(No Model.)

M. F. STANLY.

SPRING AIR GUN.

No. 454,081. Patented June 16, 1891.

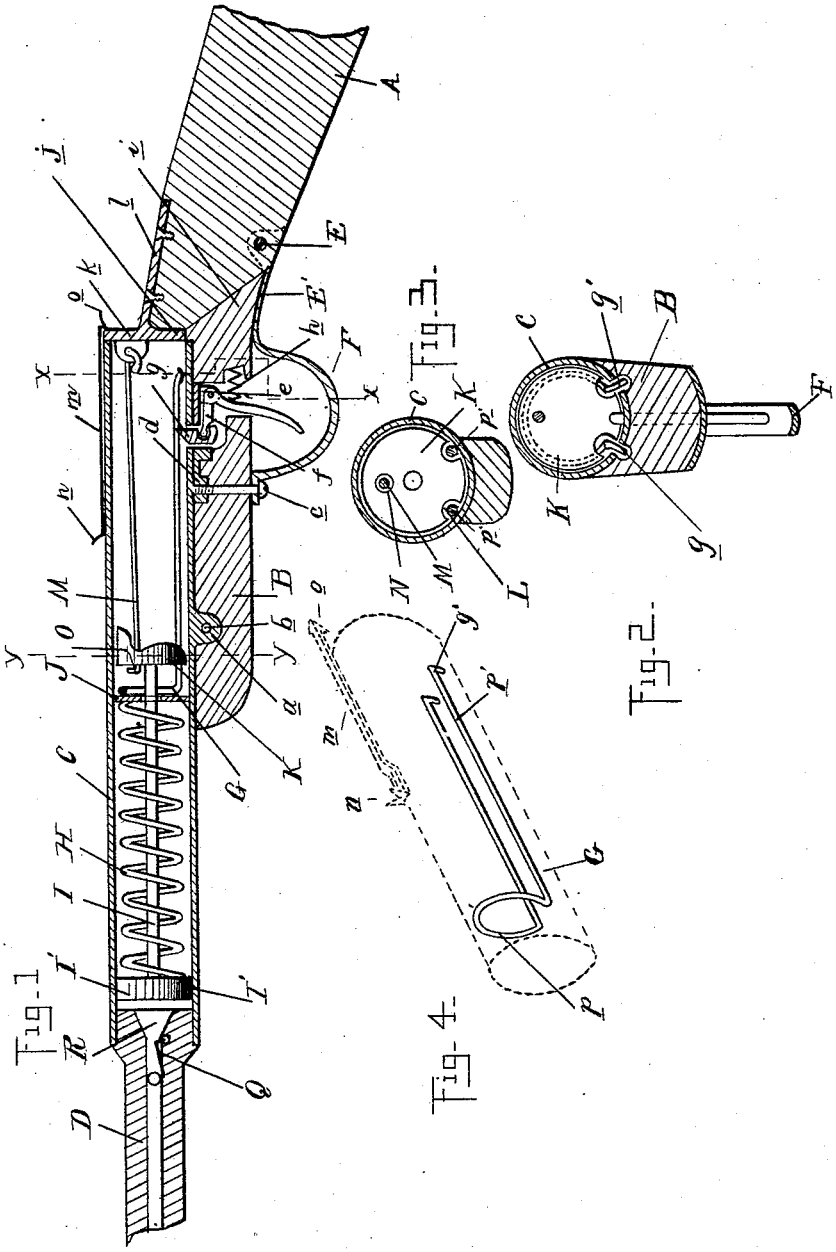

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Witnesses
M. B. Dogherty.
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Inventor
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UNITED STATES PATENT OFFICE.

MERRITT F. STANLY, OF NORTHVILLE, ASSIGNOR OF ONE-HALF TO ANDERSON BROS., OF PLYMOUTH, MICHIGAN.

SPRING AIR-GUN.

SPECIFICATION forming part of Letters Patent No. 454,081, dated June 16, 1891.

Application filed June 25, 1890. Serial No. 356,631. (No model.)

To all whom it may concern:

Be it known that I, MERRITT F. STANLY, a citizen of the United States, residing at Northville, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Spring Air-Guns, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in spring air-guns; and the invention consists in the peculiar construction, arrangement, and combination of the different parts, all as more fully hereinafter described.

