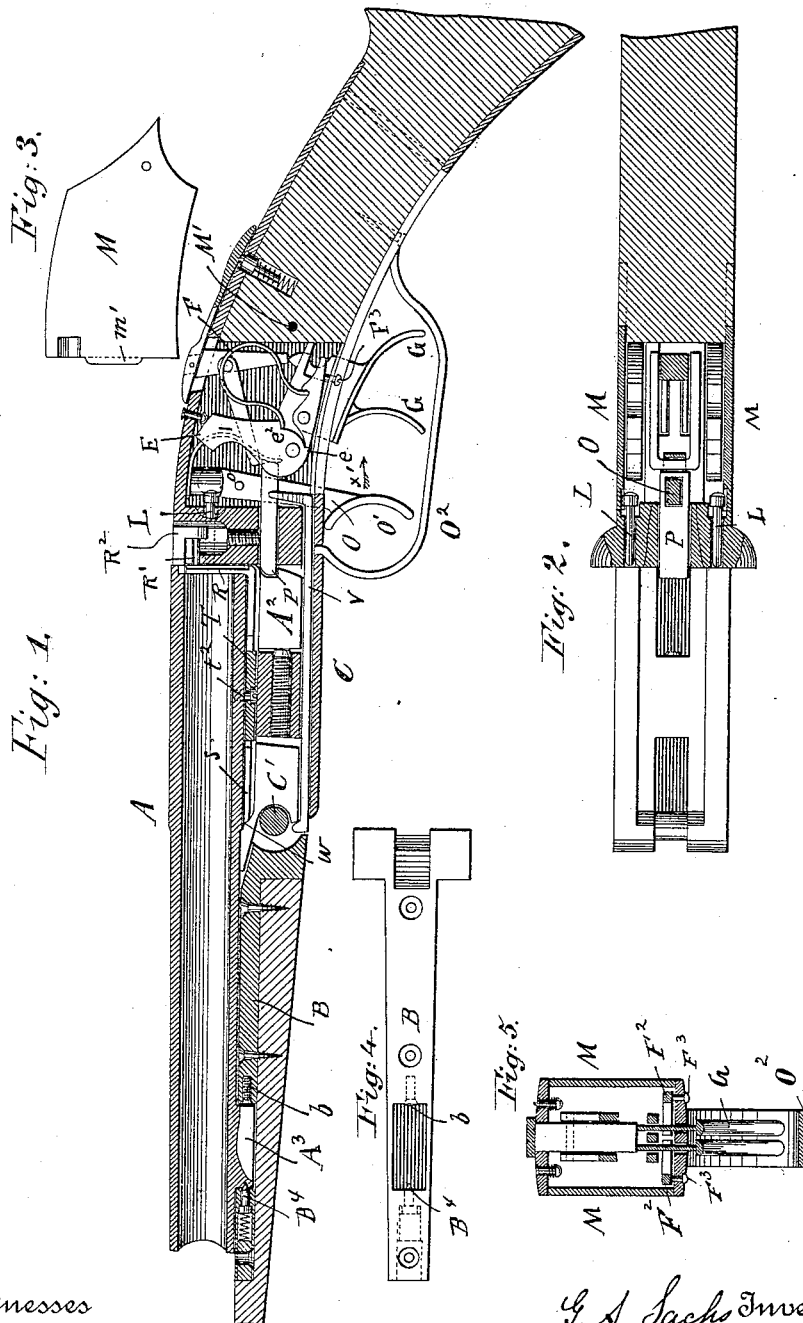


G. A. SACHS.  
EJECTOR FOR BREAKDOWN GUNS.

No. 523,130.

Patented July 17, 1894.



