

(No Model.)

E. C. ELLWOOD.  
BURGLAR ALARM.

No. 364,637.

Patented June 14, 1887.

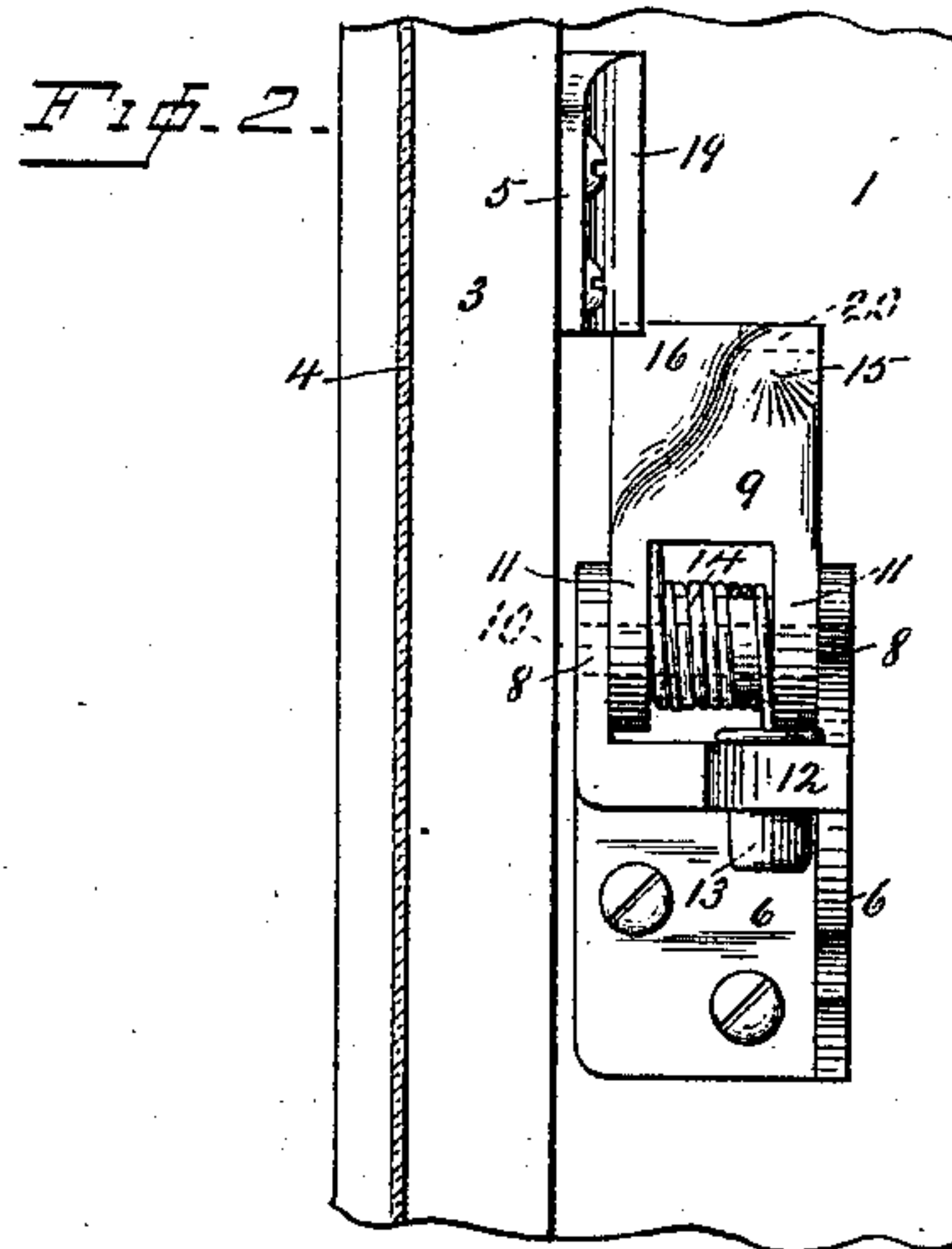
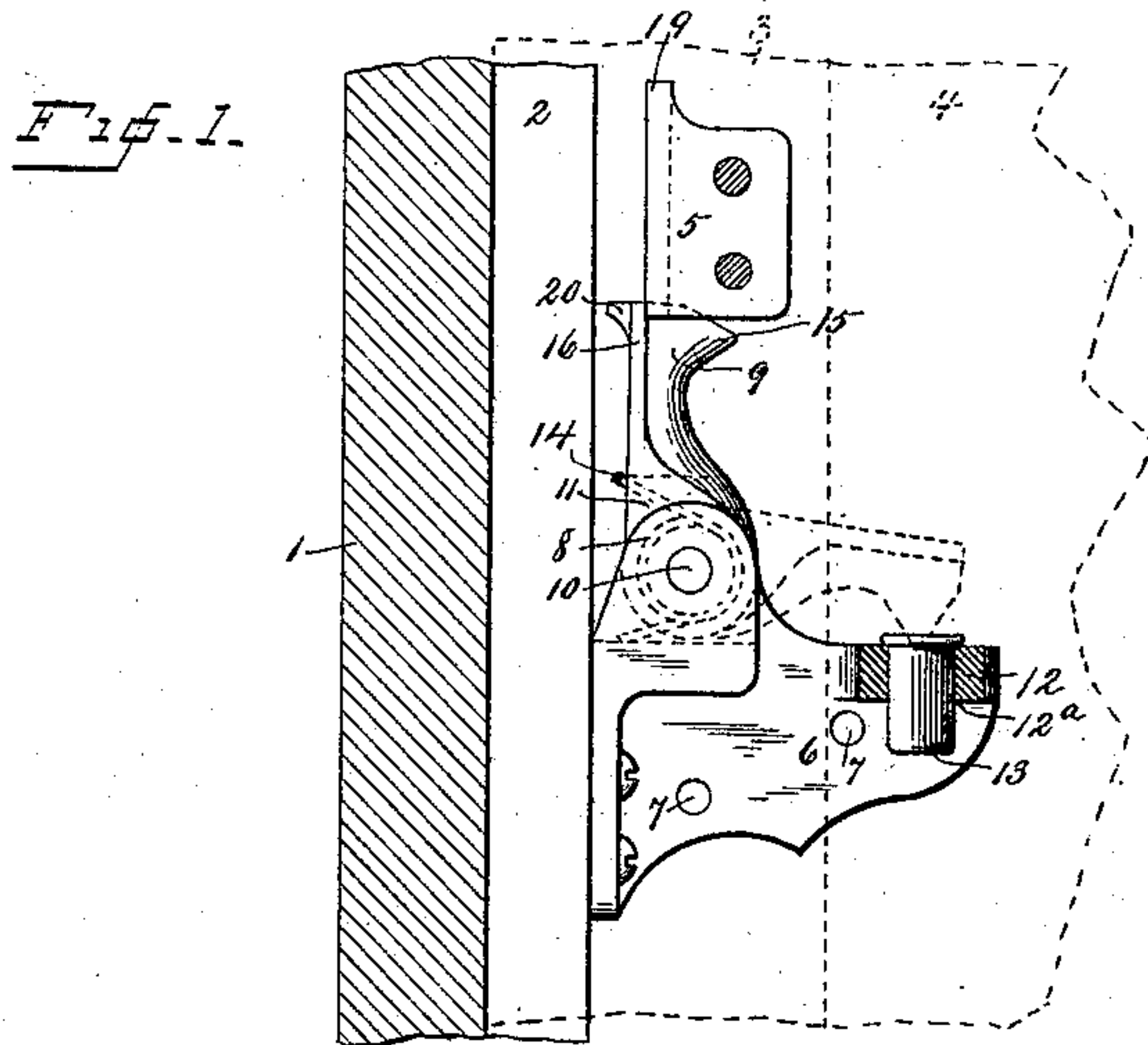


