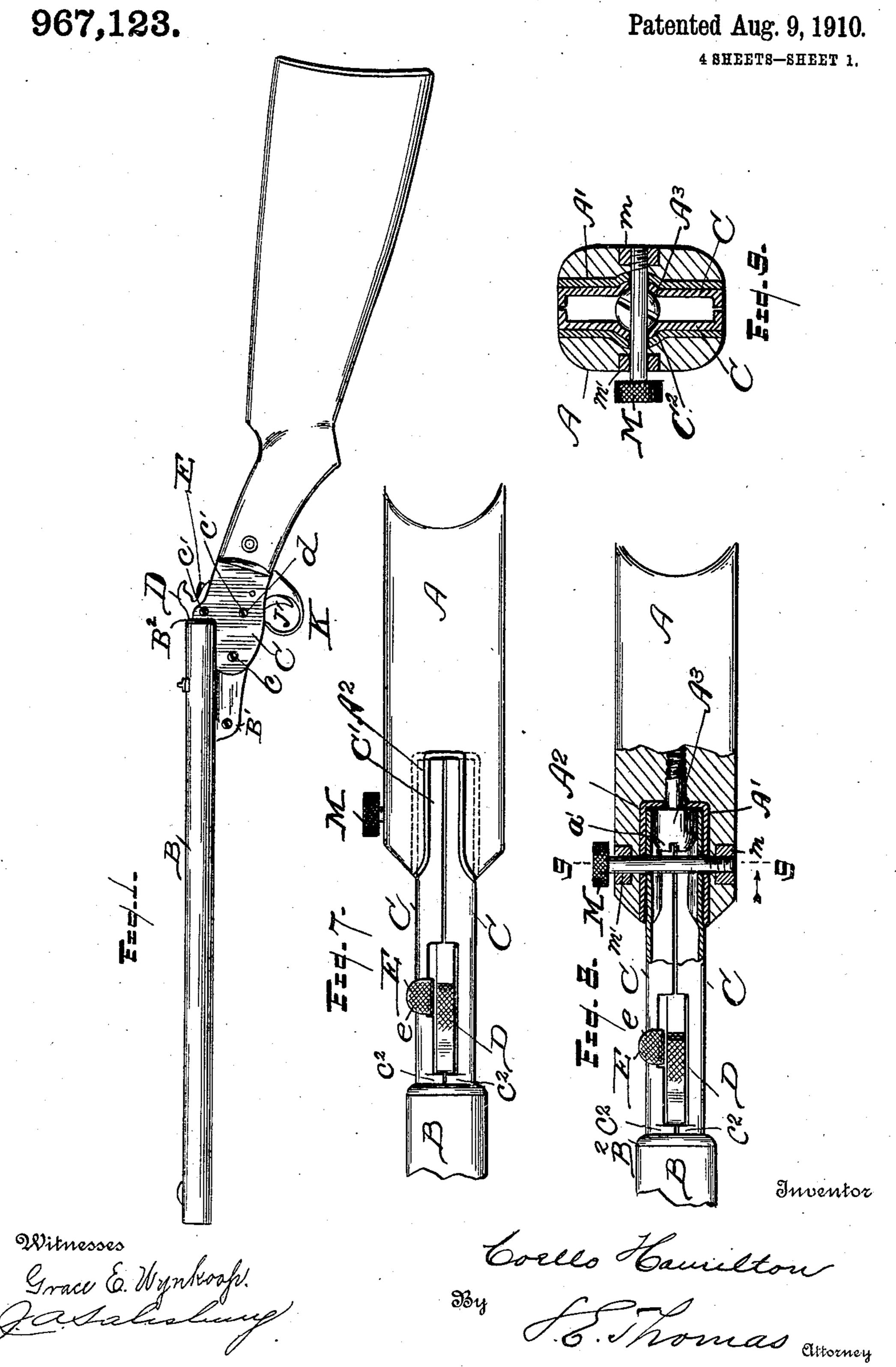
C. HAMILTON. RIFLE.

APPLICATION FILED MAY 16, 1910.



