L. PEPIN.

BURGLAR ALARM.

APPLICATION FILED AUG. 31, 1915.

1,265,504.

Patented May 7, 1918.

2 SHEETS—SHEET 1.

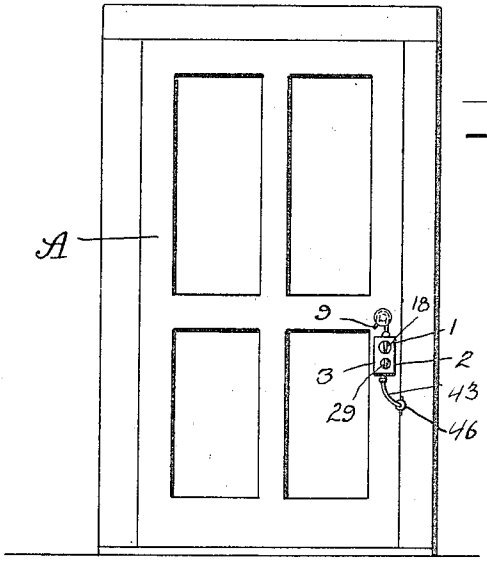


Fig. 1.

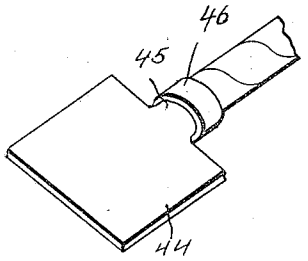


Fig. 7.

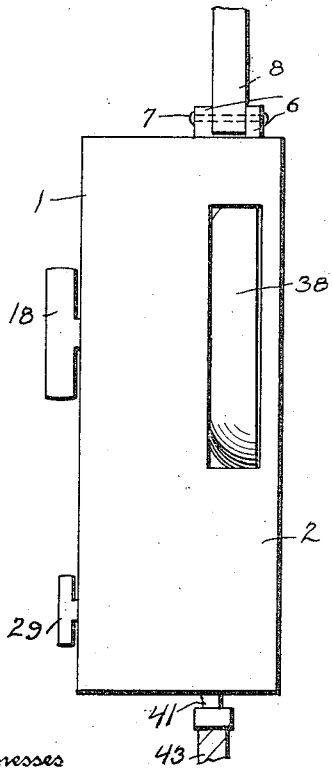


Fig. 2.

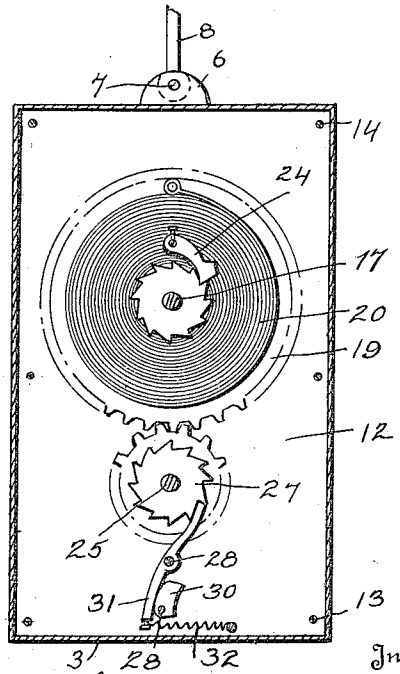


Fig. 4.

Witnesses

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2 SHEETS—SHEET 2.

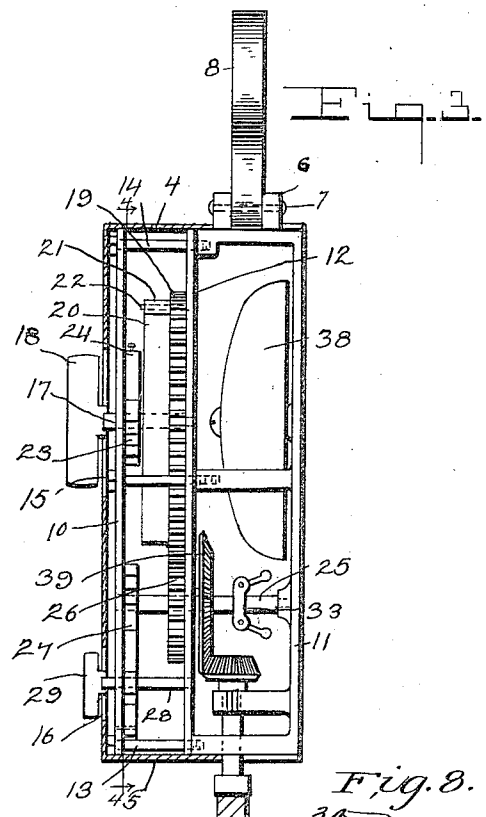


Fig. 3.

