No. 719,563. PATENTED FEB. 3, 1903.

I. S. BUNKER.

FIRE AND BURGLAR ALARM.

APPLICATION FILED MAY 5, 1902.

NO MODEL.

Fig. 1.

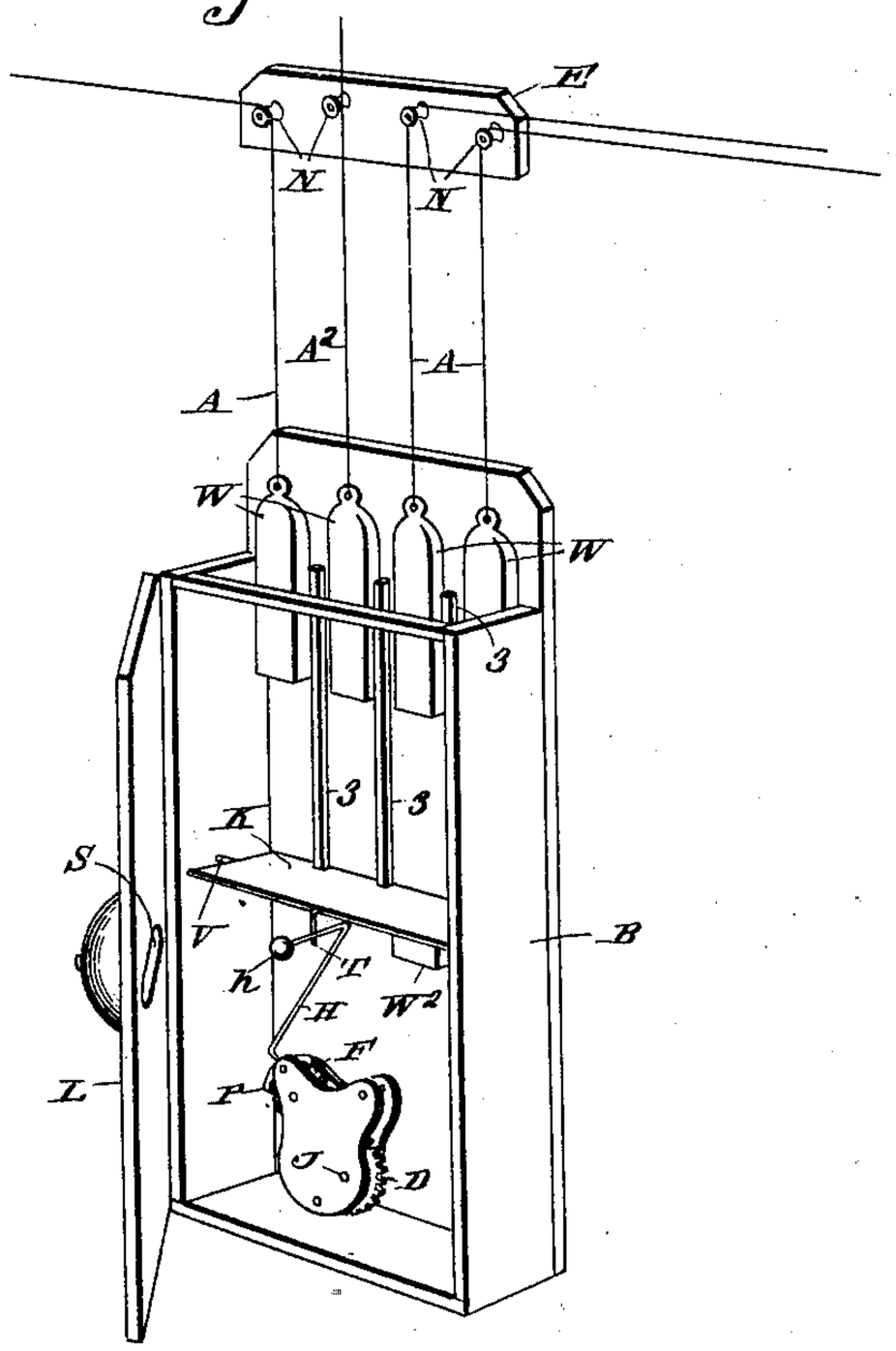
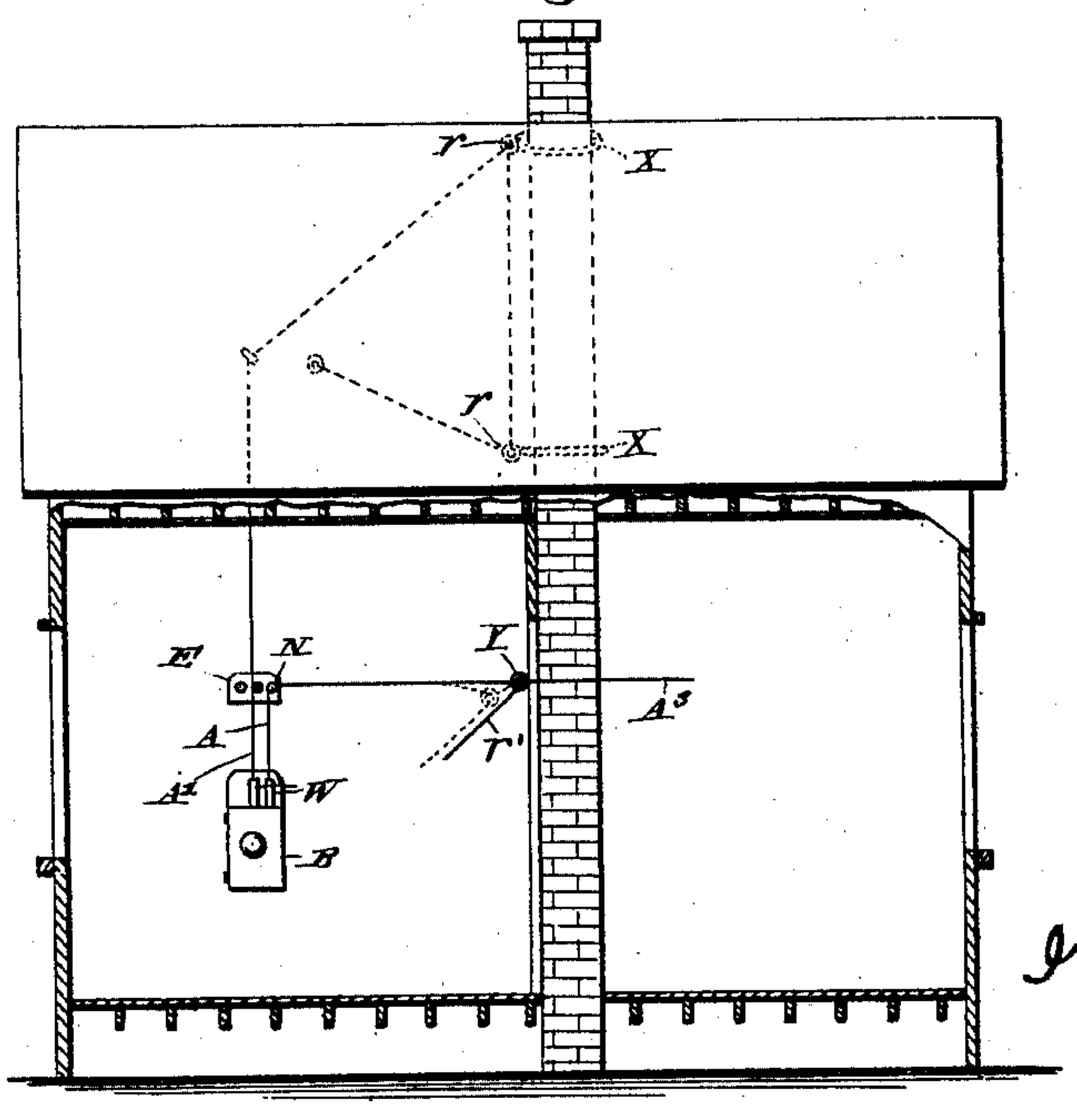