C. HAMILTON.

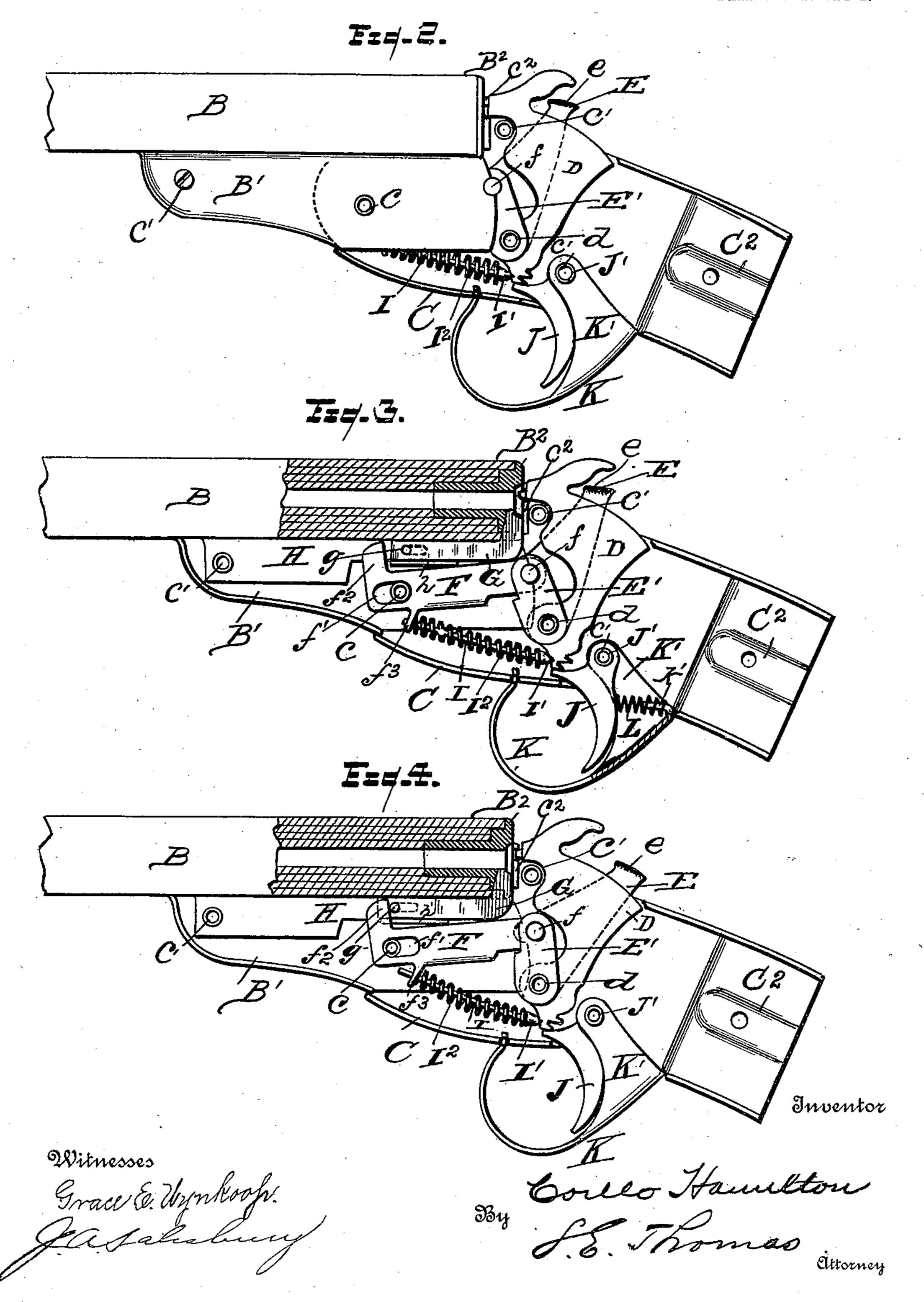
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967,123.

Patented Aug. 9, 1910.

