

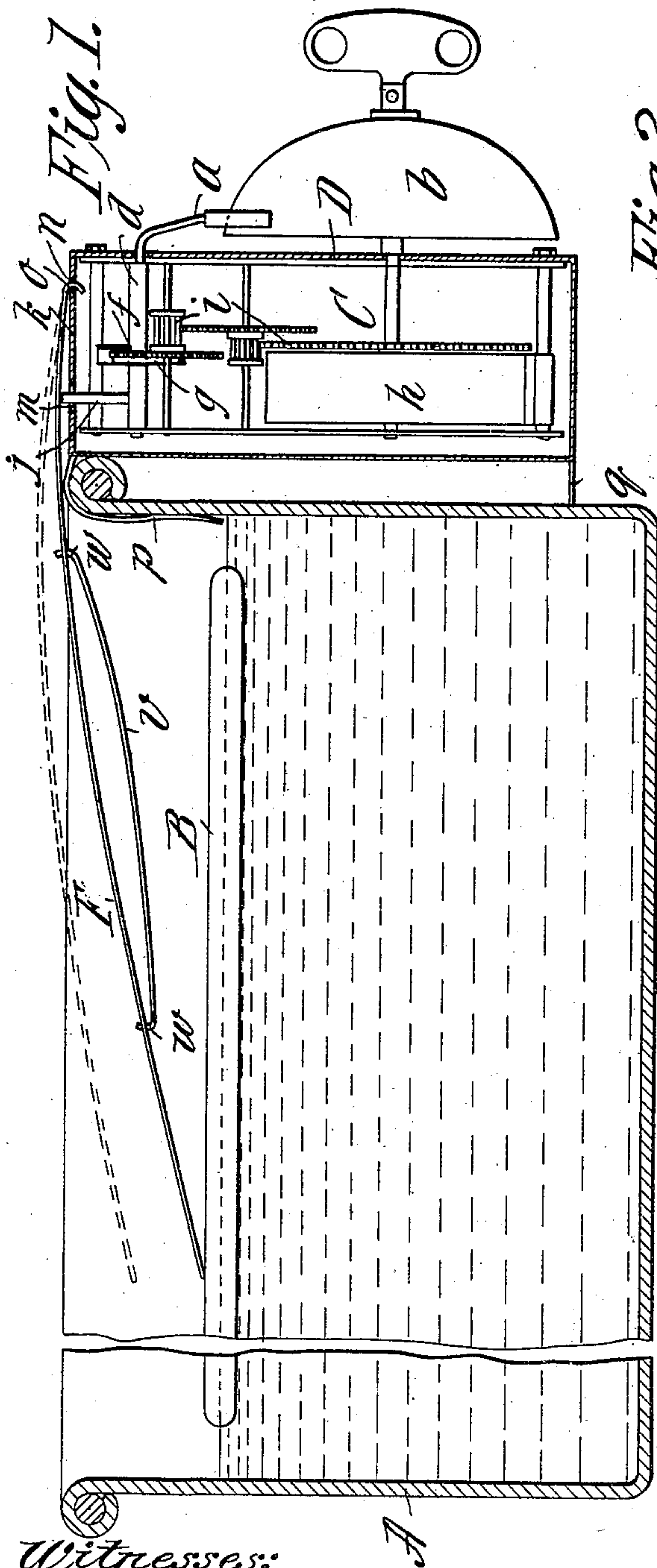
No. 886,776.

PATENTED MAY 5, 1908.

H. T. DUMAS.

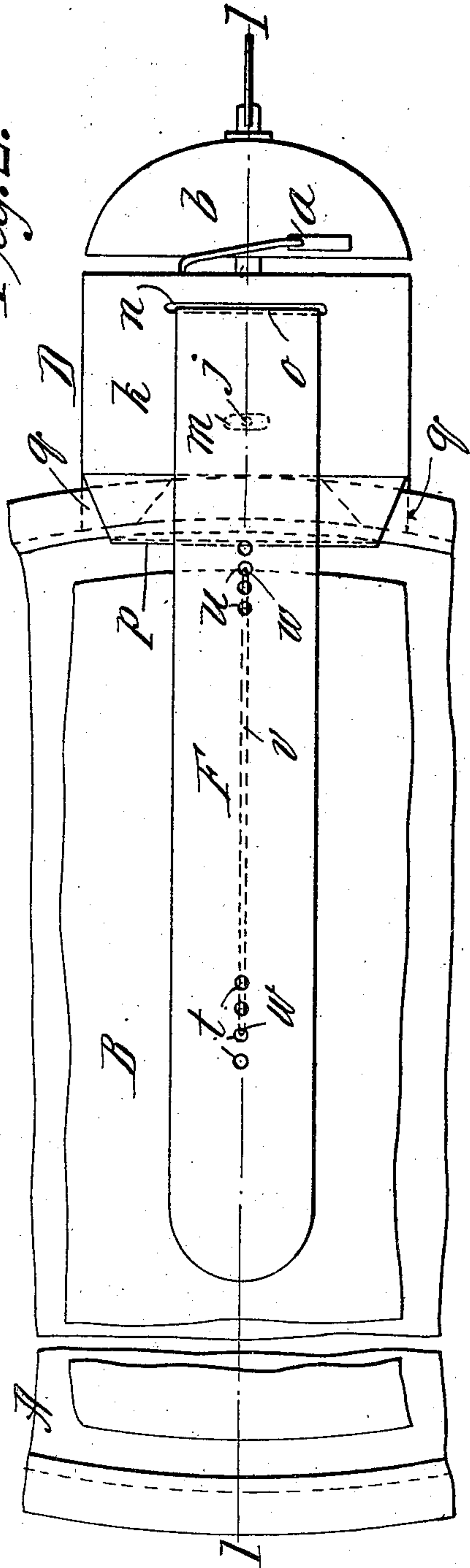
## ALARM DEVICE FOR REFRIGERATOR OVERFLOW TANKS.

