

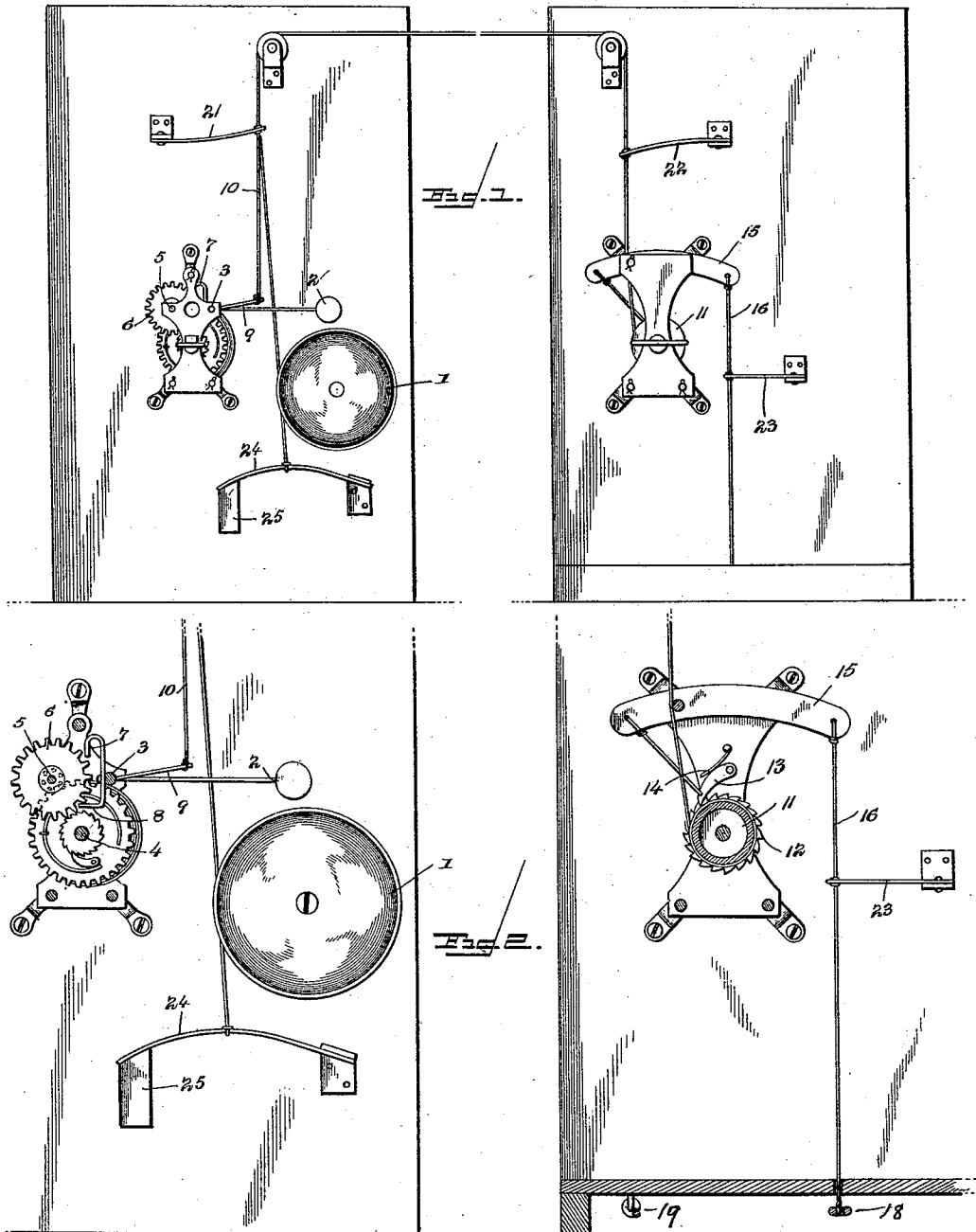
(No Model.)

2 Sheets—Sheet 1.

J. H. FINLEY.
BURGLAR ALARM.

No. 543,618.

Patented July 30, 1895.



