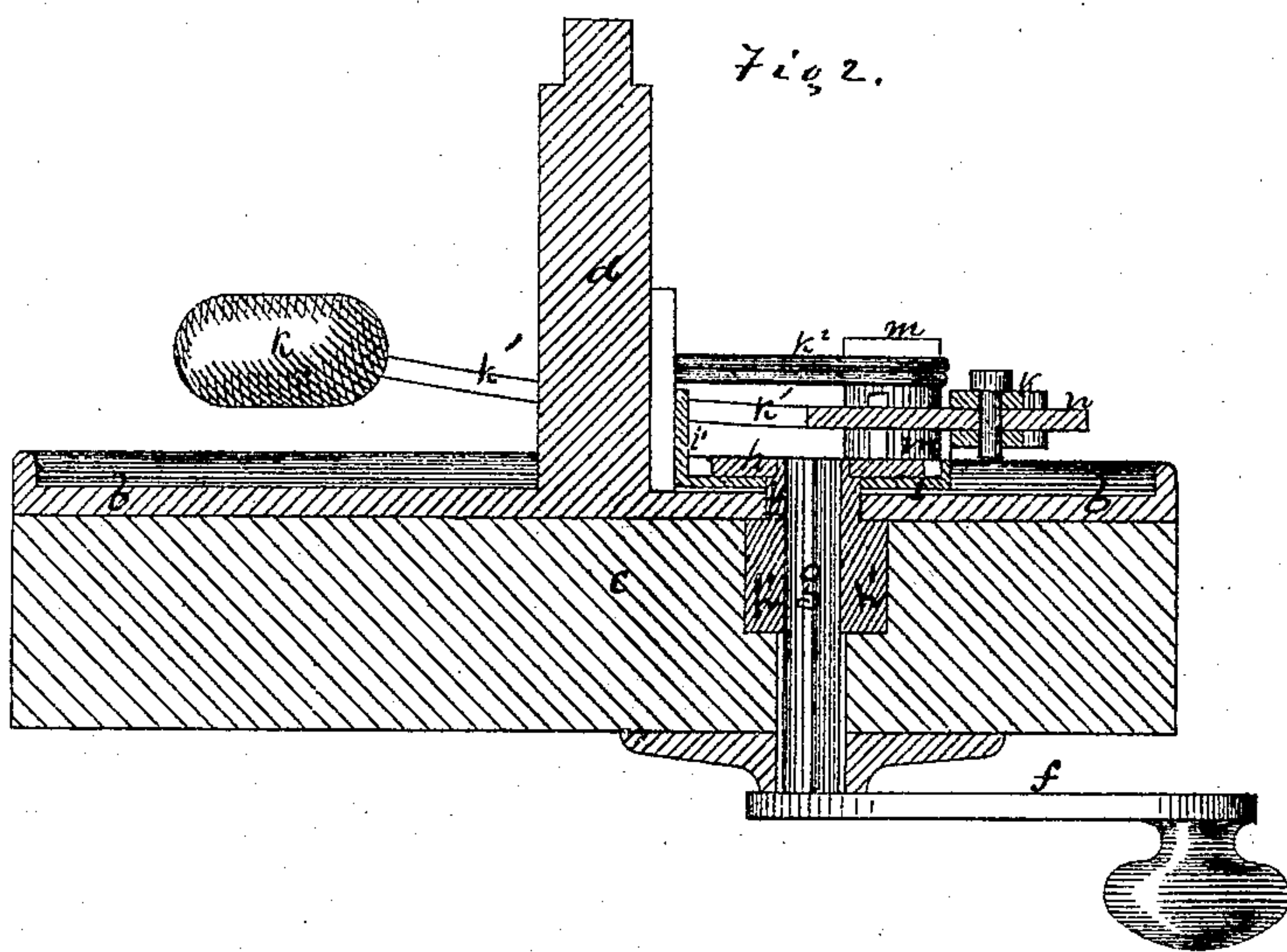
