J. C. LISTON.

ALARM AND RELEASING ATTACHMENT FOR WINDOWS.

APPLICATION FILED NOV. 14, 1917.

1,306,702.

Patented June 17, 1919.

2 SHEETS—SHEET 1.

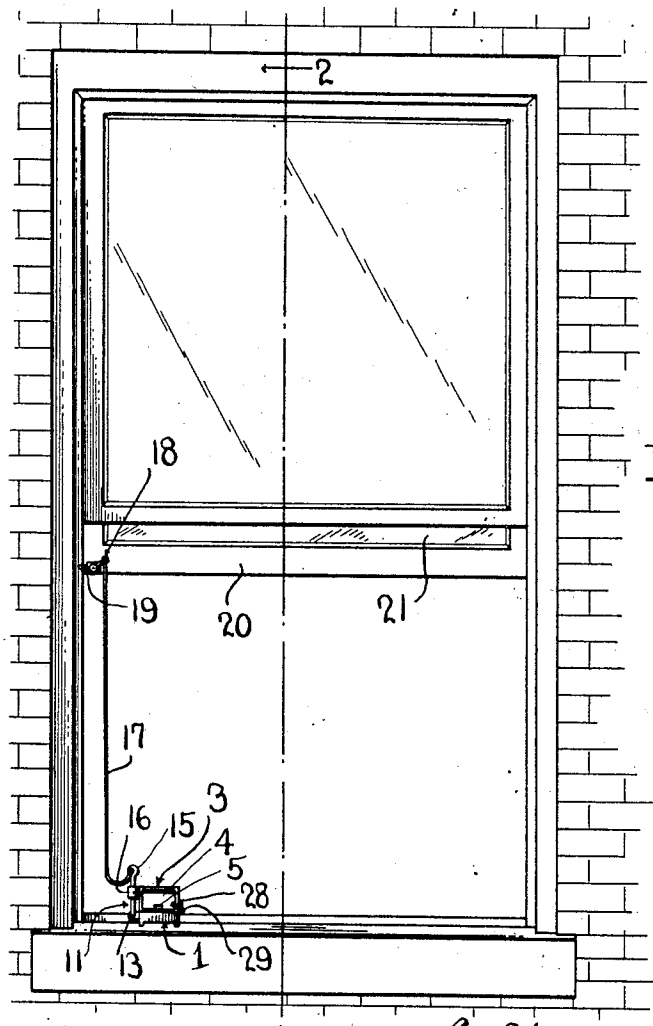


FIG. 1.

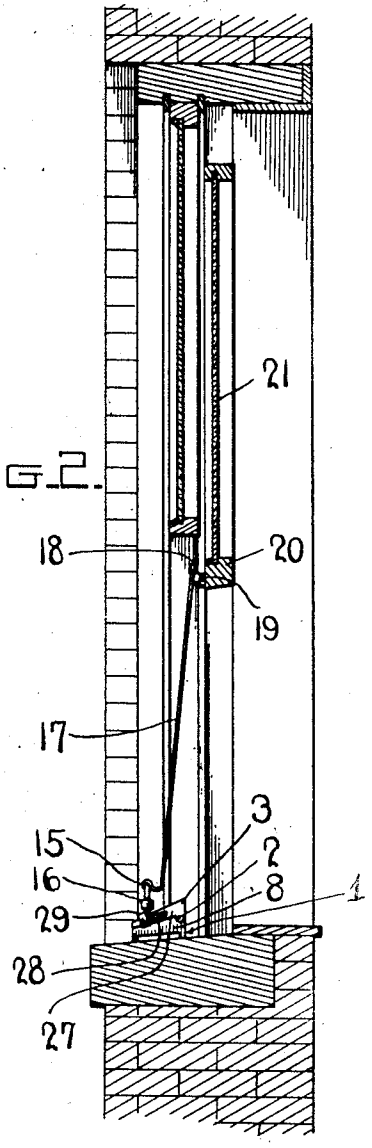


FIG. 2.

