

(No Model.)

C. W. STORM.
CALL BELL.

No. 526,417.

Patented Sept. 25, 1894.

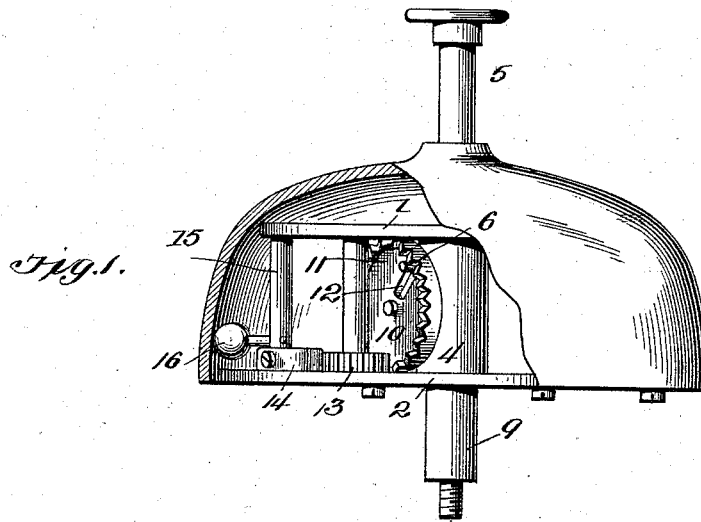


Fig. 2.

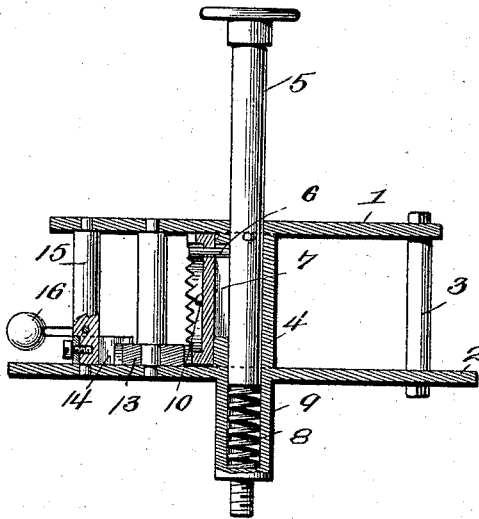
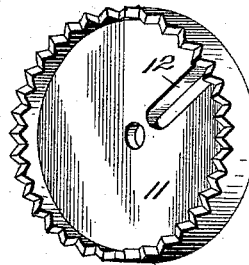


Fig. 3.



Witnesses

Joseph Stack.
[Signature]

Charles W. Storm.

By his Attorneys.

C. Snow & Co.

UNITED STATES PATENT OFFICE.

CHARLES WM. STORM, OF ELGIN, ILLINOIS.

CALL-BELL.

SPECIFICATION forming part of Letters Patent No. 526,417, dated September 25, 1894.

Application filed July 17, 1894. Serial No. 617,820. (No model.)

To all whom it may concern:

Be it known that I, CHARLES WM. STORM, a citizen of the United States, residing at Elgin, in the county of Kane and State of Illinois, have invented a new and useful Bell, of which the following is a specification.

My invention relates to improvements in call and similar bells, and the objects in view are to provide a simple, inexpensive and efficient construction whereby a rapid repetition of the stroke, or a series of strokes of the bell may be obtained with a single pressure of the operating knob, handle, or button.

Further objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claim.

In the drawings: Figure 1 is a side view partly broken away of a bell constructed in accordance with my invention. Fig. 2 is a vertical section of the same. Fig. 3 is a detail view of the master-gear.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 and 2 designate, respectively, the upper and lower plates which, together with the connecting bars 3 by which said plates are held at the desired interval, constitute the frame by which the operating mechanism of the improved bell is supported. At the center of and arranged perpendicularly between these plates is a sleeve 4, in which is slidably fitted the shank or stem of the push-button 5, and this shank or stem is provided with a lateral pin 6 which operates vertically in a slot 7 in the side of the sleeve. A return spring 8 is arranged in a lower projecting portion or extension 9 of the sleeve, to return the push-button to its normal position after depression.

Mounted upon a stub-shaft 10 projecting horizontally from the sleeve is the master-gear 11, provided with a slot 12 in which fits the lateral pin 6. The reciprocation of the push-button causes a partial rotary movement of the master-gear, and the latter is adapted to impart a corresponding motion to

an escapement wheel 13. In the construction illustrated in the accompanying drawings the master-gear teeth mesh directly with the teeth of the escapement-wheel, and as the escapement wheel is of smaller diameter than the gear it is caused to turn more rapidly than the gear. The motion of the escapement-wheel is imparted to the escapement lever 14, the arbor 15 of which carries the bell-hammer 16.

It will be seen from the above description that the communication of motion from the push-button to the bell-hammer is through a large gear, by means of which a long stroke of said push-button may be attained, the escapement-lever receiving the motion of the master-gear through an escapement-wheel of small diameter, whereby an effective operation thereof is insured.

It will be understood that in practice various changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described my invention, I claim—

In a device of the class described, the combination with a frame, of a slotted sleeve, a push-button having its shank or stem fitting in said sleeve and provided with a lateral pin operating in a slot thereof, a master-gear provided with a radial slot in which operates the said pin on the shank of the push-button, an escapement-wheel operatively connected to the master-gear, whereby an increased or multiplied rotation of the escapement is attained, an escapement lever arranged in operative relation with the escapement-wheel, and a bell-hammer carried by the arbor of the escapement lever, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CHARLES WM. STORM.

Witnesses:

F. E. ALLEN,
CHAS. E. JONES.