4 SHEETS-SHEET 2.



C. HAMILTON.

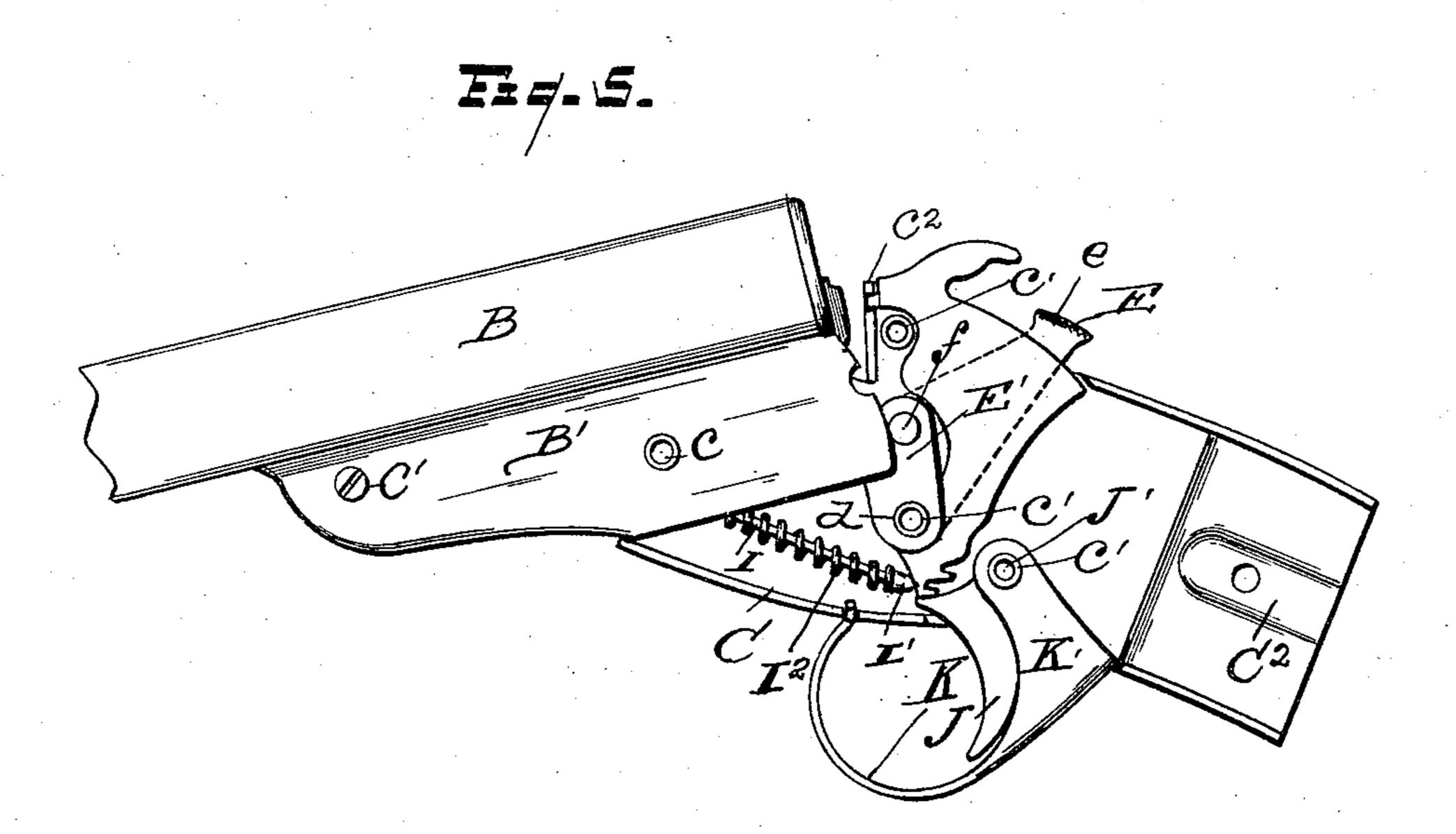
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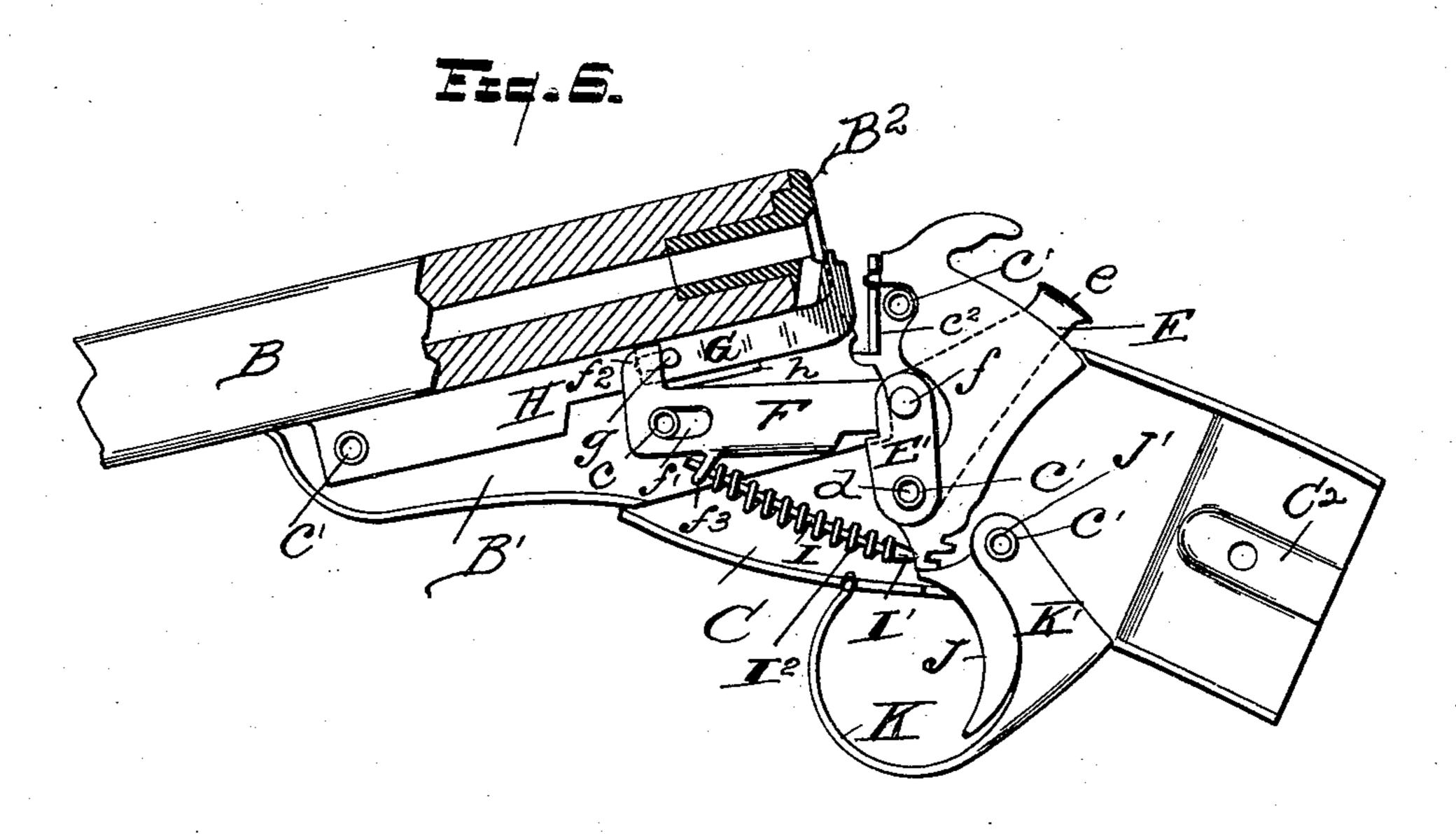
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4 SHEETS-SHEET 3.





