No. 705,990. Patented July 29, 1902.

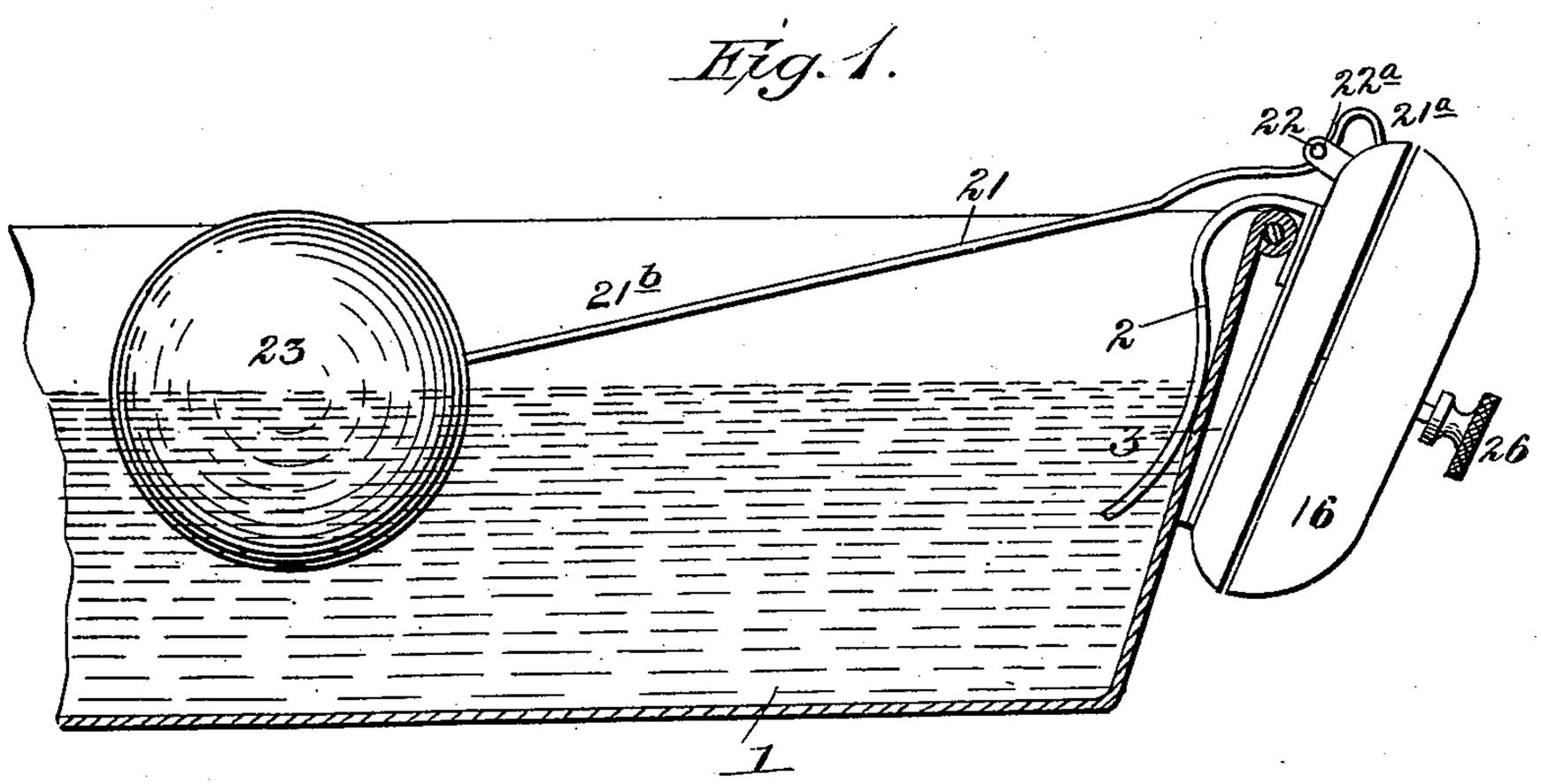
P. YON & L. LAPRISE.

ALARM FOR REFRIGERATOR PANS.

(Application filed May 27, 1902.)

(No Model.)

Fig. 1.



