Aug. 5, 1924. 1,504,073

S. L. MOORE

DISAPPEARING BAYONET

Filed March 26, 1924

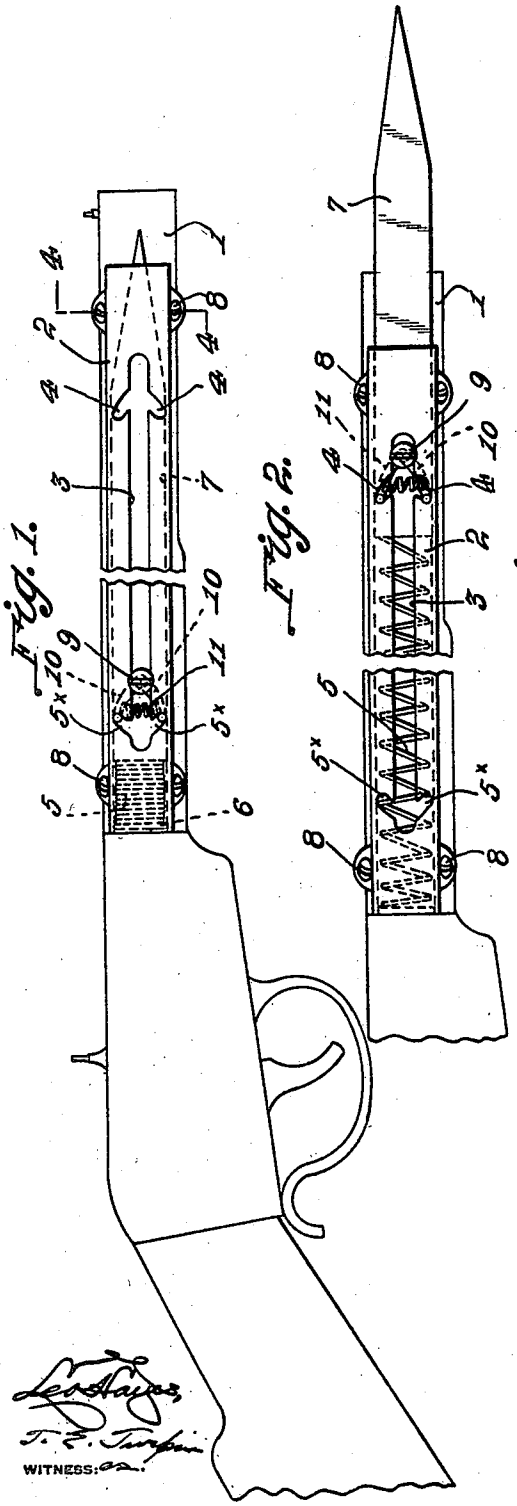

Fig. 1.

Fig. 2.

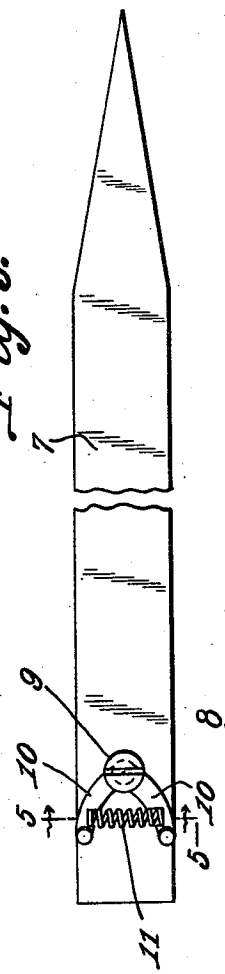

Fig. 3.

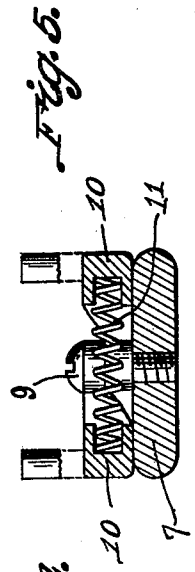

Fig. 5.

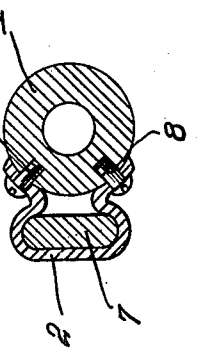

Fig. 4.

WITNESS:

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UNITED STATES PATENT OFFICE.

SIMMIE L. MOORE, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO EDWARD MONTGOMERY, OF ST. LOUIS, MISSOURI.

DISAPPEARING BAYONET.

Application filed March 26, 1924. Serial No. 702,087.

To all whom it may concern:

Be it known that I, SIMMIE L. MOORE, a citizen of the United States, residing at St. Louis, in the county of St. Louis and State of Missouri, have invented new and useful Improvements in Disappearing Bayonets, of which the following is a specification.

My present invention pertains to bayonets for use on rifle barrels and particularly the type of bayonet that is normally disposed in a sheath and is projected for use when needed.

The object of my said invention is to provide a bayonet construction of the type indicated that is simple and inexpensive, compact, and reliable and quick in action.

To the attainment of the foregoing, the invention consists in the improvement as hereinafter described and definitely claimed.

In the accompanying drawings, forming part of this specification:—

Figure 1 is a view illustrating the arrangement of my improvement relative to a rifle barrel, and with the bayonet blade housed in its sheath.

