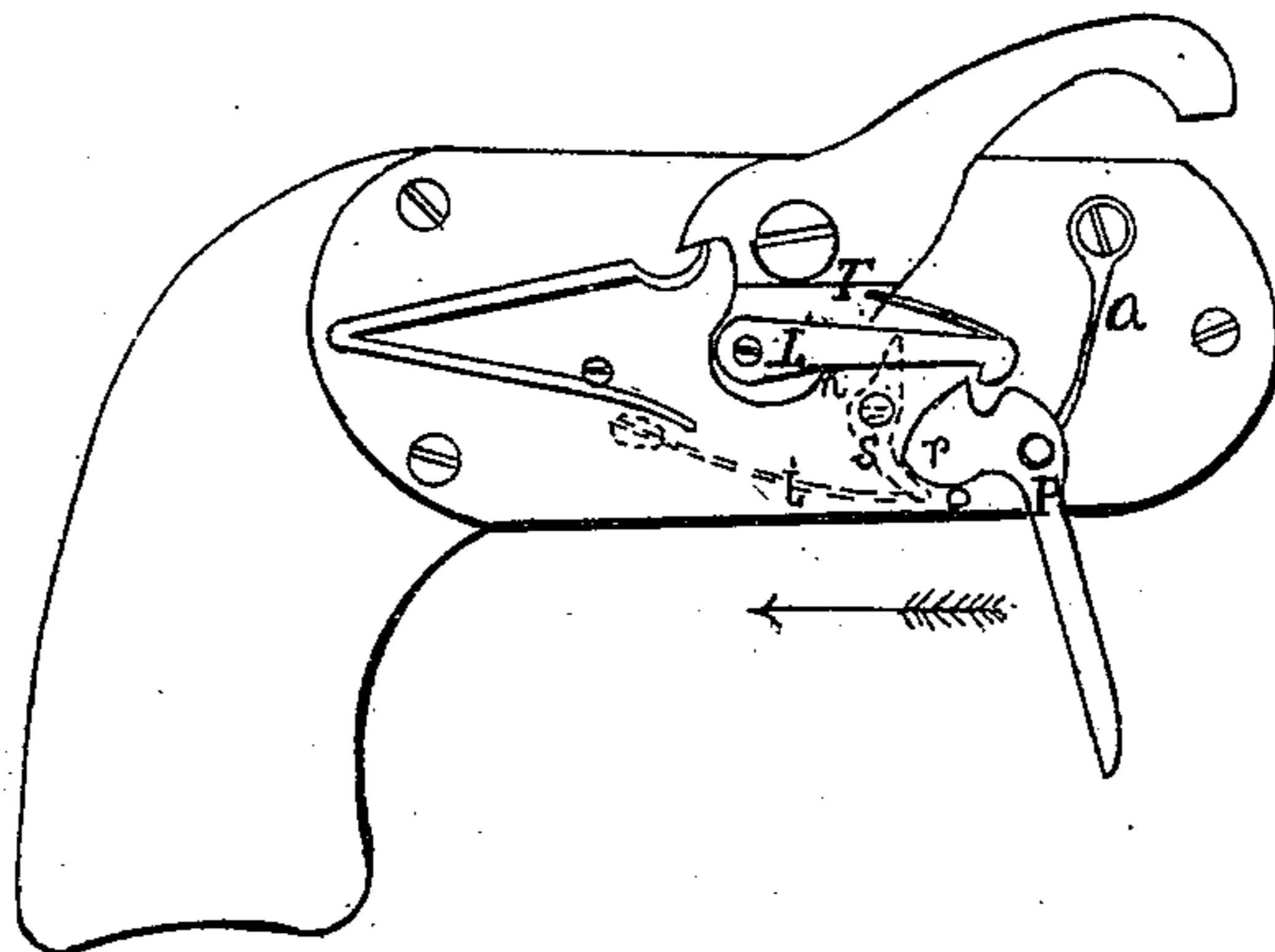


J. PHIN.
Gun Lock.

No. 13,825.

Patented Nov. 20, 1855.



UNITED STATES PATENT OFFICE.

JOHN PHIN, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN GUN-LOCKS.

Specification forming part of Letters Patent No. **13,825**, dated November 20, 1855.

To all whom it may concern:

Be it known that I, JOHN PHIN, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in the Locks of Fire-Arms; and I do hereby declare that the following is a full and accurate description thereof, reference being had to the accompanying drawing, annexed to this specification and making part of the same.

The nature of this invention consists in so constructing the lock that while a direct pull on the trigger will elevate or cock the hammer no additional intensity or duration of that pull will release it; but the lock is so arranged that on a relaxation taking place in the pressure on the trigger the hammer will be instantly released. Several arrangements may be made to effect this; but the one which I prefer is shown in the drawing, and consists in the addition of the secondary sear *s* and spring *i*, drawn in red lines. On the trigger being pulled in the direction of the arrow it will elevate the hammer by means of the link *L*, and as the point *r* of the trigger recedes from the sear *s* the pressure of the spring *i* will cause said sear to press against the tumbler *T* and to fall into the notch *n* when said tumbler has been rotated sufficiently. The trigger may now be allowed to move forward in obedience to the spring *a*; but until it touches the tail of the sear *s* the hammer will remain cocked. Instantly on the trigger pressing on this sear, however, it will release the hammer, which will descend in obedience to the mainspring; and it is evident that while the sear *s* remains in the notch *n* no pressure on the trigger in the direction of the arrow can effect a discharge. The objects and advantages of this arrangement are, first, the finger is relieved from nearly all pressure at the moment of discharge, and no direct effort being requisite to effect the discharge, the liability to derangement of aim is greatly lessened; secondly, as the hammer is not liberated by increased pressure, the weapon may be cocked in dangerous positions before it is absolutely wanted, and thus celerity and cer-

tainy of fire are secured, as well as the prestige which a cocked pistol is apt to give in some situations; thirdly, in those arms in which the back sight is formed by the elevated hammer (as in Colt's arms) a difficulty insuperable in all other forms of self-acting locks is here surmounted, for in other forms the hammer is never absolutely at rest at its full elevation. No time, therefore, is given to take correct aim when the hammer is in that position, and any aim taken prior to the descent of the hammer will evidently be too low; but in my lock the hammer remains at full elevation during the pleasure of the marksman, and ample time is given to take aim over it. I am aware, however, that this last object (and, indeed, several other points) might be obtained by producing the tail of the sear *s* so as to have it strike the trigger below the screw or pivot *P*. Two distinct efforts in the same direction would then effect a discharge, and as these efforts might be made at different times opportunity would be afforded to take aim over the hammer, and as the finger would be released from all pressure of the mainspring little derangement of aim need be apprehended; but the adjustment of the amount of pressure requisite to make these movements distinct is too nice for ordinary purposes, and I should consider such weapons dangerous, as a nervous twitch or start or a thoughtless pull would discharge the piece. As, however, I consider the sear *s* in this combination as my invention, I should regard this arrangement as an infringement.

What I claim as new, and desire to secure by Letters Patent, is—

My method of securing accuracy of aim and safety in the use of trigger-cocking fire-arms by means substantially as described, which consist, first, in the sear *s* and spring *i*, to hold the hammer up; and, secondly, in the spring *a*, acting on the trigger to release said hammer.

JOHN PHIN. [L. S.]

Witnesses:

A. K. AMSDEN,
P. P. PECK.