

(Model.)

C. L. MOREHOUSE.

COMBINED FIRING AND BELL RINGING BURGLAR ALARM.

No. 300,107.

Patented June 10, 1884.

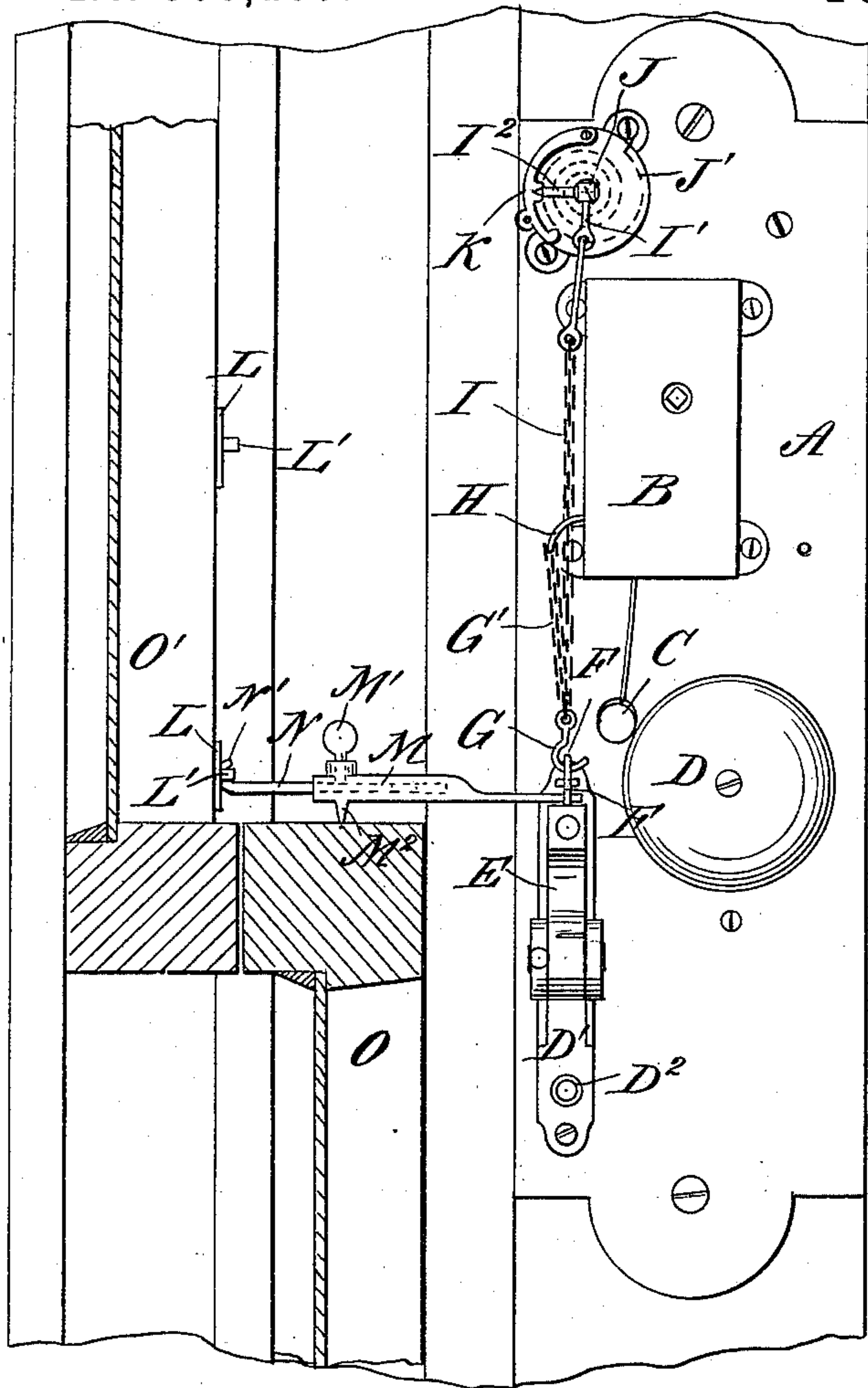


Fig. 1.