Figure 2 is a similar view with the bayonet blade projected so as to rest in working position with its forward portion in advance of the mouth of the barrel.

Figure 3 is a broken view of the bayonet and its appurtenances.

Figure 4 is a cross-section on line 4—4 of Figure 1.

Figure 5 is an enlarged section on the line 5—5 of Figure 3.

Similar numerals of reference designate corresponding parts in all of the views of the drawings.

The rifle barrel 1 is of the ordinary well known construction, and in accordance with my invention a sheath 2 is arranged longitudinally of the barrel 1 and alongside thereof and is appropriately fixed with respect to the barrel so that the forward end of the sheath 2 rests adjacent to though slightly in rear of the mouth of the barrel. The said sheath 2 is provided in its side remote from the barrel 1 with a longitudinal slot 3. The said slot 3 is provided adjacent to its forward end with two lateral and rearwardly divergent arms 4, and near its end the said slot is provided with two arms $5^{\times}$ disposed substantially at right angles thereto.

In the rear end of the sheath 2 is housed a coil spring 5 which abuts at its rear end against the rear closed end 6 of the sheath. The bayonet which is slidably arranged in the sheath 2 is designated by 7 and its rear or heel end is opposed to the forward end of the spring 5 as shown, the function of the said spring 5 being to quickly and forcibly impel the bayonet or blade 7 forwardly when the said bayonet or blade 7 is released as hereinafter described.

In the illustrated embodiment the sheath 2 is shown as fixed by pins 8 to the barrel 1, but as before indicated it is within the purview of my invention to fix the sheath 2 alongside of and with respect to the barrel 1 in any manner compatible wth the purpose of my invention.

Attached by a screw 9 or other appropriate means to the bayonet 7 is a lever 10 which is of brace type and is equipped with a spring 11 for the purpose of forcing the lever open, the lever being made up of members subject to the action of the spring 11, and being adapted when the bayonet 7 is restricted to cooperate with the arms $5^{\times}$ in strongly retaining the bayonet in retracted state and fully housed in the sheath 2, and the said lever being also adapted when the bayonet is released and impelled forwardly to working position to automatically work into the arms 4 of the slot 3 so as to strongly and safely maintain the bayonet in advanced position without liability of the bayonet being adapted to casually move rearward relative to the barrel 1 and the sheath 2.

Manifestly the lever 10 constructed as described may be depended upon to hold the bayonet in retracted position against the action of the spring 5, and yet when the said lever 10 is displaced from the arms $5^{\times}$, it will be noted that the bayonet will be promptly forced to working position whereupon the members of the lever 10 by coaction with the slot arms 4 will preclude casual rearward movement of the bayonet. In this latter connection it will be appreciated that the rearward divergence of the slot arms 4 will attend to preclude accidental displacement of the lever members from the arms 4, and yet when it is desired to sheath the bayonet in the housing tube or sheath 2, the lever members may be manually removed from the arms 4 following a slight forward movement of the bayonet. I would also have it understood that in the preferred embodiment of my invention the spring 5 is connected at

one end to the heel end of the bayonet 7, and said spring is connected at its rear end to the closed rear end of the sheath 2.

It will be apparent from the foregoing that my improvement is at once reliable in operation, and is simple and durable in construction, being made up of very few elements none of which is delicate or otherwise likely to get out of order incident to the usage to which rifles are ordinarily subjected.

I have entered into a detailed description of the construction and relative arrangement of the parts embraced in the present and preferred embodiment of my invention in order to impart a full, clear and exact understanding of the said embodiment. I do not desire, however, to be understood as confining myself to the specific construction and relative arrangement of parts inasmuch as in the future practice of the invention various changes and modifications may be made such as fall within the scope of my invention as defined in my appended claims.

Having described my invention, what I claim and desire to secure by Letters-Patent, is:—

1. In a disappearing bayonet construction, a sheath adapted to be fixed alongside a rifle barrel and closed at its rear end and having an exposed longitudinal slot extending throughout a considerable portion of its length, said slot provided near its rear end with lateral arms and near its forward end with lateral rearwardly divergent arms, a bayonet movable rectilinearly in said sheath and adapted in one position to be fully housed therein and in another position to project beyond the sheath, a coiled spring housed in the sheath and interposed between the heel ends of the sheath and bayonet, and a sectional spring actuated lever carried on the bayonet and adapted to cooperate with the said lateral arms of the slot.

2. In a disappearing bayonet construction, a sheath adapted to be fixed alongside a rifle barrel and closed at its rear end and having an exposed longitudinal slot extending throughout a considerable portion of its length, said slot provided near its rear end with lateral arms and near its forward end with lateral rearwardly divergent arms, a bayonet movable rectilinearly in said sheath and adapted in one position to be fully housed therein and in another position to project beyond the sheath, a coiled spring housed in the sheath and interposed between the heel ends of the sheath and bayonet, and a sectional spring actuated lever carried on the bayonet and adapted to cooperate with the said lateral arms of the slot; the said sections or members of the said lever being disposed at opposite sides of the lever spring and movable at right angles to the line of movement of the bayonet, and the coiled spring in the sheath being connected at its ends to the heel of the sheath and the heel of the bayonet.

In testimony whereof I affix my signature.

SIMMIE L. MOORE.