

No. 619,997.

Patented Feb. 21, 1899.

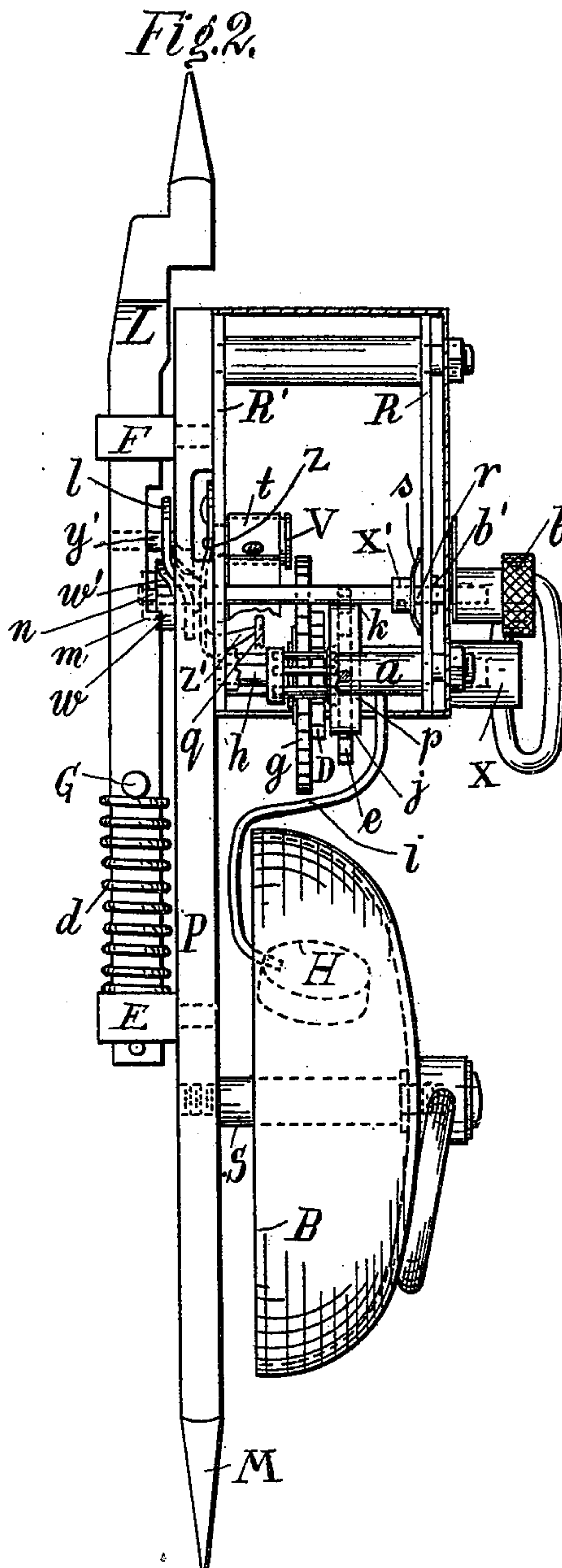
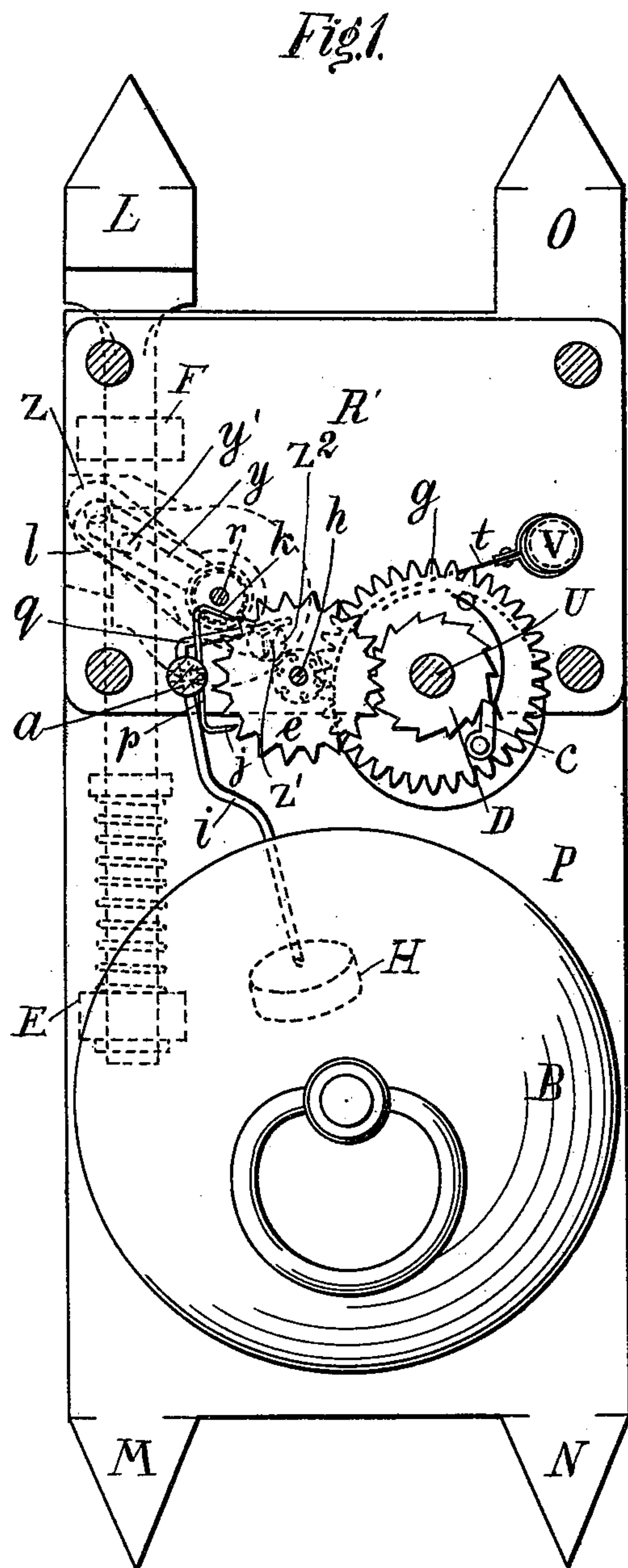
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DOOR FASTENER AND BURGLAR ALARM.