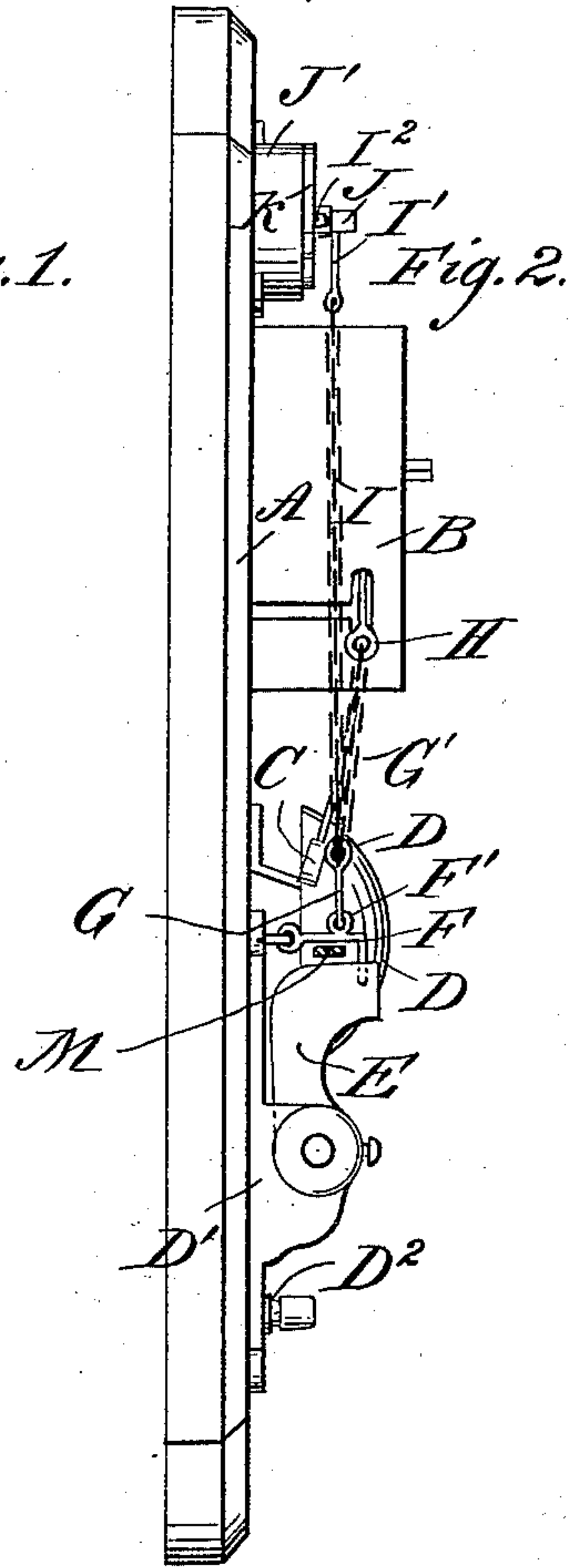


Fig. 2.

