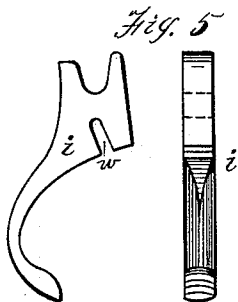
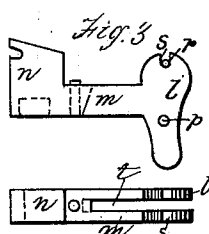
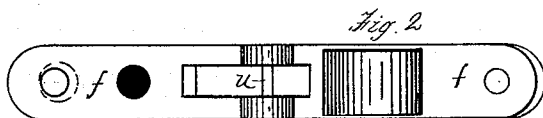
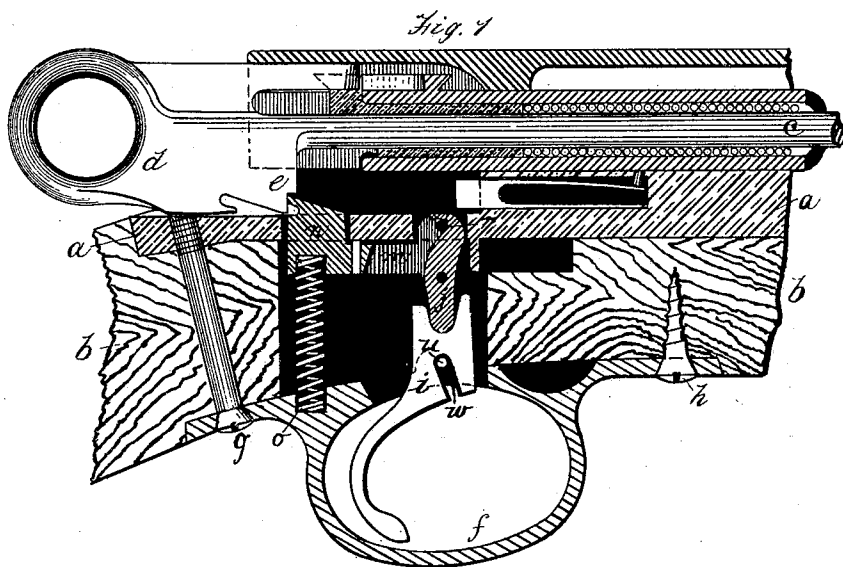


(No Model.)

T. B. WILSON.
LOCK FOR BOLT GUNS.

No. 571,608.

Patented Nov. 17, 1896.



Witnesses
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UNITED STATES PATENT OFFICE.

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LOCK FOR BOLT-GUNS.

SPECIFICATION forming part of Letters Patent No. 571,608, dated November 17, 1896.

Application filed May 23, 1892. Serial No. 433,986. (No model.)

To all whom it may concern:

Be it known that I, THOMAS B. WILSON, a citizen of the United States of America, residing in Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Firearms, of which the following is a specification, reference being had to the accompanying drawings and letters of reference marked thereon.

My invention relates more particularly to the construction of the lock mechanism for firearms, and although I have illustrated my invention as applied to a bolt-gun the same may without material alteration be applied to other constructions of firearms.

In the accompanying drawings, in which like letters of reference indicate like parts, Figure 1 is a side view in section of my device as applied to a bolt-gun. Fig. 2 is a top view of the trigger-guard removed from the stock. Fig. 3 is a side and top view of the sear. Fig. 4 is a side and top view of the latch, and Fig. 5 is a side and edge view of the trigger.

In detail, *a* indicates the receiver-frame. *b* indicates the stock; *c*, the firing-pin spindle; *d*, the cocking-piece; *e*, the nose or engaging point upon the same. *f* indicates the trigger-guard; *i*, the trigger; *j*, the latch; *l*, the sear-head; *m*, the sear-body; *n*, the sear-nose, and *o* the sear-spring.

The construction is such that the whole of the lock mechanism may be removed from the firearm by the removal of the guard.

The sear is constructed as shown in Figs. 1 and 3, the same being provided at one end with a head *l* and at its opposite end with a nose or engaging point *n*. The sear is formed with a vertical slot *t*, as shown in Fig. 3, and a latch *j* fits and is pivotally mounted in the slot. The upper portion of the head of the sear is provided with a transverse slot or recess *s*, and a pin *r* is fixed within the lock-recess of the arm in the requisite position, and when the sear is mounted in the recess in the arm the latch is turned upon its pivot *p* to carry its hooked portion away from the slot *s*. The sear is then placed within the lock-receiving recess, the pin *r* entering the slot *s*, after which the latch is turned upon its

pivot to carry the hooked or overhanging portion toward the slot *s*, thus closing the open side of the slot and preventing the sear being moved in any direction so long as the latch is maintained in its closed position. This construction enables me to insert or remove the sear without drawing or inserting pins.

