

(No Model.)

J. H. ELLIS.
BURGLAR AND FIRE ALARM.

No. 594,389

Patented Nov. 30, 1897.

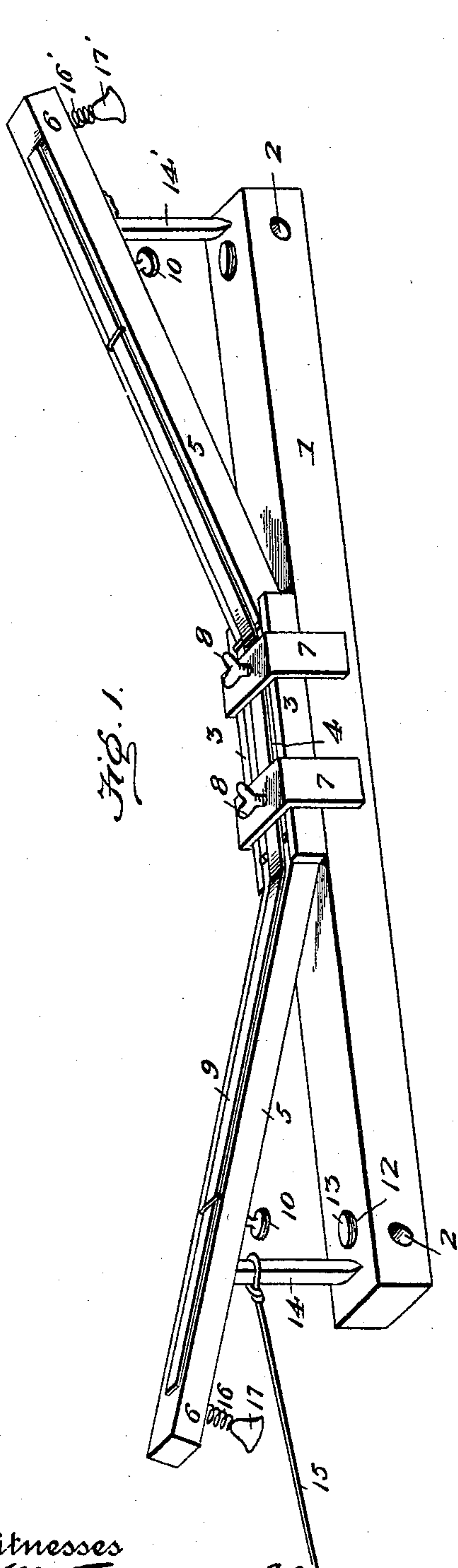


Fig. 1.

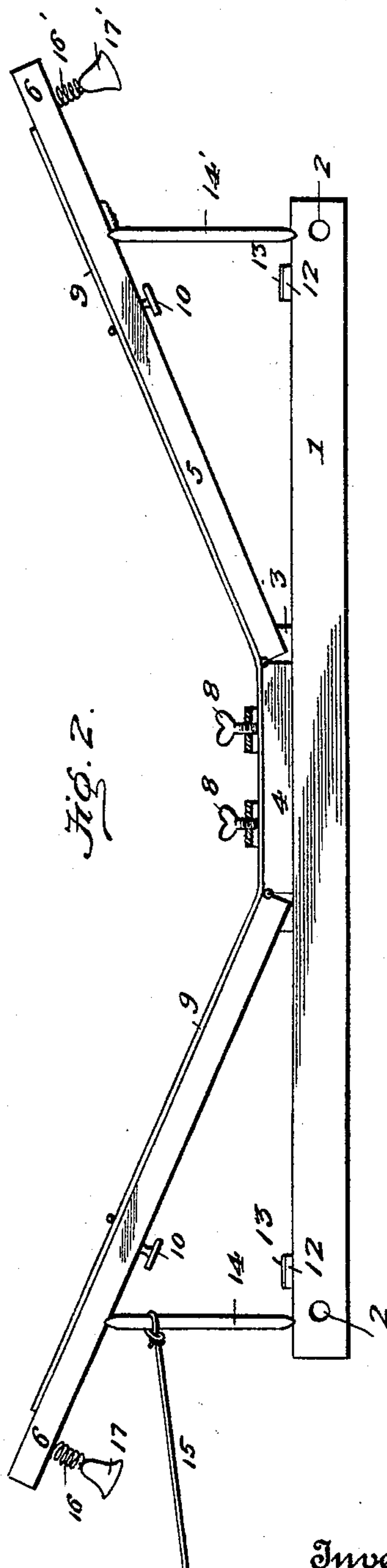


Fig. 2.