Inventor

John H. Finley

Witnesses

E. K. Stewart
J. H. Riley

By *his* Attorneys,

C. A. Snow & Co.

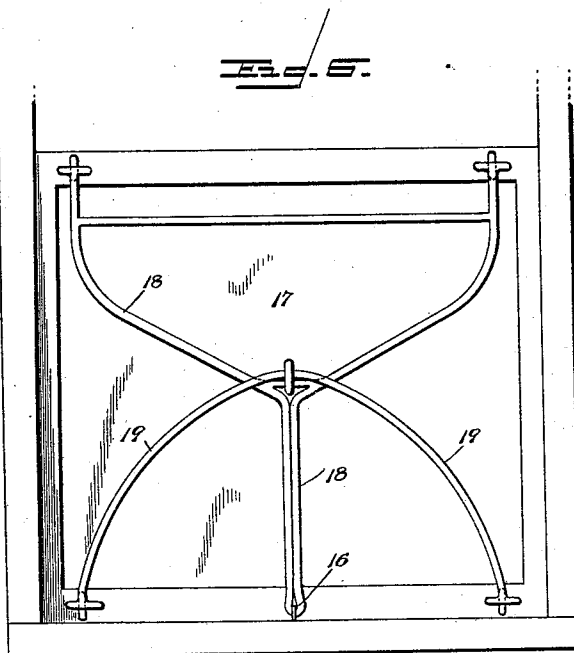
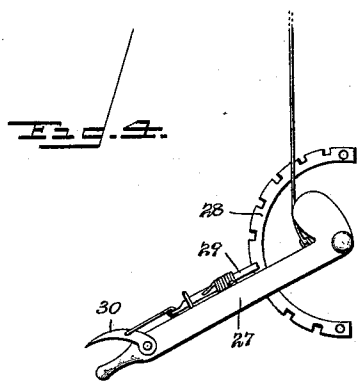
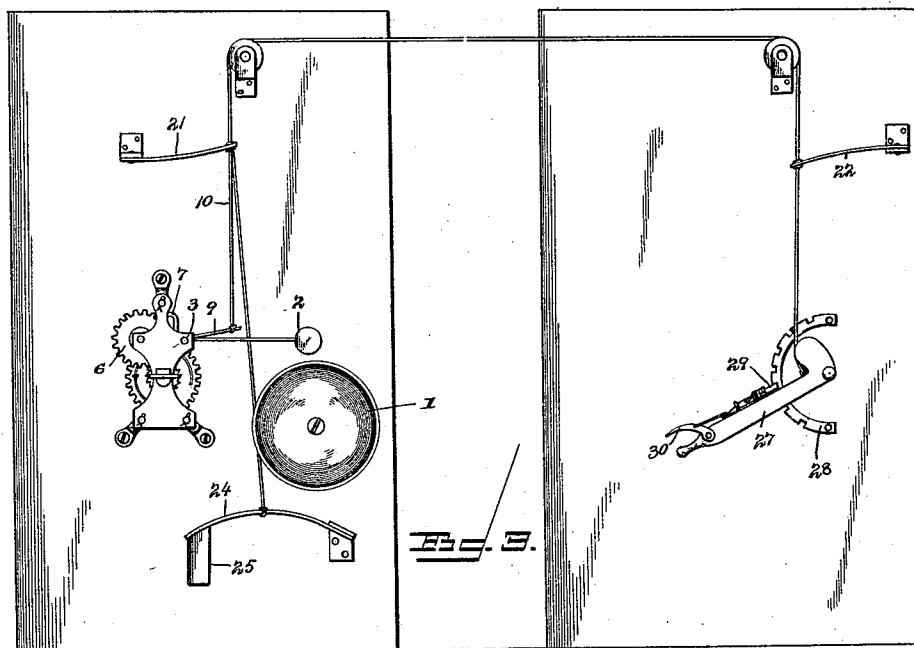
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UNITED STATES PATENT OFFICE.

JOHN H. FINLEY, OF MORGANTOWN, ASSIGNOR OF ONE-FOURTH TO CLAY P. JOHNSON AND GEORGE M. JOHNSON, OF REEDYVILLE, KENTUCKY.

BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 543,618, dated July 20, 1895.

Application filed October 13, 1894. Serial No. 525,829. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. FINLEY, a citizen of the United States, residing at Morgantown, in the county of Butler and State of Kentucky, have invented a new and useful Burglar-Alarm, Fire-Alarm, and Call-Bell, of which the following is a specification.

The invention relates to improvements in burglar-alarms, fire-alarms, and call-bells.

The object of the present invention is to simplify and improve the construction of burglar-alarms, fire-alarms, and call-bells, and to provide an inexpensive device capable of ringing a bell and adapted to be readily reset after an alarm has been sounded.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is an elevation showing a burglar-alarm constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is an elevation of a fire-alarm and call-bell constructed in accordance with this invention. Fig. 4 is a detail view of the hand-operated device. Fig. 5 is a reverse plan view of the platform, illustrating the construction of the supporting-levers.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates an alarm-bell adapted to be located at a fire-engine house, a telegraph-office, a servant's room, or any other place where it is desired to sound an alarm, and the said bell is engaged and rung by an oscillated hammer 2 fixed to a shaft of a spring-motor or similar actuating device. The spring-motor or actuating mechanism preferably consists of a spring-impelled arbor or shaft 4 connected by gearing with a shaft 5, and the latter carries a tappet-wheel 6, engaging oppositely-disposed tappet-arms 7 and 8 of the shaft 3. The shaft 2 is provided with an outwardly-extending arm 9, which is connected with a line 10 extending from the alarm-

sounding mechanism to any desired point from which the alarm is to be sounded.

