No. 806,185. PATENTED DEC. 5, 1905.

J. H. RAMSEY.

BURGLAR ALARM OR TRAP TRIGGER.

APPLICATION FILED MAY 31, 1904.

Fig. 1.

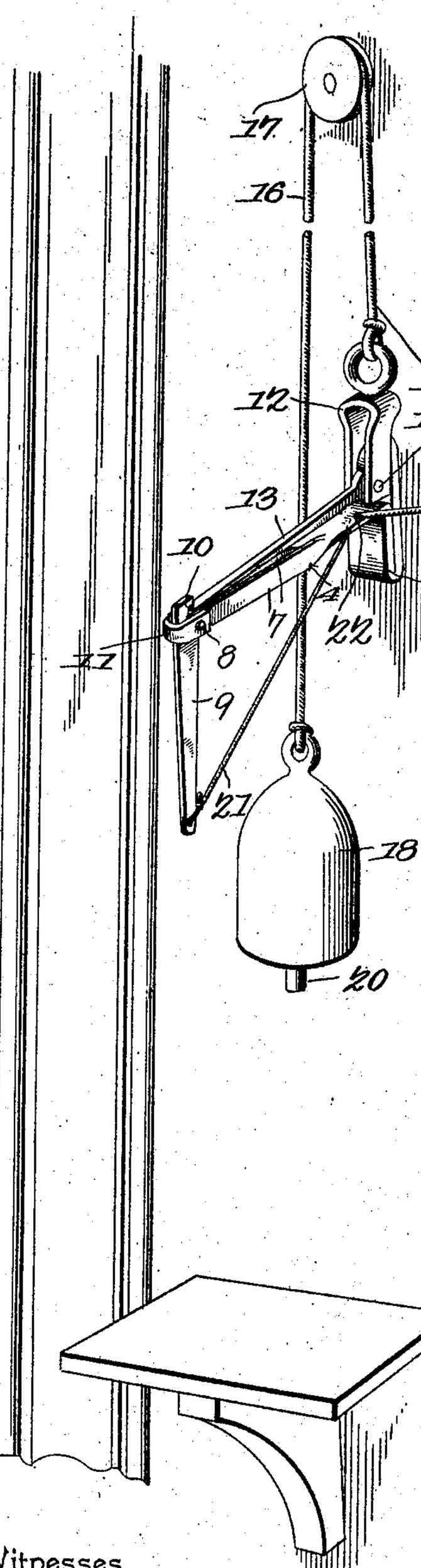

Fig. 3.

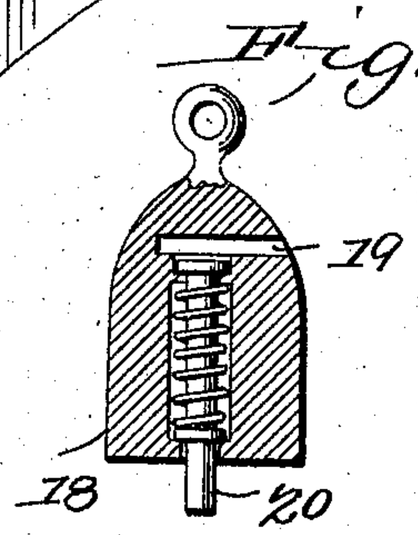

Fig. 2.

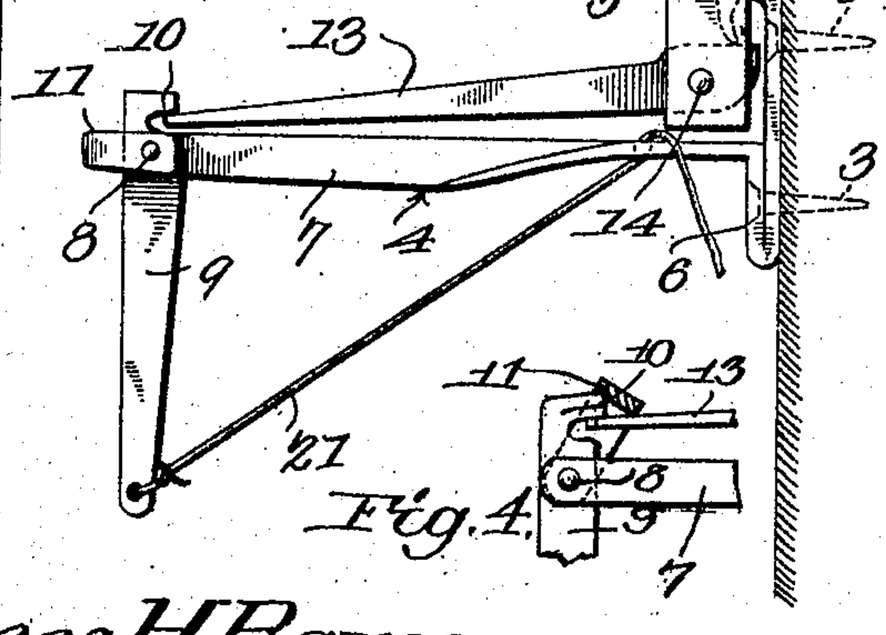

Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

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BURGLAR-ALARM OR TRAP TRIGGER.

No. 806,185. Specification of Letters Patent. Patented Dec. 5, 1905.

Application filed May 31, 1904. Serial No. 210,596.

