No. 718,007. PATENTED JAN. 6, 1903.

C. W. LINN.

SASH LOCK AND ALARM.

APPLICATION FILED JULY 13, 1901.

NO MODEL.

FIG. 1.

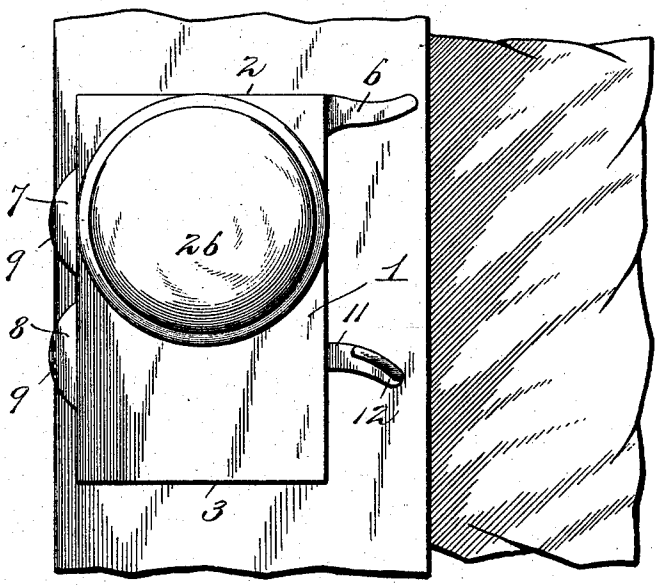


FIG. 2.

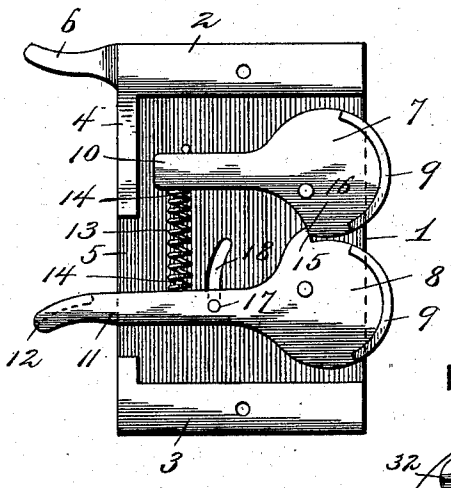


FIG. 3.

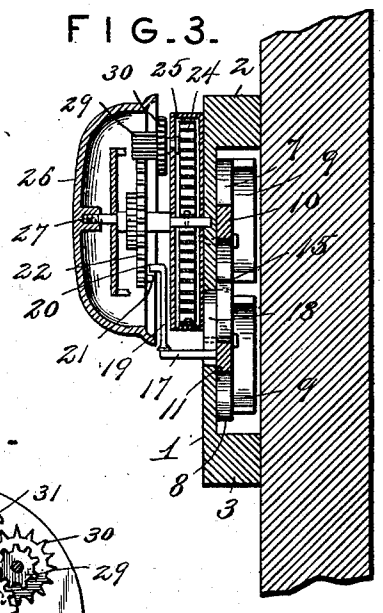
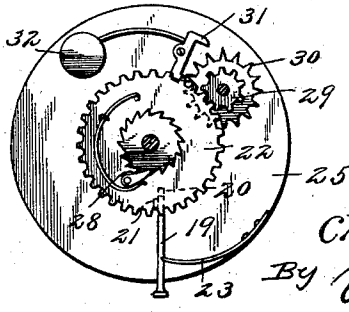


FIG. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

CHARLES W. LINN, OF MUNCIE, INDIANA.

SASH-LOCK AND ALARM.

SPECIFICATION forming part of Letters Patent No. 718,007, dated January 6, 1903.

Application filed July 13, 1901. Serial No. 68,240. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. LINN, a citizen of the United States, residing at Muncie, in the county of Delaware and State of Indiana, have invented new and useful Improvements in a Combined Automatic Sash-Lock and Alarm, of which the following is a specification.

This invention relates to combined automatic sash-locks and alarms, the object in view being to provide a device of the character referred to especially designed for application to the sliding sashes of windows, the device being so constructed as to automatically lock the window-sash at any point to which it may be elevated or adjusted and also to automatically lock the sash when closed, forming an effectual bar against the opening of the sash by unauthorized persons. The sash-lock is so constructed and combined with alarm mechanism that when the locking device is manipulated for releasing the sash an alarm is sounded, which alarm continues to ring for a sufficient period of time to warn the occupants of the house.

