

UNITED STATES PATENT OFFICE.

JOSEPH A. WOODWARD, OF PHILADELPHIA, PENNSYLVANIA.

SIGNAL-BELL.

Specification of Letters Patent No. 26,137, dated November 15, 1859.

To all whom it may concern:

Be it known that I, JOSEPH A. WOODWARD, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Signal or Gong Bells for Cars, Locomotives, Steamboats, Hotels, &c.; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, of which—

Figure 1 is a detached perspective view of my improvement (minus the gong). Fig. 2 is a perspective view of the same (with the gong).

Similar letters of reference indicate corresponding parts in the same figures.

The object of my invention is to insure the striking of the bell at all times, and by simplicity of construction to diminish its liability to accident.

To enable others skilled in the art to fully understand and construct my invention, I will proceed to describe it.

Cast with and forming a part of the bed-plate (B P) there are three stop posts (A), (*s p*) and (*s p*). In the center of the bed plate (B P), there is a round post (*b p*) finished with a screw on the top. To the left of the post (*b p*) and almost on a line therewith there is a small post (O). The hammer or striking arm (S A) works upon the post (O) and is held in its place by a washer and pin. As shown in (Fig. 1), the lever escapement bar (L E B) having an elliptical slot, works upon the post (*b p*) and is held in its place by a pin. At the end (E) of the projecting arm of the escapement bar (L E B) there is a small pin (P), to which one end of the spiral spring (S) is attached. To the end (E) of the hammer or striking arm (S A) there is a small pin (P), to which the detached end of the spiral spring (S) is attached. (See Fig. 1). On the hub of the hammer or striking arm (S A) there is a projecting point (X). On the left end of the lever escapement bar (L E B) there is a projecting point (*x x*).

When operating the bell, draw the lever escapement bar in the line indicated by the arrow, which will force the end (*x x*) (of the lever escapement bar) in contact with the end (*x*) of the hammer or striking arm

(S A), forcing it (the hammer arm) back until the flat face of the projecting point (*x*) is in a line with the point of the projection (*x x*) when the action of the spring will cause it (the hammer) to fly back and strike the bell. The rounded back of the projection (*x*) acting eccentrically upon the rounded face of the projection (*x x*) imparts a lateral motion to the lever escapement bar (L E B) until the point (*x x*) passes the point (*x*) when it is again thrown into gear. (See Fig. 1). The posts (*s p*) serve as stops in the forward and backward motion of the lever escapement bar, the post (A) serves as a stop for the hammer or striking arm, the bell (B) is put on the post (*b p*) and secured thereto by the nut (N). (See Fig. 2).

The various parts can be made of such metals or materials as may be best adapted for the purpose. Owing to the complicated construction of most gongs or bells now in use, they are continually out of order and fail to operate correctly, the inconvenience and danger of which defect will be readily appreciated.

The stroke of the hammer can be increased at any time, by simply filing out the slot at the opposite side from the point (*x x*) of the lever escapement bar, and by this simple means the bell can be kept in order until the points of contact (*x*) of the hammer or striking arm (S A) and the point (*x x*) of the lever escapement bar (L E B) are completely worn out.

The simplicity of construction, and the certainty of operation must necessarily render my improvement very desirable.

Having thus described my invention, I do not wish to be understood as claiming any part as used in other gongs or bells, but

What I do claim as new, and wish to secure by Letters Patent, is—

The lever escapement bar (L E B), constructed substantially as described, with the elliptical slot and projecting point (*x x*), in combination with the projecting point (*x*) of the hammer or striking arm (S A), the whole arranged substantially as described and for the purpose set forth.

JOSEPH A. WOODWARD.

