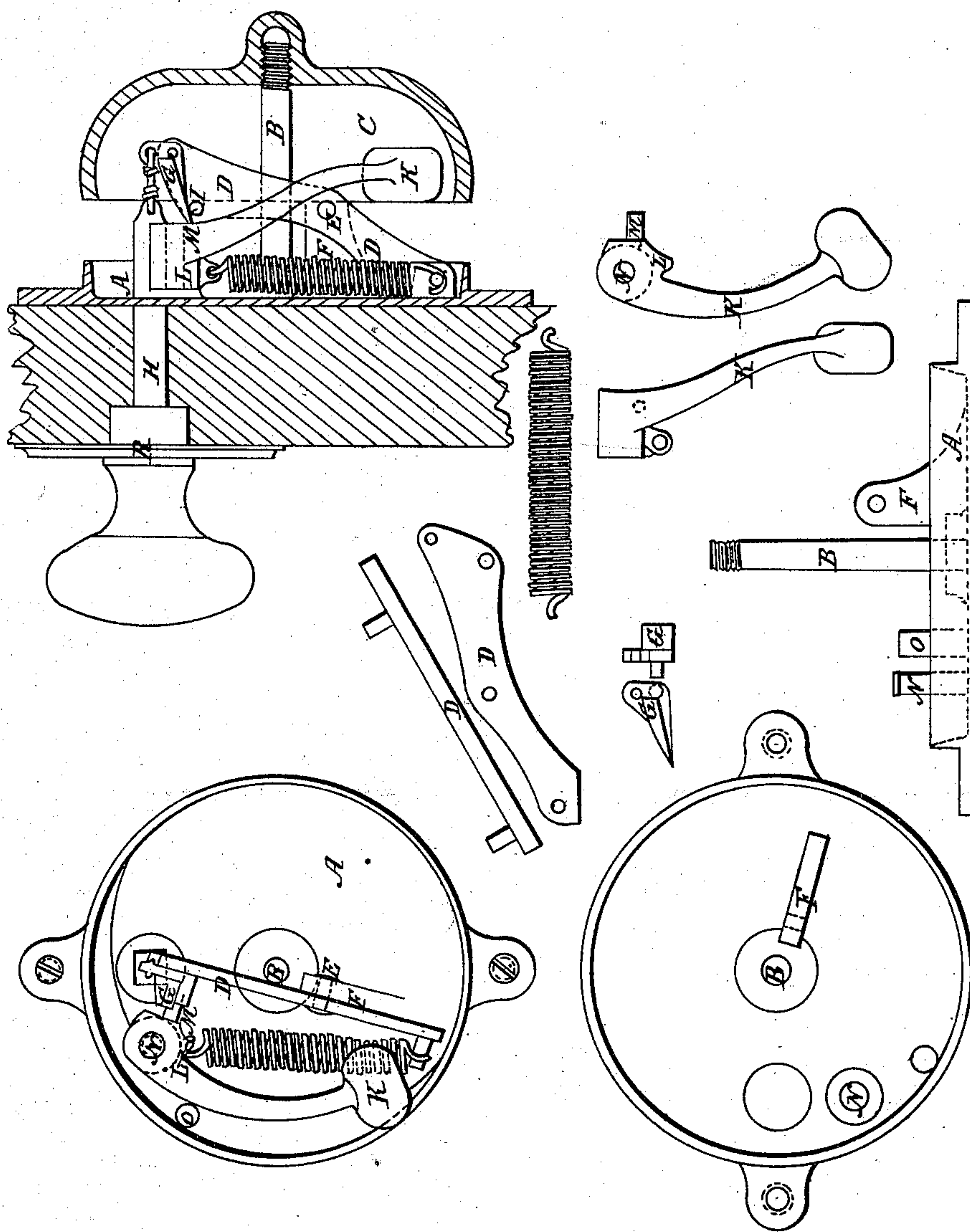


GARVEY & KIMBALL.

Door-Bell Pull.

No. 83,623.

Patented Nov. 3, 1868.



Witnesses.
George Parry.
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JAMES GARVEY AND MATTHEW H. KIMBALL, OF SAN FRANCISCO,
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Letters Patent No. 83,623, dated November 3, 1868.

IMPROVEMENT IN BELL-PULL.

