Dierkes & Fretts,

Call Bell.

No. 112,907. Patented Mar. 21. 1871.

Fig. 1.

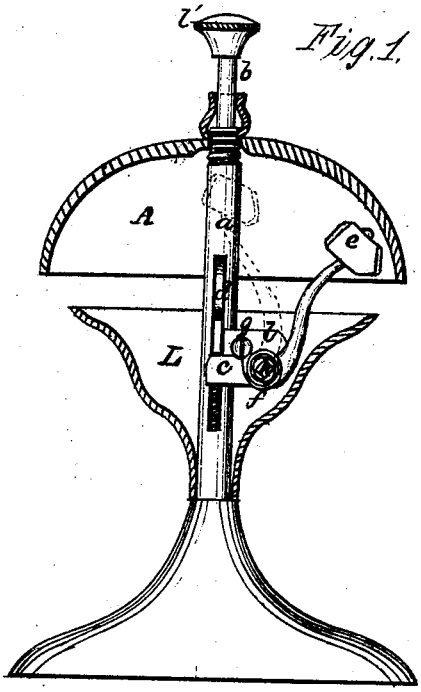


Fig. 2.

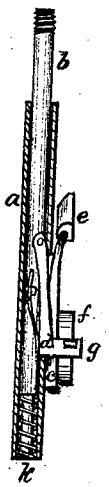
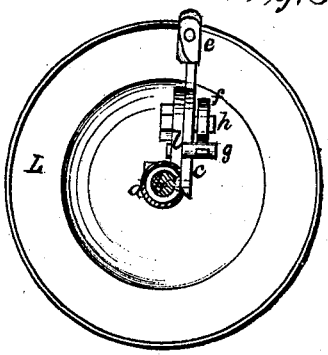


Fig. 3.



Witnesses:
Kate A. Jones.
Wheeler W. Phillips.

Inventor:
Henry A. Dierkes
J. Fretts
Per J. Fraser & Co attys

United States Patent Office.

HENRY A. DIERKES AND JOHN FRETTS, OF NEW YORK, N. Y.; JOHN FRETTS ASSIGNS HIS RIGHT TO HENRY A. DIERKES.

Letters Patent No. 112,907, dated March 21, 1871.

IMPROVEMENT IN CALL-BELLS.

The Schedule referred to in these Letters Patent and making part of the same.

We, HENRY A. DIERKES and JOHN FRETTS, both of the city, county, and State of New York, have invented an Improved Call-Bell, of which the following is a specification.

Our invention consists in an improved construction of the operating mechanism of call-bells, whereby efficiency and simplicity are combined.

Figure 1 is a vertical section of our improved bell;

Figure 2, a section of a portion of the hollow standard *a* removed, showing the rod *b*, dog *d*, and spring *f*; and

Figure 3 is a plan view of the actuating parts removed, with the rod and hollow standard in horizontal section.

A is the gong, suspended in the hollow standard *a*, which rises from the stem of the base B.

Within the standard is the plunger-rod *b*, provided with a spring, *k*, at its lower extremity, to hold it elevated, said spring yielding when pressure is applied to the button *l* to sound the gong.

In the side of the standard *a* is a vertical slot, through which protrudes the lower end of the spring-dog *d*, its upper end being pivoted to the rod *b*. Its lower end projects sufficiently far outside of the standard to strike the arm *c* of the hammer *e* when the button is depressed, and move it downward until the arc through which said arm travels is beyond the line of descent of the dog.

The arm is pivoted on the stud *h*, and bent in an upward direction, to bring the hammer within the interior of the gong.

Attached to the hub of the hammer, and coiled around the stud *h*, is the spring *f*, its opposite end being secured to the stud or pin *g* on a bracket, *l*, to which the hammer-arm is hung.

When the rod *b* is pressed down the dog *d* engages with the arm *c*, moving it through an arc, which throws the hammer *e* back to the position shown by dotted lines in fig. 1, and, the arm being suddenly released by the continued movement of the rod, the force of the coiled spring *f* brings the hammer forward till it strikes the gong.

When the pressure is removed from the button the rod rises to its former position, the dog *d* yielding as it passes the arm *c* in an upward direction, so as not to disturb its position.

The dog *d* or its equivalent projection may be rigidly affixed to the rod *b*, and the spring *i* dispensed with, by making a joint in the arm *c*, to allow it to move out of the way of the dog when the rod rises, said joint being rigid when the dog engages the arm in its downward movement, and have the same effect; but we prefer the first-named arrangement.

This construction forms a compact and simple call-bell, which is reliable in operation, and not liable to derangement of its parts, while the mechanism is concealed within the bell by the annular jacket or case L, which may be made of graceful shape and give the bell a highly ornamental appearance.

We claim as our invention—

The combination of the tube *a*, rod *b*, sliding within it, and the spring-dog *d* pivoted thereto, for actuating the arm *c* of the hammer, substantially as described, for the purpose specified.

HENRY A. DIERKES.
JOHN FRETTS.

Witnesses:
KATE N. JONES,
J. FRASER.