Witnesses:

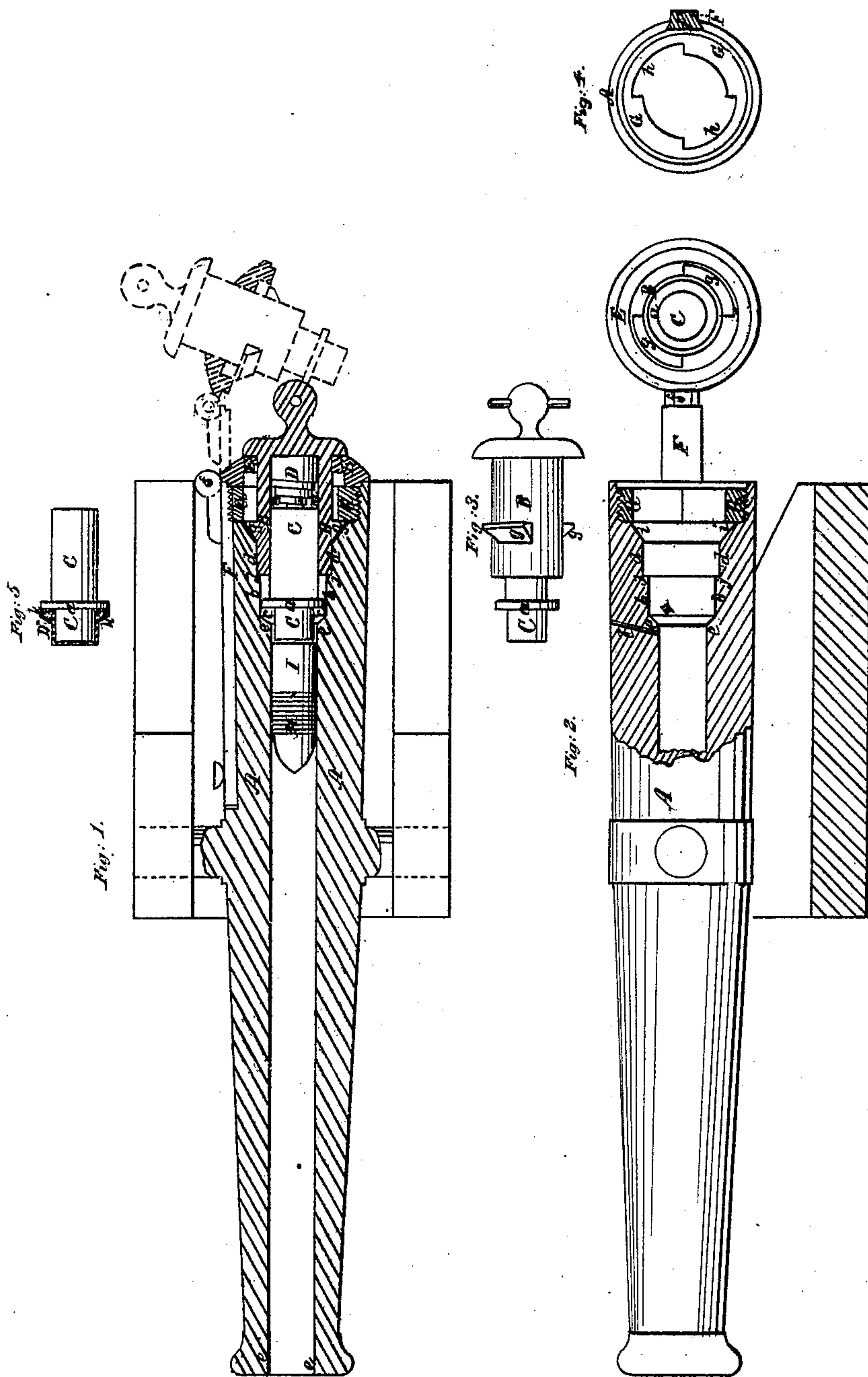
E. G. CHERMANN,

EDWD. McLAUGHLIN.

J. W. COCHRAN.
Breech-loading Fire-arm.

No. 26,256.

Patented Nov 29, 1859.



Witnesses,
C. M. Hughes
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Inventor,
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