

(No Model.)

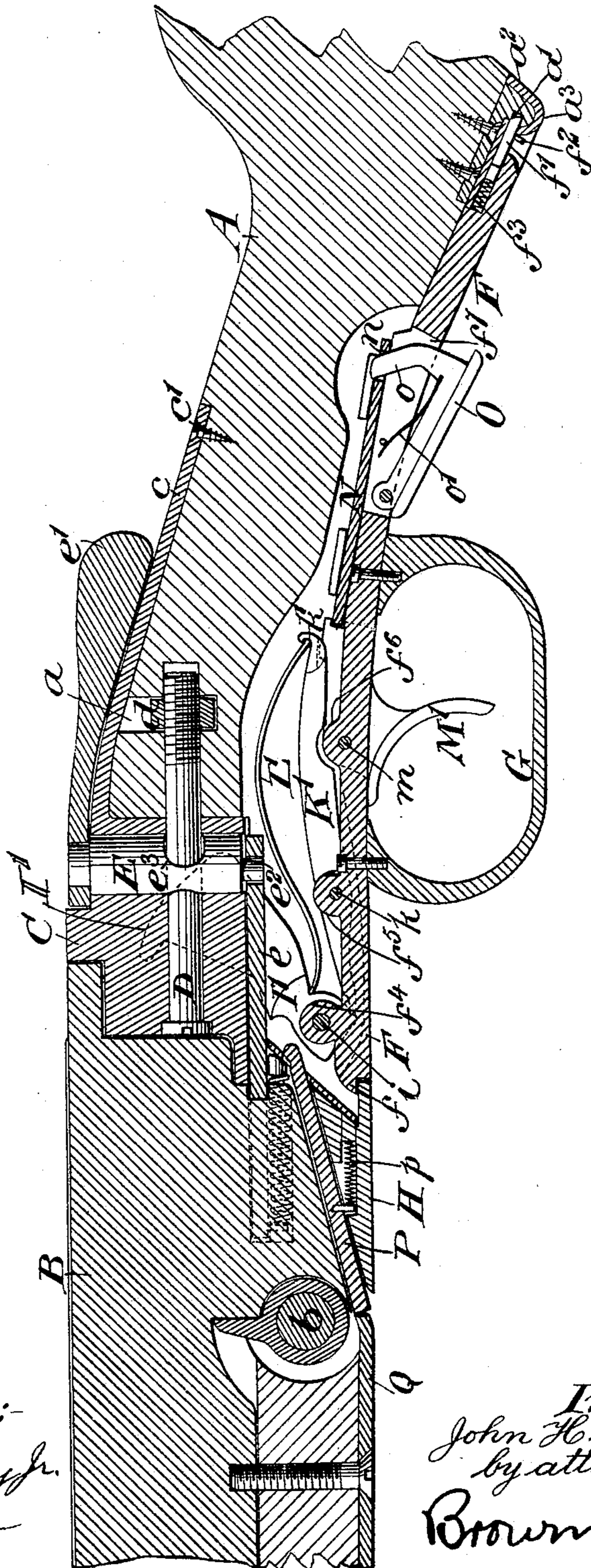
2 Sheets—Sheet 1.

J. H. BROWN.  
BREAKDOWN FIREARM.

No. 585,860.

Patented July 6, 1897.

Fig. 1.