With the above and other objects in view, the nature of which will appear more fully as the description proceeds, the invention consists in the novel construction, combination, and arrangement of parts hereinafter fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is an elevation of a portion of a window-sash, showing the sash-lock and alarm applied thereto. Fig. 2 is a view in elevation of the sash-lock looking toward the inner side thereof. Fig. 3 is a vertical section through the same, shown applied to a sash also in section. Fig. 4 is a detail elevation of a portion of the alarm mechanism.

Referring to the drawings, 1 designates the lock-casing, which comprises an outer plate 1, top and bottom flanges 2 and 3, respectively, and a back flange 4, which closes the back of the casing, with the exception of a slot or space 5, which is left for the passage and working of one of the finger-levers, by means of which the parts of the sash-lock are disengaged from the window-casing. The casing is also provided at its upper inner corner with a rigidly-attached thumb-piece 6. Within the casing are housed two cams 7 and 8, each of which is provided at its outer operative portion with a segmental flange 9, forming a broad bearing-surface adapted to operate against the adjacent inner surface of the window frame or casing. The upper cam 7 is provided with a rearwardly-extending arm 10, and the lower cam 8 is provided with a similar arm, forming a cam-lever 11, which extends through the opening 5 and is provided with a finger or grip portion 12, which lies beneath the thumb-piece 6, so that the operator by grasping the thumb-piece and cam-lever may rock the inner end of the latter upward for releasing the engagement between the cams and window-casing. The cams are normally held in their operative positions by means of an expansive spring 13, which is interposed between the arm 10 and lever 11, the opposite ends of the spring being received around studs 14, projecting from the inner adjacent edges of the arm 10 and lever 11, as clearly illustrated in Fig. 2. Simultaneous operation of the cams is effected by means of a shoulder 15 on one of the cams, which operates against a corresponding shoulder 16 on the other cam, and in this way as one of the cams is rocked on its pivot the other cam is correspondingly rocked or turned.

The lower cam 8 is provided with a laterally-projecting pin 17, which works through a slot 18 in the plate 1 of the casing, where it engages with and operates beneath the lower end of a slide-trip 19, provided at its upper end with a projection 20, adapted to be moved into and out of the path of a stop-lug 21 on a spur gear-wheel 22, the projection 20 being normally held in the path of the lug 21 by means of a spring 23, connected with the gear-casing and exerting its tension in a downward direction on the slide-trip 19, as illustrated in Fig. 4. The wheel 22 is revolved when released by means of a spring 24, housed within a spring-case 25, secured to the casing in which the cams are mounted, as shown in Fig. 3, said spring being wound up by means of the bell 26, which is mounted upon a bell-post 27, so that in turning the bell the bell-post is rotated and caused to wind the spring by means of the usual pawl-and-ratchet mechanism, (indicated at 28.) When the wheel 22 is released, it drives a spur-pinion 29 on the same shaft with an es-

capement-wheel 30, which in revolving operates an escapement-lever 31, to which is connected a hammer 32. By means of the arrangement described the bell is continuously operated during a complete revolution of the wheel 22. After said wheel has completed one revolution the lug 21 strikes against the projection 20 of the slide-trip and brings the alarm mechanism to a state of rest. The wheel 22 is released whenever the cam-lever 11 is vibrated for the purpose of opening a window, as such movement of the lever will throw the pin 17 upward and operate the slide-trip. In this way the occupants of a house or building are warned that the window-sash is being tampered with.

In view of the foregoing description it will be seen that the cams 7 and 8 by reason of the reversed location of their pivots act in opposite directions, thus defeating both the opening or closing of the window and holding the same locked either in a closed or open position at any point of elevation; also, that the more pressure that is brought to bear on the window-sash either in an upward or downward direction the more tightly will the cams bind against the window-frame. In attempting to release the sash-lock the cam-lever must necessarily be operated, and this will necessitate the releasing of the alarm mechanism, which will immediately begin to act.

Any preferred form of alarm mechanism may be employed in connection with the sash-lock, and other changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

The combination with the casing having reversely-pivoted spring-actuated cams provided with shoulders coacting one against the other to permit of the cams to operate in opposite directions from each other, a slot in the casing, a pin on one of the cams passing through said slot and engaging a slide-trip which is provided at its upper end with a projection adapted to be moved into and out of the path of a stop-lug secured to a gear-wheel by means of a spring secured at one end to the casing and having its opposite end connected to said slide-trip, of a bell mounted on a pivoted post having its lower end secured to a spring inclosed within a casing said spring adapted to be wound up by means of the turning of the bell, substantially as specified.

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

CHARLES W. LINN.

Witnesses:
WILL P. KOONS,
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