Witnesses

Grace E. Wynkoof. De Salisling Corlo Hamilton

By Lomas

Attorney

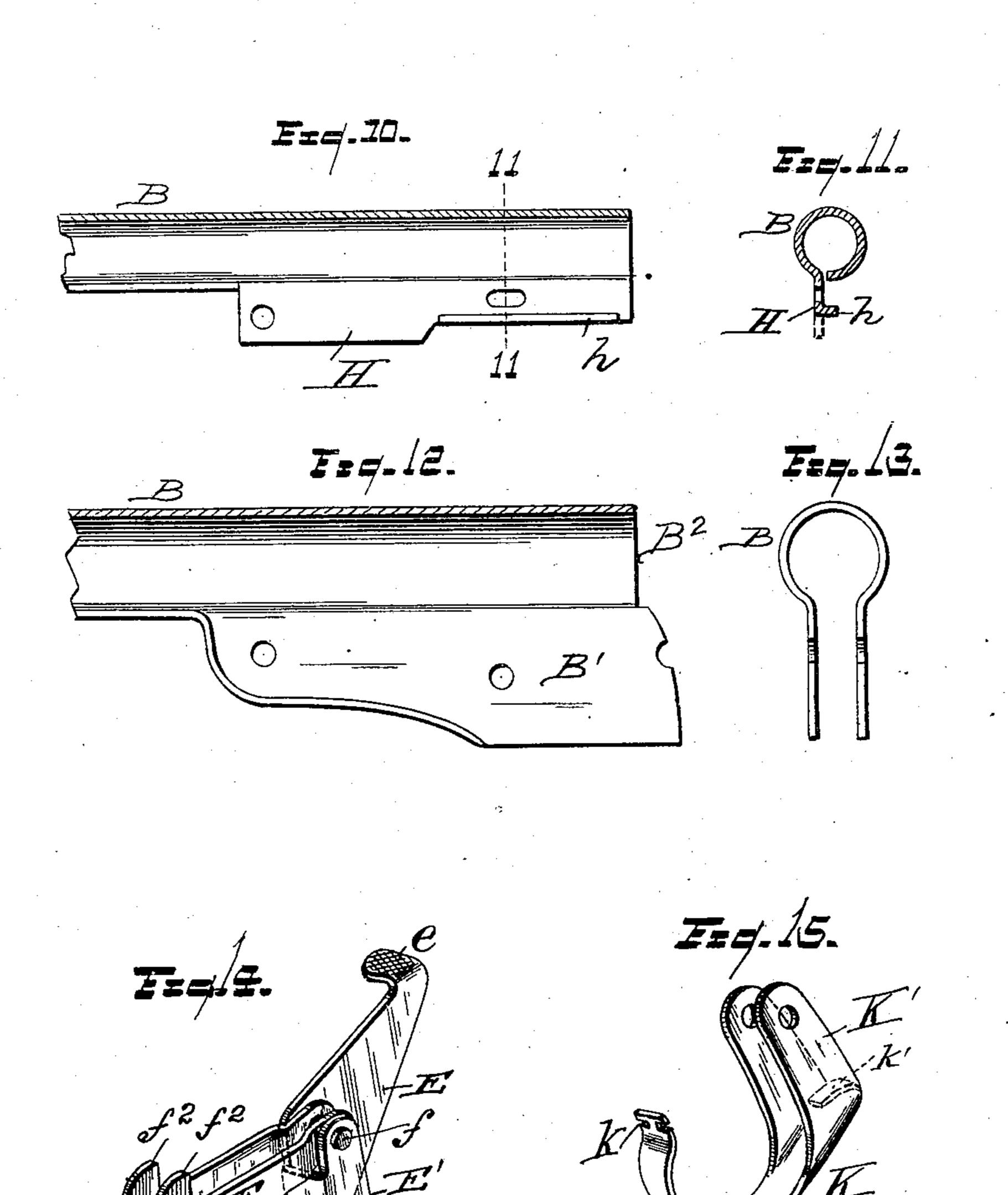
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4 SHEETS-SHEET 4.