Witnesses:  
George Barry Jr.  
Fruit Haynes

Inventor:  
John H. Brown  
by attorneys  
Brown & Howard

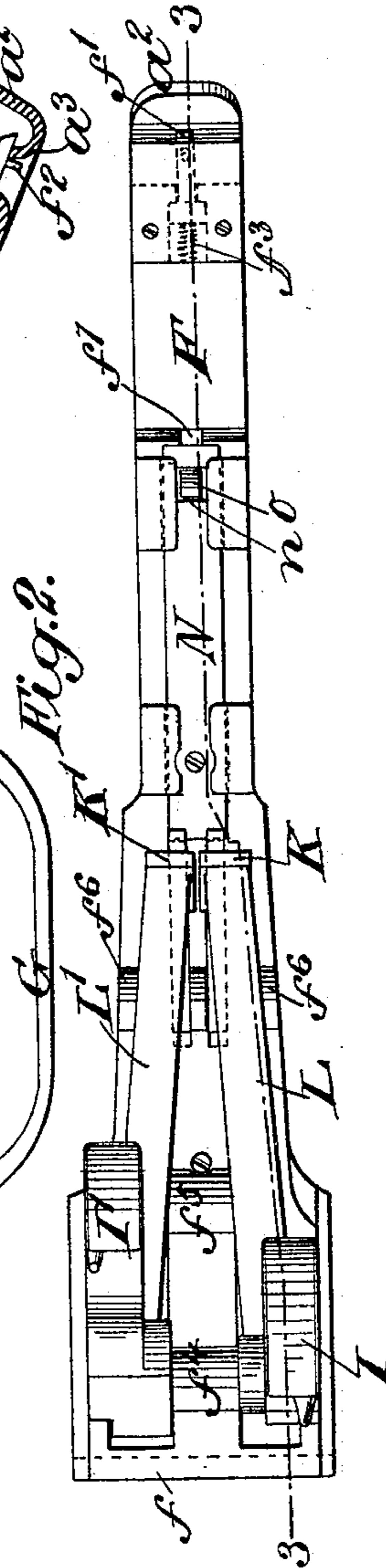
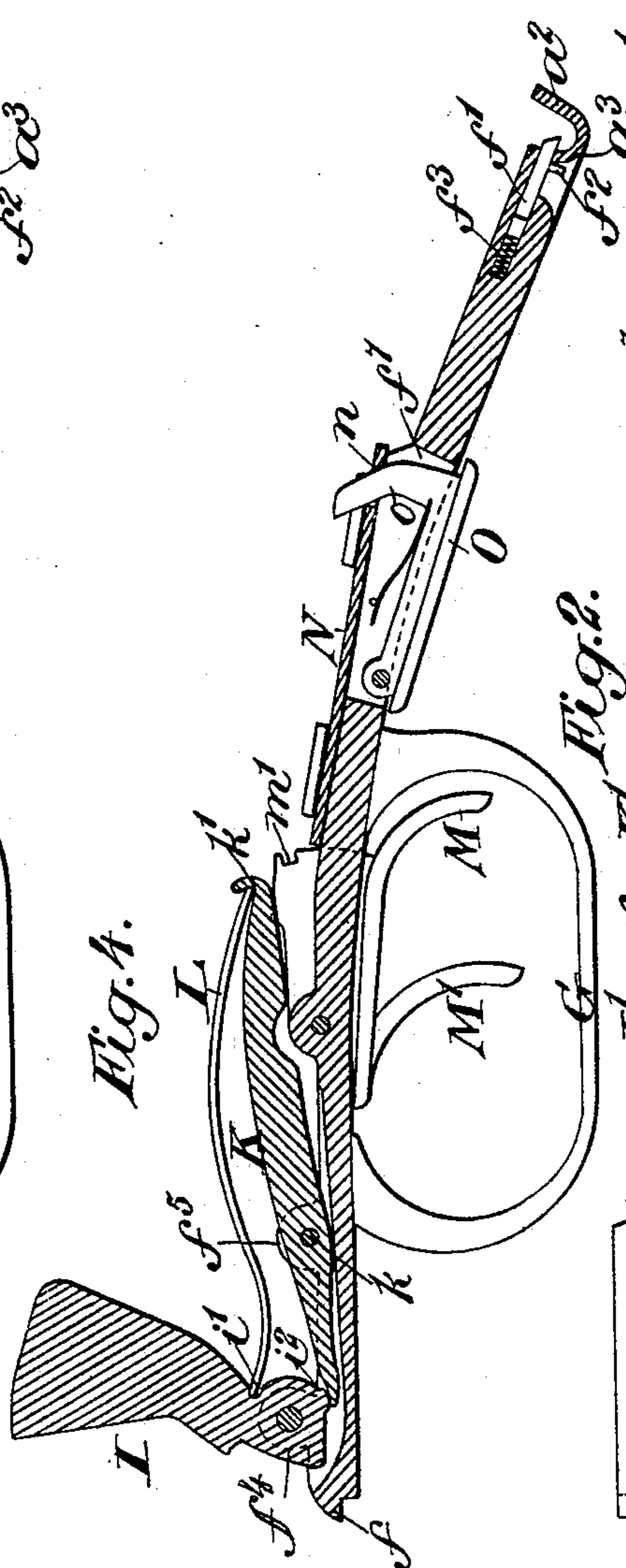
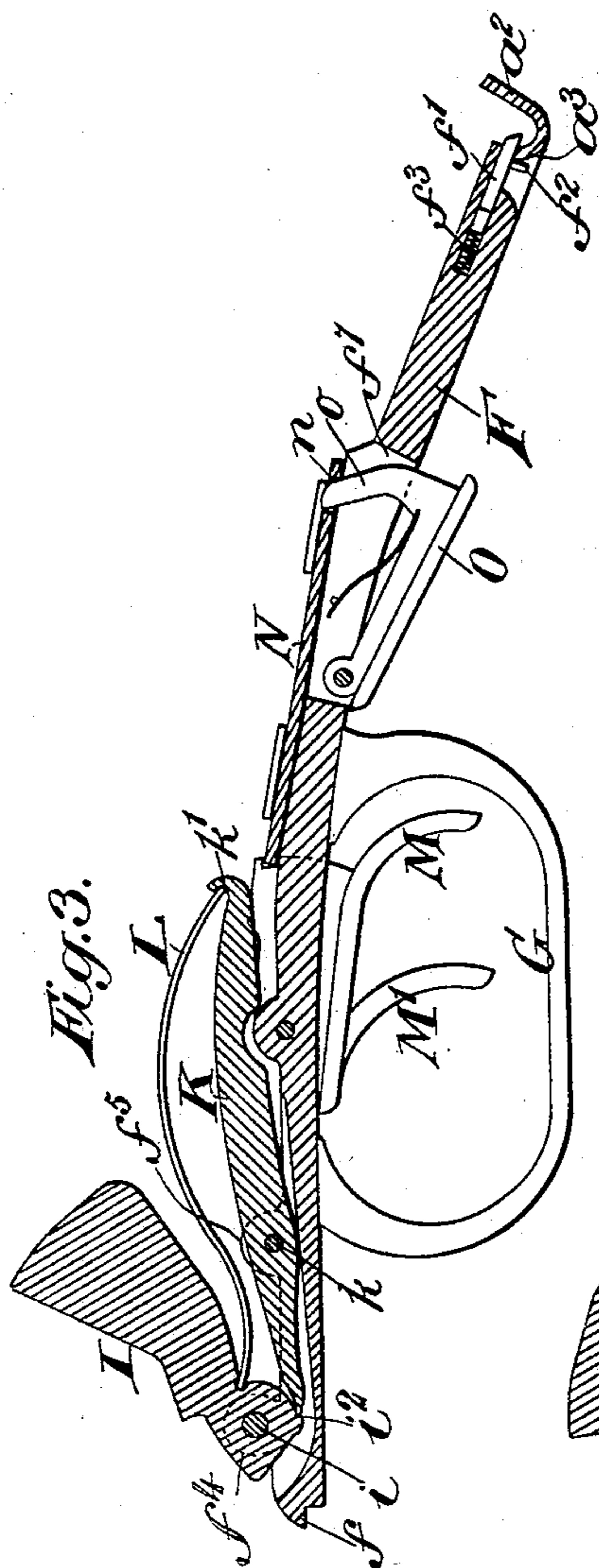
(No Model.)

