

J. P. CONNELL.
Door-Bells.

No. 149,375.

Patented April 7, 1874.

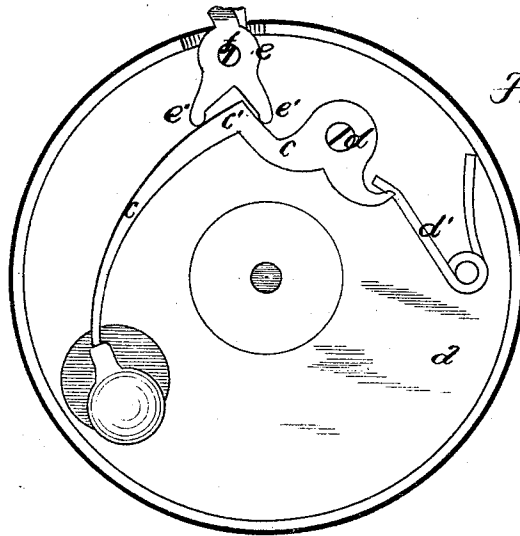


Fig. 1.

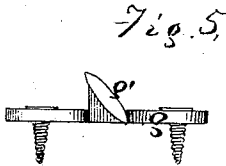


Fig. 5.



Fig. 4.

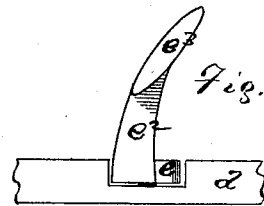


Fig. 3.

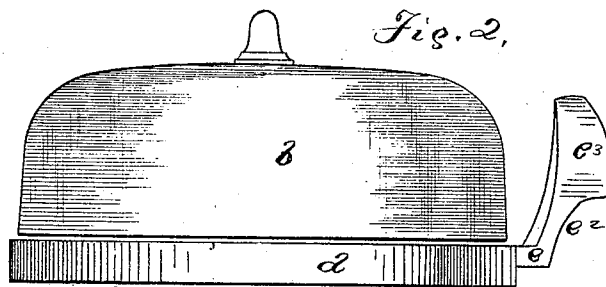


Fig. 2.

WITNESSES.

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UNITED STATES PATENT OFFICE.

JOHN P. CONNELL, OF KENSINGTON, CONNECTICUT.

IMPROVEMENT IN DOOR-BELLS.

Specification forming part of Letters Patent No. **149,375**, dated April 7, 1874; application filed August 12, 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 top or plan view of the bell with the sounding-shell removed so as to show the interior mechanism. Fig. 2 is a side view or elevation of the complete bell. Fig. 3 is an end view of the tripping-lever of the bell. Fig. 4 is a top or plan view of the cam-plate, the cam on which operates the tripping-lever. Fig. 5 is an end view of the part shown in Fig. 4. Fig. 6 is a view of a door and door-jamb, with the bell and cam-plate properly affixed. Fig. 7 is an underneath view of the parts shown in Fig. 6.

This bell is intended as an attachment for shop and office doors, to be sounded by the opening of the door, so as to give notice of the entrance of a person.

The parts in which the invention consists will be particularly specified at the end of this specification.

The letter *a* indicates the base-plate of the bell, and *b* the sounding-shell, supported from the base-plate by a central post or pillar in the common way. The letter *c* indicates the hammer, pivoted on the pin *d*, and having its stroke given by the spring *d'*. The hammer-arm has a V-shaped projection, *e'*. The letter *e* indicates the tripping-lever, which actuates the hammer. It has two horns, *e¹* *e²*, partially embracing the V-shaped projection of the hammer. It is hung on the pivot-pin *f*, and vibrates upon it. The outer end of the tripping-

lever has a rising arm, *e²*, on which is the cam-stroke receiver *e³*. The letter *g* indicates a cam-plate, to be fastened to the door *h*, while the bell itself is fastened upon the jamb *s*, though the relative positions of the bell and the cam-plate may be reversed, if desired. Upon the end of the cam-plate is the cam *g'*, which operates and actuates the tripping-lever. When the door is shut, the cam *g'* lies quiescent under and back of the cam-stroke receiver *e³*. When the door is opened, (see Fig. 6,) the cam *g'* raises the outer end of the tripping-lever, so that the inner end of the tripping-lever raises the hammer for a stroke. At the proper point, and before the then impinging horn of the tripping-lever slips by the apex of the V-shaped projection of the hammer-arm, the cam *g'* slips by the cam-stroke receiver *e³*, and allows the hammer to trip and sound the bell. When the door shuts, the cam *g'* passes back over the top of the cam-stroke receiver, actuating the tripping-lever in the opposite direction, and again sounding the bell.

I claim as my invention—

The combination of the following parts designed to be fastened to the door, to wit, the base-plate *a*, spring *d*, hammer *c*, provided with the V-shaped projection *e'*, tripping-lever *e* projecting from the base-plate, and bearing the stroke-receiver *e³*, with the following parts designed to be fastened to the door-jamb, to wit, the cam-plate *g*, bearing the cam *g'*, the whole constructed, arranged, and designed for operation and use substantially as set forth.

JOHN P. CONNELL.

Witnesses:

WM. E. SIMONDS,
JOHN POLLITT.