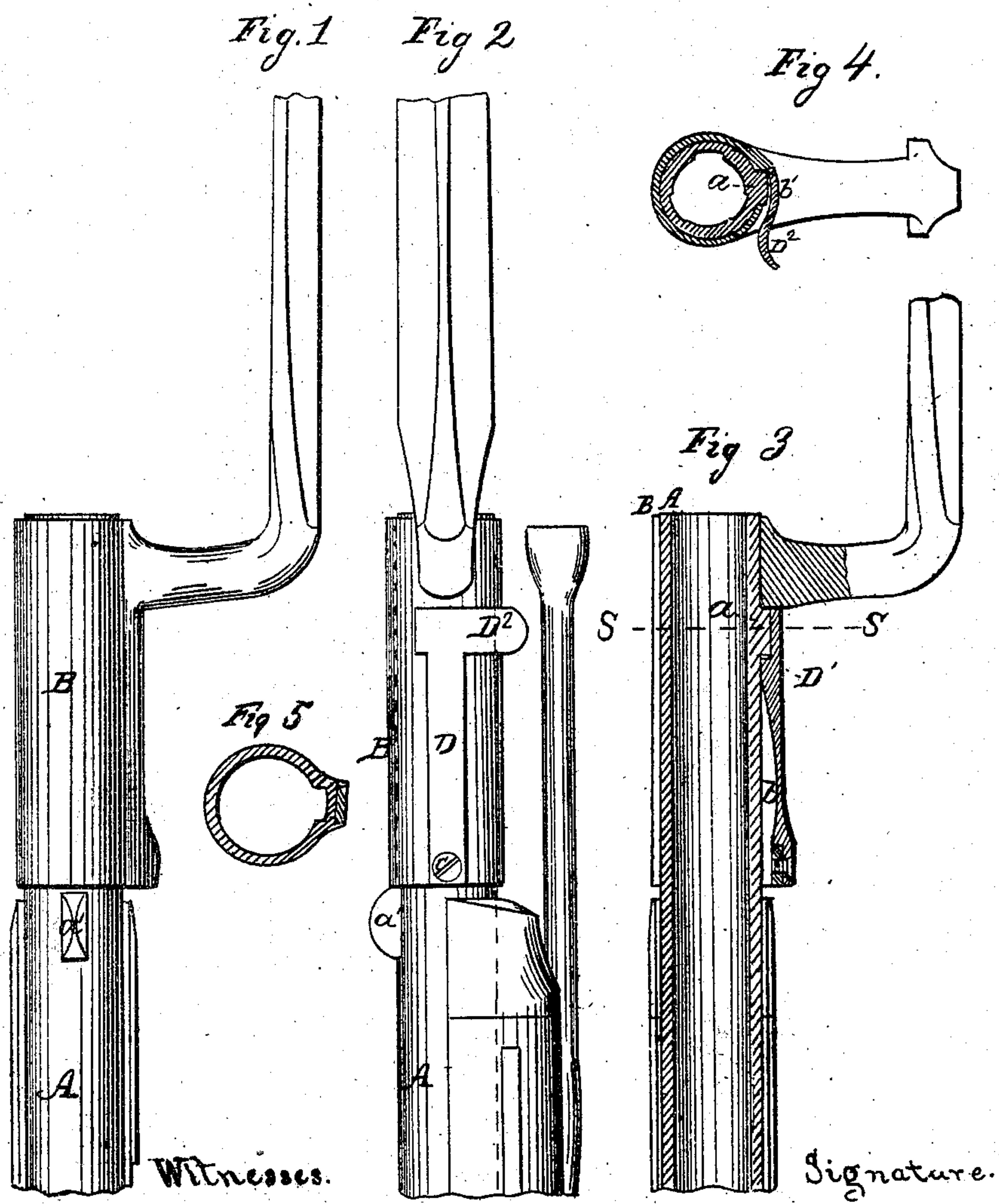


P. A. OLIVER.

Bayonet.

No. 67,210.

Patented July 30, 1867.



Witnesses.

Signature.

*Wm C. Day*  
*Campbell & Livings*

*Paul A. Oliver*



# United States Patent Office.

PAUL A. OLIVER, OF ELIZABETH, NEW JERSEY.

Letters Patent No. 67,210, dated July 30, 1867.