2 Sheets—Sheet 2.

J. H. BROWN.  
BREAKDOWN FIREARM.

No. 585,860.

Patented July 6, 1897.



Witnesses:-  
George Barry Jr.  
Fred Harper

Inventor:-  
John H. Brown  
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# UNITED STATES PATENT OFFICE.

JOHN H. BROWN, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO  
ROBERT M. BROWN, OF SAME PLACE.

## BREAKDOWN FIREARM.

SPECIFICATION forming part of Letters Patent No. 585,860, dated July 6, 1897.

Application filed April 6, 1896. Serial No. 586,315. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN H. BROWN, of the city and county of New York, in the State of New York, have invented a new and useful  
5 Improvement in Firearms, of which the following is a specification.

My invention relates to an improvement in firearms with the object in view of simplifying the lock and providing for its ready removal, together with the triggers and trigger-guard, from the stock at pleasure without disturbing the connection between the barrel or barrels and stock, for taking apart the parts of the lock at pleasure for renewal or cleaning, and for holding the barrel or barrels to  
15 the stock.

I have chosen to illustrate my invention in the form of a lock adapted for a double-barrel gun—such, for example, as the double-barreled shotgun; but its features may be applied to a rifle or single-barrel shotgun.  
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In the accompanying drawings, Figure 1 is a longitudinal section from the upper to the under side, taken centrally through the lock and the portion of the barrels and stock adjacent thereto, the section passing through the division-plate between the barrels. Fig. 2 is a top plan view of the lock in detail. Fig. 3 is a vertical section through line 3 3 of Fig. 2, showing the hammer cocked; and Fig. 4 is a similar view showing the hammer down or forward.  
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The stock is denoted by A. The division-plate, to which the barrels are secured and which carries the side groove along its upper edge, is denoted by B and the breech-block for connecting the barrels to the stock by C. The breech-block C is secured to the stock by means of a screw-bolt D, which extends from the front of the breech-block, in which the head of the screw-bolt is countersunk, rearwardly through the breech-block and into the front portion of the stock, where it engages a nut  $d$ , located in a slot  $a$ , which opens to the top of the stock, but which is covered by a tailpiece or tang  $c$  of the breech-block, which extends along down the top of the stock a considerable distance and is secured by a screw  $c'$ . Whenever the joint between the  
45 breech-block and stock becomes loosened, either by the shrinking of the wood or by jar-

ring due to the firing of the piece, such joint may be tightly closed by turning the bolt D.

The barrels are hinged to the breech-block C by means of a pintle  $b$ , as is common, to permit them to be tilted downwardly for purposes of loading and removing the shells. They are locked in their normal position by means of an inwardly and backwardly spring-actuated bar  $e$ , operated by a vertical rocking post E, which has connected therewith a thumb-lever  $e'$  for operating it, as is common. The post E is connected with the bar  $e$  by means of a pin  $e^2$ , located eccentrically to the axis of the post, and the said post is provided with a laterally-elongated opening  $e^3$ , through which the bolt D extends.  
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The usual ejector is omitted in the drawings, as it forms no part of my present invention, and it is to be assumed that it may be of any well-known or approved form, such as is in common use with breech-loading firearms.  
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The under side of the stock and the under side of the breech-block are cut away to receive the lock, the several parts of which are mounted upon the guard-plate F, to the under side of which the trigger-guard G is secured, or the trigger-guard G might be formed integral with the guard-plate F. When the guard-plate F is in position, it fits the mouth of the recess in the under part of the stock and breech-block and is conveniently secured in position by means of a projecting lip  $f$  at its front end, which catches over the rear edge of the plate H, fixed to the under side of the breech-block, and at its rear end the said guard-plate F is provided with a spring-actuated catch  $f'$ , provided with an operating pin or shoulder  $f^2$ , adapted to spring into a notch  $a'$ , formed in the front of a finishing or end plate  $a^2$ , permanently fixed to the under side of the stock. The under edge of the plate  $a^2$  in proximity to the notch  $a'$  is rounded, as shown at  $a^3$ , so that the catch  $f'$  will be forced back against the tension of its actuating-spring  $f^3$  as the guard-plate F is pressed into position and will seat in its notch as soon as the plate reaches its position from under the pressure of the extension of the spring  $f^3$ . The guard-plate F, with the parts attached thereto, may be removed at any time in a mo-  
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ment by simply springing the catch  $f'$  forwardly to release its end from the notch  $a'$  and then swinging its rear end downwardly until the lip  $f$  may be released from the edge of the plate H.

The plate F has at its front end the hammers  $I I'$ , mounted thereon to swing forwardly and backwardly by means of a pintle  $i$ , extending through upwardly-extending ears  $f^4$  on the plate and through corresponding perforations at the lower ends of the hammers. The pintle  $i$  is made to be readily inserted and removed by the endwise pressure of any pointed instrument to remove the hammers and again adjust them, and it is held in its position by the engagement of its ends with the opposite interior walls of the recess in the breech-block when the lock is in position for use.

The sears for holding the hammers cocked are denoted by  $K K'$  and are pivoted to the guard-plate F by means of a pintle  $k$ , extending through ears  $f^5$ , projecting upwardly from the plate F. The pintle  $k$  may be removed at any time by endwise pressure, and it, like the pintle  $i$ , is held in position by the interior opposite walls of the recess when the lock is in use.

