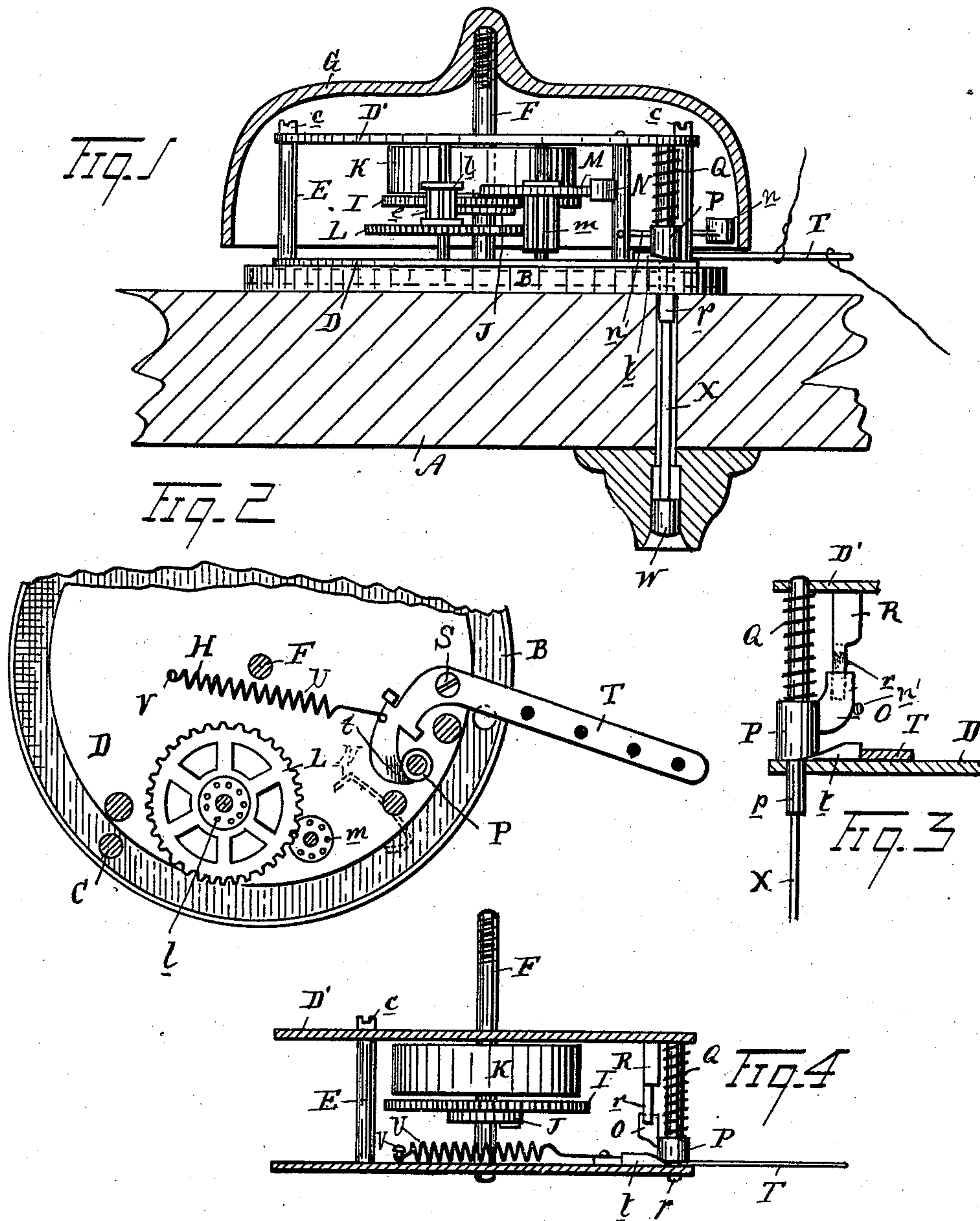


(No Model.)

J. ROCHELEAU
DOOR BELL.

No. 429,643.

