

No. 679,670.

Patented July 30, 1901.

C. J. HAMILTON.  
REPEATING AIR RIFLE.  
(Application filed Dec. 24, 1897.)

(No Model.)

Fig. 3.

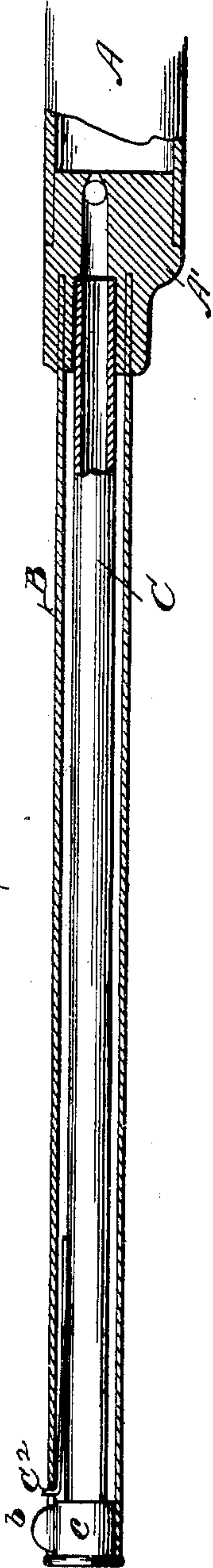


Fig. 1.

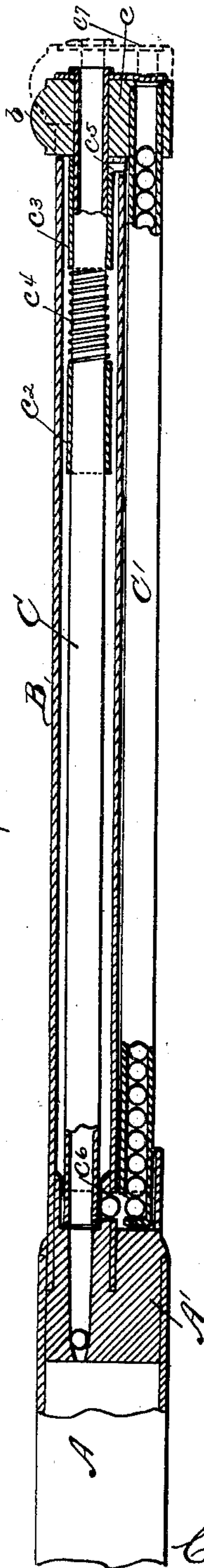
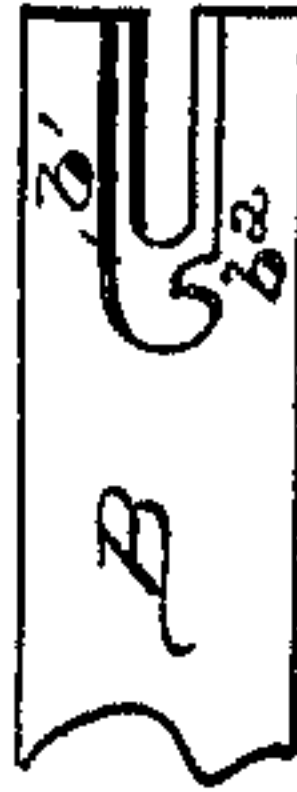


Fig. 2.



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## REPEATING AIR-RIFLE.

SPECIFICATION forming part of Letters Patent No. 679,670, dated July 30, 1901.

Application filed December 24, 1897. Serial No. 663,435. (No model.)

*To all whom it may concern:*

Be it known that I, CLARENCE J. HAMILTON, a citizen of the United States, residing at Plymouth, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Repeating Air-Rifles; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to air-guns; and it consists in improvements in the construction of the barrel of an air-gun, whereby it is adapted to shoot either shot or darts through the use of a removable barrel.

My invention also involves a repeater construction in which the removable barrel is combined with means for storing and delivering the shot one at a time to the true barrel.

My invention is shown in the accompanying drawings, in which—

Figure 1 is a sectional view showing the repeating mechanism; Fig. 2, a detail of the same, and Fig. 3 a section showing the removable barrel without the magazine shown in the repeating-gun.

In the drawings, A is the air-compressing cylinder, and A' the metal plug forming the connection between this cylinder, false barrel, and the true barrel. The forward portion of the gun consists of the outer metal tube or false barrel B, rigidly engaged with the plug A', and the inner and removable true barrel C. This true barrel in the form shown in Fig. 3 is provided with the enlarged outer end or plug c, that fits the false barrel B, and with the sight b, that registers with a slot in the end of the false barrel. By this construction the true barrel is centered in the outer barrel at the outer end, and at the inner end it fits snugly in the plug by which the barrel is held in place.

C<sup>2</sup> is a spring-catch that locks the barrel in place.

In the form shown in Figs. 1 and 2 the true barrel C is used in combination with the magazine-tube C', the two being connected

together at the outer end in the plug c and are held thereby parallel, the magazine-tube C' lying below the false barrel B.