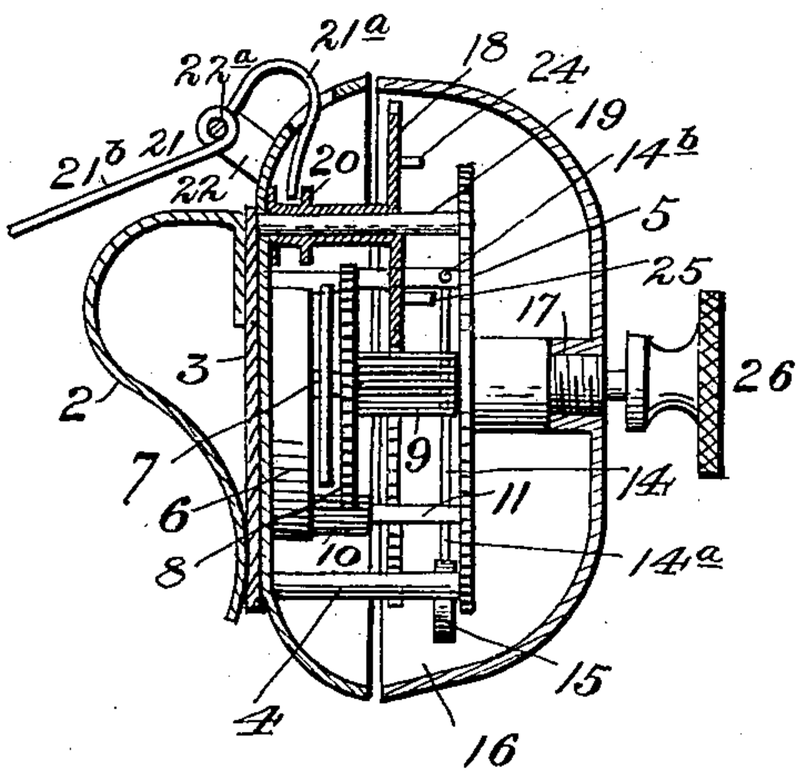


Fig. 2

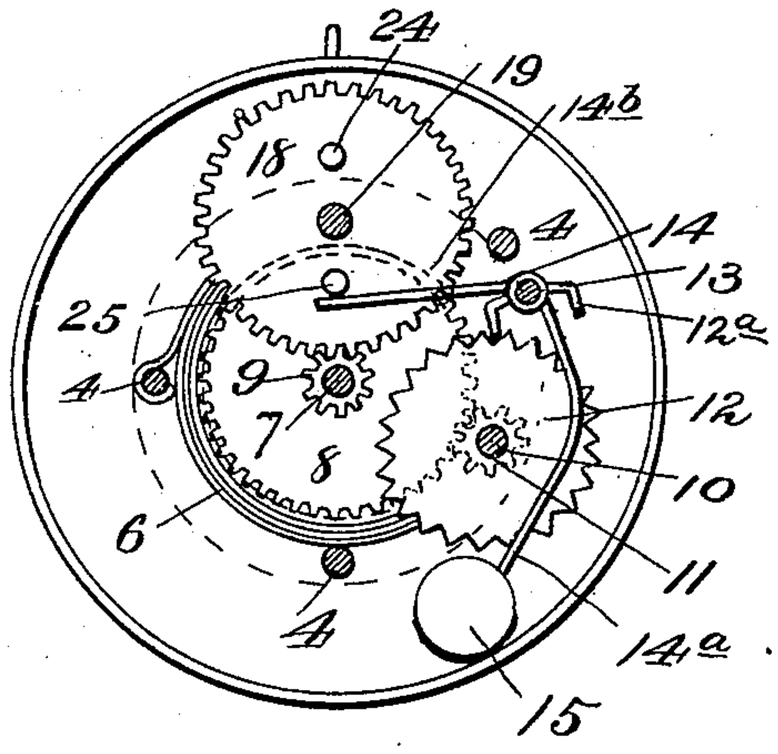


Fig. 3.

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UNITED STATES PATENT OFFICE.

PHILIP YON AND LOUIS LAPRISE, OF NORTH ADAMS, MASSACHUSETTS.

ALARM FOR REFRIGERATOR-PANS.

SPECIFICATION forming part of Letters Patent No. 705,990, dated July 29, 1902.

Application filed May 27, 1902. Serial No. 109,198. (No model.)

To all whom it may concern:

Be it known that we, PHILIP YON and LOUIS LAPRISE, citizens of the United States, residing at North Adams, in the county of Berkshire and State of Massachusetts, have invented new and useful Improvements in Alarms for Refrigerator-Pans, of which the following is a specification.

Our invention relates to alarms for refrigerator-pans or other drip-catchers, and has for its object to construct a device which will sound two alarms—a preliminary alarm of short duration, which will give notice that the pan is almost full, and a long-continued alarm, which will give notice that the pan is about to overflow.