In the drawings which accompany this specification, Figure 1 is a vertical central longitudinal section through my improved gun. Fig. 2 is a cross-section thereof on line *x x*. Fig. 3 is a cross-section thereof on line *y y*. Fig. 4 is a perspective view of the spring-abutment, showing the barrel, &c., in dotted lines.

A is the stock.

B is the fore-arm.

C is the false barrel, in the forward end of which is secured the true barrel D.

The stock is hinged to the fore-arm by means of the pin E, which passes through the extensions E′ of the trigger-guard F. The fore-arm is secured to the false barrel by means of the lug *a*, formed integrally with the barrel or soldered thereon, and the pin *b*, passing through the lug and the fore-arm, and by means of the screw *c*, which passes through the fore-arm and enters the trigger-supporting block *d*, which is formed integrally with the barrel or is soldered thereon. This block has suitable lugs *e*, in which the trigger is pivoted. The trigger has the forwardly-projecting arm *f*, to the free end of which is pivoted the detent *g*, which projects through a suitable aperture into the false barrel. A spring *h* holds this normally projected into the barrel. The stock has the inclined face *i* and the vertical face *j*.

k is a cap having the rearwardly-extending flange *l*, by means of which the cap is secured to the stock. The upper edge of this cap forms a locking-flange, over which engages the spring-latch *m*. This latch is secured to the top of the false barrel at its forward end and has the upturned end *n*, forming the hind sight. The cap *k* covers the rear of the false barrel.

o is a thumb-piece on the latch *m*, by means of which it is disengaged from the cap *k*.

Within the false barrel is secured the abutment G for the spring H, which is sleeved over the rod I, upon the forward end of which is secured the piston I′. A washer J is interposed between the spring and the abutment G. This abutment I form of wire, bent to form the bearing or head *p*, the parallel guide-arms *p′*, and the securing-pins *g′*, which latter engage in suitable apertures in the false barrel, one on each side thereof. The rod I passes through an aperture in the washer and has secured to its rear end the cross-head K, which is guided within the false barrel and has notches L, which the arms *p′* of the abutment engage.

M is a connecting-bar slidingly engaging through the aperture N in the cross-head, and having a suitable head O formed at its forward end and connected to the cap *k* at its other end.

The spring is compressed by breaking down the stock which forms the retracting-lever upon its hinge, drawing back the piston I′ until the incline P upon the cross-head strikes the detent *g*, depressing it until it has passed, when the spring *h* throws it up again and locks the spring in its compressed position.

To load, a shot is dropped into the barrel, in the lower end of which it is stopped and held by the spring Q.

R is a flaring or bell-shaped mouth in the rear of the true barrel in the rear of the spring, which materially assists in bringing the force of the compressed air upon the projectile.

What I claim as my invention is—

1. In a spring air-gun, the combination, with the barrel and spring-actuated piston, of the abutment G, formed with the head *p*, guide-arms *p′*, and securing-pins *g′*, engaging in the apertures in the barrel, substantially as described.

2. In a spring air-gun, the combination, with the barrel and spring-actuated piston, of the abutment G, the cross-head K, connected to the piston and guided within the barrel, and

the connecting-rod M, slidingly secured in said cross-head at one end and pivotally secured to the retracting-lever at the other end, substantially as described.

3. In a spring air-gun, the combination, with the barrel and spring-actuated piston, of the abutment G, cross-head K, connected to the piston and guided within the barrel, the connecting-rod M, slidingly secured in said cross-head at one end and pivotally connected to the retracting-lever at the other end, and the trigger having the detent *g* projecting into the barrel, substantially as described.

4. In a spring air-gun, the combination, with the barrel, of a stock hinged to the same, a locking-spring formed of a single piece of metal permanently secured on the barrel near the stock and extending beyond the end of the barrel over the stock, its rear end being bent to form a catch and thumb-piece and its forward end bent up to form a sight, substantially as described.

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

MERRITT F. STANLY.

Witnesses:
M. B. O'DOGHERTY,
P. M. HULBERT.