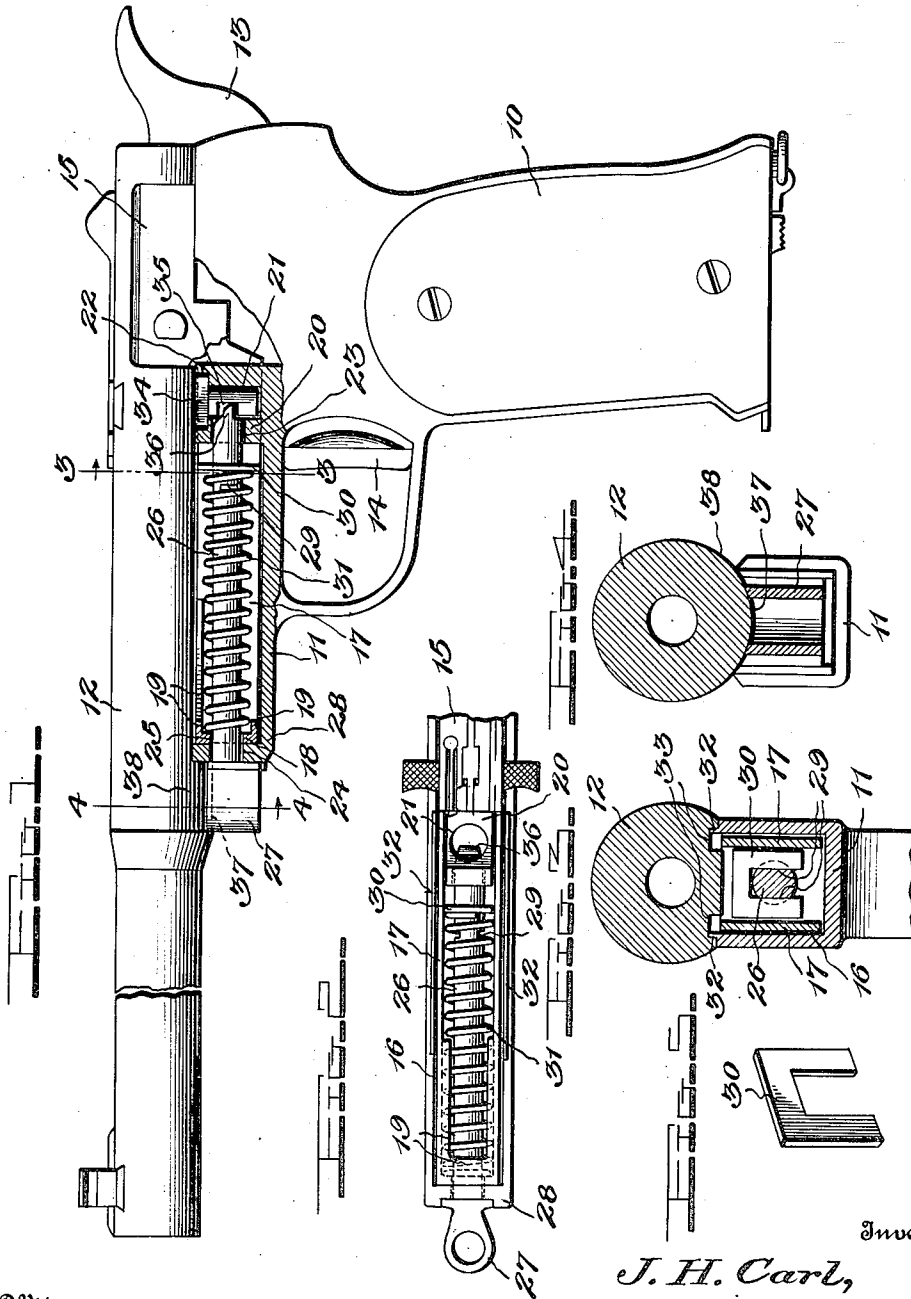


1,118,330.