To all whom it may concern:

Be it known that I, JAMES HENRY RAMSEY, a citizen of the United States, residing at Thayer, in the county of Oregon and State of Missouri, have invented a new and useful Burglar-Alarm or Trap Trigger, of which the following is a specification.

This invention relates to triggers such as are employed for springing animal-traps or operating burglar-alarms.

The objects of the invention are to improve and simplify the construction of such devices and to increase their efficiency in operation.

With these and other objects in view, as will appear from the following description and claims, the invention resides in the novel combination and arrangement of parts and in the details of construction hereinafter described with reference to the accompanying drawings, forming part of this specification, wherein—

Figure 1 is a perspective view of the improved device arranged in connection with a burglar-alarm. Fig. 2 is a side elevation of the improved trigger set. Fig. 3 is a sectional view of a combined weight and percussion device adapted for use in connection with the trigger. Fig. 4 is a sectional side elevation showing the safety-latch in engagement with the end of the pivoted latching-tongue.

The trigger of the present invention is adapted for use in conjunction with either a burglar-alarm or an animal-trap. In order to facilitate a clear understanding of the invention, it will be described in connection with a burglar-alarm system, although of course the improved trigger is not to be limited to use with only the particular system illustrated.

The reference-numeral 1 indicates a door, and 2 a door-post. Fastened to the door-post 2 by means of screws 3 is a bracket 4, which is preferably made in one piece for the sake of cheapness and is formed with a hook 5, a doubled portion 6, through which the screw 3 passes, and with two integral arms 7 7, between which is pivotally mounted, by means of a bolt 8, a downwardly-extending trigger-arm 9. At its upper end above the fulcrum-bolt 8 the trigger-arm 9 is formed with a notch 10. Pivoted upon one end of the bolt 8 is a safety-latch 11. A shackle 12, having one end of a pointed latching-tongue 13 pivoted between its ends by means of a bolt 14, is adapted normally to fit under the hook 5, with the pivoted end of the tongue 13 in engagement with the hook and the pointed end of said tongue fitting into the notch in the upper end of the trigger-arm 9. At the upper end of the shackle 12 is swiveled a ring 15, to which is attached a cord, rope, chain, wire, or other suitable flexible element 16, which passes up over a pulley 17 and is attached to a weight 18. The weight 18 is formed with a slot 19 to receive a detonating cap or cartridge and is provided with a spring-retracted plunger 20, which is adapted to explode the detonating-cap when the weight is permitted to drop to the floor or strike against any other solid surface.

Attached to the lower end of the trigger-arm 9 is a piece of string or thread 21, which passes up through a suitable perforation 22 in the bracket 4 and is provided with a small ring 23 on its end. In setting the burglar-alarm the small ring 23 is fitted over a pin 24 on the door.

The operation of the alarm after it has been set in the manner described is simple. If an attempt be made to open the door, the string or thread 21 will pull upon the trigger-arm 9, causing its notched end to disengage the pointed end of the tongue 13, which will then spring up, causing its pivoted end to slide out from under the hook 5 and free the shackle 12. When the shackle is freed, the weight drops and the detonating-cap explodes to sound the alarm.

If the device be applied to an animal-trap, the sliding door of a cage or the like may be substituted for the detonating-weight and the string 21 may be operated by any suitable animal-bait.

When the device is used in connection with an animal-trap and it is desired to lock the pivoted latching-tongue against accidental movement while baiting or otherwise setting the trap, the safety-latch 11 is swung upwardly over the trigger-arm and into engagement with the pointed end of the latching-tongue, as clearly shown in Fig. 4 of the drawings, thereby locking said tongue and effectually preventing the trap from being accidentally sprung.

The device is strong, simple, and inexpensive in construction and thoroughly practical and reliable in operation. In its arrangement and combination of parts and in its details of construction it presents a decided improvement over prior devices of a similar character.

Changes in the precise construction illus-

trated and described may be made within the scope of the following claims without departing from the spirit of the invention.

Having thus described the invention, what is claimed is—

1. A trigger for alarms or traps comprising a bracket, a trigger-arm pivoted thereto, a shackle having a pivoted tongue adapted to engage the trigger-arm, and a safety-latch pivoted to said bracket for engagement with the free end of the pivoted tongue.

2. A trigger for alarms or traps comprising a bracket, a trigger-arm pivoted thereto, a weight-supporting member, a pivoted tongue carried by said member and adapted to engage the trigger-arm, and a safety-latch pivoted to the bracket for engagement with the free end of said pivoted tongue.

3. A trigger for alarms or traps comprising a bracket provided with a hook, a shackle having a pivoted tongue for engagement with said hook, and a trigger-arm pivoted to the bracket and adapted to engage the free end of the pivoted tongue.

4. A trigger for alarms or traps comprising a bracket having a hook and integral arms, a trigger-arm pivoted between the integral arms, a flexible element for operating the trigger-arm, a shackle having a pivoted tongue engaging the hook at one end and the trigger-arm at the other, a weight connected with the shackle and a safety-latch adapted to engage the free end of said pivoted tongue.

5. A trigger for alarms or traps, comprising a bracket having a hook at one end and a trigger pivoted at the other end thereof, and a shackle having a pivoted arm for engaging the trigger.

6. A trigger for alarms or traps, comprising a shackle having a pivoted tongue, a weight attached to said shackle, a bracket, a trigger on said bracket for engagement with the shackle-tongue, and a safety-latch adapted to engage the free end of the pivoted tongue.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JAMES HENRY RAMSEY.

Witnesses:

CHAS. W. GATES,

W. A. MILLER.