B. C. ANDREWS.

FIRE ALARM.

APPLICATION FILED APR. 10, 1909.

944,305. Patented Dec. 28, 1909.

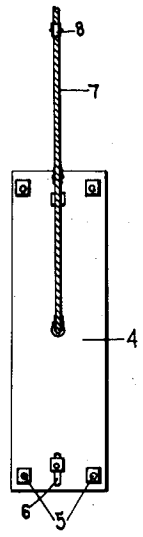


FIG. 1.

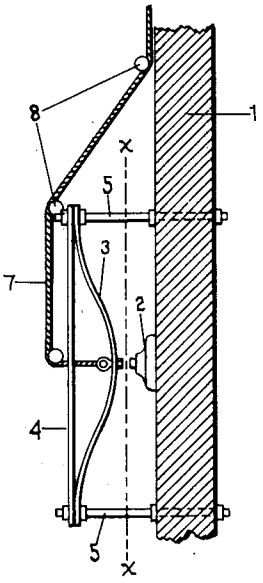


FIG. 2.

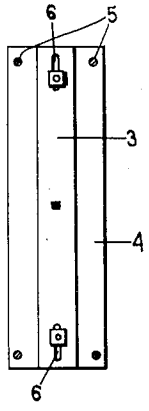


FIG. 3.

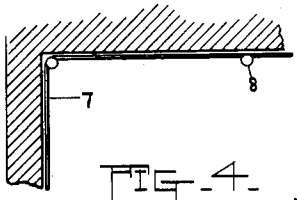
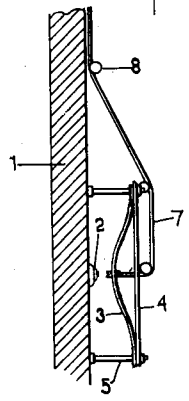


FIG. 4.



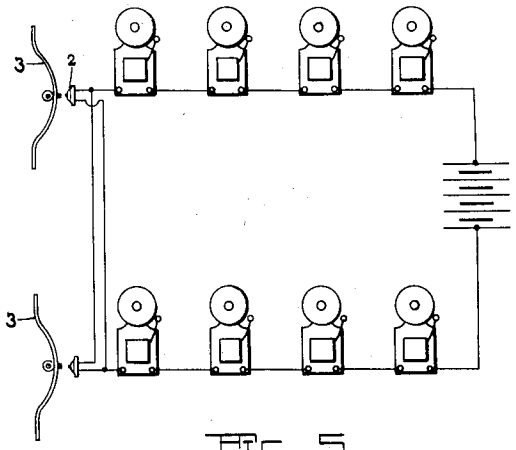


FIG. 5.

WITNESSES:

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BOLIVOR C. ANDREWS, OF MABANK, TEXAS.

FIRE-ALARM.

944,305. Specification of Letters Patent. Patented Dec. 28, 1909.

Application filed April 10, 1909. Serial No. 489,061.

To all whom it may concern:

Be it known that I, BOLIVOR C. ANDREWS, a citizen of the United States, residing at Mabank, in the county of Kaufman and State of Texas, have invented certain new and useful Improvements in Fire-Alarms, of which the following is a specification.

My invention relates to new and useful improvements in fire-alarms. Its object is to provide a fire-alarm, whereby notice of a fire will be automatically given before the fire will have gotten beyond control.

Another object is to provide a fire alarm, which may be attached to previously installed bell-circuits in hotels or residences, putting the bells into continuous operation in case of fire.

Finally, the object of the invention is to provide a fire alarm, which will be simple, strong, durable and efficient and comparatively easy to construct, and also one in which the various parts will not be likely to get out of working order.

With these and various other objects in view, my invention has relation to certain novel features of construction and operation, an example of which is described in the following specification and illustrated in the accompanying drawing, wherein:

Figure 1 is a front view of the apparatus, and Fig. 2 is a side view of the same, showing its attachment to the wall of the room; Fig. 3 shows a sectional view to the left of the line *x*—*x* in Fig. 2; Fig. 4 is a side view of the fire alarm in position upon the wall of a room, showing the manner in which the cord used to hold the spring in tension, traverses said wall upon rollers, or other suitable means, and Fig. 5 is a diagram showing the electrical connections, when a large number of rooms are protected, one of the bells shown being located in each room, and two spring being shown the cords of which are separate, each cord protecting four rooms. In like manner, any number of springs and cords may be used to avoid the difficulty of keeping one very long cord under continuous tension, the circuit being arranged, however, as shown in Fig. 5, so that the operation of any one push-button will ring all the bells.

Referring now more particularly to the drawings, in which like numerals of reference designate similar parts in all the figures, numeral 1 denotes the wall of a room, upon which is located an electric push-button 2. A bow-shaped spring 3 is held in tension in front of said push-button in such a manner that when released, its convex surface comes into contact with said push-button, operating the same. The spring 3 is supported upon a plate 4, of metal or other suitable material, which plate is attached to the wall by bolts 5, and whose position relative to the wall may be adjusted upon said bolts. The extremities of spring 3 are provided with slots 6, through which pass bolts attaching said spring to the plate 4, restricting said spring to motion longitudinal with said plate. A cord 7 is attached to the middle of the concave surface of said spring, and passes through an aperture in the middle of plate 4. Thence it is carried upon rollers 8 about the walls, or ceiling of the room, and if desired, through adjacent rooms. This cord will traverse all places which are particularly exposed to fire, so that before a fire gets beyond control, the cord will be burned through, releasing spring 3 and putting the alarm bell or bells into action.

When this fire-alarm is installed in a hotel, the electric circuit can be made to include a bell or annunciator in the office of the hotel clerk. The extreme simplicity of this fire-alarm and small cost of the necessary material will make it applicable in many cases where the matter of expense would bar a fire-alarm of more complicated construction.

What I claim, is:

In an automatic fire alarm, the combination with an electric bell or bells, of a plate, a push button in circuit with said bell or bells, a bow-shaped spring held in tension in such a manner that release thereof will operate said push button, said spring being provided with slotted extremities, bolts connecting said spring to said plate passing through the slots in the extremities of said spring and restricting said spring to motion longitudinal with said plate, bolts attaching

said plate to the wall of a room and permitting adjustment of said plate relative to said wall, an inflammable cord holding said spring in tension and passing about a room or rooms protected, and rotatable means whereby said cord is restricted and supported.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

BOLIVOR C. ANDREWS.

Witnesses:
FLETCHER BROOKS,
A. M. JOHNSON.