(Application filed Nov. 10, 1898.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses:
John A. Paulson
Clifford E. Dunn.

Louis Saladin Inventor
By his Attorney, Henry Schreiter.

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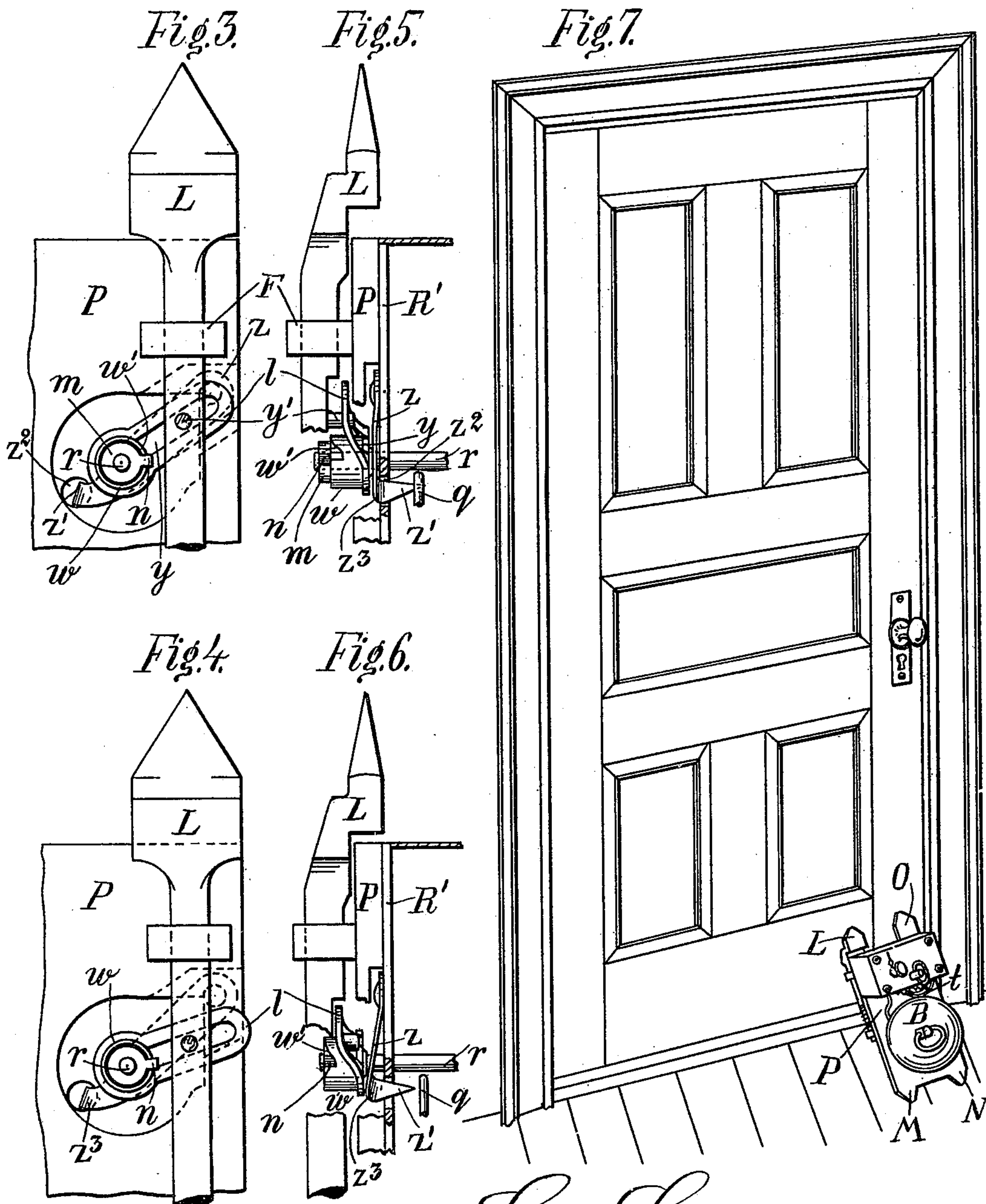
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By his Attorney Henry Schreiter