Witnesses

UNITED STATES PATENT OFFICE.

COELLO HAMILTON, OF PLYMOUTH, MICHIGAN.

RIFLE.

967,123.

Specification of Letters Patent.

Patented Aug. 9, 1910.

Application filed May 16, 1910. Serial No. 561,706.

To all whom it may concern:

Be it known that I, Coello Hamilton, citizen of the United States, residing at Plymouth, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Rifles, and 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.

My invention relates to an improvement in rifles, shown in the accompanying drawings and more particularly pointed out in the fol-

lowing specification and claims.

The object of my invention is an improvement in the general construction by which the assembling of the parts is simplified and the cost of manufacture materially reduced.

One of the features of the invention consists in the means employed for locking the barrel and stock in position for firing.

Another feature is the means employed for actuating the shell extractor operated by unlocking or "breaking" the barrel and stock.

Another feature is the means employed for securing the trigger guard to the frame.

Another feature is the employment of a single spring to control both the hammer and barrel locking mechanism.

Another feature of the invention consists in providing means whereby the cartridge cannot be fired if the barrel is not in locked relation with the stock.

Other advantages and improvements will

hereafter appear.

In the drawings accompanying this specification: Figure 1 is a side elevation of the 40 rifle. Fig. 2 is a side elevation of a portion of the rifle with one of the receiving brackets removed to show the firing mechanism,the barrel being in locked position. Fig. 3 is a similar view partially in section, show-45 ing the parts underlying the wall of the brackets in the position indicated in Fig. 2,—one-half of the rifle barrel bracket being removed to disclose the extractor mechanism. Fig. 4 is a similar view indicating 50 the lever controlling mechanism for unlocking the rifle thrown back in position for "breaking" the same. Fig. 5 is a view similar to Fig. 2 with the barrel "broken" or unlocked; the extractor being in the position 55 occupied when the shell is ejected,—showing

against firing the cartridge when in this position. Fig. 6 is a view with the parts in similar position to that shown in Fig. 5, the barrel being partially in section and one- 60 half of the depending bracket of the barrel removed to show the operation of the extractor mechanism. Fig. 7 is a fragmentary plan view showing the manner of engaging the receiver bracket of the rifle barrel to 65 the stock. Fig. 8 is a similar fragmentary view with parts in section to more clearly disclose the means employed to secure the receiver bracket to the stock. Fig. 9 is a cross-sectional view through the stock on 70 line 9—9 of Fig. 8. Fig. 10 is a fragmentary view of one of the outer shells of the rifle barrel showing the slotted depending wall and platform upon which the extractor is supported. Fig. 11 is a cross-sectional view 75 on line 11—11 of Fig. 10. Fig. 12 is a longitudinal section through a fragment of the outer shell of the barrel showing the depending bracket. Fig. 13 is an end elevation of the same. Fig. 14 is a perspective 80 view of the lever controlling the operation of the extractor,—the view also shows the extractor connected therewith. Fig. 15 is a perspective view of the trigger guard. Fig. 16 is a sectional view of one of the as- 85 sembling nuts and screws serving as pivots for the firing mechanism and for engaging the walls of the receiver brackets together.