Fig. 3.

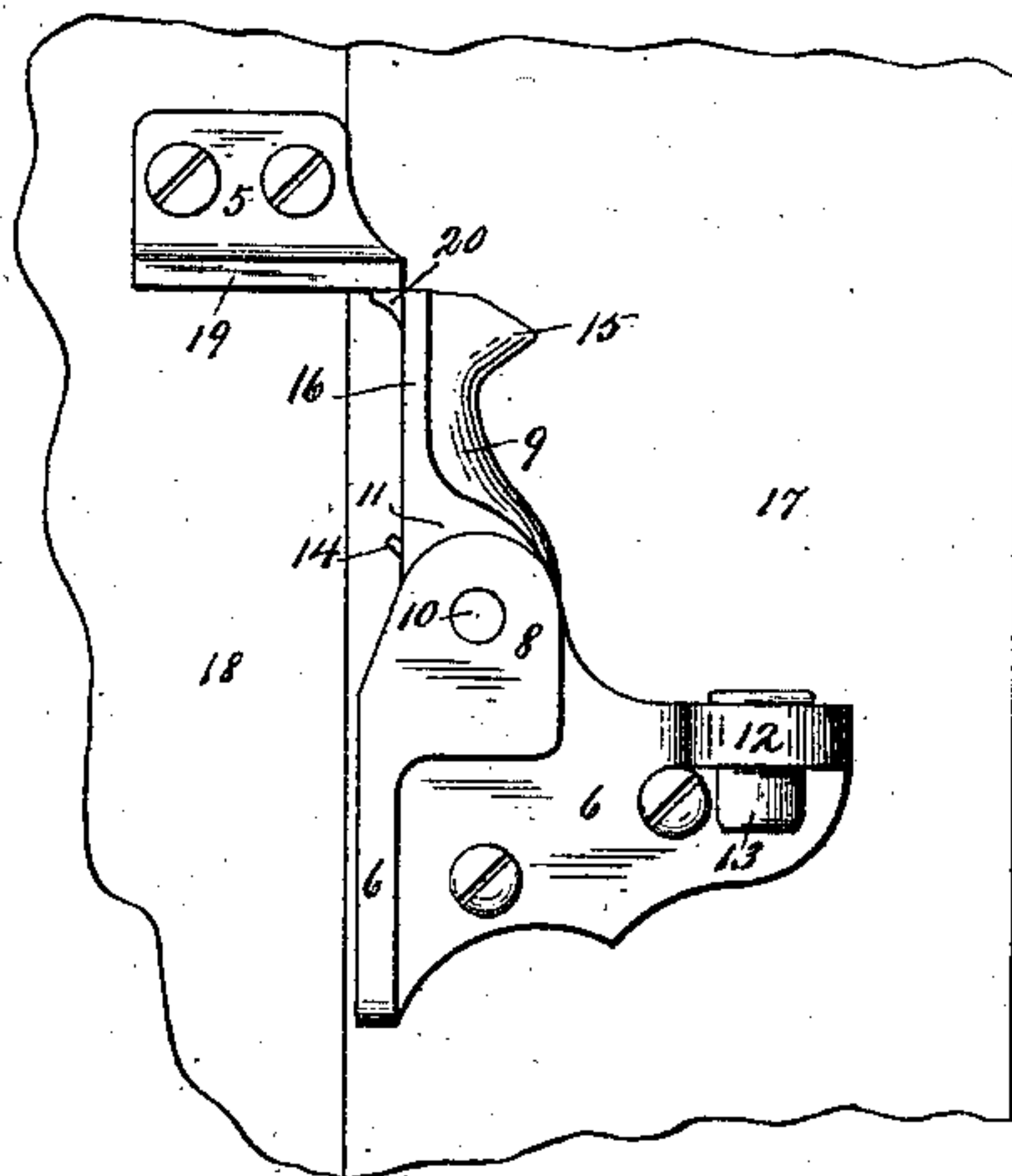