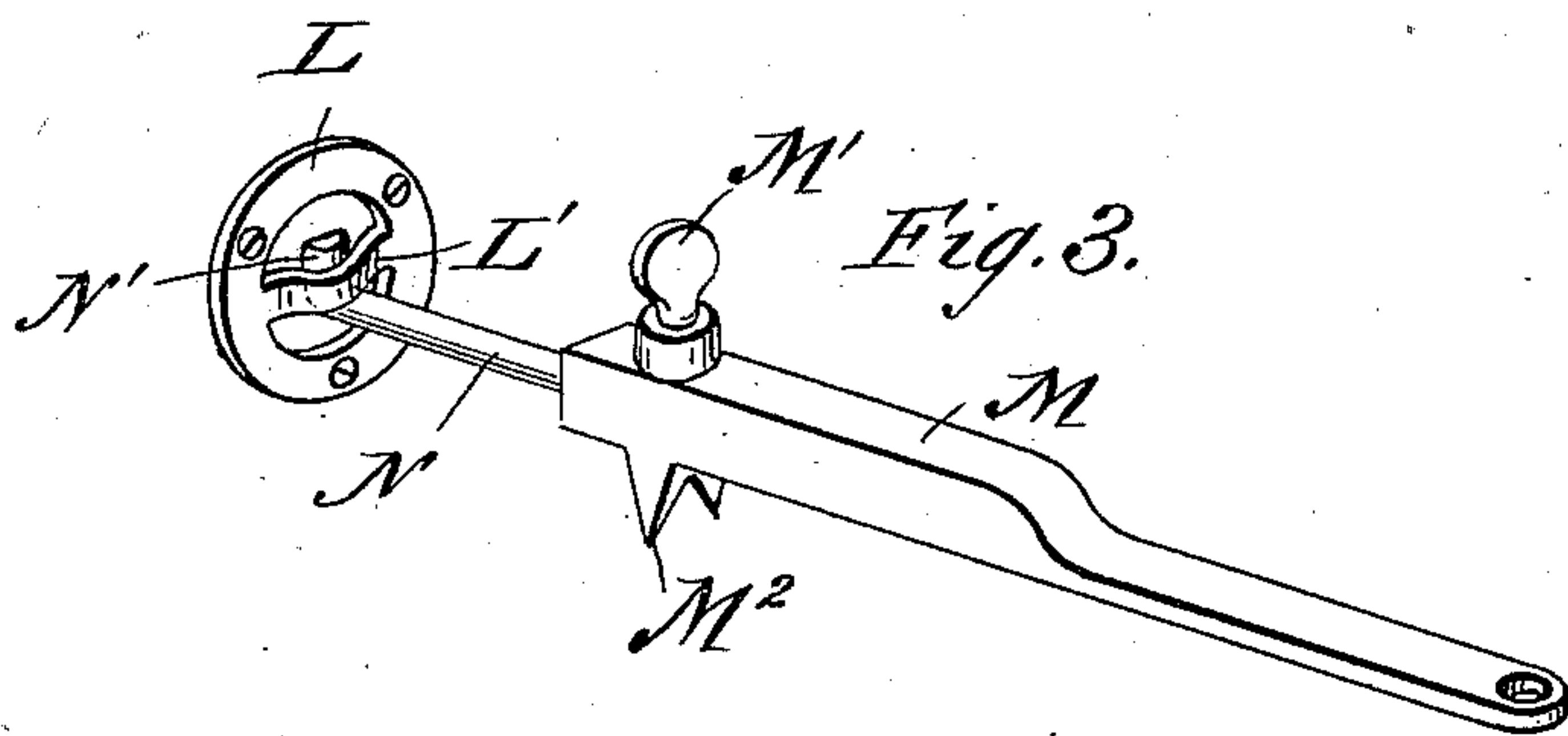


Fig. 3.