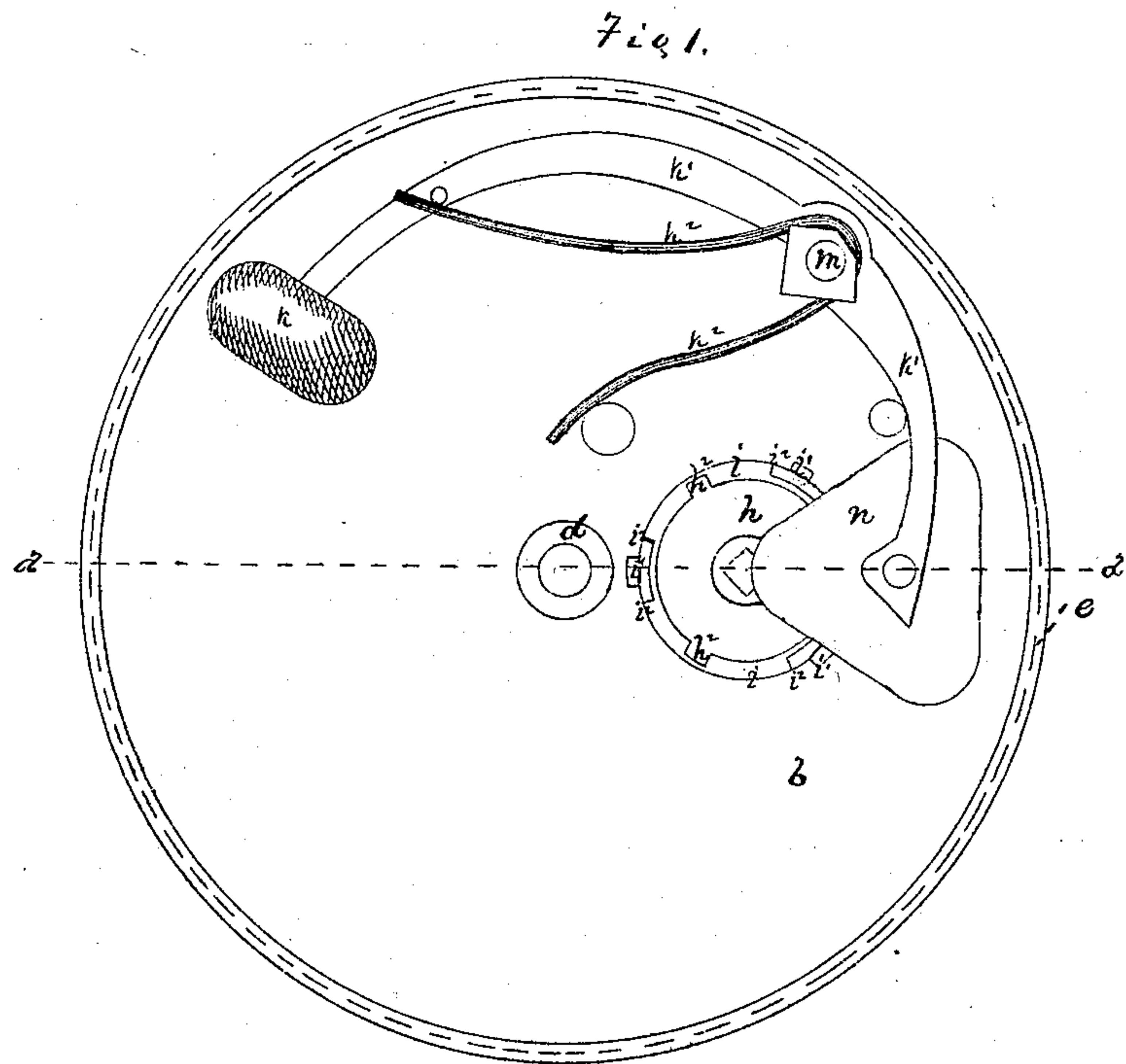


