(No Model.)

J. H. WELLER.

ALARM BELL FOR DOORS.

No. 480,001. Patented Aug. 2, 1892.

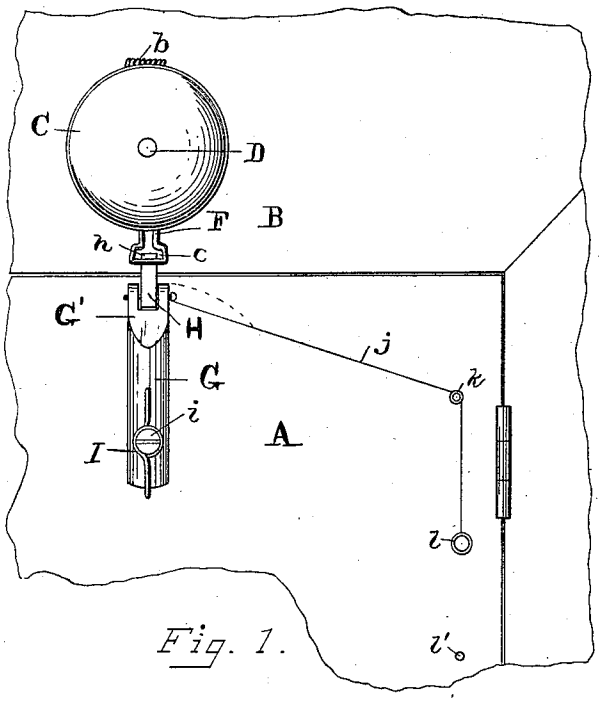

Fig. 1.

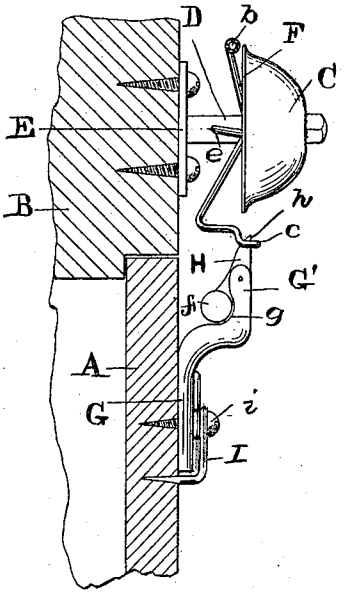

Fig. 2.

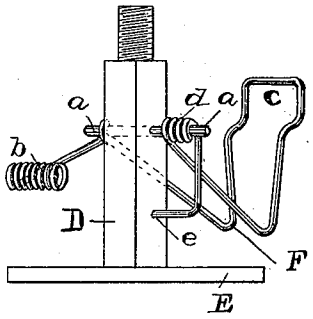

Fig. 3.

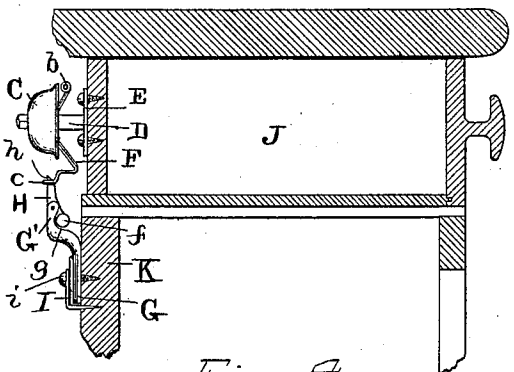

Fig. 4.

Witnesses:—
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UNITED STATES PATENT OFFICE.

JOEL H. WELLER, OF BOYERTOWN, PENNSYLVANIA.

ALARM-BELL FOR DOORS.

SPECIFICATION forming part of Letters Patent No. 480,001, dated August 2, 1892.

Application filed March 2, 1892. Serial No. 423,467. (No model.)

To all whom it may concern:

Be it known that I, JOEL H. WELLER, a citizen of the United States, residing at Boyertown, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Alarm-Bells for Doors, of which the following is a specification.

This invention relates to an improved alarm-bell for shop-doors, money-drawers, and in similar places, the object in view being to provide a simple and practical arrangement whereby the bell sounds upon the opening of the door, drawer, or other movable part, but is not affected by the closing of the same. I also provide for throwing the parts out of operative relation when desired.

