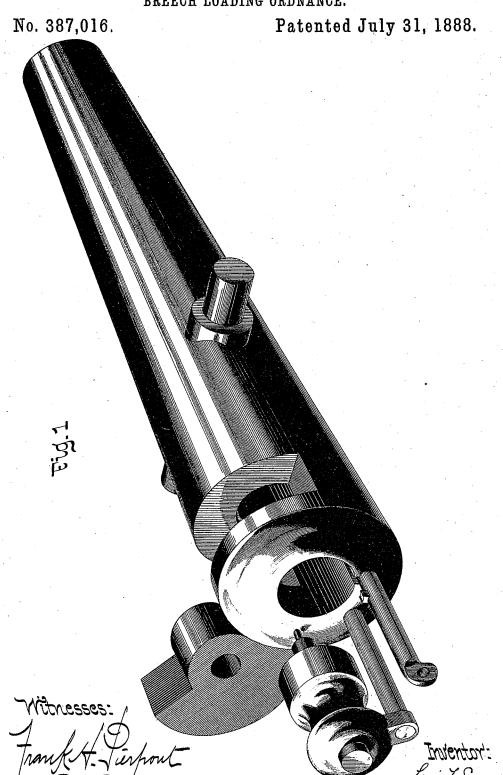
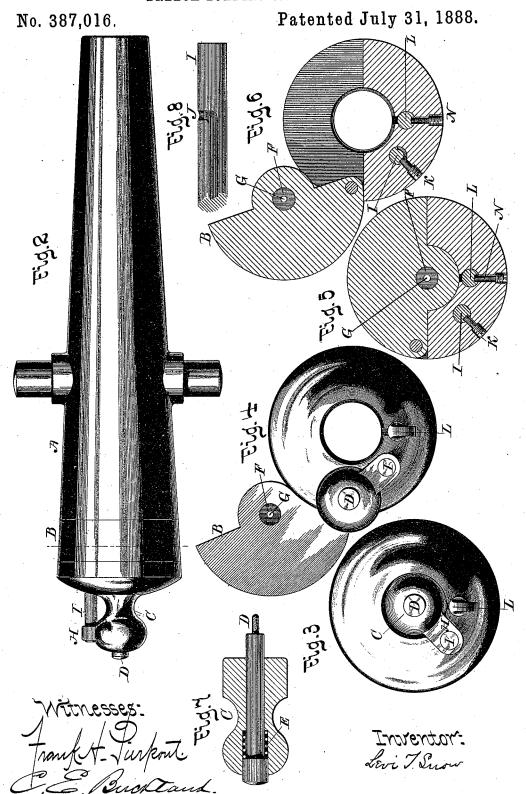
L. T. SNOW. BREECH LOADING ORDNANCE.



L. T. SNOW. BREECH LOADING ORDNANCE.



## UNITED STATES PATENT OFFICE.

LEVI T. SNOW, OF NEW HAVEN, CONNECTICUT.

## BREECH-LOADING ORDNANCE.

SPECIFICATION forming part of Letters Patent No. 387,016, dated July 31, 1888.

Application filed April 25, 1888. Serial No. 271,826. (No model.)

To all whom it may concern:

Be it known that I, LEVI T. SNOW, of New Haven, Connecticut, have invented a new and useful Improvement in Breech-Loading Ordnance, of which the following description and claims constitute the specification, and which is illustrated by the accompanying two sheets of drawings.

This invention consists in a new construction to of the breech and breech-block of a breechloading cannon, and ordnance provided with my invention is particularly adapted to firing

salutes and signals.

Figure 1 of the drawings is a perspective 15 view of a piece of cannon containing my improvements and showing them opened out to the view. Fig. 2 is a plan view of the same cannon, showing the breech-block and the cascabel closed into their firing positions. 20 Fig. 3 is an elevation of the rear end of the cannon of Fig. 2. Fig. 4 is a rear view of the cannon with its breech open. Fig. 5 is a cross-section on the dotted line of Fig. 2, looking toward the right of that dotted line. Fig. 25 6 shows the same parts as Fig. 5, but shows some of them in a different position. Fig. 7 is a central vertical section of the cascabel, showing the firing pin in full view. Fig. 8 is a view of the forward end of the rod which 30 supports the cascabel when the latter is pulled out from the cannon and turned on the axis of the rod into the position shown in Figs. 1

The letter A indicates the body of the can-35 non, while B is the breech-block and C is the cascabel.

The firing-pin D reciprocates in the axis of the cascabel against the resistance or with the movement of the spring E, as the case may be, 40 and the forward end of its body normally rests in the cylindrical recess F in the rear side of the breech-block, and thus holds the breechblock in its firing position, while the point of the firing-pin normally rests in the cylindrical 45 opening G, which is perforated axially through the forward wall of that recess. The cascabel C is provided with the bracket H, and that bracket is keyed to the rear end of the rod I. That rod reciprocates longitudinally in a re-50 cess in the body of the breech of the cannon, and is provided with the right-angled groove

stud K, by means of which groove the cascabel may be withdrawn from the breech of the cannon, and by means of which stud that with- 55 drawal is limited, at the same time that the cascabel is allowed to be turned from its axial position to its position shown in Fig. 4, where it is held in rest by the stud K in the end of the circumferential portion of the recess J, as 60 indicated in Fig. 6. The extractor L is provided with the hook-like projection M, and is prevented from revolving as it reciprocates by means of the inner end of the stud N, which occupies a longitudinal groove in the lower 65 side of the extractor L, as indicated in Figs. 5

The mode of operation is as follows: When the gun is to be loaded, the parts are placed in the positions shown in Fig. 1. Thereupon a 70 suitable cartridge, provided with an extractorflange at its rear end, is inserted in the rear end of the gun and pushed home beyond the forward side of the breech-block B, the flange of the cartridge carrying the extractor forward 75 with it by contact of its forward side with the rear side of the projection M. Then the breech block B is turned on its pivot from the position shown in Figs. 1, 4, and 6 to that shown in Figs. 2 and 5, and the cascabel is 80 turned from its position shown in Figs. 1 and 4 and is pushed forward axially to the position shown in Figs. 2 and 3. Thus the piece is prepared to be fired, and it is fired by striking a sharp blow upon the rear end of the fir- 85 ing-pin D, and thus driving the point of the firing-pin into the center of the rear end of the cartridge. To extract the cartridge-shell, the cascabel C is withdrawn from its recess in the rear end of the cannon and is then turned on 90 the rod I as an axis to the position shown in Fig. 4, and the breech-block B is turned back from its position shown in Figs. 2 and 5 to that shown in Figs. 1,4, and 6. Thereupon the cartridge-shell is readily extracted with the extractor L by drawing the latter backward to the position shown in Fig. 1.

I claim as my invention

1. The combination of the piece A, provided with a segmental recess for the reception of the 100 breech-block B, and a longitudinal recess in the rear of that breech-block for the reception of the cascabel C, the breech-block B, adjusted J for the reception of the inner end of the to that segmental recess and provided with the

opening G, and the cascabel C, adjusted to that longitudinal recess and provided with the firing-pin D, the point of which is adapted to penetrate through the opening G in the breechblock B and to be driven into the rear end of a cartridge forward of that breechblock, all substantially as described.

2. The combination of the cascabel C, and the rod I, provided with the angular groove J and reciprocating on the stud K in a longitudinal recess in the piece A, all substantially as described.

LEVI T. SNOW.

Witnesses:

J. Newton Pierpont,
H. B. Bushnell.