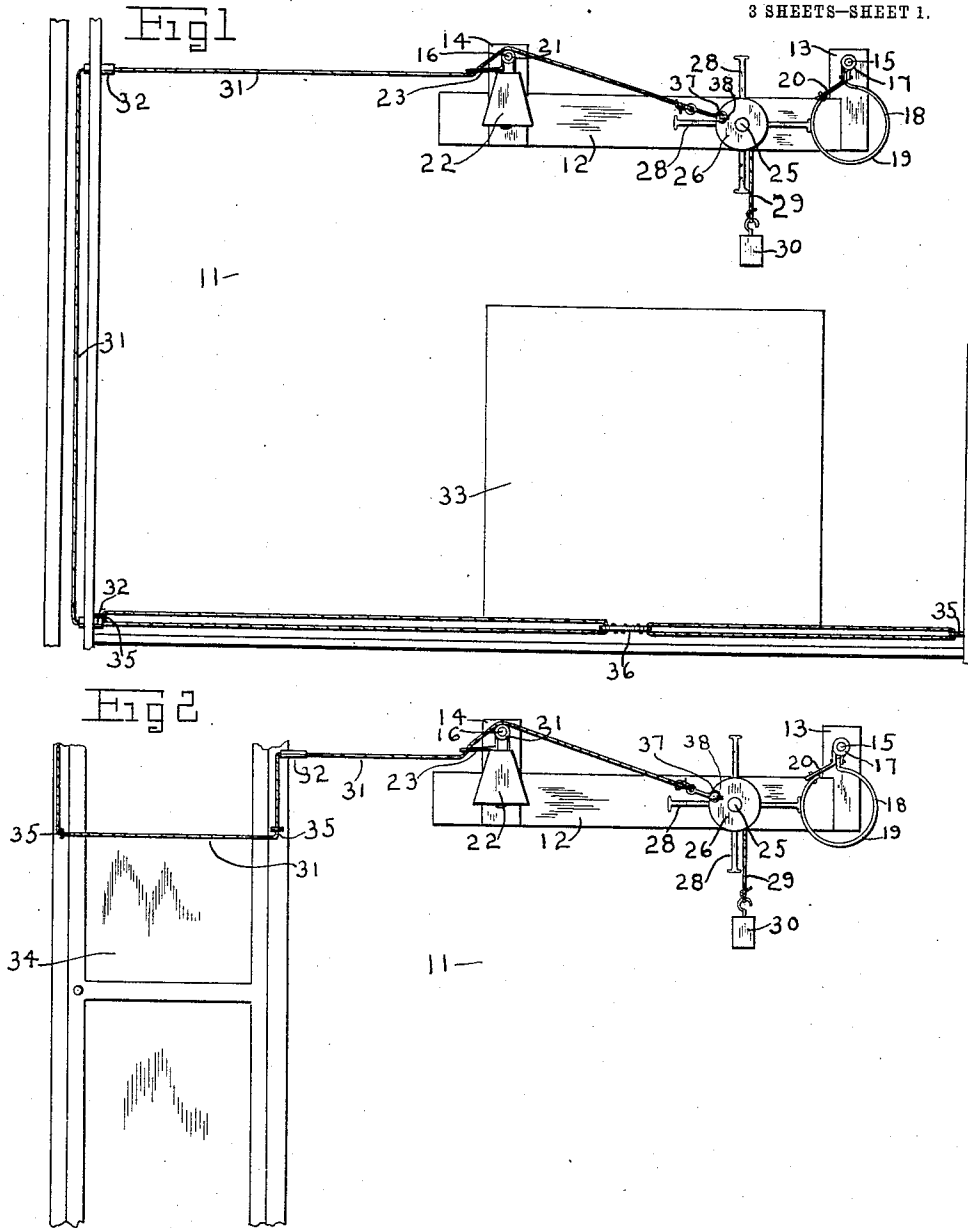


A. C. THORBJORNSON.
BURGLAR AND FIRE ALARM.
APPLICATION FILED SEPT. 5, 1911.

1,052,024.

Patented Feb. 4, 1913.