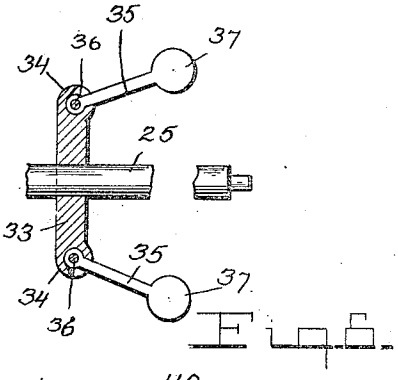


Fig. 6.

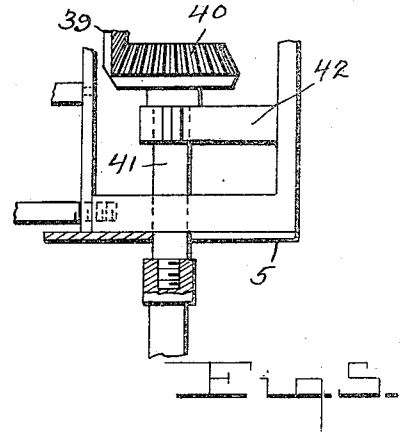
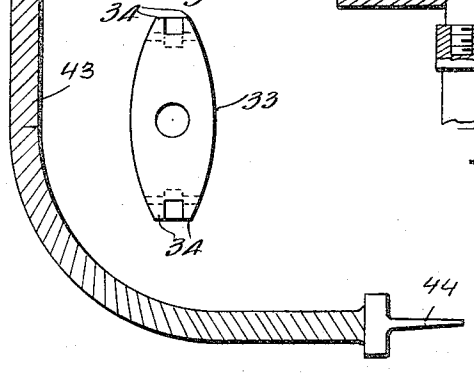


Fig. 5.

Fig. 8.



Witnesses

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UNITED STATES PATENT OFFICE.

LOUIS PEPIN, OF BUSBY, MONTANA.

BURGLAR-ALARM.

1,265,504. Specification of Letters Patent. Patented May 7, 1918.

Application filed August 31, 1915. Serial No. 48,327.

To all whom it may concern:

Be it known that I, LOUIS PEPIN, a citizen of the United States, residing at Busby, in the county of Big Horn and State of Montana, have invented certain new and useful Improvements in Burglar-Alarms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The primary object of this invention is to provide a portable burglar alarm that can be conveniently positioned on a door or window, without necessitating the altering of the door or window to accommodate the alarm.

A further object of the invention is to provide an alarm that will admit of the above object being carried out, and which alarm will be cheap to manufacture, will be durable, and efficient in operation, and of such a structure that the same can be applied to any type of door or window.

With the above and other objects in view as will more fully appear from that embodiment of my invention of which the following is a specification, reference being had to the accompanying drawings forming a part thereof, in which:

Figure 1 is a rear view of a door, showing the alarm applied thereto.

Fig. 2 is a side view of the alarm removed from the door.

Fig. 3 is a vertical sectional view through the device shown in Fig. 2.

Fig. 4 is a vertical sectional view on line 4—4 of Fig. 3.

Fig. 5 is a detail view of a part of the structure of the alarm.

Fig. 6 is a sectional detail view of the alarm sounding hammer.

Fig. 7 is a detail perspective view of the controlling member for the alarm,

Fig. 8 is a front elevation of the hammer supporting collar detached from operative position, and with the hammers removed.

Referring to the drawings, the alarm is shown, for conventional purposes, applied to a door knob of a door A, but it is to be understood that the same can be applied to a window or attached to any suitable support, adjacent the door or window.

The alarm consists of a vertically disposed casing having the front wall 1, side walls 2 and 3 and opposite end walls 4 and 5, the rear of the casing being open. The upper end wall 4 of the casing is provided with a pair of spaced ears 6, between which is pivoted by means of a pivot pin 7 the end of the shank of a hook 8, the bill of the hook, shown at 9, being engaged over the spindle of the door knob, as shown in Fig. 1.

Located within the casing is a frame, which includes the sides 10 and 11 and the intermediate partition 12, the said side 10 being connected to the intermediate partition by means of the bolts 13 and 14.

The front wall of the casing is provided with a pair of spaced openings 15 and 16, and extending through the opening 15 and through the adjacent side 10 of the frame, is a shaft 17, the inner end of the shaft being journaled in the intermediate partition 12 of the frame and the outer end of the shaft provided with a manipulating handle 18. The shaft 17 has loosely mounted thereon, a gear 19 and surrounding the shaft 17 is a spring 20, one end of the spring being fixed to the shaft 17 and the other end of the spring terminating in an eye 21 for receiving a pin 22 carried by the adjacent face of the gear 19. The shaft 17 has keyed thereto a ratchet 23, the teeth of which is engaged by means of a pawl 24 pivoted to the inner surface of the side 10 of the frame. The shaft 17 serves as a winding shaft for the spring 20 and the pawl 24 on the ratchet 23 prevents the shaft from having retrograde rotation, when the spring is wound.

Extending through the partition 12 and journaled therein is a shaft 25. This shaft 25 has its opposite ends journaled in the sides 10 and 11 of the frame and one end of the shaft has keyed thereto a gear 26 and a ratchet 27, the said gear being arranged in intermeshing engagement with the gear 19.

