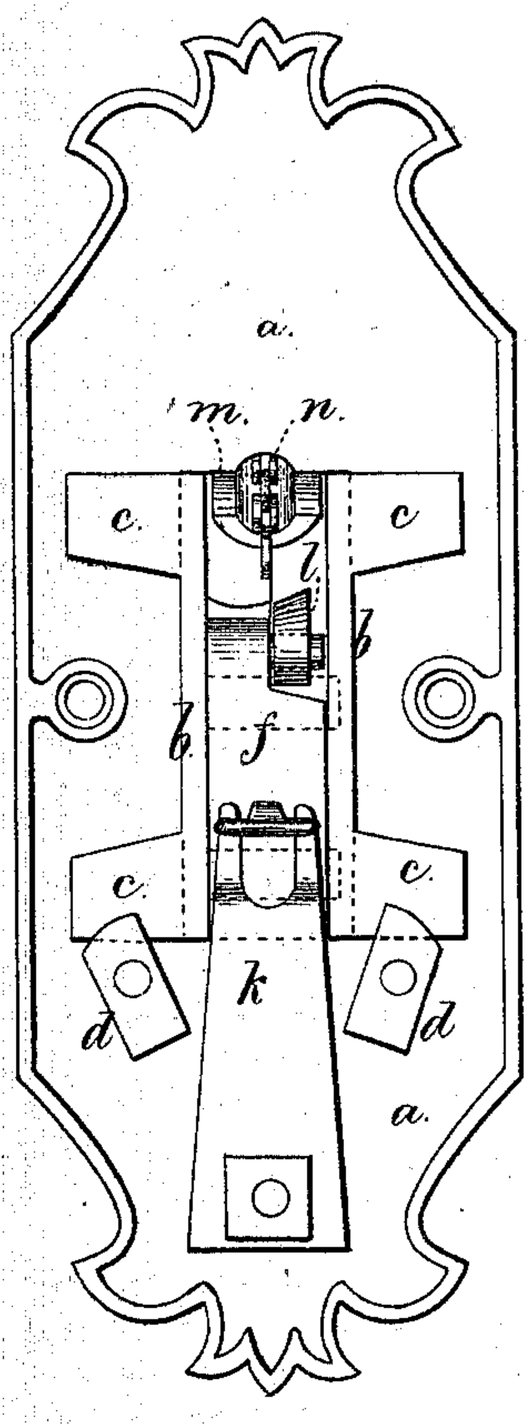
W. T. MUNGER.

Bell-Pulls.

No. 139,687. Patented June 10, 1873.

Fig. 2.