Witnesses

Wm. Croshaw
J. H. Ellis

Inventor

James H. Ellis

by *A. B. Wilson*

Attorney

UNITED STATES PATENT OFFICE.

JAMES H. ELLIS, OF PRESCOTT, ARKANSAS.

BURGLAR AND FIRE ALARM.

SPECIFICATION forming part of Letters Patent No. 594,389, dated November 30, 1897.

Application filed March 16, 1897. Serial No. 627,860. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. ELLIS, a citizen of the United States, residing at Prescott, in the county of Nevada and State of Arkansas, have invented certain new and useful Improvements in Automatic Fire and Burglar Alarms; and I do 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 has relation to combined fire and burglar alarms; and the object is to provide a simple, effective, and automatic fire and burglar alarm.

To this end the novelty consists in the construction, combination, and arrangement of the same, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings the same reference-characters indicate the same parts of the invention.

Figure 1 is a perspective view of my improved fire and burglar alarm. Fig. 2 is a longitudinal section of the same.

1 represents a rectangular bar provided with transverse screw-orifices 2 2, by means of which it may be secured to a door, window, or any other suitable support in the room.

3 3 represent longitudinal parallel guide-flanges extending outwardly in each direction from the central rib 4, and between each pair of flanges is pivoted the inner end of a lever 5, the outer ends 6 of which project beyond the end of the bar 1.

7 7 represent clamps screwed to the rib 4, and each is provided with a thumb-screw 8. 9 represents a flat spring secured to said clamps, and their free ends extend outward along the levers 5 5 and terminate a short distance from the free ends of said levers.

10 represents a hammer-head formed integral with the inner face of each lever, and 12 represents a stud or anvil secured on the upper face of the outer ends of the bar 1 and in line with the hammer-heads 10 10. These studs 12 12 receive an ordinary percussion-cap 13, which is exploded to sound an alarm when the hammer-head strikes it.

14 14' represent detachable props, one of which is inserted under the outer end of each lever to retain them in an elevated position when the alarm is in operation.

15 represents a flexible cord having one end secured to the prop 14, while the opposite end of the cord is drawn taut and fixed to the window-sash, door, or other point to be protected, so that if the door or window be opened the prop 14 will be withdrawn from under the lever, which then closes by the action of the spring and explodes the cap.

16 16' represent spiral springs fixed to the outer ends of the levers, and 17 17' represent jingle-bells mounted on the springs, which vibrate and assist in sounding the alarm when the springs are in motion. The bell 17' is of different tone from that of the one 17.

The prop 14' is preferably of metal, and it is secured in place between the end of the bar and the lever by a lump of wax or other substance sensitive to the action of heat, so that when the temperature of the apartment rises above the normal the wax will soften and release the prop and sound the alarm, and as the bell 17' is of a different tone from the one at the opposite end it will at once indicate that alarm is caused by a fire instead of an intruder, as would be the case if the bell first mentioned were sounded.

Although I have specifically described the construction and relative arrangement of the several elements of my invention, I do not desire to be confined to the same, as such changes or modifications may be made as clearly fall within the scope of my invention without departing from the spirit thereof.

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

A combined fire and burglar alarm comprising the bar 1, provided with the studs 12 12, in combination with the pivoted levers 5 5, formed with the hammer-heads 10 10, the clamps 7 7 provided with the thumb-screws 8 8, the spring 9 centrally secured in said clamps, the detachable props 14 14' and the jingle-bells 17 and 17', located in the path of the free ends of said levers 5 5, substantially as shown and described.

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

JAMES H. ELLIS.

Witnesses:

C. H. DOME,
J. M. F. GILL.