Patented June 10, 1890.



Witnesses
John Schuman
Thos. Ernest

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UNITED STATES PATENT OFFICE.

JACQUES ROCHELEAU, OF WINDSOR, ONTARIO, CANADA.

DOOR-BELL.

SPECIFICATION forming part of Letters Patent No. 429,643, dated June 10, 1890.

Application filed November 29, 1889. Serial No. 331,945. (No model.)

To all whom it may concern:

Be it known that I, JACQUES ROCHELEAU, a citizen of Canada, residing at Windsor, in the county of Essex and Province of Ontario, Canada, have invented a new and useful Door-Bell, of which the following is a specification.

This improvement relates to that class of door-bells in which the hammer is operated by a gearing similar to a clock-alarm; and the invention consists in the peculiar construction, arrangement, and combination of parts hereinafter more fully described, and then definitely pointed out in the claims.

In the accompanying drawings, Figure 1 shows one of my bells attached to the casing of a door with the bell and door-jamb in section; Fig. 2, a detail showing a plan of the lever. Figs. 3 and 4 are details showing different views of the stop.

Referring now to the details of the drawings, A represents the jamb of a door, and B a base, preferably of cast-iron, by which it is attached to the jamb by means of screws C. To this base is attached the frame of the train of gearing by screws c. This frame consists of two plates D D', connected by posts E in the usual manner. Between this frame is set the train of gearing, consisting of a central arbor F, carrying the gong G, spring H, spur-wheel I, ratchet-wheel J, ratchet j, and spring K, in a manner well understood, and therefore unnecessary to further describe, except to state that the ratchet-wheel is fast on the arbor, while the spur-wheel is loose thereon. The spur-wheel I gives motion to another wheel L through the pinion l, and the wheel L in its turn gives motion through the pinion m to escape-wheel M, which operates the pallets N of the hammer n, all in the usual manner of operating alarm mechanism.

The stop device (see Fig. 3) consists of an arm O on a collar P, surrounding the bar p, on which is a spiral spring Q. The arm O slides in a groove or slot r in a stud R, attached to the plate D'.

Pivoted at S is a lever T, whose short arm has an incline or cam t, which, when the lever is moved in one direction, runs between the plate D and collar P and raises the latter against the pressure of the spring Q, which always tends to keep said collar pressed toward the plate D, in which last position the

arm O presses against the arm n', and thus prevents any movement thereof until said arm O is moved away from the arm n'.

At U is shown a spiral spring having one end attached to a stud V on the plate D and its other end connected to the lever T and acting to draw the cam away from between the plate D and collar P.

On the outside of the door-jamb is shown a button W on the outer end of a rod X, whose other end is in contact with the bar p, so that by pushing on the button W the bar p is moved inward, carrying the arm O away from the arm n', and thus, if the spring has been wound up, operating the hammer by means of the spring and train of gearing in the usual manner of operating alarm mechanisms.

The lever T may be connected by wire with any other part of the hall or any other room in the building, so as to be operated from that point, if desired; or a string or wire may be connected to it and carried to the other side of the door-frame and be fastened there, so that any attempt to open the door would press on said wire or cord and cause it to operate the lever T, and thus give motion to the alarm mechanism.

The gong is fast on the arbor F, so that by turning the gong the spring is wound up; but, if preferred, the gong may be a fixture and the spring wound up by any well-known means.

What I claim as new is—

1. The combination, with a gong and its supporting-frame, of a hammer and a spring mechanism for operating the same, a collar P, having arm O, a support for said collar P, and the beveled lever T for raising said collar and thus liberating the alarm mechanism, substantially as described.

2. The combination, with a gong and its supporting-frame, of a hammer and a spring mechanism for operating the same, the grooved stud R, attached to the frame, a bar p, spiral spring Q and collar P, both on said bar, arm O, working in a groove r in said stud R, and a lever t for moving the collar and liberating the alarm mechanism, substantially as described.

JACQUES ROCHELEAU.

Witnesses:

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