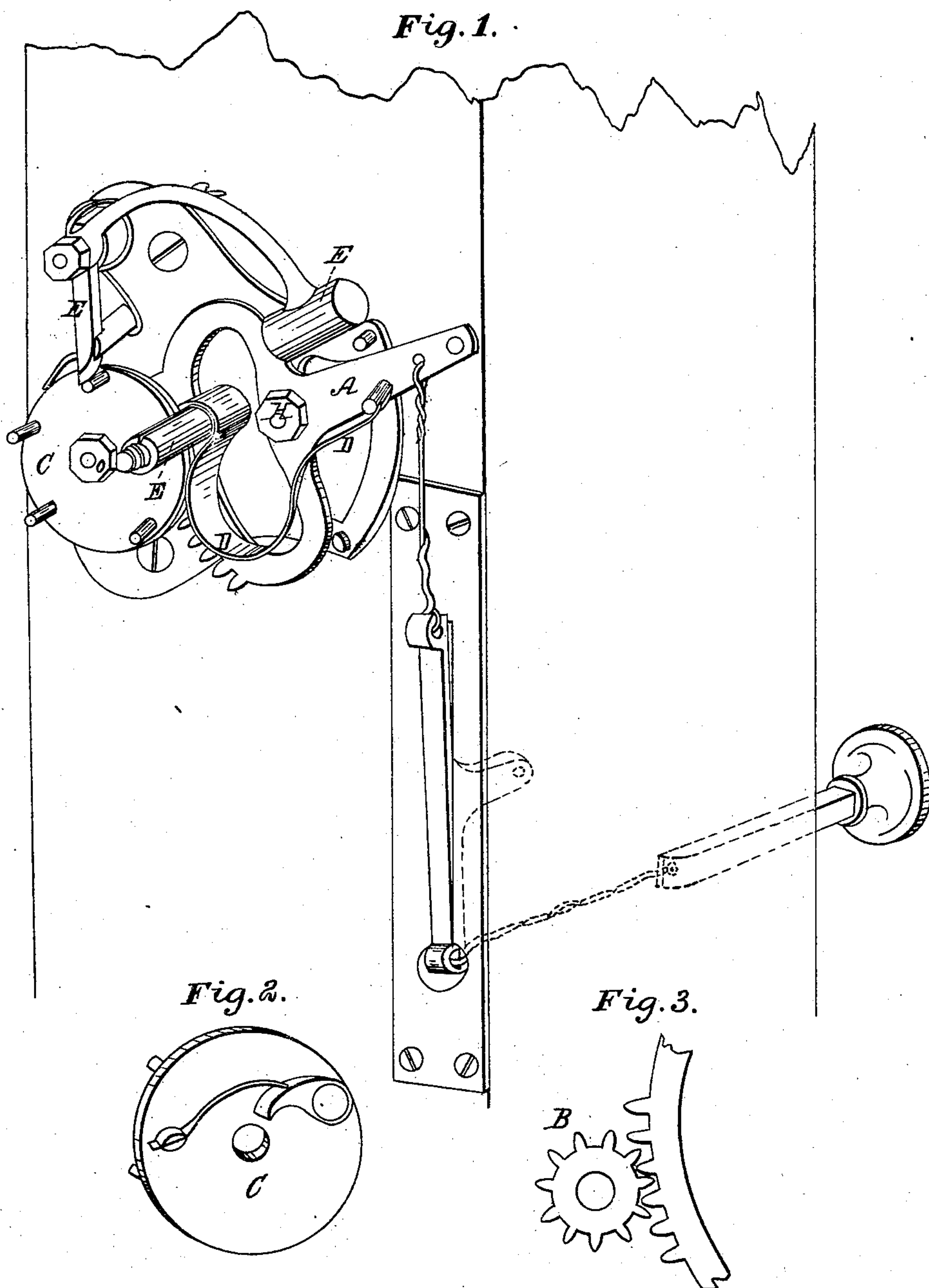


O. A. NORTH.
Door Bell.

No. 89,331.

Patented April 27, 1869.



Witnesses:
R. S. Porter
H. B. Goodrich

Inventor:
Orrin A. North



ORRIN A. NORTH, OF NEW BRITAIN, CONNECTICUT.

Letters Patent No. 89,331, dated April 27, 1869.

IMPROVED DOOR-BELL.

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

To all whom it may concern :

Be it known that I, ORRIN A. NORTH, of the town of New Britain, county of Hartford, State of Connecticut, have invented a new and improved Way of Operating the Hammer in a Door or Table-Call Bell; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The nature of my invention or improvement consists in the mechanism which operates the hammer of the bell by a pull on a geared lever, and that working a ratchet and wheel, causing the hammer to strike the bell two, three, or more times at each pull while in the act of ringing the bell.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

It is operated by a lever, as shown in the drawing at letter A, on one end of which there is a gear, forming a part circle, as shown in fig. 3, working on a pin or stud, as its fulcrum, as shown at H on the drawing matching into and operating a gear-wheel, B, as shown in fig. 3, which sets on a pin or stud marked O, and sitting on the same pin or stud that the geared wheel B works upon, and lying upon it is a circular plate, with pins in the upper surface of the plate to operate the hammer, as shown at C in the drawing. Upon the lower side of the plate O (the plate being larger than

the gear-wheel B) is attached a ratchet, operated by a spring, as shown in fig. 2, which catches into the teeth of the gear-wheel B, turning the plate O and operating the hammer, the plate O being held stationary by a friction-spring, (a part of the same spring which operates the hammer,) while the lever A is thrown back to its place after being pulled in the act of ringing the bell by the spring D, as shown in the drawing, the spring being attached to the bell-post, marked F, reaching out on the shank of the lever A, these bearing upon a pin set in said shank, as shown at A. The situation and operation of the hammer will be shown in the drawing at E. The bell used is a gong-bell, screwed on to the post marked F and covering the inside or working part of the bell, except the end of the lever A, to which the wires for operating the same are attached.

What I claim as my invention, and desire to secure by Letters Patent, is—

The application of a lever-gear, matching into a gear-wheel or shaft, in combination with a ratchet and plate with pins or arms thereon, for the better operation of the hammer, to a door or call-bell, substantially as set forth and described in the above specification.

ORRIN A. NORTH.

Witnesses:

RICHARD S. PORTER,
LESTER A. VIBBERTS.