## IMPROVEMENT IN BAYONET-ATTACHMENT.

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, PAUL A. OLIVER, of Elizabeth, in the county of Essex, and State of New Jersey, have invented a certain new and improved Means of Securing Bayonets; and I do hereby declare that the following is a full and exact description thereof.

The ordinary bayonet-joint is very strong, to resist a direct pull, but the friction which aids in securing it is always liable to be either so great as to seriously obstruct the fixing of the bayonet in a sudden emergency, or so slight as to allow the bayonet to become loose. It is common to have bayonets dropped off from muskets in performing movements on the "double-quick," in consequence of the mere shaking of the arms in the hands of the soldiers.

My invention consists in the employment of a spring catch, peculiarly arranged to relieve the spring from all thrusting strain, to avoid risk of accidental unlocking, to lock the bayonet by a positive action of the spring, and allow it to be applied by a single straight and easy movement of the hand. The bayonet may be liberated by deflecting the spring by the third finger—the middle finger—of the right hand, while the other fingers lie along the socket, and the thumb along the inside of the blade, while the ramrod effectually guards against unlocking by a well-directed or accidental blow from the enemy's bayonet. This is an operation which cannot take place accidentally in any use of the arm. I will now proceed to describe what I consider the best means of carrying out my invention:

Figure 1 is a side elevation, showing a face view of the spring.

Figure 2 is a view at right angles to fig. 1.

Figure 3 is a central longitudinal section; and

Figure 4 is a cross-section on the line S S, in fig. 3.

Figure 5 is a cross-section of the bayonet-socket on the line T T.

The figures show the novel parts, with so much of the other parts as is necessary to indicate their relation thereto. Similar letters of reference indicate like parts in all of the figures.

A is the barrel of the musket, carbine, or other arm to which the bayonet is attached; *a* is the projection thereon by which the bayonet is secured, and *a'* is the sight. B is the socket which forms the connecting portion of the bayonet, and *b* is a groove extending longitudinally along the interior of the socket B. This groove *b* is of such size as receives the projection *a*, and allows the bayonet to slip freely down upon the barrel A. C is a screw which secures the locking-spring D, formed as represented, which is mounted so as to hold the angular catch D<sup>1</sup> in an open position or slot, *b'*, which extends quite through into the groove *b*, as represented. D<sup>2</sup> is a side wing, which is adapted to receive the action of the finger or of any convenient tool to lift the spring D D<sup>1</sup>, and thus liberate the bayonet.

By my construction and arrangement, the locking-spring secures the bayonet against accidental removal, without receiving any of the thrusting strain. It is only strained when any force is applied to improperly remove the bayonet. Thrusting strain will generally be received, in part at least, on the end of the stock, which is prolonged to touch the base of the bayonet-socket, but in any event it will not be thrown on the spring. In case the stock is a little shorter than usual, as represented, the thrusting strain will be received on the projection *a*. My bayonet can be unfixed in less time and by more direct movements than the ordinary arrangement. My bayonet is represented as the ordinary triangular-formed weapon, but any approved form of sword bayonet or analogous weapon may be used in its stead, if preferred. I do not confine myself to any form of the effective portion of the bayonet, or to any exact condition or kind of fire-arm to which it is attached. In fixing the bayonet, it is simply necessary to apply the socket B upon the muzzle of the piece A, in such position that the spline *b* shall come in line with the projection *a*, and to slide the bayonet directly down upon the barrel. This movement causes the bayonet to fix itself. It first lifts the spring D, and afterward allows it to snap into position and hold the bayonet when it is fully in place. To unfix the bayonet, the spring catch D D<sup>1</sup> is deflected outward by the pressure of the middle finger or otherwise, until the angle of the catch D<sup>1</sup> will pass outside of the knob *a*. In this condition, the bayonet is withdrawn by sliding it directly off. The thrusting strain is received on the projection *a*, without any strain on the spring D.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows:

I claim a spring catch, D D<sup>1</sup>, arranged, as represented, relatively to the bayonet-socket B A, and adapted to operate relatively to the barrel A and projection a, or its equivalent, substantially in the manner and for the purpose herein specified.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

PAUL A. OLIVER.

Witnesses:

HENRY M. COLLYER,

WM. C. DEY.