T. A. WASHINGTON.

Breech-Loading Fire-Arm.

No. 15,990 Patented Oct. 28, 1856.

Fig. 1

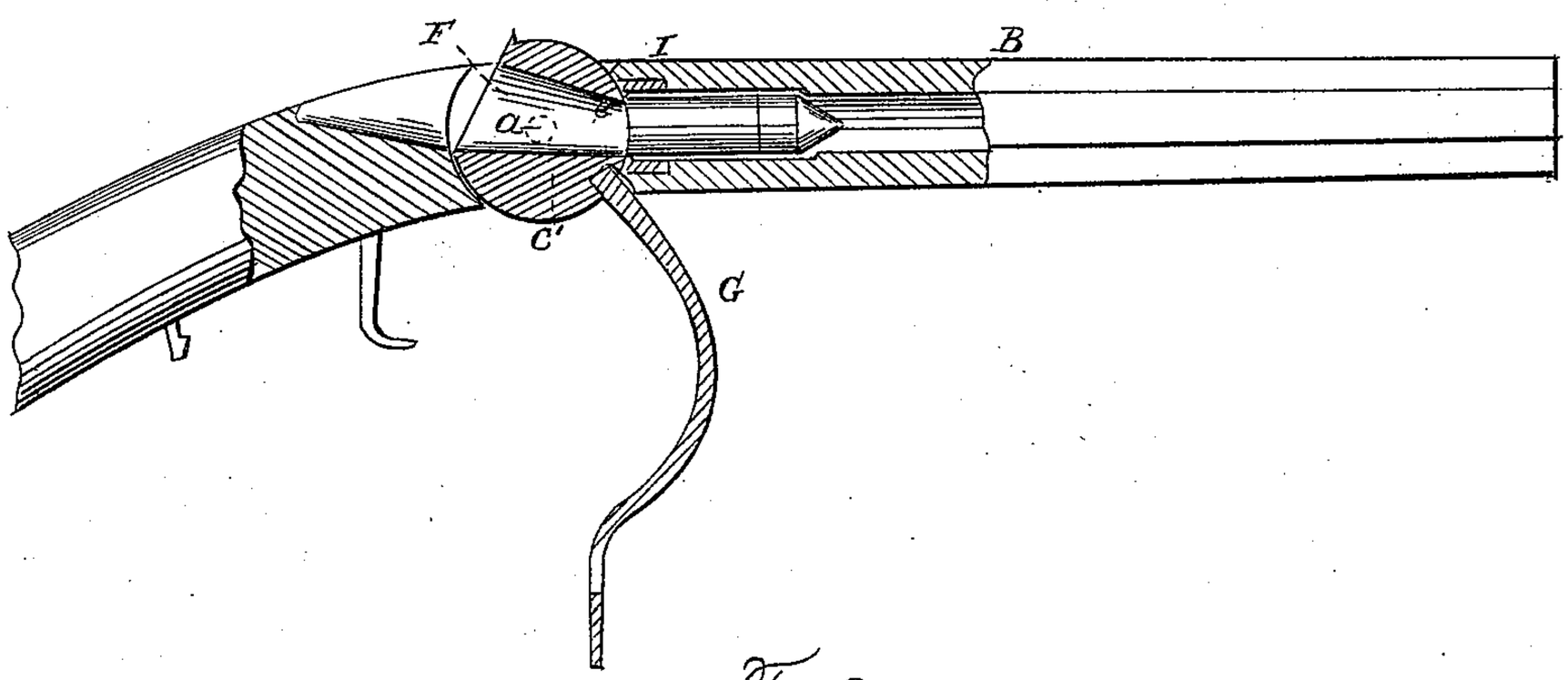


Fig. 2.

