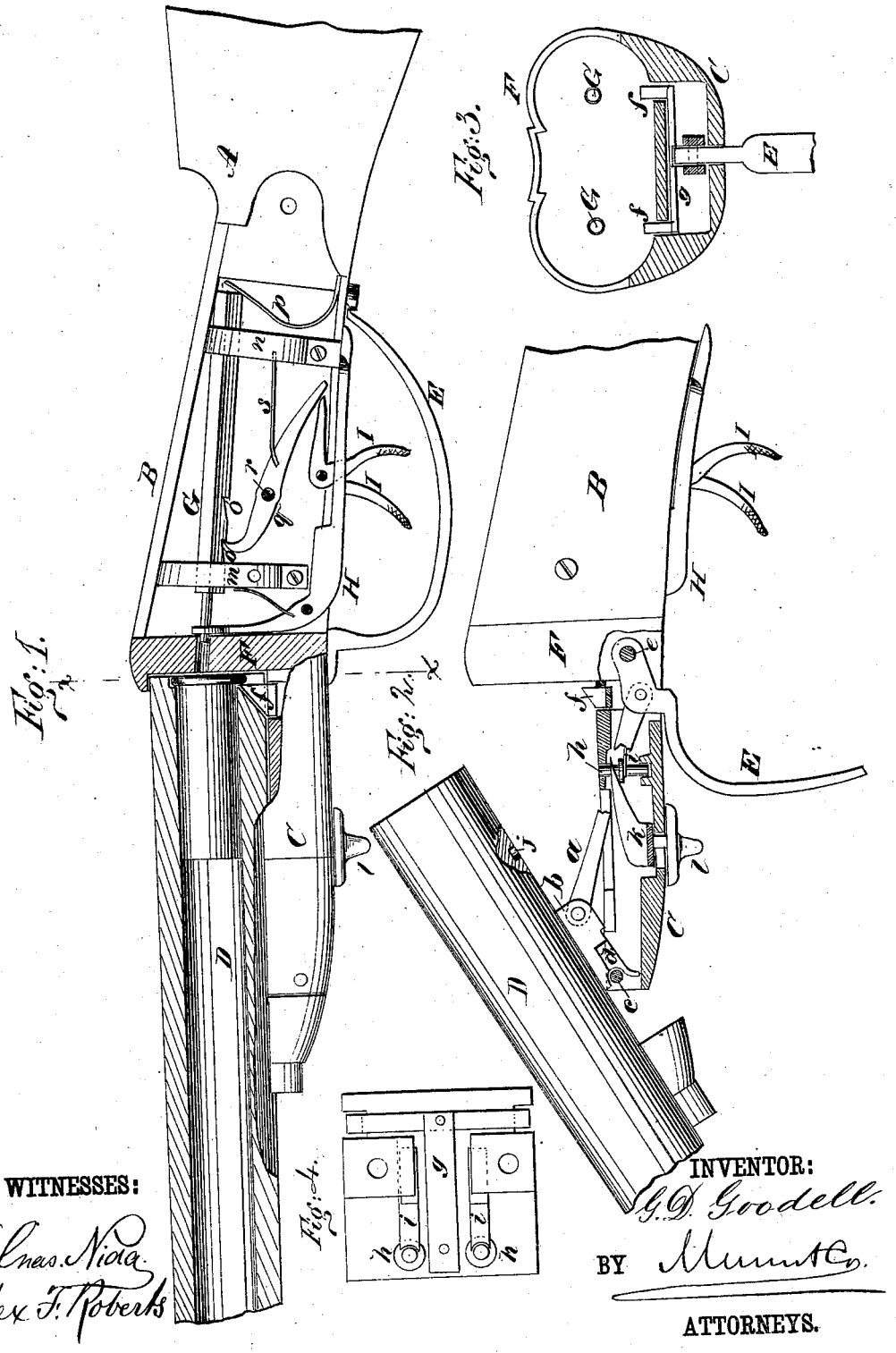
G. D. GOODELL.

Breech-Loading Fire-Arm.

No. 197,773. Patented Dec. 4, 1877.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE D. GOODELL, OF MIDDLETOWN, CONNECTICUT.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. **197,773**, dated December 4, 1877; application filed August 11, 1877.

To all whom it may concern:

Be it known that I, GEORGE D. GOODELL, of Middletown, in the county of Middlesex and State of Connecticut, have invented a new and Improved Breech-Loading Fire-Arm, of which the following is a specification:

Figure 1 is a longitudinal section of a gun containing my improvement. Fig. 2 is a side elevation, in part section. Fig. 3 is a transverse section on line *x x* in Fig. 1, looking toward the stock of the gun. Fig. 4 is an inverted plan view of the cartridge-retractor, and of a part of the locking device.

Similar letters of reference indicate corresponding parts.

The invention will first be described in connection with drawing, and then pointed out in the claim.

In the drawing, A is the stock of the gun, to which is attached the casing B, which contains the lock. The portion C of the stock that supports the barrel D is chambered and slotted in its upper surface to receive the link *a* and the ear *b*, attached to the barrel. A pin, *c*, extends transversely through this portion of the stock, and the forward end of the ear *b* is notched to receive it. Lugs *d* are formed on the sides of the ear *b*, and the slot in the part C is widened near the pin *c*, to admit of turning the ear *b* on the pin. The finger-guard E is pivoted to the breech-piece F at *e*, and is jointed to the link *a*, which latter is also jointed to the ear *b*.

By throwing the finger-guard E forward, the barrel D is first thrown forward until the notch in the ear *b* engages the pin *c*, and the lugs *d* are below the wider part of the slot in the part C; it then throws the breech of the barrel up, as shown in Fig. 2.

f f are nibs formed on a T-shaped spring, *g*, that is secured in the part C. These nibs project upward into notches cut in the lower side of the barrels, and engage the heads of the cartridges, and start them from the barrels, when the latter are thrown forward by moving the finger-guard F. Two bolts, *h*, are placed in the part C, and are thrown upward by springs *i*. These bolts are received by holes *j* in the lower side of the barrel and lock it, so that it cannot be moved forward. The bolts are disengaged by moving the sliding wedges *k* by means of the external thumb-piece *l*. These wedges engage collars formed on the bolts *h*, and draw them downward. The breech-piece F is recessed to receive the end of the barrels D, and is drilled opposite the center of each barrel to receive the end of hammer G. The hammer consists of a straight bolt, that passes through guides *m n*, and is provided with notches *o*. The hammer is thrown forward by a spring, *p*, and is thrown backward or cocked by a right-angled lever, H, that is pivoted in the lock-casing, and is provided within the lock with a forked end, that straddles the smaller part of the hammer-bolt, and when in use presses against a shoulder formed by reducing the diameter of the bolt. The longer arm of the lever H extends toward the stock, under and parallel to the lock-casing, and is provided with a thumb-piece. A dog or pawl, *q*, is pivoted at *r*, and provided with a spring, *s*, that throws it into the notches *o* in the hammer G. I is a trigger for tripping the dog *q*.

The improvement is applicable to either single or double barreled guns. When applied to a double-barreled gun, the parts on both sides are alike, with the exception of the triggers, one of them being bent so that it stands behind the other.

The advantages claimed for my improvement are, that it is extremely simple, and not liable to get out of repair. The hammers are concealed, so that the gun cannot be discharged accidentally, and the improvements may be readily adapted to muzzle-loading guns, thereby converting them into breech-loaders.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The bolt *h*, spring *i*, and sliding wedge *k*, in combination, substantially as shown and described.

GEORGE DUMER GOODELL.

Witnesses:

T. B. AVERY,

JOHN R. SMITH.