

(No Model.)

H. SCOTT.

BREECH LOADING FIRE ARM.

No. 252,703.

Patented Jan. 24, 1882.

Fig. 1.

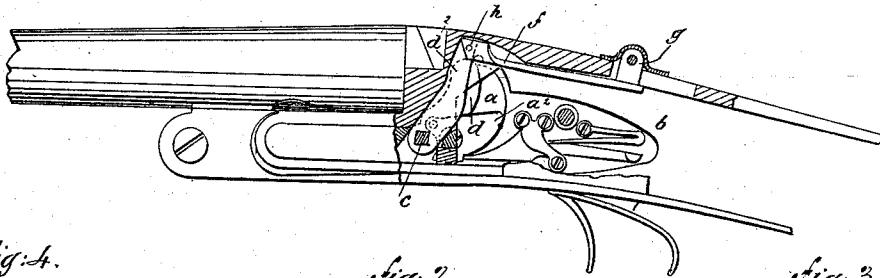


Fig. 4.

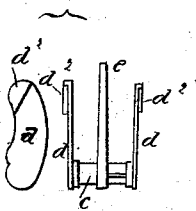


Fig. 2.

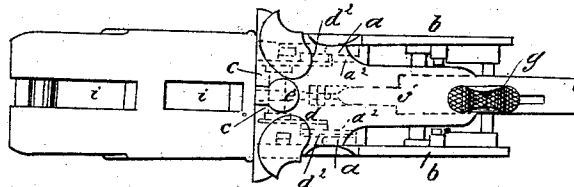


Fig. 3.

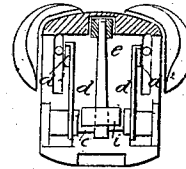


Fig. 5.

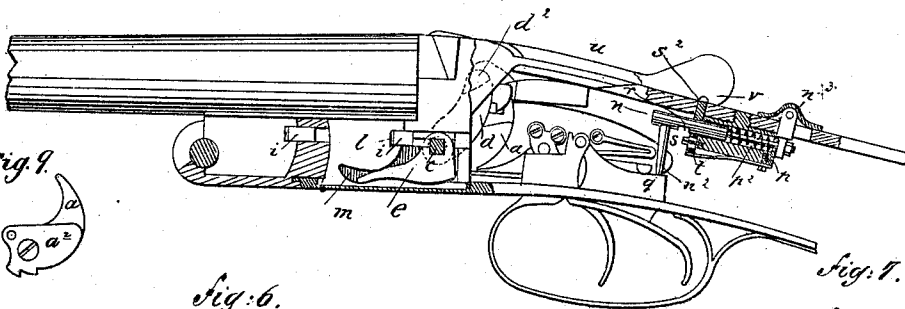


Fig. 6.



Fig. 7.

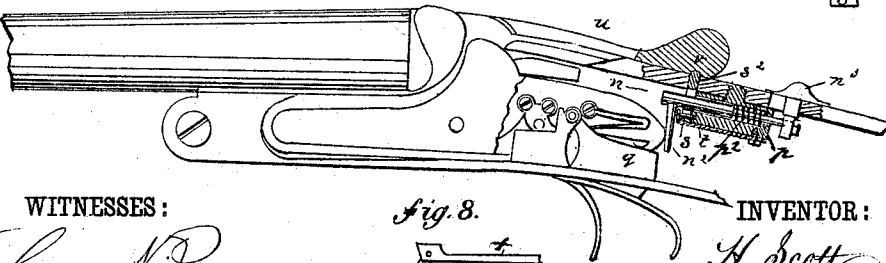


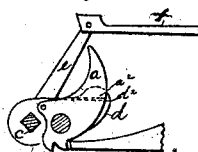
Fig. 8.



WITNESSES:

Chas. Nida.
C. Sedgwick

Fig. 8.



INVENTOR:

H. Scott
BY *Munn & Co.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

HENRY SCOTT, OF BIRMINGHAM, ENGLAND, ASSIGNOR TO JOHN P. CLABROUGH, OF SAME PLACE.