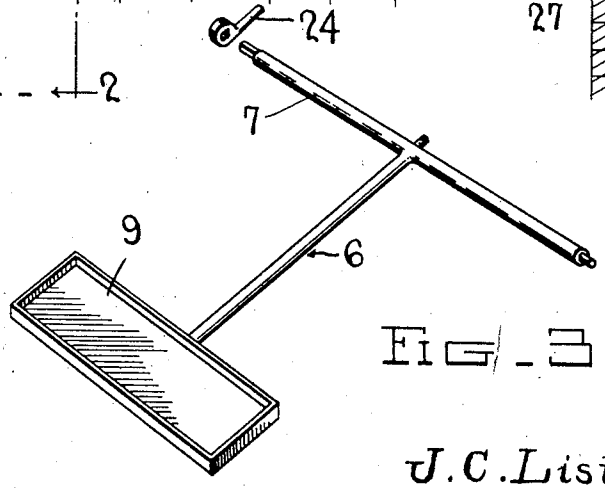


FIG. 3.

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2 SHEETS—SHEET 2.

FIG. 4.

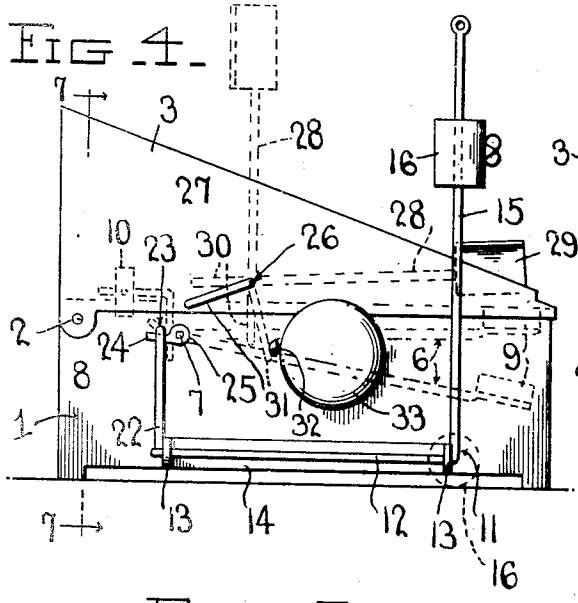


FIG. 5.

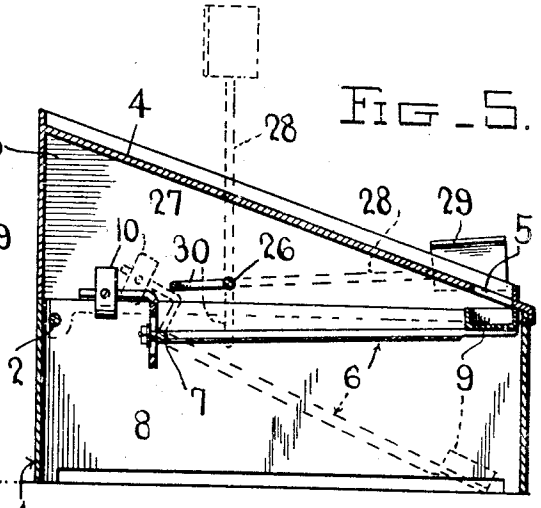


FIG. 6.

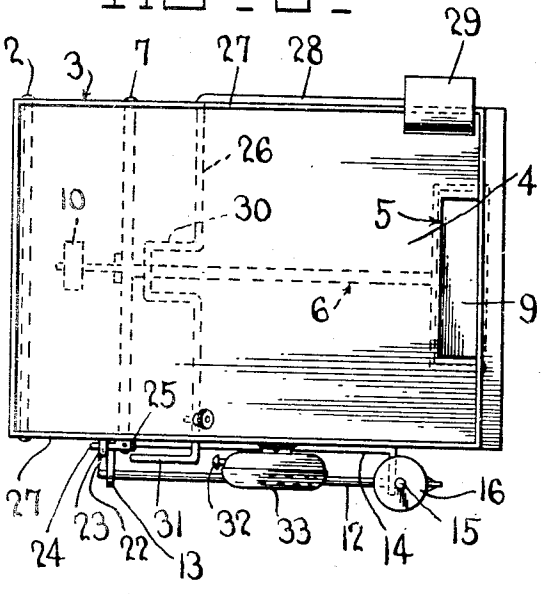


FIG. 7.

