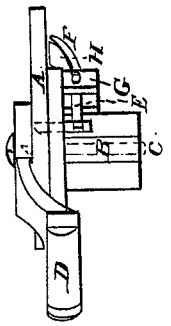
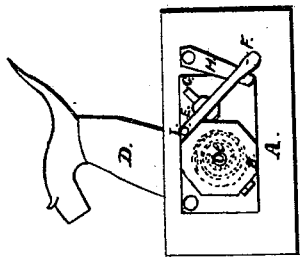
E. S. CHAPIN.

Lock for Fire-arm.

No. 274. Patented July 17, 1837.





UNITED STATES PATENT OFFICE.

ETHAN S. CHAPIN, OF STAFFORD SPRINGS, CONNECTICUT.

IMPROVEMENT IN THE MODE OF CONSTRUCTING LOCKS FOR FIRE-ARMS.

Specification forming part of Letters Patent No. 274, dated July 17, 1837.

To all whom it may concern:

Be it known that I, ETHAN S. CHAPIN, of Stafford Springs, in the county of Tolland and State of Connecticut, have invented an Improvement in the Mode of Constructing Locks for Fire-Arms of various descriptions, which I denominate the "Spiral-Spring Lock;" and I do hereby declare that the following is a full and exact description thereof.

The accompanying drawing represents the lock-plate A with the principal parts of the lock, which are to be let into the stock. The plate A, I frequently make circular, so that it may be let into the stock by means of a center-bit.

B is a hollow cap or barrel, which is to contain the mainspring, which is spiral, like that of a spring time-piece, and is coiled up within it. The outer end of this spring is attached to the inside of the barrel and the inner end to a revolving center shaft, one end of which is seen at C. The other end passes through the lock-plate, and has the hammer D secured to it. A spring of this description allows of the cocking of the gun by the application of a very slight degree of force, while it gives a very lively action to the hammer, and from its great length and equal size throughout it is but little liable to fracture. The number of coils in such a spring may be six, more or less, as may be preferred.

E is a lever, which is to be acted upon by the trigger at its end F, its fulcrum being at G. This lever is borne up by the spring H. At its opposite end there is a pin, I, which has a hole drilled into it to receive the rounded end of the lever. The pin I passes through the lock-plate, and forms the catch by which the hammer is held either at half or full cock. To effect this there are two holes drilled into that side of the plate of the hammer which bears upon the lock-plate. One of these holes receives the pin I at half-cock and the other at full-cock. The outer end of the catch-pin is beveled, as are the holes which are to receive it, so that it is readily forced back in the act of cocking. To prevent the going off at half-cock, the hole which in that position receives the pin I is drilled deeper into the lock-plate than that which receives it at full-cock, and by this means the end E of the lever upon which the trigger acts is raised on the half-cock to a position in which the trigger will not act upon it, while at the full-cock the position is such as allows the trigger to operate.

What I claim as my invention in the above-described lock for fire-arms is—

The employment of a spiral mainspring connected to and operating upon the hammer in the way described, and also the manner in which I have constructed and arranged the lever and catch-pin to be operated upon by the trigger.

ETHAN S. CHAPIN.

Witnesses:

THOS. P. JONES,

P. I. K. MORSELL.