The simple and novel construction employed by us in carrying out our invention is fully described in this specification and claimed, and illustrated in the accompanying drawings, forming a part thereof, in which—

Figure 1 is a side elevation of a drip-pan with our device attached thereto. Fig. 2 is a transverse section of the device. Fig. 3 is a section on the line 3 3, Fig. 1.

Like numerals of reference designate like parts in the different views of the drawings.

The numeral 1 designates a drip-pan placed to catch the drippings from a refrigerator. Mounted on the rim of the pan 1 and secured by a clip 2 is our alarm. The working parts of our alarm are carried by a base-plate 3, to which the clip 2 is riveted. A frame comprising three posts 4, footed in the plate 3, and a disk 5 support a spring-motor mechanism. The spring-motor comprises a spring 6, which is secured to a shaft 7, carrying a large pinion 8 and a small pinion 9. The large pinion 8 meshes with a small pinion 10, carried by a shaft 11, which also carries an escapement-wheel 12, which is engaged by an escapement 12^a, mounted on a shaft 13. A lever 14 is also secured to the shaft 13, and the long arm 14^a thereof carries a hammer 15, located to strike a gong 16, screwed on a sleeve 17, mounted on the disk 5 and surrounding the prolonged end of the shaft 7. The small pinion 9, carried by the shaft 7, is elongated and meshes with a larger pinion 18, which is slidingly mounted on an axle 19 and bears a grooved hub 20, which is engaged by the short arm 21^a of a lever 21. The lever 21 is fulcrumed on a pin 22^a, mounted in a standard 22, secured to the base-plate 3. The long arm 21^b of the lever carries a float 23, which is located within the pan 1 in position to be actuated by the water in the pan.

Returning now to the pinion 18, it will be observed that two pins, a short one 24 and a long one 25, are mounted on this pinion in position to engage the short arm 14^b of the hammer-lever 14 when the pinion is closest to the gong 16. It will also be noted that when the float 23 is in its highest position the pinion 18 is drawn back by the lever 21, so the hammer-lever 14 is clear of the pins 24 and 25.

A key 26 is fitted on the shaft 7 to serve in winding the spring-motor after each long alarm.

When in use, the motor is wound by the key 26 and the short pin 24 set to engage the short arm 14^b of the hammer-lever 14. When the water rises in the pan 1, the float 23 will be lifted to actuate the lever 21 to slide the pinion 18 on its axle to disengage the pin 24 to release the lever 14 and permit the motor to start. The hammer 15 will strike the gong 16 until the pinion 18 completes a half-revolution, when the longer pin 25 will engage the lever 14 and stop the ringing. If the alarm has not been heeded and the pan 1 emptied, the float 23 will continue to raise and to operate the lever 21 to slide the pinion until the pin 25 is disengaged from the lever 14, and thereby permit the hammer 15 to strike the gong 16 until the spring 6 has run down or the pan is emptied. It is obvious that the number of pins used may be increased to turn in a long series of alarms.

We do not wish to be limited as to details of construction, as these may be modified in many particulars without departing from the spirit of our invention.

Having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In an alarm, the combination with a gong, of a spring-motor, an escapement arranged to control said motor, a lever bearing a hammer located to strike said bell, a slidingly-mounted pinion mounted to be driven by said motor and bearing a pin located to engage said le-

ver to hold said escapement inoperative, a lever bearing a float and arranged to operate said pinion to disengage said pin from said first-mentioned lever, substantially as described.

2. In an alarm, the combination with a bell, of a spring-motor, a lever bearing an escapement arranged to control said motor and carrying a hammer located to strike said bell, a slidingly-mounted pinion arranged to be driven by said motor, a long and a shorter pin carried by said pinion and located to engage said lever to hold said motor inoperative, a lever engaging said pinion, and a float positioned to be operated to release said motor, substantially as described.

3. In an alarm, the combination with a spring-motor, means arranged to control said motor, a lever arranged to control said means, a slidingly-mounted pinion bearing a plurality of pins of graduated length located to engage said lever, means controlled by a float and arranged to operate said pinion to disengage said pins, substantially as described.

4. In an alarm, the combination with a bell, of a spring-motor, a lever bearing a hammer and an escapement arranged to control said motor, a slidingly-mounted pinion arranged to be driven by said motor, two pins of different length carried by said pinion and located to engage said lever, a lever one arm of which is connected to said pinion, and a float mounted on said last-mentioned lever and arranged to operate it to release said motor, substantially as described.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

PHILIP YON.
LOUIS LAPRISE.

Witnesses:
JOHN Q. CARROLL,
MAURICE C. PHILLIPS.