Referring now to the letters of reference placed upon the drawings:—A indicates the 90 stock. B the barrel preferably composed of a plurality of concentric tubes,—the outer one being provided with a depending bracket B' beneath the breech end B².

C are receiver brackets struck up of sheet 95 metal and formed in two parts embracing the depending bracket of the barrel, the latter being pivoted thereto by the screw and nut c. The opposing walls of the receiver brackets are secured together by like as- 100 sembling nuts and screws c' which also serve as pivots for the firing mechanism.

D is the hammer pivoted at d between the

walls of the receiver bracket.

anism. Fig. 4 is a similar view indicating the lever controlling mechanism for unlocking the rifle thrown back in position for "breaking" the same. Fig. 5 is a view similar to Fig. 2 with the barrel "broken" or unlocked; the extractor being in the position occupied when the shell is ejected,—showing also the manner of locking the hammer it. The pivotal end of the locking of the 105 rifle barrel in position for firing, and also the operation of the link F for actuating the extractor G. The lever E is constructed of sheet metal and fulcrumed upon the hammer pivot d,—its free end being formed with a 110 thumb piece e for convenience in operating it. The pivotal end of the lever is shaped to

form a link E'' pierced to receive a bolt f connecting the link F thereto. The link F is also constructed of sheet metal and is slotted at its forward end as indicated at f', for the passage of the pivotal nut and screw c engaging the walls of the depending bracket of the rifle barrel and by which the receiver bracket is pivoted to the barrel

portion.

10 H is a depending wall preferably integral with one of the tubes forming the rifle barrel, having a ledge h adapted to partially support the extractor G. The extractor G is provided with a projecting transverse pin 15 g secured thereto which on one side extends through the slot in the depending wall H of the barrel. Projecting upwardly from the link F are fingers f^2 spaced apart as indicated in Fig. 14 to receive between them 20 the depending wall H and the end of the extractor G, being adapted, however, to encounter the projecting ends of the pin gwhereby the extractor is actuated.

 f^3 is a depending lug formed integral with 25 the link and pierced to receive the main spring pin I which is free to move through said aperture. The rear end of said pin is enlarged as indicated at I' and pointed to enter a suitable depression formed in the

so lower end of the hammer D.

I² is a main spring supported on said pin. J is the trigger pivoted upon the screw J' between the up-standing ears K' of the trigger guard K. The forward end of the trigger 35 guard is notched as indicated at k in Fig. 15, to receive the projecting wall of the abutting receiver brackets C, by which means this end of the guard is secured against displacement;—the trigger pivot J' extending through the abutting walls of the receiver brackets C and the guard K secures the opposite end of the latter against displacement.

Between the ears K' of the trigger guard 45 and formed integral with the guard, is a projecting portion k' bent back upon itself to receive the end of a coil spring L, adapted to bear against the trigger to hold it in

locked relation with the hammer.

As indicated in Fig. 7, the receiver brackets C at the point C' are formed narrower relatively than between the portion housing the trigger mechanism, whereby a narrower and thereby neater formation at

55 the grip stock is possible.

A' is a lining in the kerf A2 formed in the end of the stock and shaped to receive the ends of the receiver brackets. A³ is a screw securing said lining to the stock, provided with a relatively large head tapering at its forward end as indicated at a'. As shown in cross-section in Fig. 9, the walls of the receiver bracket are given an arc-shaped formation indicated at C², to receive the 65 head of the screw A³ which upon entering

between the spaced walls of the bracket expands them slightly laterally. The lining A' is also provided with a complementary arc-shaped formation to receive the round or convex portion of the receiver bracket. 70 It will now be noted that upon forcing the receiver bracket into the kerf formed in the end of the stock that the head of the screw will enter between the opposing walls of the receiver bracket causing them to ex- 75 pand, thereby engaging the lining A' in the kerf of the stock and thus assist in securing the barrel to the stock. The relatively long convex portion also serves to prevent any tendency of the receiver bracket to rock 80 on the bolt M by means of which the bracket is secured to the stock. The removable bolt M is provided with a suitable milled head at one end for facility in operating it,—the other end being screw-threaded to engage 85 the counter-sunk nut m. The opposite side of the stock is provided with a counter-sunk washer m' to provide against the wear incident to the entry and removal of the bolt.

