

No. 662,068.

Patented Nov. 20, 1900.

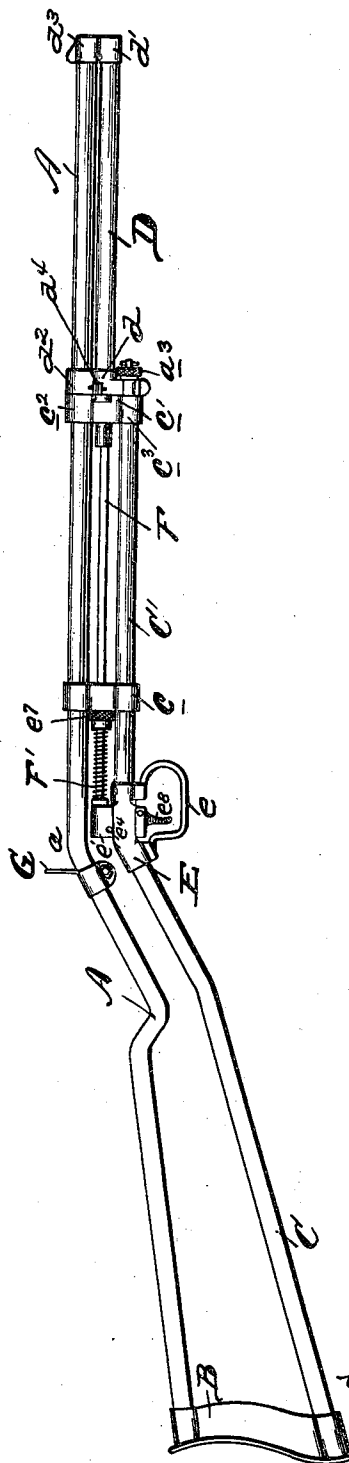
C. J. & C. HAMILTON.

RIFLE.

(Application filed Nov. 7, 1898.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES

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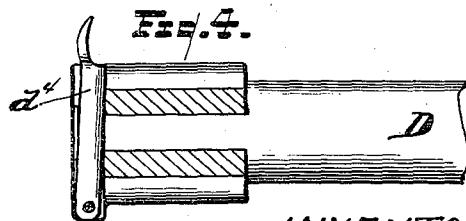
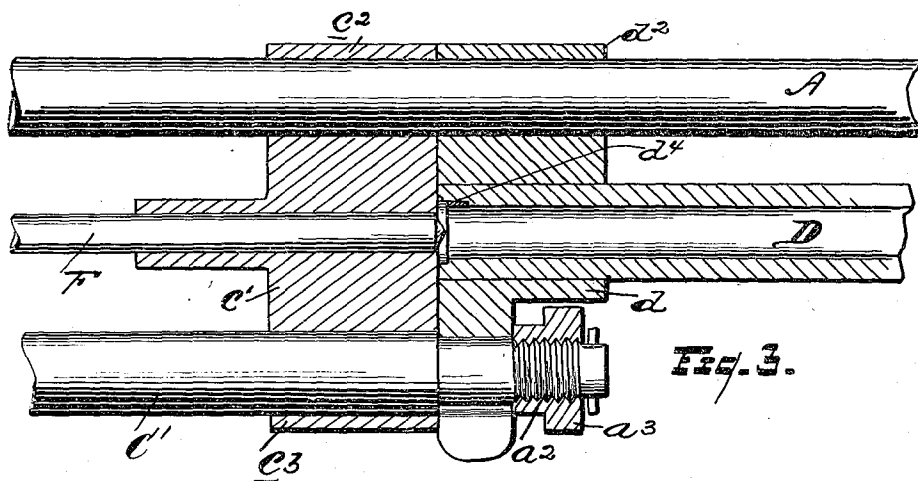
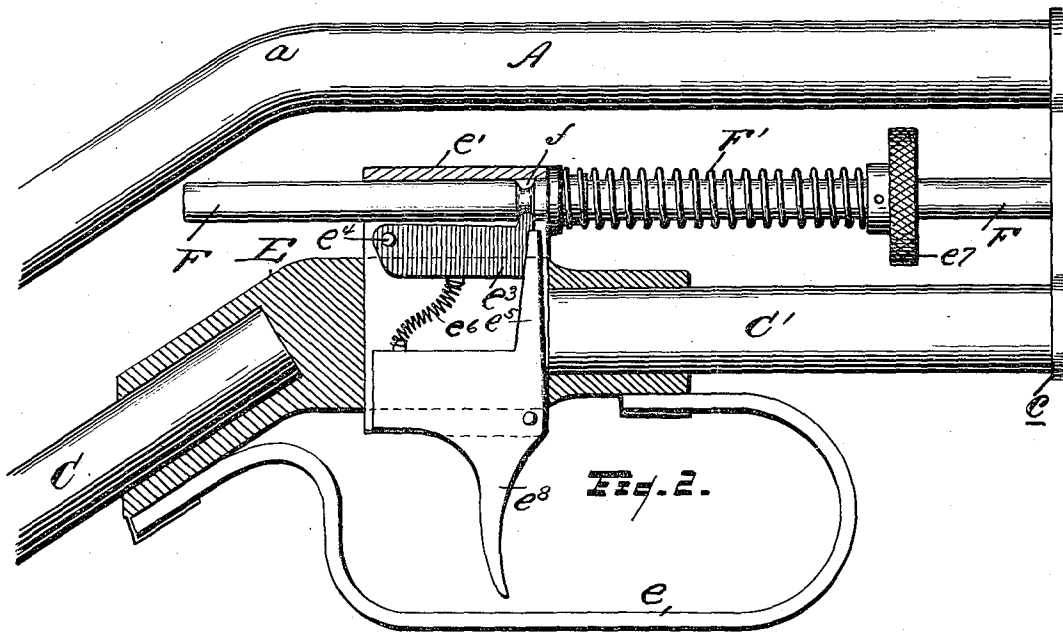
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UNITED STATES PATENT OFFICE.