A shaft 28 extends through the opening 16 in the front wall of the casing and through the side 10 of the frame, and has its inner end journaled in the partition 12 and has its outer end provided with a manipulating handle 29. The shaft 28 carries a cam 30, which is adapted, when the shaft is rotated in one direction, to engage a pawl 31 which is pivoted to the inner side 10 of the frame and which is normally held in engagement with the teeth of the ratchet 27, by means of a spring 32 so as to prevent the rotation of the shaft 25.

When the spring 20 is wound, and the shaft 28 is turned so as to cause the cam 30 to engage the pawl 31 to effect withdrawal of the same from engagement with the ratchet 27, the spring will unwind and through the medium of the gears 19 and 26 cause rotation of the shaft 25. When it is desired to stop the shaft 25 from rotating, the shaft 28 is turned in the opposite direction so as to cause the cam 30 to become disengaged from the pawl 31, to permit the latter to engage the ratchet 27, which by being keyed to the shaft 25 will hold the same against rotation.

The shaft 25 has the end which is positioned between the partition 12 and the side 11, of the frame, provided with a collar 33, which collar is provided at diametrically opposite points with pairs of spaced ears 34. Associated with the collars 33 are a plurality of hammers. Each of these hammers consists of an elongated rod 35, one end of which is pivoted between one pair of ears 34 by means of a pin 36, and a spherical head 37, which is mounted on the opposite end of the rod 35. Located between the side 11 and the partition 12 and positioned adjacent the hammers, is a bell 38. When the shaft 35 is rotated, the rods 35 are moved outwardly so that during rotation with the shaft 25 the spherical heads 37 will strike against the bell 38 so as to sound an alarm.

The shaft 25 has mounted thereon and at a point spaced from the collar 33, a beveled gear 39, which gear is arranged in intermeshing engagement with a smaller beveled gear 40 carried by the inner end of a stub shaft 41 journaled in a laterally projecting arm 42 carried by the side 11 of the frame, the outer end of the shaft 41 extending through and journaled in the end wall 5 of the casing, as shown in Fig. 3.

The outer end of the stub shaft 41 has connection with one end of a flexible shaft 43, the opposite end of the flexible shaft being provided with a rectangular flat head 44, one edge of which head is provided with a laterally extending cylindrical projection 45, received by a collar 46 carried by the adjacent end of the flexible shaft. The head 44 is of such a thickness, that the same can be inserted between the door and the door frame, as shown in Fig. 1, without interfering with the closing of the door.

In use, the spring 20 is wound by means of the shaft 17 and the cam 30 is moved out of engagement with the pawl 31 so as to permit the pawl to engage in the ratchet 27 and to prevent the unwinding of the spring. The device is then placed on the door, as shown in Fig. 1, or as before stated the same can be applied to a window frame, and the head 44 is inserted between the door and door frame, or between the window sash and frame, and the shaft 28 is then turned to cause the cam to engage the pawl and withdraw the same from the ratchet 27. By virtue of the flexible shaft being secured between the door and frame, or the window sash and frame, as the case may be, it will be seen that the shaft will be held against rotation, thereby preventing rotation of the shaft 25 by the spring 20. However, as soon as the door or window is opened, releasing the head 44 the flexible shaft 43 will be free and the spring 20 will unwind, causing rotation of the shaft 25 and resulting in the spherical head 37 on the hammers engaging the bell, during their rotation, so as to sound the alarm.

Having thus described the invention what is claimed as new, is:

1. In a burglar alarm, the combination with a support having a stationary member and a movable member, of a casing carried by one of the members, a sounding device located within the casing, a shaft journaled within the casing and adjacent the sounding device, means for rotating the shaft, means carried by the shaft for engaging the sounding device when the shaft is rotated, means rotatably connected to the shaft and adapted to be clamped between the movable and stationary members for holding the shaft against rotation, and when released to permit the shaft to rotate, a ratchet carried by the shaft, a pawl engaging in the ratchet for normally holding the shaft against rotation and means for disengaging the pawl from the ratchet when the holding means is clamped between the movable member and the stationary member of the support, as and for the purpose specified.

2. In a burglar alarm, the combination with a support having a stationary member and a movable member, of a casing carried by one of the members and having a sounding device therein, a shaft journaled within the casing and located adjacent the sounding device, means for rotating the shaft, means carried by the shaft for operating the sounding device when the shaft is rotated, a gear wheel carried by the shaft, a second gear wheel located within the cas-

ing and meshing with the first gear, a flexible and rotatable element having one end connected to the second gear and having its other end extending beyond the casing, a flat head carried by the last-mentioned end of the flexible element, the said head being adapted to be detachably clamped between the stationary and movable members of the support so as to hold the flexible element and the shaft against rotation, and when released to permit the shaft and the flexible element to rotate, for the purpose specified.

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

LOUIS PEPIN.

Witnesses:
HENRY A. BARRETT,
J. M. DENMAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."