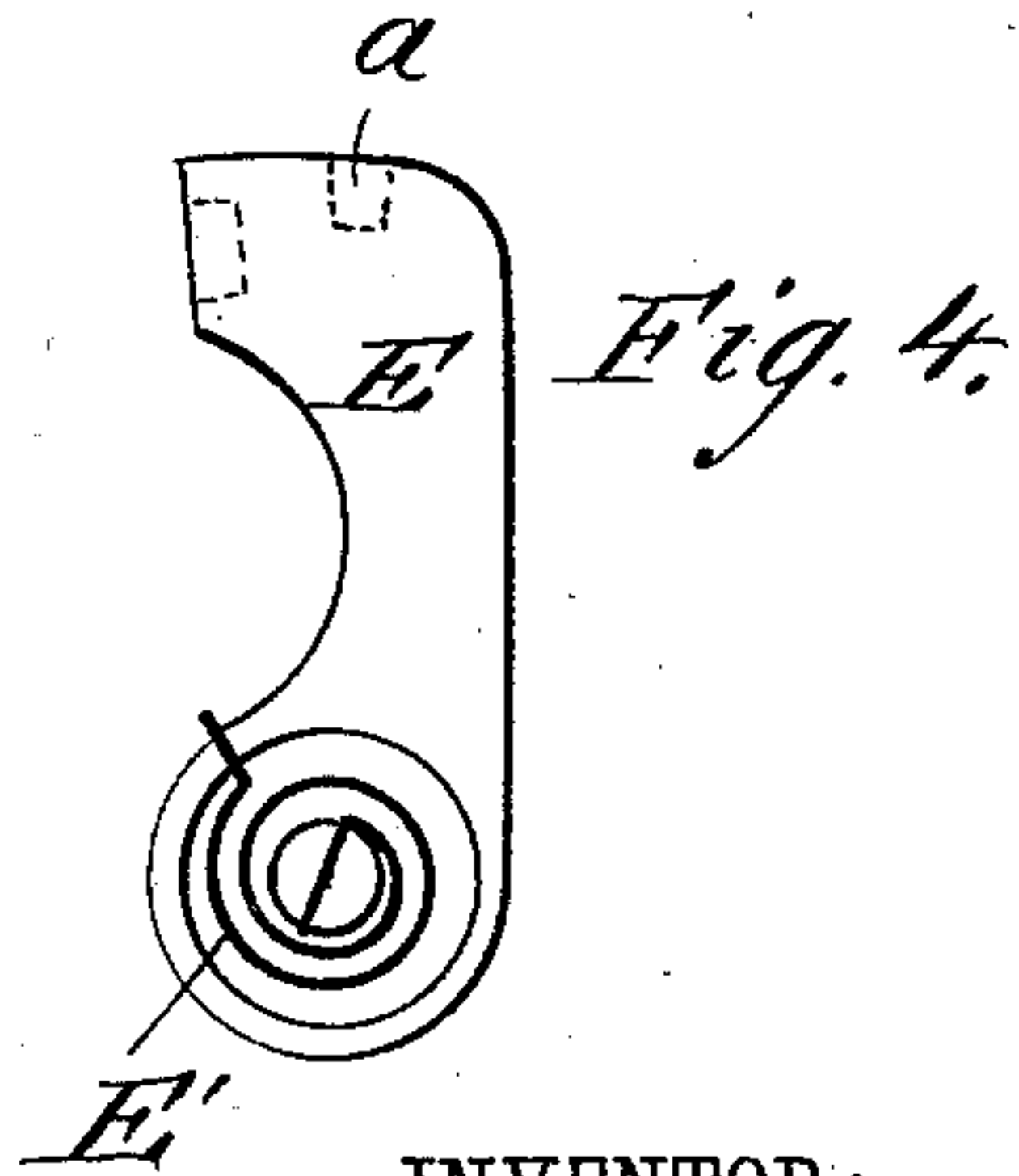


Fig. 4.

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# UNITED STATES PATENT OFFICE.

CHARLES L. MOREHOUSE, OF BROOKLYN, NEW YORK.

## COMBINED FIRING AND BELL-RINGING BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 300,107, dated June 10, 1884.

Application filed November 24, 1883. (Model.)

*To all whom it may concern:*

Be it known that I, CHARLES L. MOREHOUSE, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Automatic Firing and Bell-Ringing Burglar-Alarm, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved burglar-alarm, which sounds an alarm-bell and fires an explosive cap or cartridge as soon as an attempt is made to open the door or window with which the alarm is connected, which alarm can also be connected with a clock-work mechanism in such a manner that the alarm is released at a certain hour and is sounded for the purpose of awakening persons.

The invention consists in a burglar-alarm formed of a cap or cartridge firing device and a bell operated by a clock-work mechanism, which firing device and bell are so arranged that they are both released at the same time.

The invention further consists in the combination, with the above-mentioned devices, of a lever adapted to rest on the top rail of the bottom sash, and to have one end connected with a plate or device on the sash and the other end passed under the trigger-hook of the firing-hammer.

The invention also consists in other parts and details and combinations of the same, as will be fully set forth and described hereinafter.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a face view of my improved burglar-alarm, showing the manner in which it is applied on a window, and set to be released when the window is opened. Fig. 2 is a side view of the alarm. Fig. 3 is a perspective view of the lever for releasing the alarm. Fig. 4 is a side view of the cap-firing hammer and its spring.

On a board, A, adapted to be fastened to a window-casing, a case, B, is secured, which contains a clock mechanism adapted to operate a hammer, C, for sounding a gong or bell, D, secured on the board A. Adjoining the bell a plate, D', is secured on the board A, which plate is provided in its lower end with a nipple, D<sup>2</sup>, for receiving a cap or cartridge,

and at the middle the said plate D' is provided with jaws, between which a hammer, E, is pivoted, which is acted on by a coil-spring, E', secured in the pivoted end of the hammer and held to the pivot of the hammer. The hammer E is provided in its swinging end with an aperture, a, adapted to receive the prong of a hook, F, pivoted on the upper end of the plate D', which hook F is provided with an eye, F', for receiving a hook, G, attached to the end of a chain, G', secured to the projecting end of an arm, H, of the bell-hammer-operating mechanism. The hook G is also fastened to a chain, I, one end of which is fastened to an arm, I', of a spindle, J, on which a spring is secured, which is contained in a casing, J'. The spindle J is provided with another arm, I<sup>2</sup>, at right angles to the arm I', which arm I<sup>2</sup> is pointed, and is adapted to be passed into a notch on the curved lever K, pivoted on the casing J', which lever K can be connected by a cord or wire with another door or window, or with an alarm-clock. On the side rail of the window-sash one or more rings, L, are secured, which are provided with an outwardly-bent cross-piece, L'. A lever, M, is provided with a sliding extension-piece, N, on the outer end of which a hook, N', is formed, which extension-piece N can be locked in the desired position on the lever M by means of a binding-screw, M'. The lever M is provided below the binding-screw with two downwardly-projecting prongs or studs, M<sup>2</sup>, which form a fulcrum of said lever.

