B. Z. SMITH.

ALARM BELL.

APPLICATION FILED OCT. 30, 1909.

1,007,611. Patented Oct. 31, 1911.

Fig. 1.

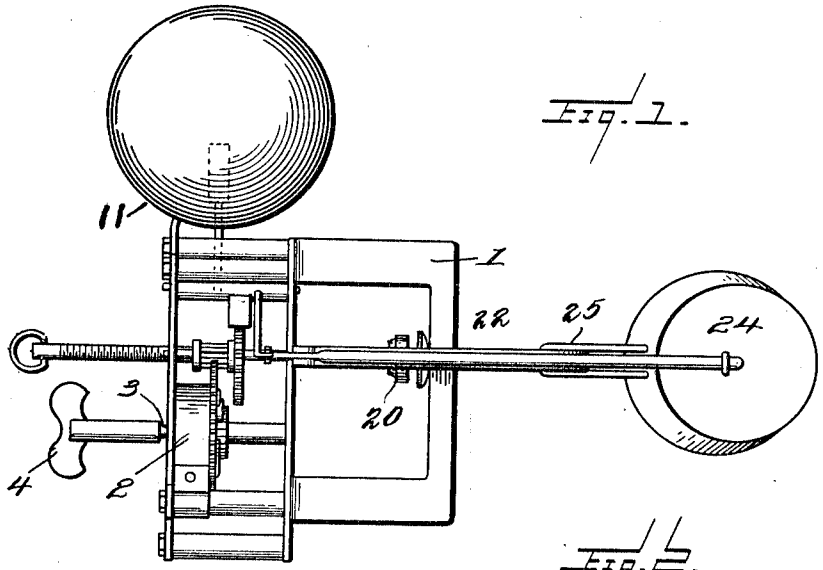
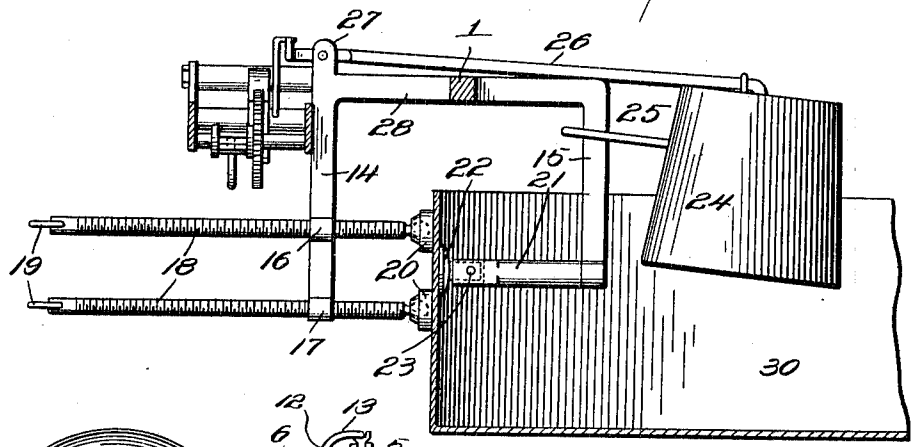


Fig. 2.



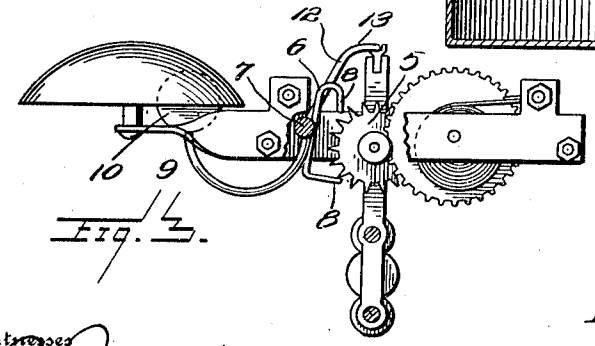
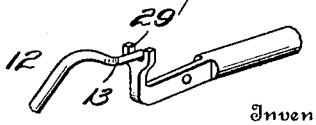


Fig. 3.

Fig. 4.



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UNITED STATES PATENT OFFICE.

BIRT Z. SMITH, OF MOUNTAIN HOME, IDAHO.

ALARM-BELL.

1,007,611. Specification of Letters Patent. Patented Oct. 31, 1911.

Application filed October 30, 1909. Serial No. 525,487.

To all whom it may concern:

Be it known that I, BIRT Z. SMITH, a citizen of the United States, residing at Mountain Home, in the county of Elmore and State of Idaho, have invented new and useful Improvements in Alarm-Bells, of which the following is a specification.