APPLICATION FILED MAR. 25, 1907.



Witnesses:

H. L. Sprague  
W. C. Ross.



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# UNITED STATES PATENT OFFICE.

HENRY T. DUMAS, OF LUDLOW, MASSACHUSETTS.

## ALARM DEVICE FOR REFRIGERATOR OVERFLOW-TANKS.

No. 886,776.

Specification of Letters Patent.

Patented May 5, 1908.

Application filed March 25, 1907. Serial No. 364,474.

*To all whom it may concern:*

Be it known that I, HENRY T. DUMAS, a citizen of the United States of America, and resident of Ludlow, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Alarm Devices for Refrigerator Overflow-Tanks, of which the following is a full, clear, and exact description.

The present invention pertains to improvements comprised in a device for giving an alarm when the water in a tank or pan under a refrigerator fills or nearly fills the tank, so that a person may be warned to empty the same; and the invention consists in certain particular combinations or arrangements of parts and the formations of certain of the parts all substantially as hereinafter fully described and set forth in the claims.

In the accompanying drawings,—Figure 1 is a central vertical section through the drip tank and alarm device combined therewith; Fig. 2 is a plan view of the same.

In the drawings,—A represents the tank having a float B therein, the same being advantageously in the form of a circular board somewhat smaller than the area of the tank.

C represents a motor train for actuating a striker *a* operative upon a bell *b*, said striker being carried on a rockshaft *d* having an escapement *g* coacting with which is a toothed wheel *f*, and all as common and well known in alarm clock mechanism, and operative from the power of the clock spring *h* and gearing *i*, when the rock shaft *d* is not restrained from having its free rocking movement to impart a succession of vibrations to the striker and a ringing of the bell.

The rockshaft *d* carrying the striker *a* and provided with the escapement, is also provided with an upwardly extended arm or stud *j* projected through and a short distance above the upper wall *k* of the casing D in which the motor train is contained. The upper wall *k* of the casing has a slot *m* to permit the passage therethrough, and free movements therewithin, of said arm *j*.

The top of the casing has an elongated slot *n* therethrough near the front edge, engaged in which is the hook shaped end *o* of a sheet metal bar or strip F which extends therefrom over the rear edge of the casing and the edge of the tank A on which the casing is supported and with a more or less downward inclination into the tank space, its extremity

being located more or less, but comparatively slightly, below the top of the tank. This bar F acting as a lever fulcrumed by its hooked end *o* in the slot *n* bears by an intermediate portion on the upper end of the aforementioned arm *j* which is appurtenant to the striker device, and merely by its weight acts as a clog or stop to prevent the operation of the clockworks to vibrate the striker and ring the bell.

When the overflow or drip tank beneath the refrigerator becomes nearly filled, the float board B will engage and elevate the free end of the lever like bar, carrying it free from its restraining engagement on the arm *j* whereupon the alarm mechanism is left unrestrained and will ring, jingle, or buzz, for an indefinite time and give warning that the tank should be emptied.

The casing in which the motor train is inclosed has at its rear upper edge a wide hook *p* which engages over the upper edge of the overflow tank; and it also has at its rear lower edge rearwardly extended lugs *q*, *q*, to rest against the side of the tank, serving to maintain the casing in its properly vertical position and steadied against the tank.

The aforementioned strip or bar F which may be of sheet metal and more or less flexible, has two series of perforations *t* and *u* in longitudinal arrangement and located at different regions in the length of the strip. The distances between the perforations of the series *t* are slightly different from the different distances between the perforations of the series *u*.

*v* represents a wire rod having hooks *w*, *w*, at its opposite ends; and by engaging the hook end into perforations of both of the series, the strip may be deflected more or less so as to have its free end as much or little below the top of the tank as desired, whereby to assure warning accordingly.

By changing the engagements of the hook ends of the rod in different ones of the perforations of the two series thereof, the inclination of the strip may be much or little as best suits the user of the device.

I claim:—

1. The combination with a tank and a float therein, and a motor train and an inclosing casing therefor, mounted on the side of the tank, provided with an aperture and an elongated slot in its top, and also comprising an alarm device having a vibratory striker, and a striker restraining arm projected up-



wardly, through said aperture, above the casing, of a flat metal strip, provided with a hook-shaped end having a fulcrum engagement in said slot of the casing, normally having an intermediate portion thereof resting, 5 gravitatively, upon the upper end of the said arm, and having its extremity projected into the tank at a point suitably below the top thereof, and adapted on being raised by the 10 float to be lifted above, and free from, the striker restraining arm.

2. The combination with a refrigerator overflow tank and a float therein, of a motor train having a supporting casing mounted on 15 the said tank and comprising an alarm hav-

ing a vibratory striker, and a striker restraining arm projected above the casing, of a thin metal flexible strip fulcrumed to the casing having an intermediate portion thereof in restraining engagement against the said arm 20 and having its extremity projecting into the tank below the top thereof, and means for imparting varied degrees of deflection to the said strip for the purposes set forth.

Signed by me at Springfield, Mass., in presence of two subscribing witnesses. 25

HENRY T. DUMAS.

Witnesses:

WM. S. BELLOWS,  
G. R. DRISCOLL.