Having thus indicated the several parts 90 by reference letters, the operation of the invention will be readily understood. When it is desired to release the locking mechanism for the purpose of inserting a cartridge and to eject the old shell, the lever E is 95 operated by pressing upon its thumb piece; the pin f may thus be forced out of locked relation with the notched end of the arcshaped depending bracket and the fingers f^2 of the link F drawn toward the projecting 100 pin of the extractor. The adjustment of the parts is such that upon the fingers of the link coming into contact with the projecting pin of the extractor, the locking pin of the lever is released from the notch of 105 the bracket as clearly indicated in Fig. 4 of the drawings. The barrel portion may now be "broken" from the stock by forcing it to turn on the pivot c. This action causes the arc-shaped portion of the bracket to pass 110 in front of the locking pin thereby forcing the link F to the limit of its movement, at the same time the projecting pin g of the extractor is brought into operating contact with the up-standing fingers of the link 115 F;—this action pushes the extractor rearward discharging the shell. A cartridge may now be inserted and the barrel portion swung back upon its pivot into firing position.

Immediately upon the locking pin returning to the notched portion of the bracket, the spring I² becomes active forcing the link F forward to its normal position and the locking pin into the notch, again securing 125 the barrel and stock portion in firing relation. In returning the parts to their locked or normal position, the end c^2 of the abutting wall of the receiver bracket forces the extractor forward to its initial position.

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As indicated in the description of the parts, the receiver bracket and stock may be readily disconnected by releasing the bolt M engaging the receiver bracket and stock.

5 Having thus described my invention, what

I claim is:—

1. In a fire arm, a stock portion and a barrel portion pivoted together, a depending bracket carried by the barrel portion 10 notched to receive a locking pin, a lever pivoted in the stock portion carrying a pin adapted to enter the notch in the depending bracket whereby the parts are locked in firing position, and means for maintaining the 15 pin in notched relation until manually released.

2. In a fire arm having a stock portion and a barrel portion pivoted together, a depending bracket carried by the barrel por-20 tion notched to receive a locking pin, a lever fulcrumed in the stock portion, an extractor supported in the barrel portion, a pin carried by the lever adapted to enter the notched portion of the depending bracket 25 to lock the barrel portion and stock portion in firing position, and means operated by said lever adapted to actuate the extractor simultaneously with the withdrawal of the pin from the notched bracket.

30 3. In a fire arm, a barrel having a depending bracket portion notched to receive a locking pin, a stock portion pivoted to the barrel portion, an extractor carried by the barrel portion, a lever fulcrumed within 35 the stock portion carrying a pin adapted to enter the notched portion of the bracket to lock the barrel and stock portions in firing position, a link pivoted to the locking pin

adapted to actuate the extractor, and means 40 for maintaining the pin in locked relation with the notched portion until manually

released.

4. In a fire arm, a barrel portion carrying a depending bracket, an extractor supported 45 in the barrel portion provided with a projecting pin transversely mounted therein, a stock portion pivoted to the depending bracket, a hammer pivoted to the stock portion, a lever fulcrumed on said pivot, a link 50 pivoted to said lever provided with means adapted to encounter the projecting pin of the extractor, and a spring adapted to actuate said hammer and to normally maintain said link out of actuating relation with the 55 pin carried by the extractor.

5. In a fire arm, a barrel portion having a depending bracket the wall of which is notched to receive a locking pin, a stock portion carrying a firing mechanism pivoted to 60 said depending bracket, a lever fulcrumed within the stock portion, a locking pin carried by said lever adapted to enter the notched portion of the depending bracket, an extractor carried by the barrel portion ⁶⁵ provided with a transverse projecting pin, a

slotted link pivoted at one end to the locking pin, a bolt engaging the walls of the bracket and projecting through the slotted link, said link provided with up-standing fingers adapted to engage the pin of the extractor 70 whereby upon operating said lever the locking pin may be withdrawn from the notched portion of the bracket and the extractor ac-

tuated.