BREECH-LOADING FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 252,703, dated January 24, 1882.

Application filed July 23, 1881. (No model.) Patented in England July 10, 1879.

To all whom it may concern:

Be it known that I, HENRY SCOTT, of Birmingham, England, have invented certain new and useful Improvements in Fire-Arms, of which the following is a specification.

My invention has reference to breech-loading small-arms of the kind commonly called "drop-down guns;" and the invention consists in the arrangements or combinations of parts, hereinafter described, for cocking the concealed or internal hammers of the said guns, and also the arrangement of the parts, hereinafter described, of safety apparatus for preventing the accidental discharge of the guns.

In the accompanying drawings, Figure 1 is a vertical longitudinal section of the breech portion of a drop-down gun containing cocking mechanism according to my invention. Fig. 2 is a plan view of the body of the gun. Fig. 3 is a transverse vertical section of the same, taken behind the break-off, with the internal hammers omitted. Fig. 4 represents a part of the cocking mechanism detached. Figs. 5 and 6 are longitudinal sections of the gun, showing the safety appliances. Fig. 7 is a detail. Fig. 8 is a detail view, showing the position of the parts at the moment the hammer arrives at full-cock. Fig. 9 is a detail view of the hammer.

Similar letters of reference indicate corresponding parts.

In the drawings, $a a$ are the internal hammers, carried by the lock plates $b b$, let into the sides of the body. c is the cross-axis turning in the said body. The axis c has at each end a cocking-arm, d , the ends of the arms being provided with shoulders $d^2 d^2$, for engaging with the shoulders $a^2 a^2$ on the internal hammers, $a a$.

On the middle of cross-axis c a vertical arm, e , is fixed, the said arm extending upward to the under side of the tang of the break-off. Under the said tang is a slide, f , worked by the thumb-plate g on the upper side of the tang, and capable of motion to and from the break-off. The front end of the slide f is jointed at h to the upper end of the vertical arm e . When the slide f is in the normal or forward position represented in the drawings the cocking-arms $d d$ lie in recesses in the side of the body and are out of contact with the

cocked hammers $a a$, as represented, and the said hammers may fail to discharge the gun. After the gun has been discharged the side shoulders, $a^2 a^2$, on the hammers a are in contact with the side shoulders, $d^2 d^2$, on the ends of the cocking-arms $d d$.

In order to cock the gun after firing, the thumb-plate g of the slide f is moved back toward the butt-end of the gun. The said slide, acting through the vertical arm e , gives motion to the cross-axis c , and the cocking-arms $d d$ on the said axis are thereby made to throw back the hammers to full-cock by the shoulders $d^2 d^2$ of the said arms bearing against the shoulders $a^2 a^2$ of the hammers.

The hammers are retained in their cocked positions by the sear mechanism carried by the lock-plates $b b$, as usual. On releasing the thumb-plate g of the slide it is returned by the locking-bolt to the normal position shown, and the cocking-arms $d d$ are at the same time removed from the cocked hammers, and the gun is ready to be discharged. The locking-bolt i is worked by the middle vertical arm, e , which passes through it, so that the motion of the slide f to cock the hammers at the time withdraws the locking-bolt i to unfasten the barrels. A spring gives the back or snapping action to the lock-bolt i , and the back motion of the said bolt causes the return of slide f and cocking-arms $d d$ to their normal positions. I have represented hammers having curved noses for striking directly on the cartridges, but flat hammers acting upon strikers may be used with my improved cocking mechanism.

Instead of operating the cocking-arms $d d$ by means of a slide, $f g$, as described and illustrated, the said arms may be worked by a hand-lever on the side or under side of the gun. In this case the middle arm, e , is dispensed with, and the hand-lever is furnished with a square hole which takes upon a square part of the cross-axis c , carrying the cocking-arms $d d$, or a hand-lever on the tang having a side or horizontal motion may be used. In this modification the axis of the hand-lever is made to operate upon a short arm at the middle of the axis of the cocking-arms to move the said cocking-axis through the required angle, to cause the said cocking-arms to lift the hammers to full-cock.