The ordinary springs for operating the sears are omitted and the main springs for operating the hammer are made to perform the double function of operating the sears and also throwing the hammers. The said springs are denoted by  $L L'$ , the spring  $L$  being arranged to operate the hammer  $I$  and sear  $K$  and the spring  $L'$  to operate the hammer  $I'$  and sear  $K'$ . The springs  $L L'$  are removably supported by their engagement at their rear ends with notches  $k'$  at the rear ends of the sears and at their front ends with depressions  $i'$  at the rear of the hammers a short distance above the shoulder  $i^2$ , where the sear engages the hammer and holds it cocked. The springs  $L L'$  are normally slightly curved, as represented in Fig. 4, and when the hammer is forward or down, as represented in Fig. 4, the spring  $L$  or  $L'$  may be inserted in position or removed from its position by a lateral pressure with the fingers. The structure and arrangement are such that when the hammers are thrown back they will compress the springs  $L L'$ , as shown in Figs. 1 and 3, and the spring-pressure will at the same time exert itself to push the rear end of the sears downwardly to throw their forward ends into engagement with the shoulder on the hammer to hold it cocked. The amount of downward pressure which shall be exerted upon the sears by the springs is determined to a nicety to afford the desired amount of pressure upon the trigger in firing by so locating the spring with respect to the sear that more or less of its force shall be expended in pressing the sear rearwardly instead of downwardly.

The sears  $K K'$  are rocked in a direction to release the hammers by the lifting pressure

under their rear ends when the triggers  $M M'$  are pulled. The triggers are pivoted to the guard-plate F by a pintle  $m$ , which extends through uprising ears  $f^6$  on the plate and through corresponding perforations in the triggers.

The triggers are normally locked against rearward movement, and hence the gun locked at safety by the action of a longitudinally-sliding bar N, the forward end of which rests normally in notches  $m'$  in the rear ends of the operating-arms of the triggers and which is slid rearwardly out of engagement with the triggers when the gun is grasped for firing by the upward pressure upon the spring-actuated lever O, pivoted in a slot  $f^7$  in the guard-plate to the rear of the trigger-guard. The lever O is provided with an upwardly and forwardly inclined arm  $o$ , which works within a slot  $n$  in the bar N as the lever O is raised. The effect of the inclined arm  $o$  upon the bar N is to force it rearwardly out of engagement with the triggers, and when the lever O is returned to its depressed position under the tension of the spring  $o'$  the arm  $o$  will force the bar N forwardly into locking engagement with the triggers.

The hammers  $I I'$  are cocked as the barrels are swung downwardly and upon their pivotal connection  $b$  by the rearwardly-sliding movement of a cocking-plate P, seated within the breech-block and held in position by the plate H, fastened to the under side of the breech-block, the cocking-plate P being so located that it will be engaged by the rear edge of a plate Q, fixed to the division-plate B, which rocks with the barrels. As the barrels are thrown back into normal position the cocking-plate P will be thrown forwardly out of the way of the hammers by means of a spring  $p$ .

In practice the hammers are held cocked against unintentional operation by the bar N, which prevents the triggers from being rocked in a direction to lift the rear ends of the sears and disengage the hammers. When, however, the gun is grasped around the small part of the stock to be brought to the shoulder for firing, the fingers other than the forefinger or fingers which are used for the operation of the triggers will without any unusual exertion naturally lift the lever O and free the triggers, so that they may be operated to throw the hammers.

The lock, together with the guard-plate and trigger-guard, may be removed in a moment by simply springing the catch  $f'$ , and when so removed the several parts of the lock—viz., the hammers, the sears, the springs, and the triggers—may be removed by simply sliding the pintles  $i$ ,  $k$ , and  $m$  laterally out of their positions. The several parts may be cleaned with the greatest ease, and if anything happens to injure any one of the parts it may be renewed in a moment's time by exchanging it for another taken from a supply which may be kept at hand. The parts may

be assembled without difficulty and without requiring the use of either a screw-driver or hammer.

What I claim is—

5 1. The combination with the stock and the breech-block, of a screw-bolt extending through the breech-block into the stock for fastening the breech-block into the stock and a nut seated within a slot in the stock for en-  
10 gaging the screw-bolt to hold the parts in removable adjustment, substantially as set forth.

2. The combination with the hammer, the

sear, the actuating-spring, the trigger and their support, of a longitudinally-sliding bar 15 having a locking engagement with the trigger and a spring-actuated lever pivoted to the said support and having an engagement with the sliding bar to positively throw it out of and into engagement with the trigger as 20 the lever is raised and lowered, substantially as set forth.

JOHN H. BROWN.

Witnesses:

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