JOHN P. CONNELL.
Improvement in Door-Bells.

No. 127,959.

Patented June 18, 1872.



Witnesses.

L. Schäferlin
Kamron & Freeman

Inventor.

John P. Connell
by Wm. E. Simms &

UNITED STATES PATENT OFFICE.

JOHN P. CONNELL, OF KENSINGTON, CONNECTICUT.

IMPROVEMENT IN DOOR-BELLS.

Specification forming part of Letters Patent No. 127,959, dated June 18, 1872.

SPECIFICATION.

I, JOHN P. CONNELL, of Kensington, in the county of Hartford and State of Connecticut, have invented an Improved Gong-Bell, of which the following is a specification:

Nature and Objects of the Invention.

This invention consists in a new arrangement for operating that kind of a gong-bell which is usually fastened on the inside of a door and struck by means of a small crank-arm on the outside of the door.

Description of the Accompanying Drawing.

Figure 1 is a plan view of the bell with the concave metal shell forming the bell proper removed so as to expose to view the interior arrangement. Fig. 2 is a central vertical section of the parts shown in Fig. 1, the section being made in the plane indicated by the dotted line *a a* on Fig. 1. The scale is that of a full-sized bell.

General Description.

The letter *b* indicates the base-plate of the bell, the back side of which is to be fastened flatly against the door *c*. From the center of the base-plate rises the pillar *d*, on the top of which screws the concave metal shell which forms the bell proper, which, when in place, almost conceals the interior mechanism, and against the inside of which the hammer strikes. The dotted line *e* indicates the outline of this shell. The letter *f* indicates the crank-arm on the outside of the door, fast on the square shaft *g* projecting through the door, and fitting into a square center-hole in the round sleeve *h*¹, which extends through and turns in the base-plate *b* through the swivel-plate *i*, and is fastened into the center of the revolving plate *h*. This sleeve is cylindrical on the outside, and on it, between the revolving plate *h* and the base-plate *b*, is hung the swivel-plate *i*, which is larger in diameter than the revolving plate

h, and bears on its circumference three upright spurs, *i*¹ *i*¹ *i*¹. At the base of each of these spurs is a small abutment, *i*², which serve as boundaries to confine the motion of the swivel-plate *i* with reference to the revolving plate *h*, for there are three teeth, *h*², projecting from the revolving plate *h*, and against which the abutments *i*² strike and stop when the swivel-plate would revolve far either way. The letter *k* indicates the hammer of the bell; *k*¹, the hammer-arm pivoted on the pin *m*, and given a throw by the spring *k*². The opposite end of the arm *k*¹ is slotted to receive the triangular tumbler *n*, which projects on one side, when at rest, between two of the upright spurs *i*¹ *i*¹.

Now, when the crank-arm *f* is turned in either direction one of the spurs *i*¹ will press upon and pass by the tumbler *n*, thus giving the hammer a trip and striking the bell. The hammer is allowed a sudden stroke after one of the spurs *i*¹ has passed by the center of one of the flat sides of the tumbler *n* by the play which the swivel-plate *i* has with reference to the plate *h*, which allows the spur which has just tripped the tumbler to freely move on with the inward pressure of the tumbler far enough to not interfere with the stroke of the hammer.

Claims.

I claim as my invention—

1. The combination and arrangement of the revolving plate *h* and the swivel-plate *i*, or their equivalents, when operating upon or in combination with the arm of a bell-hammer lever.

2. The combination of base-plate *b*, revolving plate *h*, and swivel-plate *i*, tumbler *n*, and arm *k*¹, the whole constructed, arranged, and operated substantially as and for the purposes set forth.

JNO. P. CONNELL.

Witnesses:

WM. E. SIMONDS,
GEORGE G. SELL.