In addition to the plug c the true barrel is provided with a fixed sleeve c<sup>2</sup> and a movable sleeve c<sup>3</sup>, between which is the spring c<sup>4</sup>. This spring holds the sleeve c<sup>3</sup> against the plug c. From the sleeve c<sup>3</sup> is struck up a small lug c<sup>5</sup>, that engages with the bayonet-fastening b<sup>2</sup>, formed in the slot b' in the false barrel or outer shell. The lug c<sup>5</sup> on the movable sleeve is disengaged from the bayonet-fastening by rotating the sleeve c<sup>3</sup> against the action of the spring c<sup>4</sup> until the lug clears the fastening. By this construction the movable sleeve is locked to the outer shell when the barrel is put in place; but the barrel C itself is allowed a slight endwise movement as the sleeve c<sup>3</sup> slides on the barrel against the action of the spring. By this slight movement a shot is admitted from the magazine to the barrel, as shown in Fig. 1. The true barrel and the magazine are of the same length, and the magazine is closed at the rear end and provided with a side opening c<sup>6</sup> to permit the lowermost shot to move sideways out of the magazine and against the end of the barrel, but free from the magazine. As the barrel and magazine are moved the distance allowed by the spring c<sup>4</sup> this single shot is left by the magazine, and as the same movement draws out the barrel the shot drops in behind the barrel and is held in the opening in the plug A', ready to be shot through the barrel by the next discharge of the gun.

To disengage the barrel entirely, the lug c<sup>5</sup> is disengaged from the bayonet-fastening, when both the barrel and magazine can be drawn out.

To provide for holding the charge in the magazine, I make the true barrel a trifle larger than the magazine and allow it to extend through the plug c far enough to form a pivot for the cover c<sup>7</sup>. After the cover is in place the end of the barrel is turned out to form an annular flange to hold it on. This cover swings down over the end of the magazine and closes it except when opened to recharge it.

To load the gun from the magazine, it is



held upright in one hand and the barrel drawn out by grasping the magazine with the other, when a shot will drop from the magazine into the barrel.

5 Where the magazine is not used, as in Fig. 3, and it is desired to fire a dart the barrel is drawn clear out and the dart inserted in the rear end and the barrel returned. To hold the removable barrel in place in this form of the gun, the spring C<sup>2</sup> is provided, which engages with a hole in the false barrel just back of the slot provided for the sight.

What I claim is—

1. In an air-gun, the combination with a false barrel and a true barrel removable from the false barrel for loading, of means connected with the true barrel exposed to the hand of the operator whereby said true barrel may be removed, substantially as described.

2. In an air-gun, the combination with a false barrel and a true barrel removable therefrom for loading, of means connected with the true barrel exposed to the hand of the operator whereby said true barrel may be removed and means for temporarily locking the true barrel within the false barrel substantially as described.

3. In an air-gun, the combination with a false barrel and a true barrel held within the same, adapted to be removed for loading, of means for temporarily locking the true barrel within said false barrel, said means comprising a projection and coacting slot, substantially as described.

4. In combination, an air-gun comprising a false barrel and a true barrel held therein adapted to be removed for loading, said false barrel being slotted, said slot opening into the front edge of said barrel and a projection carried by the true barrel coacting with said slot, substantially as described.

5. In a spring air-gun, the combination of an outer or false barrel, an inner or true barrel and muzzle-cap permanently secured together, and detachable from the false barrel, and means for detachably securing said muzzle-cap and true barrel in position, substantially as described.

6. The combination of the false barrel, the true barrel removably supported in the false barrel and a spring-catch to hold them together substantially as described.

7. The combination of the false barrel, the true barrel having an endwise movement in the false barrel, the magazine having a side opening through which to pass a single shot and means for moving the true barrel and magazine to cut off other shot and deliver the

one shot into the false barrel substantially as described.

8. In an air-gun, the combination of the true barrel and the magazine having a fixed relation to each other, and having a common parallel movement, and means operated by such common parallel movement for passing a single shot from the magazine to the true barrel, substantially as described.

9. In an air-gun, the combination of the false barrel, the true barrel located within the false barrel, the magazine located outside of the false barrel, means connecting the magazine and true barrel whereby they are caused to move together and means operated by the common movement of the magazine and true barrel for passing a single shot from the magazine to the true barrel, substantially as described.

10. The combination of the false barrel, the true barrel within the false barrel, the magazine, a fixed sleeve on the true barrel, a slidable sleeve on the true barrel adjacent to the muzzle, a spring between the fixed and slidable sleeves and means for engaging the slidable sleeve with the false barrel whereby the true barrel is given a limited movement against the action of the spring, substantially as described.

11. The combination of the false barrel, the true barrel within the false barrel, the movable sleeve surrounding the true barrel, a fixed sleeve on the true barrel, a spring between the fixed and movable sleeves and a bayonet-fastening for engaging the movable sleeve and the false barrel, substantially as described.

12. The combination of the false barrel, the true barrel within the false barrel, the magazine outside of the false barrel, and the removable plug uniting the true barrel and magazine substantially as described.

13. The combination of the barrel, the magazine and the cover pivoted on the barrel and adapted to swing over the mouth of the magazine, substantially as described.

14. In a spring air-gun, the combination of the outer or false barrel, the inner or true barrel and the muzzle-cap permanently secured together and detachable from the false barrel, and a bayonet-lock for detachably securing the same in position, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

CLARENCE J. HAMILTON.

Witnesses:

S. E. THOMAS,

C. H. FISK.