The line 10, which may be constructed of wire or any other suitable material, is normally maintained taut to retain one of the tappet-arms in engagement with the tappet-wheel to lock the latter against rotation, and whenever it is designed to sound an alarm the line or connection 10 is slackened to free the arm 9 to permit the shaft 3 to oscillate.

Various devices may be employed for slackening the wire or connection 10, either automatically or at will, and in case the device is to be employed as a burglar-alarm a shaft or windlass 11 is employed, and is normally held against rotation, to maintain the wire or connection 10 taut, by a ratchet 12, fixed to the shaft or rung, and a pawl 13 mounted on a frame or casing and held in engagement with the ratchet-wheel by a spring 14. The pawl is operated to disengage it from the ratchet-wheel by a lever 15, fulcrumed intermediate of its ends and having one end connected with the pawl, and having its other end connected by a wire 16, or the like, with a depressible platform 17, or to a door, window, or the like, and as soon as the wire 16 is pulled upon the pawl is disengaged from the ratchet-wheel and the wire or connection 10 is slackened, and the bell-sounding mechanism is free to operate.

The depressible platform 17 may be constructed of any suitable material and may be located at any desired point, and it is supported by oppositely-disposed forked levers 18 and 19, centrally connected and having their ends suspended from a suitable support. The forked lever 18 is provided with a stem, which is connected to the wire 16.

In order to insure the operation of the device, springs 21 and 22 are connected with the wire 10 and are located adjacent to the bell-sounding mechanism and to the windlass, and when the latter is set the springs are drawn back, whereby when the pawl is disengaged the springs will return to their normal position and cause the wire or other connection employed to be slackened. A spring 23

is also employed for assisting the return of the lever 15 and to counterbalance the weight of the platform.

In order to convey the desired inclination
 5 when an alarm is sounded, a spring 24 is located adjacent to the bell-sounding mechanism. It carries a plate 25, and is connected with the spring 21 by a wire 26, and when the shaft 3 is oscillated its arm 9 slightly agitates
 10 the spring 21 and causes a corresponding movement of the spring 24, thereby readily indicating by data on the plate 25 from what point the alarm is sounded. The plate 25 is adapted to bear all the information necessary
 15 and may contain the location of a fire-alarm box, the number of a room, or any similar information.

When the apparatus is used as a fire-alarm or call-bell the platform and the windlass
 20 mechanism are dispensed with, and a lever 27 is employed, and has the line or connection 10 attached to it. It is provided with a cam-head to enable the wire or connection 10 to be drawn taut, and it is secured in a
 25 stationary position by means of a curved ratchet-bar 28 and a spring-actuated detent or pawl 29, mounted on the lever for engaging the ratchet. The spring-actuated detent is operated by a latch-lever 30, mounted
 30 on a cam-lever and arranged adjacent to the handle thereof.

It will be readily apparent that the apparatus may be duplicated, and may be readily arranged to serve as a burglar-alarm, a fire-
 35 alarm, and a call-bell; that it is positive and reliable in operation, and that it is exceedingly inexpensive, as the first cost is the only expense.

Changes in the form, proportion, and the
 40 minor details of construction may be resorted

to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

1. In an alarm, the combination of a bell, 45 a bell-hammer actuating mechanism, a line having one end connected with the actuating mechanism for holding the same normally out of operation, a pawl and ratchet device connected with the other end of the line and 50 having the same wound on its drum to hold the line taut, a lever connected with the pawl and pivotally mounted, and adapted to be swung on its pivot to withdraw the pawl from its engagement with the ratchet to release the 55 line, whereby an alarm is sounded, and a vibrating spring mounted independently of the bell and the actuating mechanism, connected with said line and carrying a plate at its free end, substantially as and for the purpose de- 60 scribed.

2. In an alarm, the combination of a bell, a bell-hammer, actuating mechanism for operating the bell-hammer, a line connected with the actuating mechanism for normally 65 holding the same out of operation, a shaft or windlass connected with the line for holding the latter taut, a pawl and ratchet for locking the shaft, and a lever fulcrumed between its ends and having one end connected with 70 the pawl and designed to have its other end connected with a platform or the like, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature 75 in the presence of two witnesses.

JOHN H. FINLEY.

Witnesses:

COLUMBUS NEEL,
 LOU BUNCH.