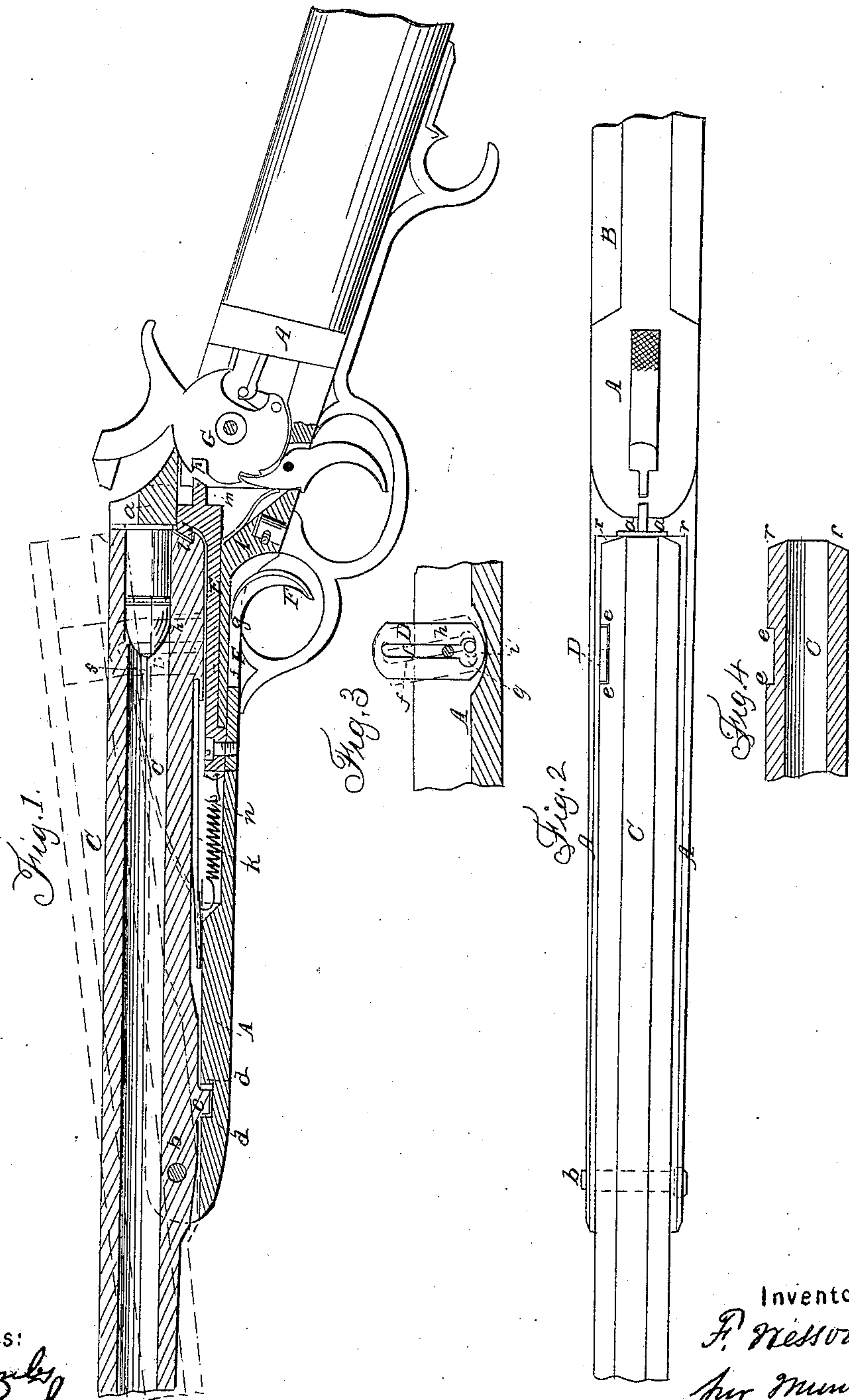


F. WESSON.

Breech-Loading Fire-Arm.

No. 36,925.

Patented Nov. 11. 1862.



Witnesses:
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UNITED STATES PATENT OFFICE.

FRANKLIN WESSON, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 36,925, dated November 11, 1862.