J. H. Carl,

Witnesses:
Chas. L. Griebauer.

Wayne M. Idart



 Attorney

UNITED STATES PATENT OFFICE.

JOHN HOWARD CARL, OF GILROY, CALIFORNIA.

AUTOMATIC FIREARM.

1,118,330.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN HOWARD CARL, a citizen of the United States, residing at Gilroy, in the county of Santa Clara and State of California, have invented certain new and useful Improvements in Automatic Firearms, of which the following is a specification.

This invention relates to firearms and has special reference to a demountable recoil loading firearm.

The principal object of the present invention is to provide a novel arrangement of means for locking the barrel on the stock or frame of such a firearm wherein the bolt retracting spring shall also serve to hold the locking pin for the barrel in locking position.

A second object of the invention is to provide an improved detent for the barrel in such a firearm.

A third object of the invention is to provide improved means for holding the locking pin from rotation so that it may assist in forming the detent for the barrel.

A fourth object of the invention is to provide means on such locking pin for adjusting the tension of the bolt retracting spring.

With the above and other objects in view the invention consists essentially in the features and combinations hereinafter claimed.

In the accompanying drawings, like characters of reference indicate like parts in the several views, and: Figure 1 is a side elevation, partly in section, of a firearm embodying this invention. Fig. 2 is a plan view of the forestock, the barrel being removed. Fig. 3 is a section on the line 3—3 of Fig. 1. Fig. 4 is a section on the line 4—4 of Fig. 1. Fig. 5 is a detail perspective view of a certain adjusting stop or clip used in this invention.

It is to be understood that only those parts of this firearm that have to do with the objects to be accomplished, as hereinafter set forth, will be described in the present application specifically; the remaining parts being described in general.

In the present embodiment, as illustrated in the drawings, there is disclosed a firearm having a stock 10, forestock 11, barrel 12, hammer 13, trigger 14 and sliding bolt 15; these numerals indicating the respective parts in general.

The forestock 11 is provided with the

usual groove 16 wherein slides the bolt 15 which has its forward end formed with side portions 17 and an end portion 18, said side and end portions being provided with lips 19 which project inwardly as shown in Figs. 1 and 2.

Located in the groove 16 between the sides 17 of the bolt is a lug 20 which is provided with a vertical recess 21 having an enlarged mouth 22. Opening forwardly from this recess into the groove 16 is an opening 23. At the forward end of the forestock there is provided an opening 24 alining with the opening 23. In like manner, the portion 18 of the bolt is provided with an opening 25 which, when the parts are assembled, alines with the openings 23 and 24. Slidable through these openings is a pin 26 which is provided with a head 27 having parallel side edges fitting between ribs 28 on the front end of the forestock. The rear end of this pin is provided with a plurality of pairs of oppositely disposed notches 29 to receive the legs of a U-shaped clip 30 so that a coiled spring 31 may be placed around the pin with one end bearing against the clip and the other end bearing against the inner side of the portion 18 of the bolt thereby both holding the pin in position and constantly urging said bolt forward. Moreover, by shifting the clip from one pair of notches to another the tension of the spring may be varied. On the side walls of the forestock there are provided certain upstanding ribs 32 which are arranged to enter grooves 33 in the under side of the barrel 12 and said barrel is also provided with a shouldered lug 34, adapted to fit the recess 21, and having a locking notch 35 therein which, when the parts are assembled receives the beveled end 36 of the pin 26 so that the barrel is locked on the forestock. Now the rear end of the barrel is securely held by said lug 34 while the forward end is held by the ribs 32 and grooves 33 assisted by the concave upper surface 37 of the pin head 27 into which the circular portion 38 of the barrel seats.

To take down the firearm the pin is withdrawn sufficiently to release the lug 34 whereupon the barrel is lifted off. The clip 30 is then removed and the pin entirely withdrawn. Finally the spring is taken out and the bolt will then be left loose so that it can be removed. To assemble, the parts are put back in the reverse order.

