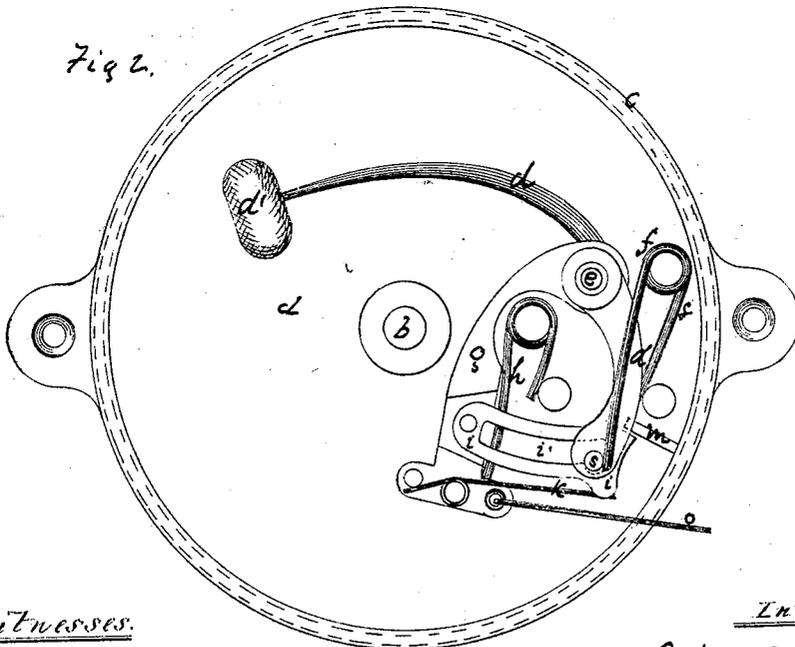
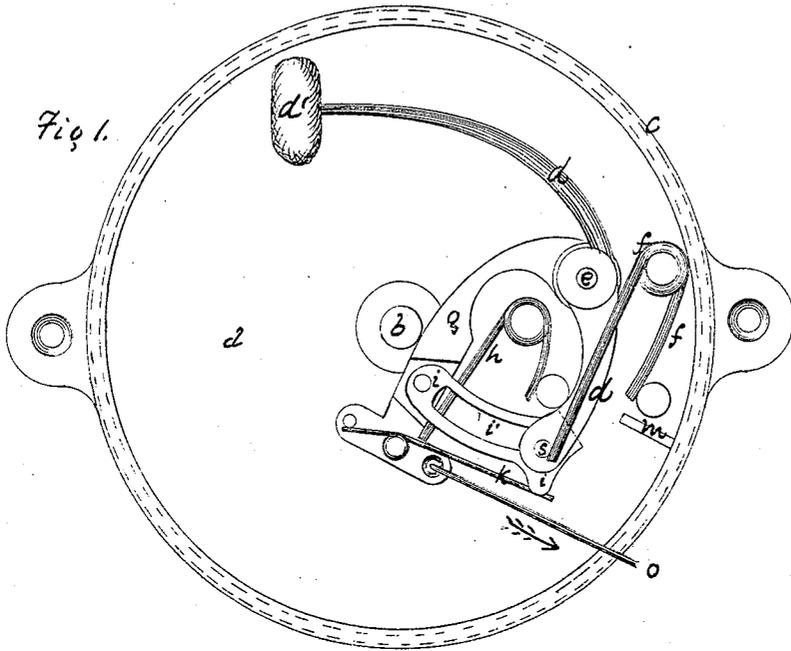


J. P. CONNELL.
Door-Bells.

No. 150,139.

Patented April 28, 1874.



Witnesses.

L. Häfelin
Harrison Sherman

Inventor.

John F. Connell
by Wm. E. Simonds
Solicitor

UNITED STATES PATENT OFFICE.

JOHN P. CONNELL, OF KENSINGTON, CONNECTICUT.

IMPROVEMENT IN DOOR-BELLS.

Specification forming part of Letters Patent No. 150,139, dated April 28, 1874; application filed October 27, 1873.

To all whom it may concern:

Be it known that I, JOHN P. CONNELL, of Kensington, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Door-Bells, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of the bell, with the metal shell or bell proper removed, so as to show the interior mechanism, the parts all being in the position which they occupy when the bell is not being operated. Fig. 2 is a view precisely like Fig. 1, except that the parts are in the position that they occupy just at the moment before the bell strikes.

The invention consists in a new method and arrangement for causing the hammer to strike. This bell is one of that class which is operated by a pull-wire.

The letter *a* indicates the base-plate, from which rises the post *b*, on the top of which is screwed the common, bowl-shaped, metal shell, forming the bell proper, which overhangs and incloses within its concavity the striking mechanism. The base-plate, the post, and the bell proper are all old and common. The outline of the metal shell is indicated by the letter *c*. The letter *d* indicates the hammer-arm, pivoted on the upright pin *e*, bearing the hammer-head *d'*, and caused to strike by the spring *f*. On the same pin *e* is pivoted the pull-wire lever *g*, pivoted to the pin *e* under the hammer-arm. The spring *h* presses the pull-wire lever so as to tend to make it always occupy and retain the position shown in Fig. 1. On the upper side of the pull-wire lever is pivoted

the detent-lever *i*, which the spring *k* presses upon and tends to make it always occupy the position shown in Fig. 1. This detent-lever extends outward, and its end underlies the end of the hammer-arm. It has a slot, *i'*, extending its length, with a circular enlargement at its free end. There is a pin, *s*, in the end of the hammer-arm, which projects from the under side of the hammer-arm, and travels in the slot *i'*. When the parts come to rest, as shown in Fig. 1, the circular enlargement in the end of the slot *i'* catches upon the pin *s*; and, when a pull is given upon the pull-wire *o*, which is attached to pull-wire lever, in the direction indicated by the arrow, it carries back the end of the hammer-arm with it. When the hammer has been drawn back, by this movement, far enough to afford a good stroke, the flat end of the detent-lever strikes upon the stop *m* and forces back the end of the detent, so that the pin *s* is released from the catch in the end of the slot *i'*; and the hammer, impelled by the spring *f*, flies back and strikes upon the metal shell, and sounds the bell. At the same time all the parts go back to the position shown in Fig. 1, ready for another stroke.

I claim as my invention—

The combination of the hammer-arm *d*, the pull-wire lever *g*, the detent *i*, and the stop *m*, operating substantially as described, for the purpose set forth.

JOHN P. CONNELL.

Witnesses:

E. W. MORGAN,
A. J. WARNER.