Fig. 2.



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IRA S. BUNKER, OF FREEWATER, OREGON.

FIRE AND BURGLAR ALARM.

SPECIFICATION forming part of Letters Patent No. 719,563, dated February 3, 1903.

Application filed May 5, 1902. Serial No. 105,954. (No model.)

To all whom it may concern:

Be it known that I, IRA S. BUNKER, a citizen of the United States, residing at Freewater, in the county of Umatilla and State of Oregon, have invented a new and useful Improvement in Fire and Burglar Alarms, of which the following is a specification.

My invention relates to improvements in fire and burglar alarms, the object of which is to provide a cheap, simple, and reliable device for giving an alarm in case of fire or burglary in any part of a house or other place desired to be protected. These objects I attain by means of a device illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan view of the box with the cover raised to show the interior of the same. Fig. 2 is a view showing a building with the roof and one wall partly cut away and showing the alarm and manner of putting it up and connecting the cords around rooms and flues.

Similar characters of reference indicate corresponding parts.

B is a box of any desired size and shape, having in its lower end a clock mechanism G, which has a cogged drive-wheel D, a winding-shaft J, escape-wheel F, and pawl P, also a propelling-spring. (Not shown.) Pawl P has a hammer-wire H, having its upper end bent upward, so that the hammer *h* will reach through the slot S in the box-cover when it is closed and be in position to strike a bell which is placed on the outside the box-cover immediately over the slot, as shown in Fig. 2. At the end of hammer-wire H where it turns upward there is a tipping shelf K, which is held in the box by means of pivots *v v*. The shelf K also has attached a small weight W^2 to balance and tip it forward, so that the short wire or detent T will engage the hammer-wire H and hold the clock mechanism from running. (The tipping-shelf K is preferably made of tin, with the pivots, weight, and detent soldered to it.)

The box B is preferably made of wood and should be about five by ten inches in the clear inside and one and three-fourth inches deep, with the back side extending about four inches above the sides and front. The clock mechanism is fastened to the back piece of the box. The upper end piece of the box is only one and one-fourth inches wide and is placed flush with the front edge of side pieces, leaving a slot of one-half inch to admit the weights W W W W. There are also partition-pieces 3 3 3 fastened to the back of the box to keep the weights apart. The partitions between weights are one-half inch high and a piece of thin wood or tin (not shown) can be placed over them, so that weights are kept in proper position. There is also a turning-board E, corresponding in shape to the upper end of the back piece of the box, on which is placed small porcelain or other ornamental knobs N N N N. This turning-board is placed on the wall of a room directly above the alarm and on a line a little above the top of window-casings. The cords A A A A are placed upon the knobs in turning to right or left around the rooms, excepting the cord A^2, which extends to an attic above, as shown in Fig. 2. This cord extends through rings *r r*, which are placed upon and held in position by separate cords X X, which encircle the flue where it intersects the ceiling and roof. The cords are held in position by small screw-eyes, the ring part preferably coated with glass to lessen the friction on the cords. Where an angle is turned in a corner of a room, the adjoining room can be fitted by a separate cord, (shown at Y, Fig. 2,) where the cord A^3 has a ring attached to its end and by its tension holds the ring in position against the wall of the first room; but if the cord A^3 is burned off or released by burglars the ring is released and goes along with the first cord A, as shown by dotted lines.

The device operates as follows: The alarm-box is placed on the wall of a bed-room. The tipping shelf K is tipped forward by means of a weight W^2, its back edge resting up against the partition-pieces 3 3 3. The detent T engages the hammer-wire H and holds it and the clock mechanism from running; but should fire burn off a cord or should one be released by burglars the weight W being allowed to drop moves the back edge of the tipping shelf K downward and the front edge upward, thereby removing the detent T from holding the hammer-wire *h*, which sets the bell to ringing.

The advantages I claim of this device over others are: It is more simple in construction,

more accurate in its operation, as the tipping shelf can be so neatly balanced that the weight of one-fourth of an ounce will set the alarm off. The detent engages the hammer-wire at its end, where the resistance is but little, so a small weight of three or four ounces can be used. A small cord, that is almost invisible on the walls of a room, can be used. The weight being light, the elasticity of the cord will hold it up and the alarm will stay in order. For business houses in cities a large bell, that can be heard several blocks, can be placed outside of the building in front, so if fire occurs or burglars enter the police or others can go directly to the disturbance.

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

In a fire or burglar alarm, the combination of an alarm mechanism, a detent for stopping its movement, a shelf pivoted at its ends, one or more weights suspended above said shelf, each adapted when released to fall and tip said shelf and release said detent, a weight to restore said shelf to its normal position, combustible cords suspending the weights and means such as a glass ring for holding said cords.

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