3 SHEETS—SHEET 1.



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Inventor

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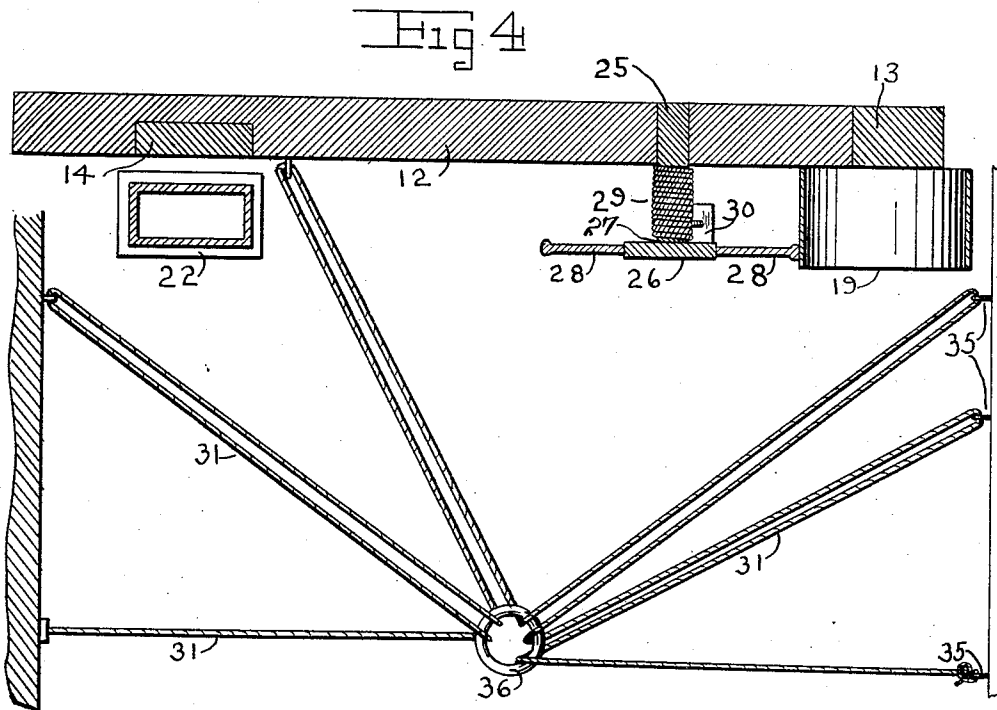
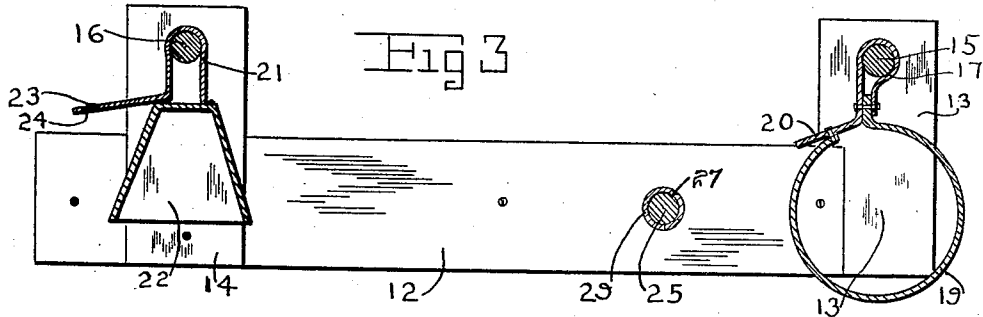
Attorneys

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3 SHEETS—SHEET 2.