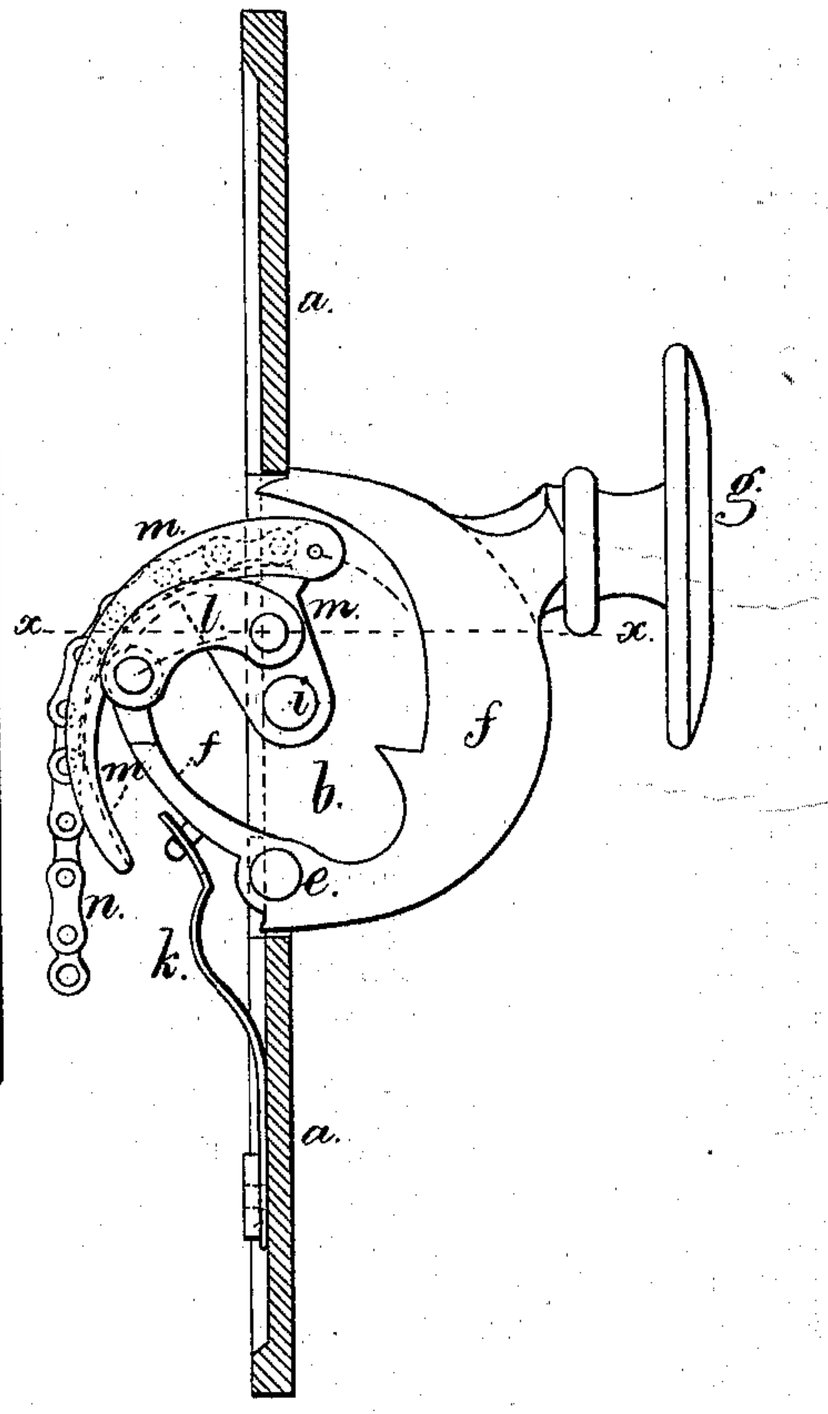


Fig. 1.

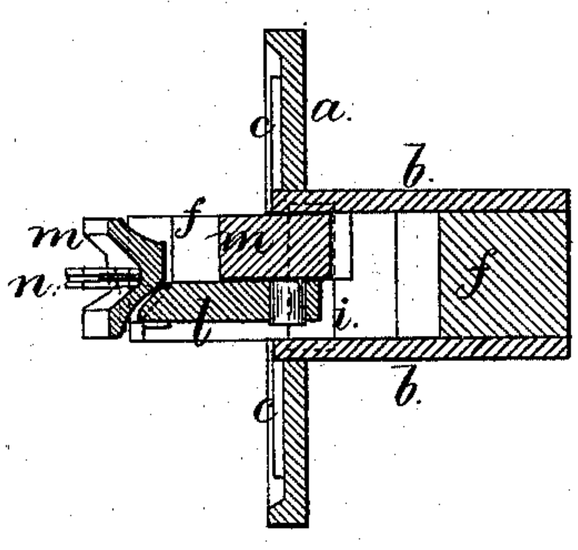


Fig. 3.

Witnesses,
Chas. A. Smith
Geo. D. Walker.

Inventor
Wallace T. Munger
Lemuel W. Serrell
atty.

UNITED STATES PATENT OFFICE.

WALLACE T. MUNGER, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO P. & F. CORBIN, OF SAME PLACE.

IMPROVEMENT IN BELL-PULLS.

Specification forming part of Letters Patent No. **139,687**, dated June 10, 1873; application filed April 12, 1873.

To all whom it may concern:

Be it known that I, WALLACE T. MUNGER, of New Britain, in the county of Hartford and State of Connecticut, have invented an Improvement in Lever Bell-Pulls, of which the following is a specification:

This bell-pull is constructed so that the chain or wire is moved a greater distance than the lever-handle, so as to secure a better action in the bell. The handle is at one end of a bent lever, and at the other end a link is connected that extends to the segmental chain-pulley, and is connected to the same comparatively near the axis upon which such segment swings, so that the surface of the chain-pulley segment moves in the same direction as the pull, but at a more rapid rate.

In the drawing, Figure 1 is a vertical section of the face-plate, and an elevation of the pull and parts connected therewith. Fig. 2 is a rear view with the parts in the position they assume when the handle is pulled, and Fig. 3 is a section at the line *x x*.

The front or face plate *a* is of any desired ornamental character; through it is a mortise that receives the side plates *b b*, that have flanges *c* at the back of the plate *a*, secured by rivets or screws, or by the clamping-buttons *d*. Upon one of these side plates are the gudgeons *e* and *i*, the ends of which enter recesses in the other plate. Upon the gudgeon *e*, and between the plates *b b*, is the pull-lever *f*, of suitable size and shape to fill the space between the plates *b b*, and there is an ornamental end or knob, *g*, to said pull-lever *f*. The rear end of the lever *f* is acted on by a spring of any suitable construction. I have shown a plate-spring, *k*, forked at the ends and passing behind a button or T projection on the lever *f*; this spring draws the pull back to place. The link *l* connects from the inner end of the lever *f* to the side of the segmental chain-pulley *m*, that swings upon the gudgeon or stud *i*, and the chain *n* is attached at the forward end of this pulley-segment, and the other end is fastened to the wire leading to the bell. It will now be evident that the segmental pulley *m* is moved in the same direction as the pull; but in consequence of the difference of leverage, the periphery of the segment moves faster than the pull-lever, and swings forward into the curved back of that lever, drawing rapidly upon the bell-wire.

I claim as my invention—

1. The segmental pulley *m*, connected by the link *l* with the pull-lever *f*, and acting upon the chain *n* with an accelerated motion, substantially as and for the purposes set forth.

2. The side plates *b b*, with the gudgeons *e i* introduced within the mortise in the plate *a*, and receiving between them the pull-lever *f* and segmental chain-pulley, substantially as set forth.

Signed by me this 4th day of April, A. D. 1873.

W. T. MUNGER.

Witnesses:

CHARLES PECK,
JOHN R. SLOAN.