This invention relates to signaling devices and the object of the invention is to provide an alarm primarily adapted for use in connection with drip pans for ice boxes and which is provided with a suitable float adapted to rise with the water and sound an alarm after the water has reached a predetermined height.

Another object of the invention is to provide a device of this character which may be easily and quickly adjusted to a vessel having its sides arranged at various angles or inclinations.

With the above objects in view, and others which will appear as the description progresses the invention resides in the novel construction and combination of parts hereinafter more fully described and claimed.

In the accompanying drawings there has been illustrated a simple and preferred embodiment of the improvement, in which;

Figure 1 is a top plan view of the signaling device. Fig. 2 is a vertical sectional view of the same showing the device in operative position upon the catch basin of the refrigerator. Fig. 3 is a front elevation of the device, parts being shown in section to more clearly illustrate the details of the invention. Fig. 4 is a detail perspective view of the end of the floater stem, showing same in engaged position with the arm of the arbor.

In the accompanying drawings the numeral 1 designates a substantially rectangular frame. This frame 1 is adapted to support a suitable motor power, in this instance comprising a chain of gears actuated by a spring motor 2. The spring 2 is provided with the usual extending stem 3 adapted for the reception of a key 4, by which the spring is wound. One of the shafts supporting the gear wheels is provided with an escapement wheel 5 which is adapted to act in conjunction with the escapement dog 6 of the ordinary construction and which is supported upon an arbor 7. The escapement dog 6 is provided with upper and lower pallets 8 and these pallets are adapted to engage alternately with the teeth of the escapement wheel 5 in the usual manner. The arbor 7 is also provided with a striker arm 9 having its extremity provided with the usual striker 10 which is adapted to contact and sound a bell 11 when the device is operated. The arbor 7 is also provided with an upwardly extending arm 12 having an offset portion 13, the purpose of which will hereinafter be described.

The substantially rectangular frame 1 is provided with centrally arranged front and rear arms 14 and 15. The arm 14 is provided with internally threaded enlargements 16 and 17, spaced a suitable distance from each other and adapted for engagement with longitudinally extending threaded members 18. These members 18 are substantially similar in construction, having their outer extremities provided with a bail or handle 19 and their inner ends provided with a substantially ball-shaped extension which are adapted for swivel engagement with suitable heads 20.

The inner arm 15 is provided with a substantially right angular outwardly extending portion 21. This extension 21 has its extremity bifurcated so as to provide for the reception of a stem integrally formed upon a head 22. The stem or head 22 is pivotally connected between the arms as indicated by the numeral 23. It is to be understood that the offset portion 21 and the threaded elements 18 have their heads 20 and 22 facing each other, so that it will be readily seen that upon adjusting the elements 18 the device may be supported upon a drip pan or other receptacle having its sides arranged at any angle and that the device will be supported effectively without danger of movement or displacement.

The numeral 24 designates the floater employed with this device. This floater is preferably constructed of cork or some other suitable buoyant material and the floater is provided with a suitable bail 25 encircling the arm 15, while the upper face of the floater 24 is provided with a stem 26 pivotally connected between bifurcated arms 27 provided upon the centrally arranged arm 28 of the frame. The outer extremity of the stem 26 is bent upwardly at a substantially right angle to the body of the stem

and is provided with an enlarged head centrally cut away to provide a substantial pocket 29. This pocket 29 is adapted for the reception of the offset portion 13 of the arm 12 carried by the arbor 7.

It is to be understood that the floater 24 is of sufficient weight to normally force the arm 12 of the arbor upwardly so as to cause the lower pallet 8 of the escapement dog 6 to contact one of the teeth of the escapement wheel 5 and to resist the tension of the spring 2. When a sufficient amount of water is deposited within the drip pan 30 the buoyant floater 24 will rise so as to allow the stem 26 to swing upon its pivot and to disengage the offset 13 from the pocket 29. When this is accomplished it will be apparent that the pallets of the dog 6 will be free and allowed to oscillate in the customary manner thereby imparting motion to the striker arm and sounding the bell 11, thus calling attention of the occupants of the house in which the device is positioned to the fact that the pan is filled with water.

I claim:—

In a device for the purpose set forth, a substantially rectangular frame provided with means for clamping it to a vessel, the said frame comprising a depending rear arm, a float, said float having a bail encircling the rear depending arm, an elongated arm connected with the top of the float and pivotally secured to the forward portion of the frame, the extremity of the said arm being bent upwardly and forked, and a stop member loosely engaged by the forked portion of the elongated arm, substantially as and for the purpose set forth.

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

BIRT Z. SMITH.

Witnesses:
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ETHEL BRAUCHT.