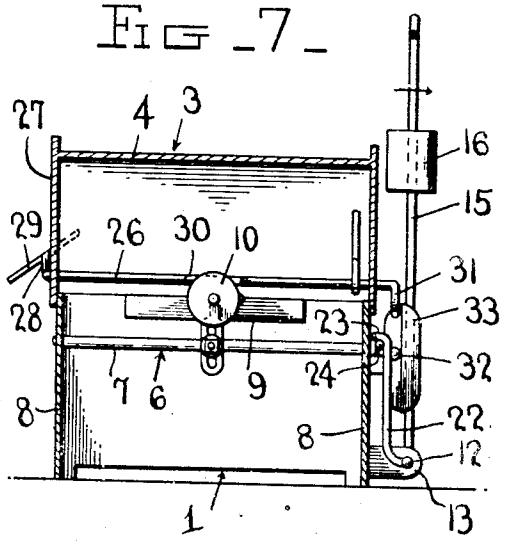
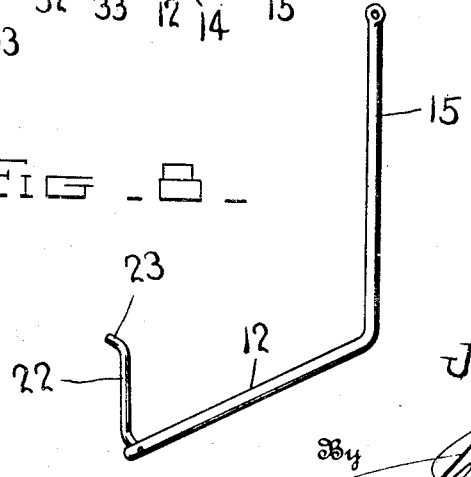


FIG. 8.



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UNITED STATES PATENT OFFICE.

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ALARM AND RELEASING ATTACHMENT FOR WINDOWS.

1,306,702. Specification of Letters Patent. Patented June 17, 1919.

Application filed November 14, 1917. Serial No. 201,969.

To all whom it may concern:

Be it known that I, JAMES C. LISTON, a citizen of the United States, residing at Chatsworth, in the county of Livingston and State of Illinois, have invented certain new and useful Improvements in Alarm and Releasing Attachments for Windows, of which the following is a specification.

This invention relates to an alarm and releasing attachment for windows.

The primary object of this invention is to provide an attachment which may be readily applied to the window casing or frame and will ring a bell should it commence to rain or should a wind come up of sufficient strength to blow dust into the room.

A further object of this invention is to provide means for automatically releasing the window should either or both of the foregoing conditions ensue, thus safeguarding the interior of the room and its furnishings against injury from rain or dust.

With the foregoing and other objects in view that will appear as the nature of the invention is better understood, the same consists in the novel features of construction, combination and arrangement of parts illustrated in the drawings and more particularly pointed out in the appended claim.

In the accompanying drawings:—

Figure 1 is an outside or front elevation, illustrating the application of the invention.

Fig. 2 is a vertical transverse section taken on the plane indicated by the dotted lines 2—2 of Fig. 1, looking in the direction indicated by the arrows.

Fig. 3 is a detail perspective view of the trip member.

Fig. 4 is a side elevation of my improved attachment.

Fig. 5 is a vertical longitudinal section of Fig. 4.

Fig. 6 is a top plan view of the attachment.

Fig. 7 is a transverse section, taken on the plane indicated by the dotted line 7—7 of Fig. 4, looking in the direction indicated by the arrows and Fig. 8 is a detail perspective view of the catch releasing member.