6. In a fire arm, a barrel portion and a 75 stock portion pivoted together, said barrel portion provided with a depending bracket having an arc-shaped end wall notched to receive a locking pin, an extractor carried by the barrel portion, a hammer pivoted to 80 the stock portion, a lever fulcrumed upon the pivot of the hammer, a locking pin carried by said lever adapted to enter the notched portion of the bracket and to ride in contact with its arc-shaped end when 85 manually released from said notched portion, a link pivoted to said pin adapted to actuate the extractor, and a spring to actuate the hammer and to force the locking pin into engagement with the notch of the 90 bracket and its arc-shaped end.

7. In a fire arm, a barrel portion provided with a depending bracket notched to receive a locking pin, a stock portion pivoted to the bracket, a hammer pivoted to the stock por- 95 tion, a lever fulcrumed upon the hammer pivot, an extractor carried by the barrel portion provided with a transverse pin, a locking pin carried by the lever adapted to enter the notch formed in the bracket, a link 100 pivoted to said locking pin adapted to actuate the extractor, a spring adapted to operate the hammer and to maintain the locking pin in locked relation with the bracket, and means operated by the lever for forcing said 105 hammer out of firing contact with the car-

tridge, substantially as described.

8. In a fire arm, a barrel portion having a depending bracket, a stock portion pivoted thereto, a hammer pivoted to the stock por- 110 tion, a lever fulcrumed upon the hammer pivot adapted to lock the barrel portion and stock portion in firing position and to force said hammer out of firing contact with the cartridge upon actuating said lever to un- 115 lock the stock and barrel portions.

9. In a fire arm, a barrel portion provided with a depending bracket and having a slotted depending wall formed with a ledge to support an extractor, an extractor sup- 120 ported upon said ledge provided with a transverse pin projecting through the slot in the depending wall, a stock portion pivoted to the depending bracket, a hammer pivoted in the stock portion, a lever ful- 125 crumed upon the hammer pivot provided with means for locking the stock portion and barrel portion in firing position, a link pivoted to said lever provided with fingers adapted to encounter the projecting pin of 130

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the extractor, and a spring adapted to actuate the hammer and to normally maintain said link out of operating relation with the extractor.

10. In a fire arm, a depending bracket carried by the barrel portion, a receiver bracket pivoted to said depending bracket composed of two independent plates forming walls adapted to partially inclose the firing mechanism, a trigger guard notched to receive the opposing edges of the walls of the receiver bracket and provided with upstanding ears pierced to receive the trigger pivot, the trigger housed between said ears, and a pivotal bolt for said trigger supported in the ears of the trigger guard and engaging the side walls of the receiver bracket.

11. In a fire arm having a stock and a barrel portion, the stock portion having a receiver bracket pivoted to a depending bracket of the barrel portion, a trigger, a trigger guard notched to receive the walls of the receiver bracket and provided with up-standing ears pierced for the passage of the trigger pivot, said guard also provided with an inwardly projecting finger integral with the guard and disposed between its upstanding ears adapted to support a spring designed to actuate the trigger, the spring, and a trigger pivot journaled in the upstanding ears of the guard and adapted to engage the side walls of the receiver bracket.

12. In a fire arm, a barrel portion having a depending bracket, a receiver bracket composed of two opposing plates pivoted to said depending bracket and adapted to support the firing mechanism, a gun stock provided with a kerf to receive the end of the receiver bracket, an expanding element lodged in said kerf adapted to force the walls of said re-

ceiver bracket into engagement with the walls of the stock, and a transverse bolt projecting through the walls of the stock and the walls of the receiver bracket to secure the latter to the stock.

13. In a fire arm, a barrel portion provided with a depending bracket, a receiver bracket pivoted to the depending bracket composed of two opposing plates between which is housed the firing mechanism, a gun 50 stock provided with a kerf to receive the ends of the receiver bracket, a metallic lining for said kerf, an element adapted to secure said lining to the stock and to expand the walls of the receiver bracket into frictional 55 relation with the lining, and a retaining bolt to secure the receiver bracket to the stock.

14. In a fire arm, a barrel portion having a depending bracket, a receiver bracket pivoted to the depending bracket composed of 60 two opposing plates, suitable firing mechanism supported between the walls of said bracket, the projecting ends of said bracket provided with a relatively long convex portion, a gun stock provided with a kerf, a 65 metallic lining lodged in said kerf having a convex portion complementary to that of the receiver bracket, an expanding element lodged in said kerf adapted to force the opposing plates of the receiver bracket apart 70 into frictional contact with the lining, and a transverse bolt adapted to engage the receiver bracket and stock, substantially as described.

In testimony whereof, I sign this specifi- 75 cation in the presence of two witnesses.

COELLO HAMILTON.

Witnesses:

SAMUEL E. THOMAS, GRACE E. WYNKOOP.