

C. B. GEER.
LETTER-BOX, BELL, AND DOOR-PLATE COMBINED.

No. 195,598.

Patented Sept. 25, 1877.

Fig. 1.

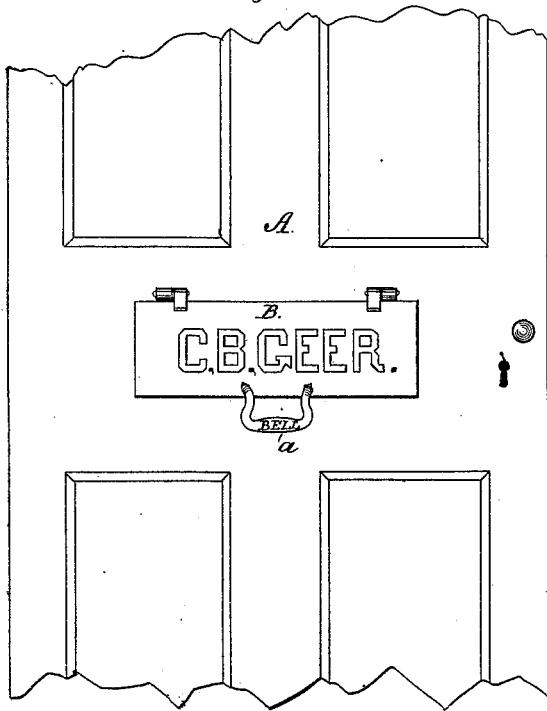


Fig. 2.

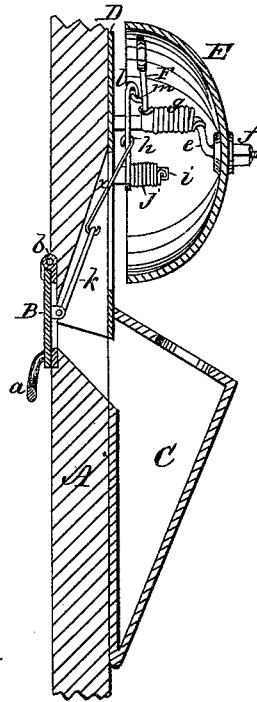


Fig. 3.

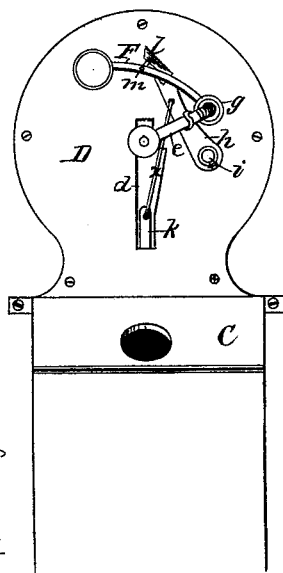
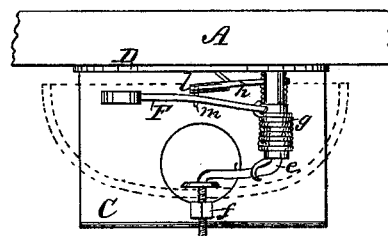


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

COSTELLO B. GEER, OF UNION CITY, PENNSYLVANIA.

IMPROVEMENT IN LETTER-BOX, BELL, AND DOOR-PLATE COMBINED.

Specification forming part of Letters Patent No. 195,595, dated September 25, 1877; application filed August 15, 1877.

To all whom it may concern:

Be it known that I, COSTELLO B. GEER, of Union City, in the county of Erie and State of Pennsylvania, have invented a new and Improved Combined Door-Bell, Name-Plate, and Letter-Box; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a front view of the improvement applied to a door; Fig. 2, a vertical section of the same; Fig. 3, a rear view of the devices with the bell removed; and Fig. 4, a top view of the same.

The object of my invention is to effect an improvement in the class of mechanism in which a door-bell, name-plate, and letter-box are so combined that the bell will be struck when the name-plate is raised to uncover the aperture of the letter-box.

The invention consists in the particular construction and arrangement of parts, as hereinafter described and claimed.

In the drawings, A represents a section of a door, to which my improvements are shown applied. Upon the outside of said door is fastened the door-plate B, which is provided with a handle or knob, *a*, upon its lower side, and is hinged at its upper side to a frame-piece, *b*, fastened about the margin of the slot or letter-hole in the door. Upon this name-plate is engraved the name of the occupant, and upon the knob or handle is painted or engraved the word "bell." Upon the inside of the door, and over the letter-hole, is arranged the letter-box C, which has an opening in the top of the same for the removal of the letters, &c., and just above the letter-box is fastened a flat plate, D, having a vertical slot, *d*, in the center. Affixed to this plate, upon one side of the slot, is a crank-shaped stem, *e*, whose end occupies a position concentric with plate D, and is screw-threaded and provided with a nut, *f*, to secure the bell E. Upon the eccentric portion of the stem *e* is arranged a sleeve, which carries the bell-hammer F, and a spiral spring, *g*, whose tension causes the hammer to strike the bell when deflected and released. To secure this deflection of the hammer an arm, *h*, is piv-

oted upon a stud, *i*, and is held up by the tension of a spiral spring, *j*, arranged about the stud. This arm is attached, through a wire, *x*, or other connection, to an arm, *k*, hinged to the back of the door-plate, so that by raising the door-plate the arm *k* is drawn down and made to fulcrum upon the upper edge of the slot and pull down the arm *h* against the tension of the spring *j*. As the arm *h* descends in obedience to the raising of the door-plate a hooked or grooved edge, *l*, upon the end thereof engages a projecting pin, *m*, on the bell-hammer and deflects it also. As soon as the grooved end passes off of the pin *m* the hammer responds to its spring *g* and strikes the bell, while the spring *j* draws down the door-plate again to cover the letter-hole.

It will thus be seen that the name-plate serves both as a cover for the letter-hole and a handle for the door-bell.

In making use of the invention, the bell, name-plate, and door provided with a letter-hole can be used without the box, if desirable, as the letters, &c., may be passed through the hole into the hall or room; or the bell and name-plate alone may be used together, or the bell used independently of any of the other devices.

Having thus described my invention, what I claim as new is—

1. The bell E and its operating mechanism, the name-plate, having knob *a* and hinged to form the cover for the letter-hole in the door, the arm K, pivoted to the name-plate, the connected arm *h*, pivoted upon a stud, *i*, and the spring *j*, all combined, arranged, and constructed as shown and described, whereby when the name-plate is raised the arms K and *h* will be drawn down and the alarm sounded, as specified.

2. The combination of the bell E, the crank-shaped supporting-stem *e*, the hammer F having pin *m*, the spiral spring *g*, pivoted arm *h* having spiral spring *j* and grooved end, adapted to be deflected by the door-bell handle, for the purpose described.

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Witnesses:

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