There has thus been provided a simple and efficient device of the kind described and of the character specified.

Having thus described the invention, what is claimed as new, is:—

1. In a take-down firearm, a frame including a forestock, a bolt reciprocable in said frame and having a slotted front end, a recessed lug on said forestock in the groove of the frame, a locking pin extending through the front ends of said forestock and bolt and entering said lug, a removable clip on said pin adjacent the lug, and a spring surrounding said pin and bearing against said clip and the front end of the bolt, said spring serving to hold the bolt closed and the pin in locked position; in combination with a barrel having a lug on its under side arranged to fit the recess in the first mentioned lug and provided with a recess for engagement by the end of the locking pin.

2. In a take-down firearm, a frame including a forestock, a bolt reciprocable in said frame and having a slotted front end, a recessed lug on said forestock in the groove of the frame, a locking pin extending through the front ends of said forestock and bolt and entering said lug, a clip on said pin adjacent the lug, and a spring surrounding said pin and bearing against said clip and the front end of the bolt, said spring serving to hold the bolt closed and the pin in locked position, and means to hold the clip in adjusted position on the pin; in combination with a barrel having a lug on its under side arranged to fit the recess in the first mentioned lug and provided with a recess for engagement by the end of the locking pin.

3. In a take-down firearm, a frame including a grooved forestock provided with upwardly extending side ribs formed on the edges of its side walls, a barrel provided with longitudinal recesses to receive the ribs, and means for locking the barrel on the forestock.

4. In a take-down firearm, a frame including a grooved forestock provided with upwardly extending side ribs formed on the edges of its side walls, a recessed lug in the groove of the forestock, a barrel provided with longitudinal recesses to receive the ribs, a projection on the barrel entering the recess in the lug, and releasing means to lock the projection in the lug.

5. In a take-down firearm, a frame including a grooved forestock provided with upwardly extending side ribs formed on the edges of its side walls, a recessed lug in the groove of the forestock, a barrel provided with longitudinal recesses to receive

the ribs, a projection on the barrel entering the recess in the lug, and means to lock the projection in the lug at one end and serving as a barrel rest at its other end.

6. In a take-down firearm, a frame including a grooved forestock provided with upwardly extending side ribs formed on the edges of its side walls, a recessed lug in the groove of the forestock, a barrel provided with longitudinal recesses to receive the ribs, a projection on the barrel entering the recess in the lug, and a locking pin extending through the front end of said forestock and entering said lug and barrel projection, said pin having a head at its front end provided with a concave groove adapted to receive the barrel.

7. In a take-down firearm, a frame including a forestock, a bolt reciprocable in said frame and having a slotted front end, a recessed lug on said forestock in the groove of the frame, a locking pin extending through the front end of said forestock and bolt and entering said lug, said pin having an enlarged head at its front end serving as a barrel rest and a grip to remove the pin by, a clip on said pin adjacent the lug, and a spring surrounding said pin and bearing against said clip and the front end of the bolt, said spring serving to hold the bolt closed and the pin in locked position; in combination with a barrel having a lug on its under side arranged to fit the recess in the first mentioned lug and provided with a recess for engagement by the end of the locking pin.

8. In a take-down firearm, a frame including a forestock, a bolt reciprocable in said frame and having a slotted front end, a recessed lug on said forestock in the groove of the frame, a locking pin extending through the front end of said forestock and bolt and entering said lug, said pin having grooves on opposite sides, an inverted U-shaped clip adjacent the lug having its legs fitting in the grooves in said pin, and a spring surrounding the pin bearing against said clip and the front end of the bolt, said spring serving to hold the bolt closed and the pin in locked position; in combination with a barrel having a lug on its under side arranged to fit the recess in the first mentioned lug and provided with a recess for engagement by the end of the locking pin.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN HOWARD CARL.

Witnesses:

A. D. ROCCA,
H. L. EMLAY.