UNITED STATES PATENT OFFICE.

LOUIS SALADIN, OF NEW YORK, N. Y.

DOOR-FASTENER AND BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 619,997, dated February 21, 1899.

Application filed November 10, 1898. Serial No. 696,080. (No model.)

To all whom it may concern:

Be it known that I, LOUIS SALADIN, of New York, (Brooklyn,) county of Kings, and State of New York, have invented certain new and useful Improvements in Door-Fasteners and Burglar-Alarms; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to safety devices; and it consists of the hereinafter-described combination of a door-fastener and automatic burglar-alarm.

The object of my invention is to provide an ambulant convenient device readily applicable to any door and one furnishing safe protection against opening the door or gaining access therethrough.

The embodiment of my invention is fully illustrated in the accompanying drawings, wherein—

Figure 1 is a front elevation thereof, the upper plate of the casing being removed to disclose the alarm-operating mechanism. Fig. 2 is a side elevation, partly sectional view. Figs. 3 and 4 are rear views; and Figs. 5 and 6 side views similar to Fig. 2, showing the sliding prong L and the mechanism connected therewith for starting the movement of the alarm-bell. Fig. 7 is a perspective view of a door with my device set in position.

Similar letters of reference indicate corresponding parts in all views of the drawings.

The component parts of my invention are the base-plate P, provided with prongs M N O, the bell B, mounted on stud S, secured in the base-plate, a spring movement for ringing the bell, the sliding prong L, moving longitudinally in lugs E and F, secured in the base-plate, spring D, slid on the stem of the prong L and bearing, respectively, against the lug E and the pin G, set transversely in the stem, and the mechanism for setting and starting the movement of the bell.

Base-plate P, with prongs M, N, and O, is designed to serve as a door-fastening device when set up in slanting position against the door, as shown in Fig. 7. In this position prongs M and N rest against the flooring, whereas prong O rests upon the frame of the door. Any force exerted upon the door to

open it will tend to drive the prongs M and N into the flooring and prong O into the door, thus securing them more firmly in position.

Prong L is devised to yield to the pressure upon the door, and thereby start the movement of the bell B. This movement, which is set between plates R and R', secured to the base-plate P by any suitable method, consists of the coiled spring *t*, fastened by one end to the pin V and its other end to spindle U, mounted between the plates R and R' of the frame. This spring *t* is wound up by means of ring-handle *x*, screwed on spindle U, and when coiled is held by ratchet D and click or pawl *c*, pivoted to gear *g*, rigidly secured to spindle U. This gear *g* is actuated by spring *t* when the same is released and operates the escapement-wheel *e*, mounted on spindle *h*, also mounted in the plates R and R' of the frame. The teeth of the escapement-wheel are caught by the pallets *j k* of the anchor *p*, secured to the oscillating arbor *a*, journaled in bearings in the plates R and R' of the frame. To the arbor *a* is secured the rod *i*, carrying on its end the hammer H, striking the bell. This bell-ringing mechanism is in its main features and operation similar to that usually used in clocks. The teeth of the escapement-wheel *e* engage alternately pallets *j k* of the anchor *p*, causing it to oscillate and move the hammer H, which strikes the bell.