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

To all whom it may concern :

Be it known that we, JAMES GARVEY and MATTHEW H. KIMBALL, both of the city and county of San Francisco, and State of California, have invented a certain new and improved "Pull-Bell" or "Gong" for use on house-doors, on steamboats, in mines, hotels, &c., which we verily believe has not been known or used before; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a plan;

Figure 2 is a section; and

The several other figures are detached details of the separate parts composing our device.

To enable others skilled in the art to properly understand, make, and use our device, we will proceed to describe it, as follows :

We employ, in the construction of our bell, the usual circular plate or disk A, which forms a foundation or base to attach the working parts to. This disk has cast in its centre, the rod or stem B, upon the end of which is screwed the sounding-gong C.

D is a lever, of peculiar shape, which swings on a fulcrum-pin, E, which passes through the lug F, cast on the plate or disk A.

On one end of the lever D is pivoted a piece, G, which we call the lifting-wedge. It is a little wedge-shaped piece, as shown in details, which connects with the end of the pull-bar H, by a wire passing through a hole in the lug on its side.

On the lever D, and at the back of the wedge at I, a pin is provided to form a stop for the wedge G, and prevent it swinging beyond the desired point, when operated on by the pull-bar.

The striking-hammer K is formed, as shown in details, of usual shape, having a little lug, L, drilled with a small hole upon its hub, to provide for the attachment of a spring, hereinafter to be mentioned.

There is also provided on the hub of the hammer K, at M, a little projecting stem, which is of iron or steel, and may be cast or otherwise fitted in the hub, it being against this stem that the lifting-wedge bears in operating the bell.

The hammer itself swings on a pivot, N, cast in the plate A, and has provided for it the usual stop, O, cast on the plate.

A spiral spring, P, connects the hammer and back end of the lever D together, as shown in figs. 1 and 2, one end of the spring hooking into the little lug on hub of hammer, and the other end hooking around a pin or stem projecting from the side of the lever D, at Q.

The pull-bar H, or handle, is of common construction and arrangement, being simply a square rod of iron, with attached knob and handle on one end. It is provided with the usual guide-plate or washer R.

The operation, the simplicity of which will be readily recognized, is as follows :

The pull-bar or handle H is drawn forward, and with

it the attached lifting-wedge G, and lever D, to which the wedge is pivoted. In its forward movement, the wedge bears against the stem M of the hammer, and, causing it to traverse its inclined surface, it is forced forward, and swings around the hammer on its pivot, until, having escaped the wedge, it is released, and, by the action of the spring P, is brought back with force, and, impinging against the gong, sounds the bell.

The spring P, which acts to strike the hammer, serves also to return the lever D, and connected pull-bar, or handle, to their original position.

In returning, after the bell is struck, the wedge G passes the projecting stem on the hammer, by swinging forward on its pivot to clear the same, when it shall have come in contact, the simple act of pulling the bell being sufficient to return the wedge-piece to its bearing against the stop I, without aid of spring or other device.

We will here state, that, by a slight alteration in the construction of the hammer, and slight variation of the relative positions of the combined parts, as herein described, but without variation from the principle of construction involved, we may apply our invention in the manufacture of alarms, hotel, steamboat, and mining-gongs, such being usually of large size, and variously arranged, suitably to the positions they occupy, &c., some being struck from the outside and others from the inside of the gong, and the pull-bar receiving various directions, all of which separate conditions rendering suitable arrangement of working parts of this, our device, necessary to each case, and therefore we wish it to be known that we do not confine ourselves to the particular shape of relative position or direction of motion given to the combined or separate parts of our device, as herein described, but reserve to ourselves the right of making various equivalent arrangements, suitably adapted to the various conditions which may arise.

It will be observed that in the adoption of the lifting-wedge G, we encroach upon the claim made in our pending application for patent of the United States on "improved pull-bell," but, inasmuch as we desire to be protected in these our additional improvements, separately and distinct from our previous invention, we will, without reference to it, simply make claim to what may herein be considered novel and improved; therefore,

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The lever D, as constructed, and the attachment of the wedge-piece G, thereto.
2. The attachment of the handle or pull-bar H directly to the lifting-wedge G.
3. Connecting the lever D and hammer K by the spiral spring P, or its equivalent; the whole constructed in the manner substantially as herein described, and for the purposes as set forth.

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MATTHEW H. KIMBALL.

Witnesses:

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