The plate A is secured to the window-casing, as shown in Fig. 1, the clock-work mechanism in the case B is wound up in the usual manner, and the hammer E is swung upward and is locked in position by passing the end of the hook F into the aperture a. Then the hook G is passed through the eye F' of the hook F, the spring-spindle J having been previously turned in such a manner that the point of its arm I<sup>2</sup> is held in the lever K, as shown in Fig. 1. The extension N of the lever M is so adjusted that when the hook N' is passed under the cross-piece L' of the ring L the free end of the lever M can be passed under the hook F. Then the lever and the extension are brought in the position shown in Fig. 1, the hook N' passing upward under the cross-piece L' of the ring L, and the free end of the lever M being



below the hook F, the prongs M<sup>2</sup> rest on the upper surface of the top rail of the bottom sash, O, and form the fulcrum for the lever. If the lower sash is raised, the free end of the lever M will swing upward, and thereby it will push the hook F out of the aperture *a* of the hammer E, and thereby release the clock-work mechanism and the hammer. The clock-work mechanism sounds the gong or bell, and the spring E' throws the hammer down and explodes the cap or cartridge held on the nipple D<sup>2</sup>. If the upper sash, O', to which the rings L are fastened, is lowered, it will press down the hook end of the extension N, thereby throwing the free end of the lever M upward, and also releasing the hammer and the clock-work mechanism in the manner described. If the alarm is to be so adjusted that the window must always remain closed, the hook N' is passed under the cross-piece of the bottom ring, L. If the upper sash is to be slightly lowered for ventilation, the hook N' is passed under the cross-piece L' of the second ring, L, and the alarm will then be sounded as soon as any attempt is made to lower the upper sash still farther or raise the lower one.

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

30 1. In a burglar-alarm, the combination, with a spring-hammer, a bell, a clock-work mechanism for operating the bell, and a hook, F, for holding the hammer cocked, of the chain G', secured to the clock-work mechanism, and  
35 adapted to connect the said clock-work mechanism with the hook F, the chain I, adapted to be secured to the hook F, and fastened to an arm, I', of a shaft, J, provided with an arm, I<sup>2</sup>, a spring acting on the shaft J, and the piv-  
40 oted lever K, provided with a notch for receiving the end of the arm I<sup>2</sup>, substantially as herein shown and described.

2. In a burglar-alarm, the combination, with a spring-hammer, a bell, and a clock-

work mechanism for operating the bell, of a 45 pivoted hook for holding the hammer cocked, a lever resting on the upper surface of the top rail of the bottom sash, and having one end held on the upper sash and the other end under the hook, for holding the spring-hammer 50 cocked, substantially as herein shown and described.

3. In a burglar-alarm, the combination, with a spring-hammer, a bell, and a clock-work mechanism for operating the bell, of the 55 hook F, for holding the spring-hammer cocked, the lever M, provided with the extension-rod N and with spurs or lugs M<sup>2</sup> on the under side, and the ring L, provided with a cross-piece, L', which ring is fastened on the window, sub- 60 stantially as herein shown and described.

4. In a burglar-alarm, the combination, with the plate D', of the hammer E, pivoted between the jaws of the plate D', and provided at its free end with an aperture or recess, *a*, 65 and the hook F, pivoted to the upper end of the plate D', and provided with an eye, F', substantially as herein shown and described.

5. In a burglar-alarm, the combination, with a casing, J', containing a spiral spring, 70 of the spindle J, held in the casing J', and connected with the spring, the pointed arm I<sup>2</sup> on the spindle J, the arm I', the pivoted lever K, provided with a notch for receiving the end of the arm I<sup>2</sup>, and of an alarm device connected 75 with the arm I' of the spindle J, substantially as herein shown and described, whereby the alarm device can be released, by withdrawing the curved arm K, to release the arm I<sup>2</sup> of the spindle J, to permit the spring in the casing 80 to act on the spindle and throw the same, thus causing the arm I' to pull on the chain and start or release the alarm.

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Witnesses:

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