Witnesses  
D. Bogdanoff  
Chas. Cable

G. A. Sachs Inventor  
By his Attorney *Georgel Rueyema*

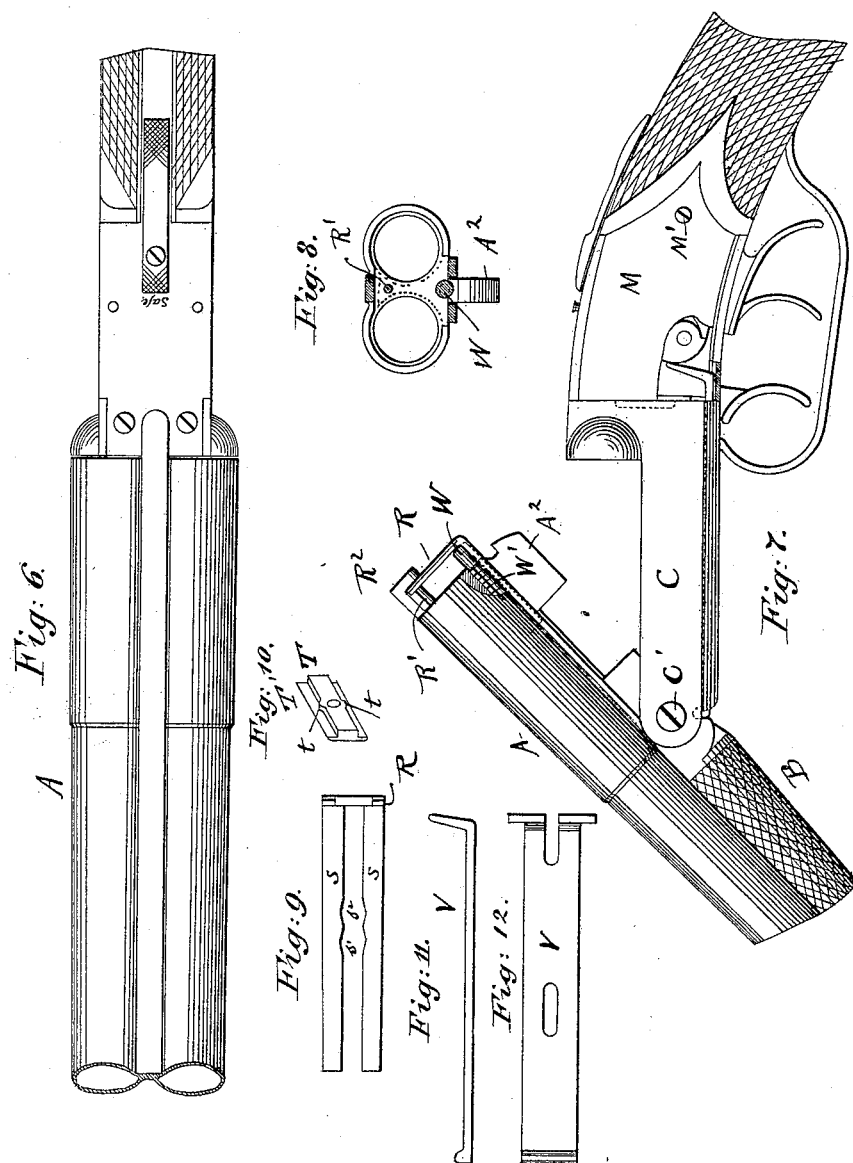
(No Model.)

2 Sheets—Sheet 2.

G. A. SACHS.  
EJECTOR FOR BREAKDOWN GUNS.

No. 523,130.

Patented July 17, 1894.



# UNITED STATES PATENT OFFICE.

GUSTAV ADOLF SACHS, OF EUGENE, OREGON.

## EJECTOR FOR BREAKDOWN GUNS.

SPECIFICATION forming part of Letters Patent No. 523,130, dated July 17, 1894.

Application filed September 9, 1893. Serial No. 485,158. (No model.)

*To all whom it may concern:*

Be it known that I, GUSTAV ADOLF SACHS, a subject of the Emperor of Germany, and a resident of Eugene, in the county of Lane and State of Oregon, have invented certain new and useful Improvements in Firearms, of which the following is a specification.

This invention relates to certain new and useful improvements on my patents on breech-loading fire arms, No. 353,432, issued to me on the 30th day of November, 1886, and No. 495,639, issued to me on the 18th day of April, 1893.

The object of my invention is to provide means for holding the hammer back when the breech is opened, to provide means for setting the trigger sear, to provide means for adjusting the fore arm, to provide an improved extractor for the empty shells, and finally to provide a trigger, spring and sear that can be interchanged and used for either barrel of the gun.

The invention consists in the construction and combination of parts and details which will be fully described hereinafter and finally pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical longitudinal sectional view of the breech-part of my improved gun. Fig. 2 is a horizontal sectional view, on the line 2 2, of Fig. 1. Fig. 3 is a side view of a lock-plate, detached. Fig. 4 is a view of the inner surface of my improved fore end. Fig. 5 is a vertical transverse sectional view of the gun, on the line 5 5, Fig. 1. Fig. 6 is a top view of the breech part of the gun. Fig. 7 is a side view of the same, opened to show the extractor, parts of the barrels being broken off. Fig. 8 is a transverse sectional view, on the line 8 8, of Fig. 7. Fig. 9 is a plan view of the extractor. Fig. 10 is a perspective view of the flanged clip of the same. Fig. 11 is a side view of the cocking slide; and Fig. 12 is a top view of the same.

Similar letters of reference indicate corresponding parts.

The barrels A A are pivoted by means of a pivot C' at the front of the frame C, so as to turn on said pivot C', and are provided with a hook-lug A<sup>2</sup> that is engaged by a sliding bolt P in the breech part of the gun, which slide-bolt is operated by a pivoted lever O

having a finger-rest O' between the stock and the trigger-guard O<sup>3</sup>.

The lever O is provided with a transverse pin o, against which, when the gun is fired, the hammers E rest, the upper ends of said hammers resting against the rear head of the firing-pins L. When the lever O is moved in the direction of the arrow x', Fig. 1, for the purpose of withdrawing the bolt P and disengaging it from the hook-lug A<sup>2</sup> so as to permit of swinging up the breech-end of the barrels, said transverse pin o bears against the free ends of the hammers and presses them back in the direction of the arrow x', so as to permit the firing-pins to recede as the breech-end of the barrel swings upward, thus permitting the more easy opening and closing of the breech.