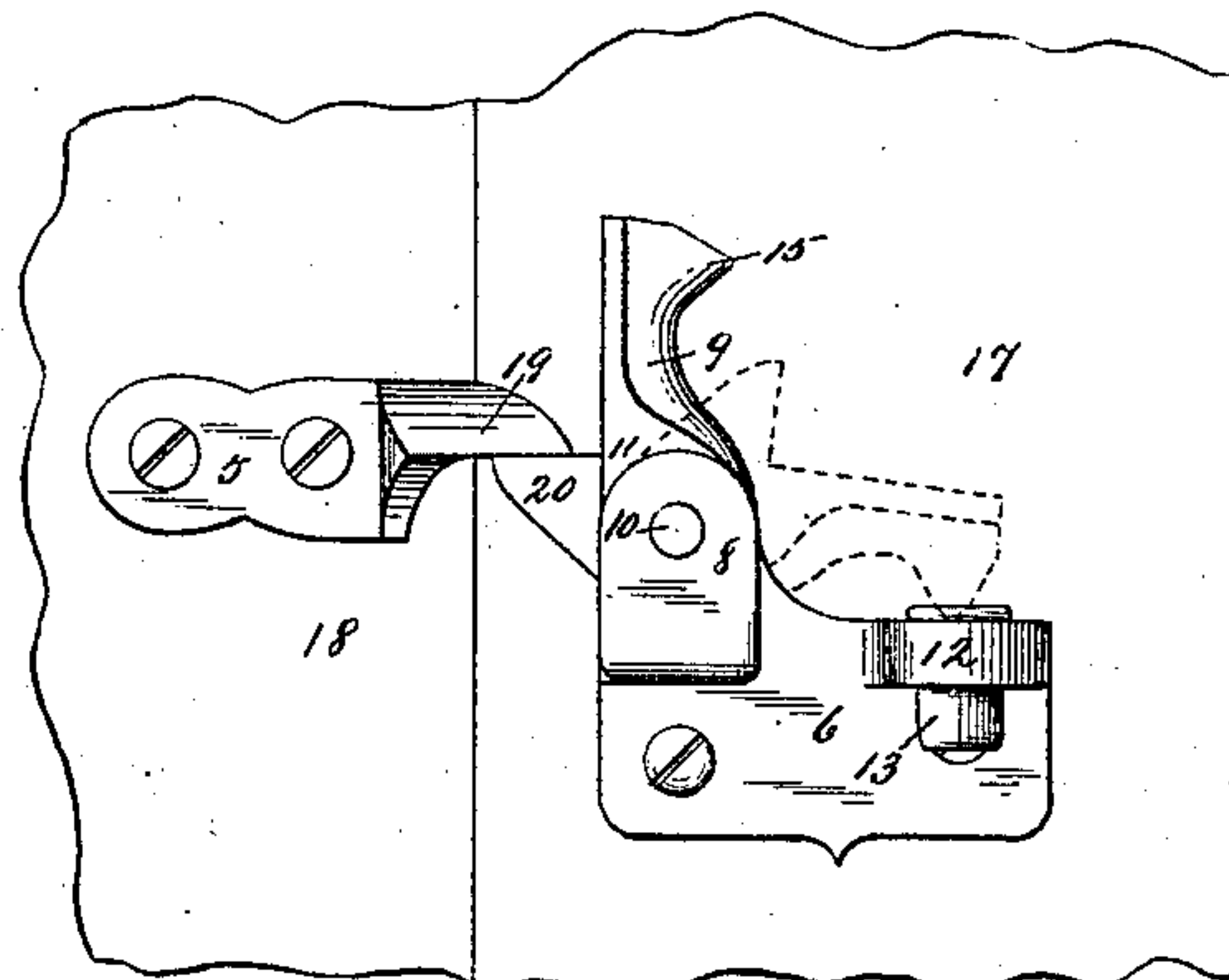