The upper portion of the trigger *i* is provided with a recess into which the lower end of the head of the sear rests, and as the head of the trigger is moved in either direction the lower end of the head of the latch will be carried with it, causing the sear to turn upon its pivot *r* and moving the nose up or down. When, therefore, the finger-piece of the trigger is drawn rearwardly, the lower end of the head of the sear will be carried forward and the nose of the sear will be drawn downwardly until it escapes from the engaging nose on the cocking-piece, thus allowing the mainspring to carry the spindle forward and discharge the arm.

The tendency of the sear-spring *o* is to maintain the nose of the sear at all times in an elevated position, so that upon the arm being cocked the sear automatically returns to its first position and there remains until again drawn out of engagement.

The trigger is pivotally supported upon a pin *u*, which I prefer should be permanently fixed in the trigger-guard, and I slot the lower portion of the trigger-head to allow the same to be dropped over its pivotal support, thus rendering the separation of the parts convenient and avoiding the liability of loosing the pivotal pin were the same removed from the guard.

The upper face of the trigger-guard is provided with a recess to receive the end of the sear-spring *o*, and the sear-nose is provided with a like recess to receive the opposite end of the spring.

It will readily be seen that any other form of spring may be employed, if desired.

The mechanism is assembled by turning the latch on its pivot to carry its nose away from the opening in the head of the sear. The sear is then placed in position and the latch turned on its pivot to cause its nose to cover the opening in the head of the sear and thus set over the pin *r*. The trigger is then passed

through the slot in the trigger-guard until the open slot in the trigger passes over the pin *u*. The spring is then placed in position and the trigger-guard screwed in place.

5 I am aware of Letters Patent for straight-pull breech-loading gun issued to S. and R. Kranka December 20, 1890, and numbered 441,673, wherein is shown a trigger provided with a slot in its upper portion, and I make
10 no claim to the construction shown in said patent.

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

15 1. The combination of a sear provided with an engaging portion *n* at one end, a head *l* at the opposite end projecting above and below the body portion *m*, and pivotally mounted at the upper portion *s* of the head, a trigger
20 arranged to engage the lower portion of the head and a sear-spring, substantially as and for the purposes stated.

2. The combination of a sear having a body portion *m*, a nose *n* and a head *l*, a latch to close the pivoted slot pivoted to the head, a
25 trigger *i* provided with a recessed head to receive the lower end of the head of the sear, a trigger-guard and a spring *o*, all in combination with a firearm, substantially as shown.

30 3. The combination in a firearm of a sear, consisting of a body portion *m* a head *l* and engaging part *n*, a detachable trigger-guard provided with a spring-receiving recess, and a spring mounted therein, and bearing at one
35 end directly against the sear, immediately below the engaging end and a trigger, substantially as and for the purposes stated.

4. The combination of a sear provided at one end with a slot *s*, a latch pivotally mounted
40 on the sear and arranged to close the open side of the slot *s*, a trigger arranged to oper-

ate the sear, a spring, and a pin *r*, engaging the slot *s* substantially as shown.

5. The combination in a firearm provided with a lock-receiving recess and having a pin
45 *r* mounted therein, of a sear provided with an engaging nose, and with a transverse slot *s*, to engage the pin *r*, a latch arranged to cover the open side of the slot *s*, a trigger arranged to operate the sear and draw the nose
50 out of engagement, a spring arranged to return the nose to its normal position, and means to support the spring and trigger, substantially as and for the purposes stated.

6. The combination in a firearm having a
55 lock-receiving recess, of a pin *r* transversely mounted therein, a sear having a body *m*, a nose *n* and a head *l*, the latter being slotted transversely in its upper portion to receive the pin *r* and being projected downwardly to
60 engage the trigger, a latch *j* mounted upon the sear and arranged to close the open side of the slot *s*, a trigger *i* pivotally mounted in the trigger-guard and provided with a recess
65 in its head to receive the depending portion of the head of the sear, and a spring arranged to return the nose of the sear to its normal position, substantially as and for the purposes stated.

7. The combination in a firearm-lock mechanism of a removable trigger-guard having a
70 slot through it for the passage of the trigger a pin *u* mounted transversely across said slot, a trigger provided with a slot opening downwardly to set over the pin, a sear and a
75 spring, substantially as and for the purposes stated.

THOMAS B. WILSON.

Witnesses:

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