments of said foot.

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

ALBERT H. HOLMES.

Witnesses:

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