Fig. 4.



Witnesses.

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Inventor.

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# UNITED STATES PATENT OFFICE.

EVERETT C. ELLWOOD, OF GREEN'S FARMS, CONNECTICUT.

## BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 364,637, dated June 14, 1887.

Application filed February 11, 1887. Serial No. 227,289. (No model.)

*To all whom it may concern:*

Be it known that I, EVERETT C. ELLWOOD, a citizen of the United States, residing at Green's Farms, in the county of Fairfield and State of Connecticut, 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.

My invention relates to that class of burglar-alarms in which an alarm is given by detonation, and has for its object to provide a device of this class which shall be simple in construction, certain in operation, may be attached to any door or window without the necessity for skilled labor, and which may be made so cheaply as to be within the reach of all. With these ends in view I have devised the simple and novel construction, of which the following description, in connection with the accompanying drawings, is a specification, numbers being used to indicate the several parts of the device.

In the drawings, Figure 1 is a side elevation illustrating my invention as applied to a window, the view being from the outer side and the sash being indicated by dotted lines; Fig. 2, a front elevation corresponding with Fig. 1; Fig. 3, a view corresponding with Fig. 1, showing the device as applied to a door; and Fig. 4 is a slightly modified form, also shown as applied to a door.

Turning now to Figs. 1 and 2, 1 denotes the jamb shown in section, and 2 the bead, the parting-strip being removed. 3 (see dotted lines in Fig. 1) denotes the sash, and 4 the glass. The entire device consists of but three castings, a pin, and a spring. 5 denotes a catch-plate, which is secured upon the inner side of the window-sash. The other parts are all attached to the bead.

6 denotes a base-plate, preferably made right-angled, as shown in Figs. 1, 2, and 3, and provided with screw-holes 7 in two of its sides, so that the same device is adapted for use upon either a window or door without change in construction.

8 denotes ears upon the base-plate, and 9 a hammer pivoted to said ears, a pin, 10, passing through ears 8, its opposite ends being

headed down, and passed loosely through ears 11 upon the hammer.

12 denotes an enlargement on the base-plate provided with a chamber, 12<sup>a</sup>, to receive a cartridge, 13.

14 is a spring coiled about pin 10, one end of which bears against the base-plate and the other against the back of the hammer, as clearly shown in the drawings.

A sleeve may be provided, if preferred, through which the pin passes and around which the spring is coiled, as shown in Fig. 2.

The hammer may be made of any preferred form. I preferably, however, provide a teat, 15, which strikes the head of the cartridge when the hammer is released.

16 is a projection on the hammer, which is adapted to engage the catch-plate to set the device. The set position of the device when applied to a window is clearly shown in Figs. 1 and 2, and the released position is shown in dotted lines in Fig. 1.

To set the device it is simply necessary to raise the window slightly, so that projection 16 on the hammer will pass under the catch-plate. The window is then dropped to its ordinary position, the hammer being locked in the raised position by the catch-plate. The engagement between the hammer and catch-plate is of course made very slight, so that if the window is raised but a slight fraction of an inch, a thirty-second of an inch being amply sufficient to hold it, the hammer is released and explodes the cartridge. In Fig. 3 I have shown exactly the same device as in Figs. 1 and 2 applied to a door.

17 denotes the casing, and 18 the door, which of course swings from the opposite side, the hinges not being shown.

The alarm is secured to the casing and the catch-plate to the door, a lip or flange, 19, on the catch-plate projecting slightly over the casing and being engaged by lip 20 upon the hammer.

To set the device when applied to a door, the door is opened slightly to allow lip 20 to pass under lip 19. The door is then closed, the hammer being held at its retracted position by the engagement of lips 19 and 20, as clearly shown in Fig. 3. As these lips are made narrow, but very slight opening of the door is suf-



10 sufficient to release the hammer and explode the cartridge. The form illustrated in Fig. 4 differs but slightly from that illustrated in the other figures. The shape of the catch-plate is  
5 changed and lip 20 on the hammer is placed at the lower end thereof near the upward opening, instead of at the top, as in the other form. The operation of the two forms is precisely the same.

10 It will of course be understood that the details of construction are subject to considerable variation without departing from the spirit of my invention.

I claim—

15 1. In a burglar alarm, the combination, with the pivoted hammer, actuating-spring, and cartridge-holder, of a base-plate supporting the hammer and having flanges, the one parallel to the movement of the hammer and the other  
20 at right angles thereto, each flange having screw-holes, whereby the device is adapted to be secured in the positions described and to be operated in connection with a suitable stop, as set forth.

25 2. In a burglar-alarm, the combination, with the angled base-plate, spring, and cartridge-holder, of the hammer having the lateral projection 16 and a projection extending to the rear of the vertical plane of the pivot, and a stop having a base-plate and a lip adapted to  
30 engage the projections of the hammer from the side or rear, substantially as set forth.

3. In a burglar-alarm, the combination, with a casing, of the base-plate secured thereto and having the cartridge-holder and ears 8, the  
35 hammer pivoted in said ears and adapted in retracted position to stand parallel with said casing, and the stop secured to the movable part or window and adapted to be engaged with and disengaged from the hammer by be-  
40 ing moved in lines parallel therewith, substantially as set forth.

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

EVERETT C. ELLWOOD.

Witnesses:

A. M. WOOSTER,

C. E. RUGGLES.