Instead of cocking the gun by hand it may be cocked by the rising of the breech ends of the barrels for reloading the gun. In this case the cocking mechanism is modified so that the middle arm, *e*, instead of being situated above the cross-axis *c*, is situated below the said cross-axis, as represented in Fig. 5, and works in a recess in the middle of the body. The rear lump, *l*, on the under side of the barrels is furnished with a recess or curved seat, *m*, upon which the extreme end of the arm *e* bears. When the breech ends of the barrels rise from the break-off for charging the gun the seat *m* raises the arm *e*, and thereby turns the axis *c*, carrying the cocking-arms *d* through the required angle, and the arms effect the cocking of the hammers *a* in the manner described with respect to the hand worked arrangement. On shutting down the barrels the arm *e* is carried down with them to the position represented in the drawings, and the cocking-arms *d* are removed from the cocked hammers.

The improved safety apparatus is represented in Fig. 5 as in action, and in Fig. 6 as withdrawn out of action.

n is the safety-slide, working in the box *p* fixed under the tang, the said slide being pressed outward, when at liberty to move, by the coiled spring *p*². The outer end of the safety-slide *n* is provided with a peg, *n*², the bottom of which is situated on a level with the shoulders *q* *q* of the triggers, so that when the said peg *n*² bears upon the said shoulders, as represented in Fig. 5, the latter cannot rise to discharge the gun, and when the said peg *n*² is withdrawn from off the said shoulders of the triggers, as represented in Fig. 6, the gun may be discharged. Near the outer end of the safety-slide *n* is a notch, *r*, and working at the front face of the box *p* is a vertically-sliding catch, *s*, (shown separately in front elevation in Fig. 7,) having an opening in it through which the slide *n* works. This catch is pressed upward by the spring *t*, and when the safety-slide *n* is withdrawn by means of the thumb-plate *n*³ on the upper side of the tang, the notch *r* is brought opposite the opening in the said catch, and the latter snaps into the notch and holds the slide *n* in its withdrawn position, as shown in Fig. 6. The safety-slide *n* is put into action, on unbolting the gun, in the following manner:

u is the hand-lever on the tang, by which the locking-bolt is withdrawn, the said hand-lever having a side or horizontal motion. In the under side of the head of the hand-lever *u* is a hemispherical hole or recess, *v*, and on the top of the catch *s* and working in a hole in the tang is a stud, *s*², having a rounded end. After the gun has been loaded and the barrels shut down the hand-lever takes the position represented in Figs. 5 and 6—that is, the hole *v* in the head of the lever is brought opposite the stud *s*² on the catch *s*. On withdrawing the safety-slide *n* to permit discharge of the gun the rising of the catch *s* to retain the slide in its withdrawn position causes the stud *s*² to enter the hole *v*, as illustrated in Fig. 6. After the gun has been discharged the side motion of the hand lever *u* to unbolt the gun causes its head to act upon and depress the stud *s*² of catch *s* and cause the latter to be disengaged from the notch *r* in the safety-slide *n*. The safety-slide being thus released is forced outward by the action of its compressed spring *p*² into the safety position represented in Fig. 5, and its peg *n*² bearing on the shoulders of the triggers prevents the accidental discharge of the gun.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In drop-down guns, the combination of the internal hammers having side shoulders, *a*² *a*², the cross-axis *c*, having at each end a side-shouldered cocking-arm, *d*, and a vertical arm, *e*, and the slide *f*, jointed to the upper part of the arm *e*, as and for the purpose specified.

2. The spring-actuated safety-slide *n*, having peg *n*², and the spring-catch *s*, in combination with the triggers having shoulders *q*, substantially as shown and described.

3. The spring-actuated catch *s*, provided with stud *s*², the hand-lever *u*, having recess *v*, and the safety slide *n*, substantially as shown and described, combined for operation, as set forth.

The above specification of my improvement in fire-arms signed by me this 30th day of June, 1881.

HENRY SCOTT.

Witnesses:

J. R. HORTON,
HY. JNO. BAKER.