CLARENCE J. HAMILTON AND COELLO HAMILTON, OF DETROIT, MICHIGAN.

RIFLE.

SPECIFICATION forming part of Letters Patent No. 662,068, dated November 20, 1900.

Application filed November 7, 1898. Serial No. 695,650. (No model.)

To all whom it may concern:

Be it known that we, CLARENCE J. HAMILTON and COELLO HAMILTON, citizens of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Rifles; and we do declare the following to be a full, clear, and exact description of the same, 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.

Our invention relates to firearm construction; and its object is to provide a rifle for shooting small cartridges, such rifle to have the cheapness of a pistol with a short barrel and the advantages of a rifle with a long barrel.

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

Figure 1 is a side elevation showing the form and details of the construction of the gun. Fig. 2 is a sectional view showing the details of the trigger mechanism. Fig. 3 is a vertical longitudinal section showing the manner of mounting the rifle-barrel on the frame and the means for opening the barrel to allow for the discharge of the shell and insertion of the cartridges, and Fig. 4 is a sectional view showing the shell-ejector.

Our design is to construct the stock and frame of the gun in skeleton form, and in the drawings we show the upper portion of the frame and stock formed of one continuous rod A. This rod extends the full length of the gun, and from the point *a* it is bent downward and formed in outline, like the upper edge or outline of an ordinary gun-stock, and at the butt enters and is engaged with the butt-plate B. This butt-plate is made of cast metal and formed to fit the shoulder, like the butt of an ordinary stock. The lower section of the frame is made in two pieces C, that extend from the butt-plate forward to the trigger mechanism and the section C', that extends forward from the trigger mechanism to the binder *c'*, that unites the frame and the barrel. The upper and lower sections of the frame are connected a short distance forward of the trigger by the binder *c*.

D is the rifle-barrel, which we preferably

make about eight inches in length. This barrel is connected at the rear end in a sleeve or breech-piece *d* and at the forward end in a sleeve *d'*. The sleeves *d* and *d'* are formed integral with the sleeves *d²* and *d³*. The sleeves *d²* and *d³* embrace the upper section A of the frame, so that the barrel is suspended therefrom and is allowed a side or rotary movement thereon. The binder *c'* is also provided with the sleeves *c²* and *c³*, by means of which it is connected with the upper and lower sections of the frame and in connection with the binder *c*, similarly constructed, provides the means for spacing the sections of the frame apart and of holding them in their proper relative position. The forward face of the binder *c'* and the rear face of the sleeve *d* are milled to provide a true contact-surface between them and to close the barrel, the binder *c'* serving as the breech-block. To force the breech-piece *d* more firmly against the binder *c'*, the lower section C' of the frame is extended forward and provided with a thread *a²*, on which is run the thumb-nut *a³*. The breech-piece *d* extends downward a sufficient distance to pass between the nut *a³* and the sleeve *c³* on the binder *c'* and against which the thumb-nut can be forced when the barrel is closed. To open the barrel, the thumb-nut is given a partial turn and the barrel forced to one side, leaving the breech exposed.

d⁴ is an ejector pivoted in the breech, by means of which the shell is extracted when the barrel is open. The forward sight for the rifle is cast with the sleeve *d³*.