To this end the invention consists in the novel features of construction and combinations of parts, hereinafter described and claimed.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 shows an inside elevation of the top portion of a door and jamb with my arrangement applied. Fig. 2 shows a vertical section of the door and jamb with the alarm devices in side elevation. Fig. 3 is a perspective view of the bell post and hammer detached from the bell. Fig. 4 shows a section of a sliding drawer to which my improvement is applied.

The letter A on the drawings designates a door hinged to swing inward, and B designates that portion of the jamb or casing which extends across the top of the said door. A bell C is located above the door and mounted on a post D, having a base-plate E, which fits against the casing and is secured thereto. The hammer of the bell is made of a single piece of wire comprising an arm F, pivoted on a pin *a*, which passes transversely through the post D and is made into a coil *b* at one end, which constitutes the clapper for striking the bell. At the opposite end the wire is formed into a loop *c*, which projects outward, and the said wire then extends back to the post, where it is wound in a coil *d* about the pin *a* and its end *e* secured in the post. It will be observed that the said coil *d* serves as a spring to hold the loop *c* inward and the clapper *b* consequently near the bell.

An arm or bracket G is secured to the upper part of the door and has an outward-extending upper portion with a vertical bifurcated arm G′. A weighted trip H is pivoted in this arm and its weighted end *f* rests in a socket *g* in the inner side of the arm G, while its opposite or upper end forms a catch *h*, engaging in the loop *c*.

The operation will be apparent. Upon opening the door the catch *h* draws the loop *c* outward, compressing the coil-spring *d* and moving the clapper *b* away from the bell, and when said catch releases the loop the clapper flies back against the bell and sounds the alarm. In closing the door the inner side of the catch strikes the loop and the trip moves on its pivot and passes under the said loop. When the catch has passed the end bar of the loop, the weight *f* returns the trip to its normal position with the catch engaging in the loop. Thus no alarm is sounded by closing the door. The arm G is secured to the door by a screw *i* passing through it at the middle, and it may turn on this screw. A spring I is coiled on said screw and has one end secured to the arm and the other to the door. This spring holds the arm vertically. If it is desired not to have the bell ring, the arm G is turned down on its pivot *i* to a position where the trip can have no engagement with the bell-hammer. This is accomplished by means of a cord *j*, attached to the upper part of the arm and running over a suitable pulley *k*, located out at one side and its end depending and provided with a ring *l* to hook over a pin *l′*, projecting from the door.

Fig. 4 shows how the invention may be applied to a sliding drawer. The letter J designates the drawer and the bell is secured to its rear side while the trip-arm is attached to a suitable stationary part, such as K. The operation is the same as before, the bell sounding only when the drawer is opened.

It will be seen my arrangement is simple, durable, and effective in its operation.

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

1. The combination, with a door, drawer, o other movable part, of a bell having a pivota spring-actuated hammer provided at one end with a projecting loop, and a stationary arm carrying a trip pivotally connected with it and constituting a catch at one end for engaging said projecting loop of the bell-hammer and at the opposite end weighted and arranged to stop against the arm, one of said parts—the bell or arm—carried by the door, drawer, or other movable part and the other stationarily located with respect to the said movable parts.

2. The combination, with a door, drawer, or similar movable part, of a bell having a pivoted hammer, and an arm carrying a pivoted and overbalanced trip stopping against said arm and arranged to engage the bell-hammer, said arm swiveled to move laterally and take the trip out of operative relation with the said hammer and spring-actuated to an upright position, one of said parts—viz., the bell or arm—fastened to the door and the other stationarily located.

3. The combination, with a door, drawer, or similar movable part, of a bell having a post with a pin extending transversely therethrough, and a hammer in one piece comprising an arm pivoted on said pin and having a clapper at one end and a loop at the opposite end, and a spring coiled on a pin and its end fastened in the post, and a trip for engaging said loop, substantially in the manner and for the purpose described.

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

JOEL H. WELLER.

Witnesses:

I. F. YOST,

L. P. G. FEGLEY.