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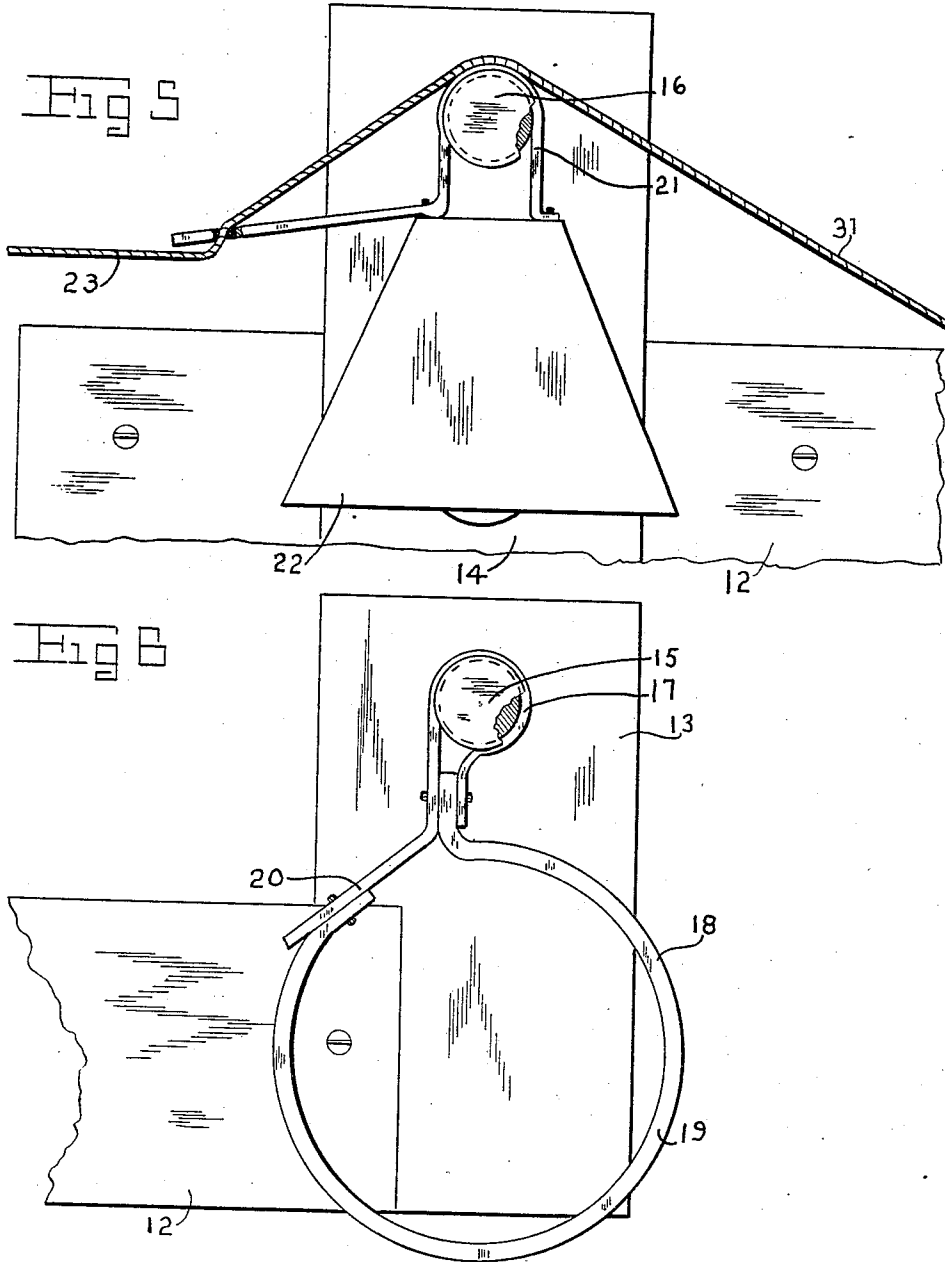
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3 SHEETS—SHEET 3.



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UNITED STATES PATENT OFFICE.

ANNA CHARLOTTE THORBJORNSON, OF POWERS, MICHIGAN.

BURGLAR AND FIRE ALARM.

1,052,024.

Specification of Letters Patent.

Patented Feb. 4, 1913.

Application filed September 5, 1911. Serial No. 647,673.

To all whom it may concern:

Be it known that I, ANNA C. THORBJORNSON, a citizen of the United States, residing at Powers, in the county of Menominee, State of Michigan, have invented certain new and useful Improvements in Burglar and Fire 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.

This invention relates to new and useful improvements in fire and burglar alarms.

An object of this invention is the provision of a device of this character which comprises a drum provided with a plurality of radially extending arms adapted to contact with a suitable alarm and means for rotating the drum in case of fire or the entrance to a building by the burglar or other unauthorized person.