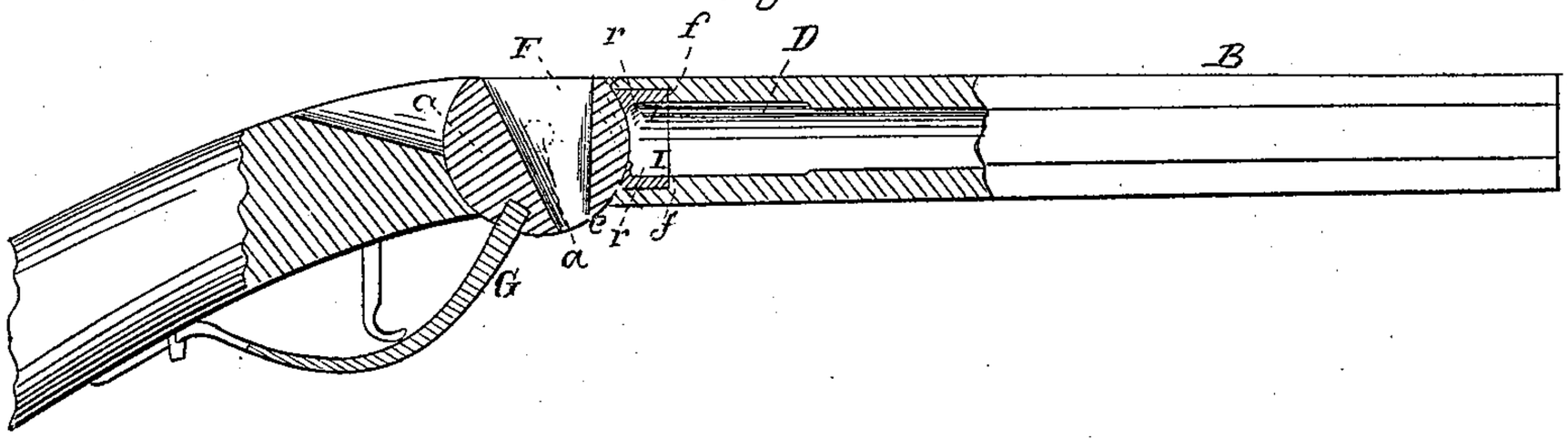
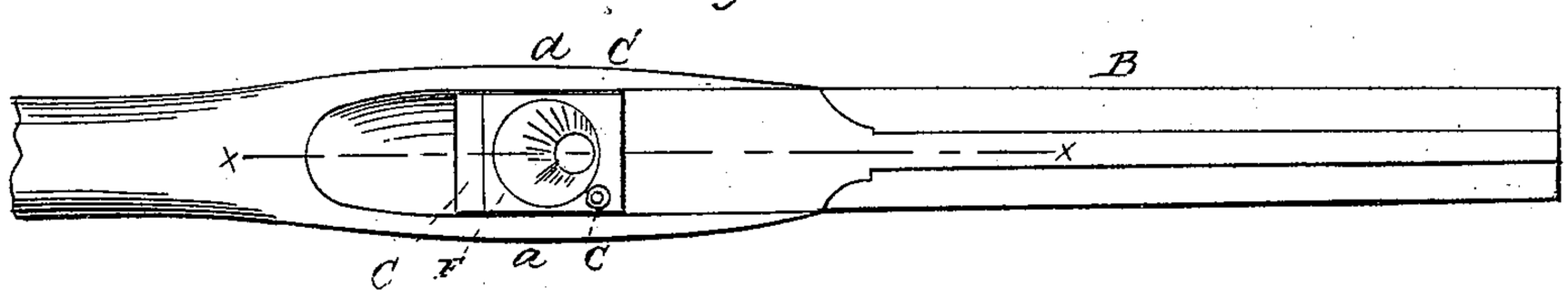


Fig. 3.



UNITED STATES PATENT OFFICE.

T. A. WASHINGTON, OF UNITED STATES ARMY.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. **15,990**, dated October 28, 1856.

To all whom it may concern:

Be it known that I, THORNTON A. WASHINGTON, of the United States Army, have invented a new and useful Improvement in Breech-Loading Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, forming part of this specification, in which—

Figure 1 is a section of breech and chamber on line *x x* and through axis of bore, the breech being in position for loading. Fig. 2 is a similar view showing the breech closed. Fig. 3 is a top view of the fire-arm with breech in position of Fig. 2.

Similar characters of reference in the several figures denote the same part of the fire-arm.

The nature of my invention consists in constructing the arm with a cylinder-breech capable of a partial rotation on trunnions, and having a funnel-shaped opening in the same, through which the cartridge is passed to the chamber when the breech is so revolved as to bring said passage coincident with the bore, the axis of the opening being at right angles to that of the bore when the piece is loaded. There is within the chamber a small cylinder with a rim on the interior of the lower base, which rests against the revolving cylinder, the action of which will be hereinafter set forth.

In the drawings, B is the barrel, and C the cylinder constituting the breech. It is held by trunnions *a a*, resting in the cheek-plates *c c*, and partially rotated by the lever G, constituting the guard.

Through the breech-cylinder is the funnel-opening F, made coincident with the bore by revolving the breech, as shown in Fig. 1. This permits the insertion of the cartridge, the end of which is cut off by the lower edge, *e*, of opening F as said cylinder is carried into the position shown in Fig. 2, the loose powder and paper falling to the ground through the opening.

In the base of the chamber D is the small cylinder *i*, with a small rim, *r*, projecting within the chamber, so that when the discharge takes place the expansive force of the gas is exerted against this rim, tending to throw the cylinder to the rear and violently compressing it against the revolving cylinder C, temporarily closing the joint and preventing the escape of gas. This interior cylinder cannot be displaced, as it is held between the shoulder *f* and the breech-cylinder.

The advantages of this construction consist in the close joint made by the breech and small cylinder *i*, and in the carrying downward of the cuttings from the base of the cartridge.

I make no claim to the removal of the breech-piece, so as to expose the base of the bore to receive the cartridge, as such construction would be inconsistent with my mode of closing the joint; neither do I claim of itself a revolving perforated breech; but

I claim—

The revolving cylinder-breech C, having the funnel-passage F, and the interior flanged cylinder, *i*, in combination with the chamber D and breech-seat, arranged and operating substantially as and for the purposes specified.

In testimony whereof I have hereunto signed my name before two subscribing witnesses.

T. A. WASHINGTON.

Witnesses:

E. D. BLAKE,

JOHN R. SHERIDAN.