The action of the bell-ringing mechanism is normally suspended by rod *q*, secured in arbor *a* in position to engage point *z'* of spring *z*. This spring is secured to the outside of the frame R', and its point *z'* projects into the space within the frame through aperture *z''*. The spring is set to draw outwardly; but its free end *z'''* engages with link *l*, which is bent in the shape of a cam corresponding to cam *w'*, which is integral therewith and is in turn engaged by finger *n*. When these parts of the mechanism are in position shown in Figs. 3 and 5, the point *z'* of the spring *z* is pressed inwardly. Trigger or rod *q* then catches thereon and prevents arbor *a* from moving. The anchor *p* then holds escapement-wheel *e* from turning, and thus the movement of the bell is held arrested.

The releasing mechanism is arranged on

spindle r and is operated by the sliding prong L in following manner: The spindle r is provided with stationary collar x' , set near the outer end of the spindle, but within the frame-plate R, and with pin b' , set transversely in the spindle outside of the frame. Knob b , set on the projecting end of spindle r beyond the pin b' , serves as a handle for turning spindle r in its bearings. Between the collar x' and the frame-plate R spring s is set, pressing against the collar x' and the frame-plate R, respectively, and thus acting as a brake against rotary motion of the spindle. The other end of spindle r is pillowed in the frame-plate R' and projects beyond it. On this end of the spindle is set collar w , integral with link l or secured thereto, and beyond that disk m with finger n engaging, as described above, the edge of the collar w . The width of collar w corresponds approximately to the distance between disk m and the rear plate R' of the frame, leaving, however, a clearance for the spring z , pressing against it. In the edge of the collar w is cut a notch w' , into which finger n of the disk m may slip when the collar w is turned in such position that the notch stands oppositely to it. One side of the notch w' is shaped into a spiral slanting way to facilitate the shifting of the finger n from the notch to the edge of the collar w by turning spindle r oppositely to the sloped side of the notch. Notch w' is sufficiently deep to permit collar w to yield to the pressure of the spring z sufficiently to disengage point z' from the trigger or rod q . It will thus be seen that the movement of the bell, which is normally arrested by the engagement of the rod q with the point z' of the spring z , can be started either by turning the spindle r until finger n stands oppositely to the notch w' or by turning the collar w to the right, as seen in Figs. 3 and 5, when the spindle r is set in the position shown therein. This turning of collar w is accomplished through link l and pin y' by moving the shift-able prong L downwardly. Link l is slotted, and in the slot y engages the pin y' , set transversely in the stem of the prong L. When prong L is pressed against—as, for instance, when the device being placed in position, as shown in Fig. 7, an attempt is made to open the door—pin y' moves link l to the right, and thus brings the notch w' in position oppositely to finger n . Collar w then slides upon disk m , allowing the spring z to react. Point z' of the spring z recedes, and rod or trigger

q becoming thereby disengaged the movement of the bell is started.

The alarm device is set by turning spindle r until finger n stands immediately adjoining the vertical side of the notch w' . When set in this position, only a slight motion of the prong L suffices to release the movement of the bell.

I claim as my invention—

1. A combined door-fastener and burglar-alarm, consisting of a base-plate provided with prongs projecting at opposite ends, a bell and bell-movement mounted on the plate and of mechanism for arresting and releasing the bell-movement, this mechanism consisting of a trigger set in the oscillating arbor of the bell-movement, a spring secured to the frame-plate and having its pointed end bent to engage with the trigger, a spindle mounted in the frame, a collar and a slotted link slid on the spindle and resting against the spindle, a notch cut in the edge of the collar, a disk secured to the end of the spindle beyond the collar and having a finger engaging the edge of the collar, a prong movably secured to the base-plate, a spring acting upon the prong and projecting it downwardly, and a pin set transversely in the prong and engaging with the slotted link.
2. The combination with a base-plate provided with prongs projecting on opposite ends and with an automatically-ringing bell mounted thereon, of mechanism for arresting and releasing the automatic movement of the bell consisting of a trigger set in the oscillating arbor of the bell-movement, a spring secured to the frame-plate and having its pointed end bent to engage with the trigger, a spindle mounted in the frame, a collar and a slotted link slid on the spindle, and resting against the spring, a notch cut in the edge of the collar, a disk secured to the end of the spindle beyond the collar and having a finger engaging the edge of the collar, a movable prong sliding longitudinally in lugs secured to the base-plate, and a pin set transversely in the stem and engaging in the slot of the slotted link.

In witness that I claim the improvements described in the foregoing specification I have signed my name in the presence of two subscribing witnesses.

LOUIS SALADIN.

Witnesses :

ROBERT VALENTINE MATHEWS,
JOHN A. PAULSON.