Another object of this invention is the provision of a burglar and fire alarm which consists of a drum to which is attached a weighted cable and means for locking said drum against any undesired rotation and releasing the same in case of fire or upon the entrance to the house in which the alarm is located by an unauthorized person.

A further object of this invention is to improve and simplify devices of this character rendering them comparatively simple and inexpensive to manufacture, reliable and efficient in use and readily operated.

With the above and other objects in view this invention resides in the novel features of construction, formations, combinations and arrangements of parts to be hereinafter more fully described, claimed and illustrated in the accompanying drawings, in which:—

Figure 1 is a side elevation illustrating my device used as a fire alarm. Fig. 2 is a similar view illustrating its use as a burglar alarm. Fig. 3 is a longitudinal sectional view through a portion thereof. Fig. 4 is a horizontal sectional view thereof, illustrating the tripping mechanism. Fig. 5 is a detailed view of the bell and its supporting means, and Fig. 6 is a detailed view of the alarm and its supporting means.

Referring to the accompanying drawings by similar characters of reference throughout the several views, the numeral 10 designates generally a portion of a building in which is located a room 11. Upon one wall

of said room adjacent the ceiling thereof is secured a base or supporting member 12 upon which my alarm operating mechanism is located. This base 12 is provided at each end with a pair of vertical arms 13 and 14 from the upper terminals of which project outwardly extending rods 15 and 16. The rod 15 has secured rigidly upon its terminal a substantially U-shaped clip 17 which embraces the opposite edges of one side of an alarm 18. This alarm 18 consists of a curved sounding plate 19 connected at its free edge by a brace 20.

The rod 16 has rotatably located upon its terminal a U-shaped clip 21 which is secured at its depending terminals to the upper end of a bell 22. One leg of the U-shaped clip is bent laterally in a substantially horizontal plane as indicated by the numeral 23 which extension is provided with an aperture 24 located in its outer terminal. The base 12 intermediate the arms 13 and 14 has extending outwardly therefrom in a substantially horizontal plane a stub shaft 25 upon which is rotatably secured a drum 26. This drum is substantially cylindrical in formation intermediate its ends, as indicated by the numeral 27, and is provided at its outer terminal with a flange 28. A cable 29 is wound upon the cylindrical portion of the said drum between the flanges 28, the said cable having one end secured to the drum and being provided at its opposite end with a weight 30.

A flexible trip member 31 extends through guide sleeves 32 attached to various points upon the wall either of a fire place which is designated by the numeral 33, or a closure as designated by the numeral 34. The fire place and opposite sides of the window are provided with a plurality of hooks 35 over which portions of the cable are loosely looped. One end of this said cable or flexible member has secured thereto a ring 36 through which the intermediate portions of the said cable between the hooks are extended.

A drum 26 is normally held against rotation caused by the action of the weight 30 and cable 29, through the medium of the cable 31 and hook 37 secured thereto, which hook is attached to the member 38. Obviously when the cable 31 is severed at any point, the action of the weight 30 will cause the rotation of the drum 26, manifestly permitting the arm 28 to strike against the

alarm and upon the movement of the cable due to the rotation of the drum 26 to which it is at all times connected through the medium of the said hook 37 and member 38, the bell 22 will be oscillated and thereby causing the same to be rung.

From the foregoing disclosure taken in connection with the accompanying drawings, it will be manifest that an alarm of the character described is provided for which will fulfil all of the necessary requirements of such a device.

Having thus fully described this invention, what I claim as new and desire to protect by Letters Patent, is:

The combination in an alarm such as described, of a base, rods extending from the base, an alarm rigidly secured to one of said rods, a bell loosely secured to the other of said rods, an arm supported by the bell and provided with an aperture located in one

end thereof, a shaft extending from the base, a drum rotatable upon the said shaft, a plurality of arms extending from the drum for engagement with the alarm, an eye provided upon the drum, a hook engaging said eye, a cable extending from the hook and secured at its opposite end, said cable also passing through the aperture formed in the bell supported arm, a cable wound upon the drum and a weight carried by the cable whereby when the first mentioned cable is severed the drum will be rotated and the alarm and bell sounded, substantially as described.

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

ANNA CHARLOTTE THORBJORNSON.

Witnesses:

MILTON KELL,

L. KELL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."