To all whom it may concern:

Be it known that I, FRANKLIN WESSON, of Worcester, in the county of Worcester and State of Massachusetts, 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 of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a central longitudinal vertical section of the frame and lock and parts of the stock and barrel of a fire-arm with my improvements. Fig. 2 is a top view corresponding with Fig. 1. Fig. 3 is a side view of the link which arrests the barrel in the proper position for loading. Fig. 4 is a horizontal section of the rear portion of the barrel.

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

This invention relates to that class of breech-loading fire-arms in which the opening and closing of the breech is provided for by an upward and downward swinging movement of the barrel on a transverse pin, which attaches it to the frame.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A is the frame, having the breech *a* made in the same piece with it, and attached permanently and rigidly to the stock B, in the usual manner.

b is the transverse pin which attaches the barrel C to the frame, and upon which the movement of the barrel to open and close the breech is performed, said pin being applied in the usual manner.

c is a projection on the side of the barrel, entering a notch, *d*, in the frame A, and serving to sustain the breech against recoil, thus relieving the pin *b* wholly or to a great extent of the strain of the recoil.

D is the slotted slide-link, consisting of a flat piece of steel plate fitted in a groove, *e*, provided for its reception in one side of the barrel, near the rear end thereof, and having its outer face flush with the side of the barrel, that it may work within the frame A, and its slot *f g* extends in a straight form nearly from top to bottom, and from the bottom it is cut transversely in both directions. The long straight portion *f* of the slot receives a small

pin, *h*, which is secured in the barrel within the groove *e*, and near the bottom thereof, and the short transverse portion *g* of the said slot receives the end of a pin, *i*, which is screwed through one side of the frame A. The movement of the barrel to open the breech, produced by the spring *k* under the barrel, is stopped when the breech is properly opened by the pin *h* coming in contact with the top of the part *f* of the slot, and in such movement of the barrel, owing to the slide-link fitting into the groove *e* in the barrel, the lower part of the said link is required to move back and forth, and it is to permit this movement that the lower portion, *g*, of the slot is cut transversely to the portion *f*, which is parallel with the sides of the link.

The operation of the link is illustrated in Fig. 3, in which the said link is shown in black and red outline in the relative positions it occupies when the breech is closed and open. This link makes a very strong and a very safe stop to the barrel, and is so applied as to be out of the way, and not to weaken the frame.

E is the bolt, which secures the barrel when in the position in which the breech is closed. This bolt is arranged to slide in a groove in the interior of the bottom of the frame A, and is provided with a hook, *j*, at its rear end, to enter a notch, *l*, in the rear end of the barrel, and has a spring, *n*, attached to its front end, to draw it forward and draw and hold its hook in the notch *l*, and has attached to it a trigger, F, which works through a slot in the bottom of the frame. The upper side of the hook *j* and the lower edge of the rear end of the barrel are beveled, to allow the latter to press the bolt forward in the act of closing the barrel. On the rear end of this bolt there is formed a tongue, *m*, of a form to enter a deep notch, *p*, in the tumbler or butt G of the hammer, said notch being so arranged as to be opposite to the said tongue when the hammer is at half-cock, and the point of the said tongue, when the bolt E is in position to lock the barrel, occupying a position just outside of the circle of the tumbler or hammer butt, so that any attempt to draw back the bolt by the trigger F to unlock the barrel, except when the hammer is at half-cock, will be unsuccessful, the point of the tongue *m* coming in contact with the tumbler or hammer butt and being stopped; but by pulling back the said trigger when the

hammer is at half-cock the bolt will be allowed to come back by the entrance of the tongue into the notch *p*.

The beveling of the rear end of the barrel on oppositesides of the bore, to facilitate the withdrawal from the barrel by the fingers of the discharged cartridge-shells or of cartridges which have failed to be fired, is best illustrated in Fig. 4 at *rr*. The bevels *rr* may commence close to the bore and then extend in a forward direction to the sides of the barrel.

I do not claim as my invention the providing of the rear end of the barrel with a tongue to fit into the butt of the hammer.

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

1. The combination of the double-slotted oscillating link *D* and pins *h i* with the frame *A* and barrel *C*, in the manner herein shown and described.

2. The combination of the tongue *m* with the locking-bolt *E*, as herein shown and described.

FRANKLIN WESSON.

Witnesses:

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