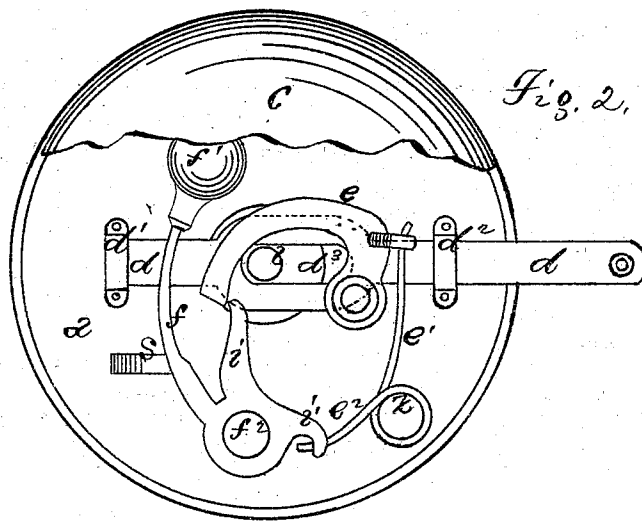
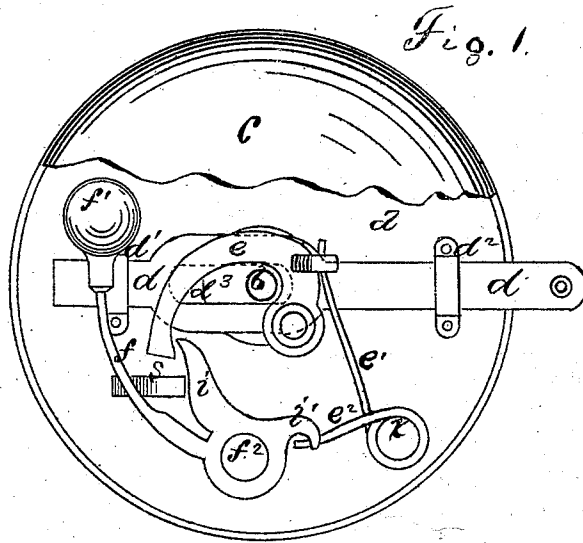


C. W. PENFIELD.

Door-Gongs.

No. 143,996.

Patented Oct. 28, 1873.



Witnesses.

Edward Goodman
T. E. Steele.

Inventor.

Charles W. Penfield
By W. E. Simms
Att'y

UNITED STATES PATENT OFFICE.

CHARLES W. PENFIELD, OF NEW BRITAIN, ASSIGNOR TO JOHN P. CONNELL,
OF KENSINGTON, CONNECTICUT.

IMPROVEMENT IN DOOR-GONGS.

Specification forming part of Letters Patent No. **143,996**, dated October 23, 1873; application filed
August 12, 1873.

To all whom it may concern:

Be it known that I, CHARLES W. PENFIELD, of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Gong-Bells, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a top view of the bell looking flat down upon the interior mechanism, the parts being in their normal position, or position of rest. Fig. 2 is a similar view, except that the hammer is just on the point of being tripped for a stroke.

The letter *a* indicates the base-plate of the bell; *b*, the central part, which supports the sounding-shell *c*, a part of which is seen in the drawings. The letter *d* indicates a slide, which reciprocates on the base-plate *a*, being held thereto by the guide-loops *d*¹ *d*². This slide has a slot, *d*³, which straddles the pin *b*. To the top of this slide is pivoted a peculiarly-shaped pawl, *e*, borne upon by the spring *e*¹. The letter *f* indicates the hammer-arm, bearing the hammer-head *f*¹, and pivoted on the pin *f*². The arm *i* projects from the base of the hammer-arm, and operates in connection with the pawl *e*. The spring *e*² bears upon the spur *i*¹ projecting from the base of the ham-

mer-arm, and gives the hammer its stroke. The pull-wire is attached to the outer end of the slide *d*.

When the slide *d* is pulled backward the pawl *e* pulls the arm *i* and the hammer backward for a stroke. The shape of the point or toe of the pawl is such that as it draws backward it tends to draw off the arm *i*, and the arm *i*, being drawn back far enough, moves laterally away from the pawl *e*, so that the two disengage, and the hammer is tripped for a stroke on the sounding-shell. The letter *s* indicates the shoulder, against which the arm *i* strikes, allowing the hammer-head, by the elasticity of the hammer-arm, to strike and sound the sounding-shell. The spring *e*¹ returns the slide *d* and pawl *e* to normal position, the pawl swinging outward and past the end of the arm *i*.

The two springs *e*¹ and *e*² are made of one piece of wire coiled around the pillar or pin *x*.

I claim as my invention—

The combination of the slide *d*, having longitudinal but not lateral motion, pawl *e*, and hammer-arm bearing the arm *i*, all substantially as described.

CHARLES W. PENFIELD.

Witnesses:

WM. E. SIMONDS,
JOHN POLLITT.