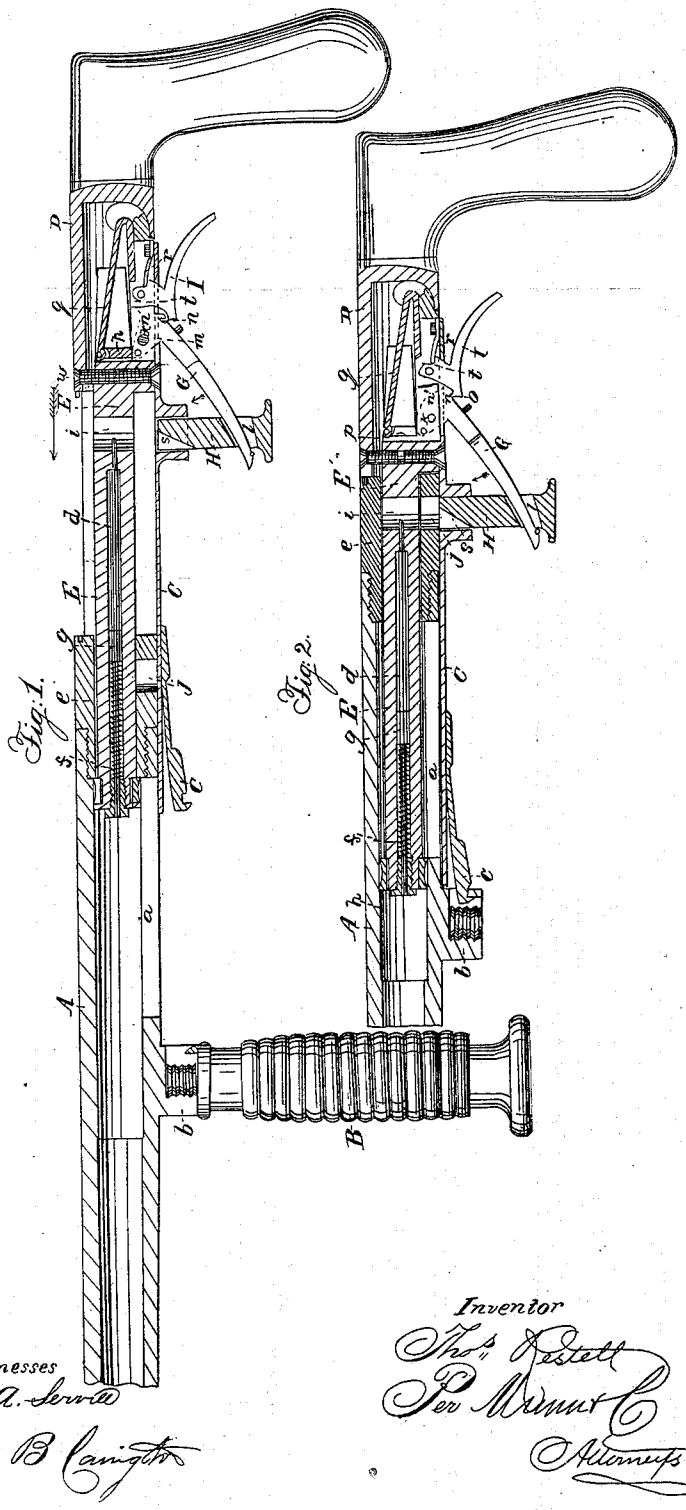
T. RESTELL.

Breech-Loading Fire-Arm.

No. 63,303 Patented Mar. 26, 1867.



Witnesses
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THOMAS RESTELL, OF LONDON, ENGLAND, ASSIGNOR TO CHARLES POMEROY BUTTON, OF NEW YORK CITY.

Letters Patent No. 63,303, *dated March* 26, 1867; *antedated March* 13, 1867.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, THOMAS RESTELL, of London, in the Kingdom of England, have invented certain new and useful improvements in Breech-Loading Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a longitudinal central section of this invention when the breech is open.

Figure 2 is a similar view of the same when the breech is closed.

Similar letters of reference indicate like parts.

This invention relates to certain improvements in breech-loading needle-guns, which are so constructed that they serve also as canes, and which are operated in an easy and simple manner.

A represents the barrel of my cane needle-gun, to the interior of which access can be had through an aperture, *a*, in its side, near to its rear end. From the outer surface of the barrel, near to the end of the aperture *a*, projects a nipple, *b*, which is bored out to receive the supporter B. The aperture *a* is opened and closed by a semicircular sleeve, C, which connects to the stock or handle D, and which when pushed forward is locked by a spring-latch, *e*, that catches in a suitable notch in the side of the nipple *b*, as clearly shown in fig. 2 of the drawing. To the sleeve C is secured a block, E′, from which extends the tube E, that forms the guide for the needle *d*, and said tube slides freely back and forth in a plug, *c*, which is screwed into the rear end of the barrel and bored out to receive the tube, as shown in the drawing. A spring *f*, which is enclosed in the tube E, and acts on a shoulder, *g*, of the needle, has a tendency to keep the needle in the position in which it is shown in the drawing, causing the rear end thereof to project beyond the tube E, while its front end or point is drawn in flush with the tube, or, more properly speaking, with a plug, *h*, which is screwed in the front end of the tube E, and which projects slightly beyond said tube so as to fit in a recess in the rear end of the cartridge. The rear end of the tube E opens in a hole, *i*, which is bored transversely through the block E′, and which forms the guide for the cylindrical hammer H. The screw plug *c*, which forms the guide of the tube E, is provided with a hole, *j*, and if the sleeve C is moved forward so as to close the aperture *a*, the hole *j* registers with the hole *i* in the block E′, and the hammer H can pass through both holes without obstruction. When the hammer is in it forms a lock, preventing the sleeve C from changing its position, and said sleeve cannot be moved back before the hammer is drawn clear out. Said hammer is subjected to the action of a lever, G, which has its fulcrum on a pivot, *k*, and passes through an oblique slot, *l*, near the outer end of the hammer. The fulcrum pin *k* of the lever G passes through a segmental projection, *m*, at the inner end of the lever, and said projection is provided with notches *n n′*, to engage with the hook *o* of the trigger I. The upper corner of the projection *m* connects by a strap, *p*, with the main-spring *q*, and by the action of said spring the lever G is turned in the direction of the arrow marked near it in the drawings. The trigger is subjected to the action of a spring, *r*, and if the hammer is pulled out to the position shown in the drawing, the hook of the trigger catches in the notch *n*, and retains the lever G against the action of the main-spring *q*. If the trigger is pressed in so that it releases the lever G, the hammer H flies in with considerable force, and by this motion the curved inclined plane *s*, at or near the inner end of said hammer, is brought to bear upon the rear end of the needle, driving said needle forward, and causing its front end to pierce the back plate of the cartridge and to explode the charge. From the rear end of the block E′ extends a dove-tailed tenon *t*, intended to receive and retain the stock or handle D, which is provided with a socket to correspond to the tenon *t*, and a screw, *u*, preserves the connection between the handle and the sleeve C. The lever G, together with the trigger I and springs *q r*, are connected to the tenon *t* and protected by the stock D.

In using the gun as a cane the supporter B is removed and carried in the pocket, and a suitable plug is inserted into the muzzle of the gun to guard the same against the entrance of mud or other impurities.

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

The reciprocating hammer H, with its curved inclined plane S and spring-lever G, in combination with the sleeve C and tube E, for operating the needle *d*, substantially as described, for the purpose specified.

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Witnesses:

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