Referring to the drawings for a more particular description of the invention and which drawings are for illustrative purposes only and are therefore not drawn to scale, the device comprises a lower rectangular oblong base frame 1 to which is hingedly connected at its inner end, as at 2, the cover 3 which, as shown, is formed with a downwardly and outwardly inclined top 4 provided at its front end with a central transverse slot 5, the purpose of which will presently appear.

A trip 6 is operatively mounted in the base frame 1, being carried by the transverse rock shaft 7, the ends of which shaft are journaled in the side members 8 of said frame. One end of the trip 6 is provided with a shallow pan or receptacle 9 while the opposite end has suitably connected thereto a weight 10 which evenly balances the trip member under normal conditions.

A releasing member 11 of right angular form, is pivoted by means of its horizontal arm 12 in the bearing lugs 13 of the bar 14 secured to the outer face or wall of one of the side pieces of the base frame. The upright arm 15 of said releasing member is provided with a weight 16 and is connected at its upper end above said weight by means of a cord 17 or other flexible element, to the arm 18 of a catch 19 secured to the bottom rail 20 of the upper window sash 21.

The horizontal portion 12 of the releasing member 11 is provided at its free end with an upright extension 22 formed with an inwardly bent hook 23 adapted to hook over a lug or finger 24 formed on the crank arm 25 and carried by one end of the rock shaft 7 to which the trip member 6 is secured.

A crank shaft 26 is journaled at opposite ends in the side members 27 of the top 3, one end of said shaft being formed with an outwardly extending longitudinally disposed arm 28 which normally assumes an approximately horizontal position and is equipped at its free end with the wind actuated plate 29.

In practice, should it commence to rain, the water which collects on the top 4 of the cover 3 flows through the slot 5 in the former into the pan or receptacle 9 of the trip member 6. The trip member 6 being evenly balanced under normal conditions by the weight 10, it is obvious that the added weight of the water which collects in the pan or receptacle 9 will cause the outer or free end of said trip member to swing down into the dotted line position indicated in Fig. 5 of the drawings. This operation causes the rock shaft to turn in its bearings and raise the crank arm 24 which, through its action on the upright arm or extension 22 of the releasing member 11, causes the

latter to swing down or away from the base frame, thereby exerting a pull on the cord or other flexible element 17 and thus disengaging the catch 19 from the adjacent member of the window frame or casing, leaving the sash 21 free to slide down or descend by its own weight into closed position.

Should a heavy wind come up of sufficient force to blow dust or other debris into the room, the action of the wind on the wind plate 29 will raise the arm 28 of the crank shaft 26 into vertical position, as indicated by the dotted lines in Figs. 4 and 5, during which movement of the arm 28, the crank 30 of said crank shaft will impinge or strike the trip member 6 and thereby trip the same, which will have the same action on the releasing member 11 above described and provide for the disengagement of the catch 19 with the window frame.

Attention is also invited to the fact that when the arm 28 of the crank shaft 26 is swung into vertical position, the crank arm 31 on the opposite end of the crank shaft comes in contact with and depresses the button 32 of the bell 33, thereby causing the bell to ring continuously until the above described contact or engagement is broken by the person who hears the alarm.

From the foregoing description taken in connection with the drawings, it is thought that the construction, operation and advantages of this invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportions and minor details of construction may be resorted to without departing from the principles or sacrificing any of the advantages of this invention as defined in the appended claim:—

Having described my invention, what I claim as new and desire to secure by Letters Patent, is:—

An attachment for windows, comprising a supporting frame adapted to be mounted in the window casing, a cover for said frame, said cover having a downwardly inclined top provided at a suitable point with a transverse slot, a window catch releasing member hinged to said frame and a counterbalanced trip member provided at one end with a water receptacle and adapted to give impetus to the releasing member when one end of said trip member is depressed by the added water of the water flowing through the slot of the cover into said receptacle.

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

JAMES C. LISTON.

Witnesses:
JOHN M. FISCHER,
CHAS. F. SHAFER.