Lock-plates heretofore have been held in place by a screw passing through the same at or near the centers thereof and also passing through the recess in the stock in which the hammer mechanism is located. This interfered to a great extent with the mechanism of the gun and also required the hammers and other parts to be of a certain shape, so as not to interfere with the screw. I overcome this difficulty by passing the screw M' for holding said lock-plates in place through the lower ends of said lock-plates and through the stock, as shown in Figs. 1 and 3, and provide the lock-plates at the front ends with lugs m', which pass into suitable recesses at the rear end of the breech-block as shown in dotted lines in Fig. 7. The fore end B has a spring-pin B<sup>4</sup> that engages a lug A<sup>3</sup> on the barrel. So as to cause the lug A<sup>3</sup> on the barrel to fit snugly in the recess of the fore-end, a screw b is provided at the lower end of said recess, which screw can be adjusted so as to make clear the length of the recess so that the lug A<sup>3</sup> fits very snugly in the same. The trigger-sear F<sup>2</sup> is pressed by the trigger-spring F against a screw F<sup>3</sup> passed through the bottom-plate of the lock casing, which screw can be so adjusted that the engagement of the trigger-sear with the hammer is greater or less, thus permitting of so adjusting said sear that a greater or less pull on the trigger G is required to fire the gun.

The hammers E are provided with a shoulder e against which the end of the sear rests

and with a shoulder  $e^2$  against which one end of the trigger-spring F rests. The trigger-spring F is made U-shaped with the ends of the shanks bent or flared outward, and the  
 5 spring is made symmetrical in relation to a central line, thus permitting of reversing the spring and engaging either end with the sear or with the hammer, or using it on either hammer as may be desired. With this construction the extra lug on the hammer can be dis-  
 10 pensed with and the shape of the hammer simplified, thus reducing the cost of making the same.

The extractor consists of a plate R having  
 15 recesses for receiving the edges of the shells, as shown in dotted lines in Fig. 8, which plate is guided at its upper end by a pin R' projecting from the end of the barrel to a hook-lug R<sup>2</sup> also projecting from the ends of the  
 20 barrel. On the under side of the barrel the extractor plate has two spring-shanks S provided on the inner edges with the two pairs of opposite notches  $s'$   $s^2$ .

A clip T provided with side-flanges T' is  
 25 provided with two opposite bevel projections  $t$  on its side edges, and said clip is fastened to the under side of the barrel by means of a screw  $t^2$  in such a manner that the clip is between the shanks  $s$   $s$ , the flanges  $t'$  resting  
 30 against the inner edges of the shanks and the bevel lugs  $t$  being in the two opposite recesses  $s'$  or  $s^2$ .

A pin W is mounted to slide in the bottom of the barrels and is pressed outward by a  
 35 helical spring W', the outer end of said pin bearing against the lower edge of the extractor-plate R, as shown in Fig. 7.

When the breech is opened and the front end of the barrel swung down, the front ends  
 40 of the shanks S of the extractor-plate R ride on the shoulders W at the front end of the breech-block, whereby the shanks S are moved lengthwise, and as soon as the projection between the two notches  $s'$   $s^2$  on the  
 45 shanks has passed the projections  $t$  on the clip T the spring W' suddenly throws the extractor-plate outward and this sudden movement forcibly throws out the cartridges which have previously been loosened by the length-  
 50 wise movement of the trigger-plate and shanks S.

To load the gun, the cartridges are inserted

in the breech-end in the usual manner and the breech-end pressed down upon the breech-block, whereby the extractor is pressed to-  
 55 ward the breech-end of the barrel. Thereby the shanks S are also moved in the direction of their length and the sides of their inclined recesses  $s'$   $s^2$  acting on the beveled projec-  
 60 tions  $t$  of the clip T, force said shanks apart until the projections  $t$  have passed from the rear recesses or recesses near the front ends of the shanks to the recess  $s^2$  nearer the closed ends of the shanks.

The cocking slide V cocks the hammers in  
 65 the usual manner when the breech is opened.

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

1. In a fire arm, the combination, with a  
 70 stock, of lock-plates having lugs at their front ends, which lugs engage parts of the breech-block, and a screw passed through the rear ends of the lock-plates and through the part of the stock, substantially as set forth.

2. In a breech-loading fire arm, the combination, with an extractor-plate, having two  
 75 spring-arms provided in their inner edges with two sets of notches opposite each other, of a clip held between said shanks at the  
 80 notched parts thereof and having projections on its side edges, and a spring pin acting on said extractor-plate, substantially as set forth.

3. In a breech-loading fire arm, the combination, with a pivoted barrel, of an extractor-  
 85 plate having two spring-shanks provided in their inner edges with two opposite sets of notches adjacent to each other, which shanks slide on the under sides of the barrels, a clip fitted between the shanks and held by a screw  
 90 to the under side of the barrels, which clip has flanges overlapping the under sides of the shanks, and beveled projections on its side edges, which clip is located at notched parts of the shanks and a spring-bolt at the bottom  
 95 parts of the barrels, which spring bolt acts on the extractor-plate, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

GUSTAV ADOLF SACHS.

Witnesses:

SHERWOOD BURR,  
 H. C. HUMPHREY.