The trigger mechanism consists of a casting E, inserted in the line of the lower section of the frame, and the trigger-guard *e* is formed from a small wire or rod and soldered or brazed to the casting E. The casing for the trigger mechanism is shown at *e'* and consists of a piece of sheet metal formed over a mandrel and the sides separated to fit an opening in the casting E. The firing-pin F extends from the trigger mechanism forward through the binders *c* and *c'*, beyond which it enters the breech of the barrel. The rear end of the firing pin or rod reciprocates within the casing of the trigger mechanism and is provided within the casing with a groove *f*, which extends entirely around the rod. The trigger mechanism consists of the dog *e³*, piv-

oted on the pin e^4 , which dog is adapted to engage at its forward end with the annular groove in the firing rod or pin. The trigger e^8 is pivoted within the case, and when the dog e^3 is engaged with the firing pin or rod the upper extension e^5 of the trigger comes under the point of the dog and holds it in engagement with the rod. The construction of the two parts is such that the force tending to disengage the dog from the firing-rod will be directly on a line through the pivot of the trigger, and the mechanism locked, so that it cannot become disengaged except by moving the lower end of the trigger backward, as in firing the gun. This construction is of particular value for the reason that it forms a lock as distinguished from a construction that holds the parts by the force of a spring or their friction. The spring e^6 is placed between the dog and the trigger and tends to throw the dog upward into engagement with the rod and to throw the upper end of the trigger to the rear into engagement with the dog and into the locked position.

F' is a coil-spring mounted on the firing-rod, with the rear end abutting against the casing of the trigger mechanism and the forward end against the thumb-nut e^7 , rigidly attached to the rod. This nut is made of sufficient size to extend outside of the frame and provides means for drawing back the firing rod or pin.

G is a peep-sight formed from sheet metal and adapted to embrace the frame, as shown in the drawings. This sight can be adjusted readily up and down on a frame or to one side when the gun is sighted.

What we claim is—

1. In a rifle construction, the combination of the skeleton frame, consisting of the upper and lower sections, the upper section provided with an extension beyond the end of the lower section, a breech-block uniting the sections at the end of the lower section, and a rifle-barrel suspended from the upper section and arranged to swing into contact with the breech-block, substantially as described.

2. In a rifle construction the combination of the skeleton frame, the forward extension of the upper section of the frame, the rifle-barrel suspended from the extension, the firing-rod lying between the sections of the frame and means for locking the suspended barrel and for operating the firing-rod, substantially as described.

3. In gun construction, the combination of the frame-piece E , provided with a vertical slot, the U-shaped metal case adapted to be seated in the slot, and the trigger mechanism mounted in the U-shaped case independent of the frame, substantially as described.

4. In gun construction the combination of the frame, the sheet-metal case adapted to be entered in the frame, means for supporting the case in the frame and the trigger and dog mounted in said case, substantially as described.

5. The combination of the skeleton frame, the upper section of said frame having a forward extension on which to suspend the rifle-barrel, the rifle-barrel suspended therefrom, the breech-block c' and means for forcing the breech end of the barrel against the binder to close the same, substantially as described.

6. The combination of the skeleton frame, the forward extension of the upper section of the frame, the breech-block c' , the rifle-barrel, the breech-piece d having a downward extension and the set-nut a^3 on the lower section of the frame to lock the breech-piece against the binder, substantially as described.

7. The combination of the skeleton frame having the forward extension of the upper section, the rifle-barrel suspended therefrom, the breech-block c' , the breech-piece d , and the ejector d^4 , substantially as described.

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

CLARENCE J. HAMILTON.
COELLO HAMILTON.

Witnesses:

S. E. THOMAS,
FRANK DUWS.