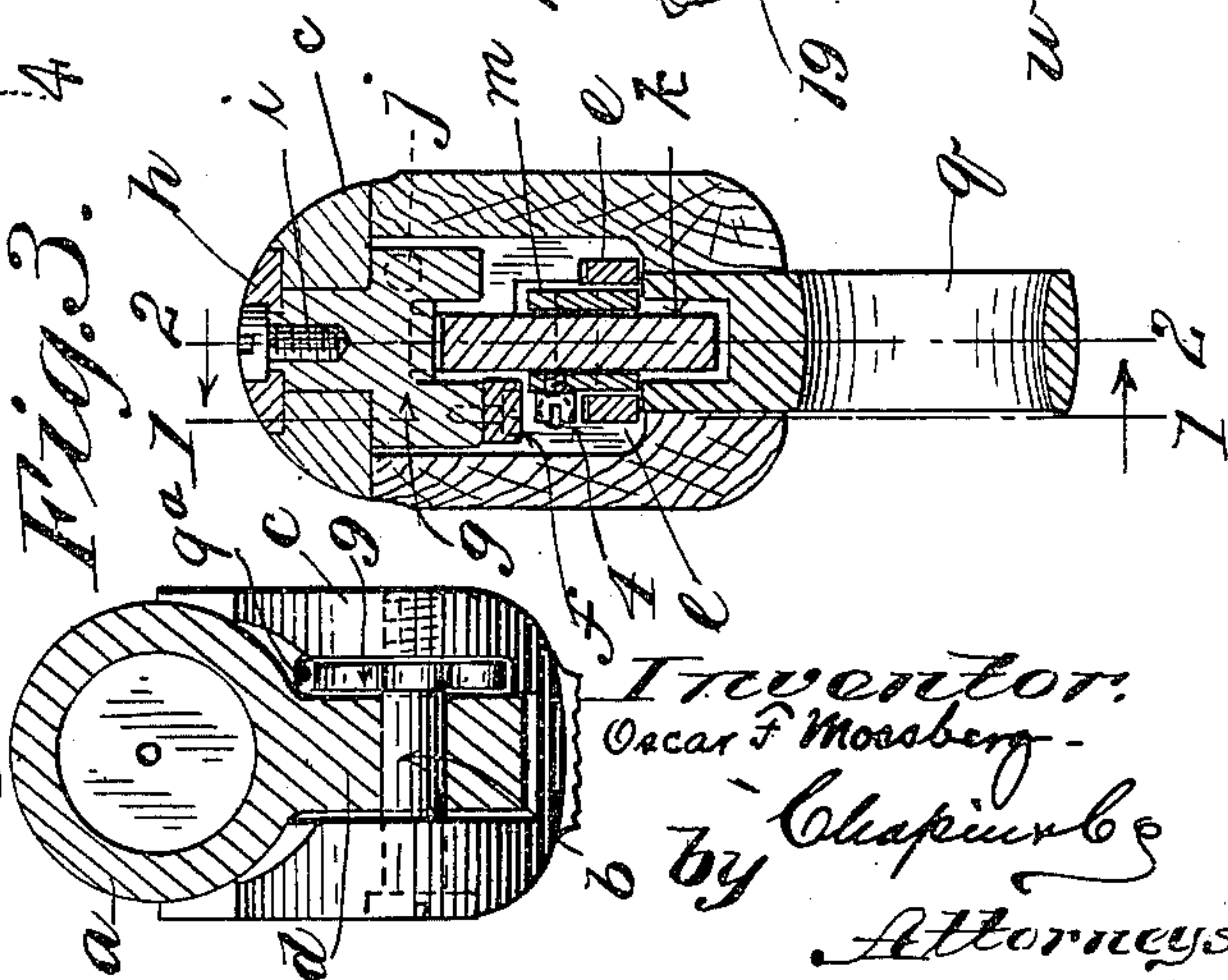
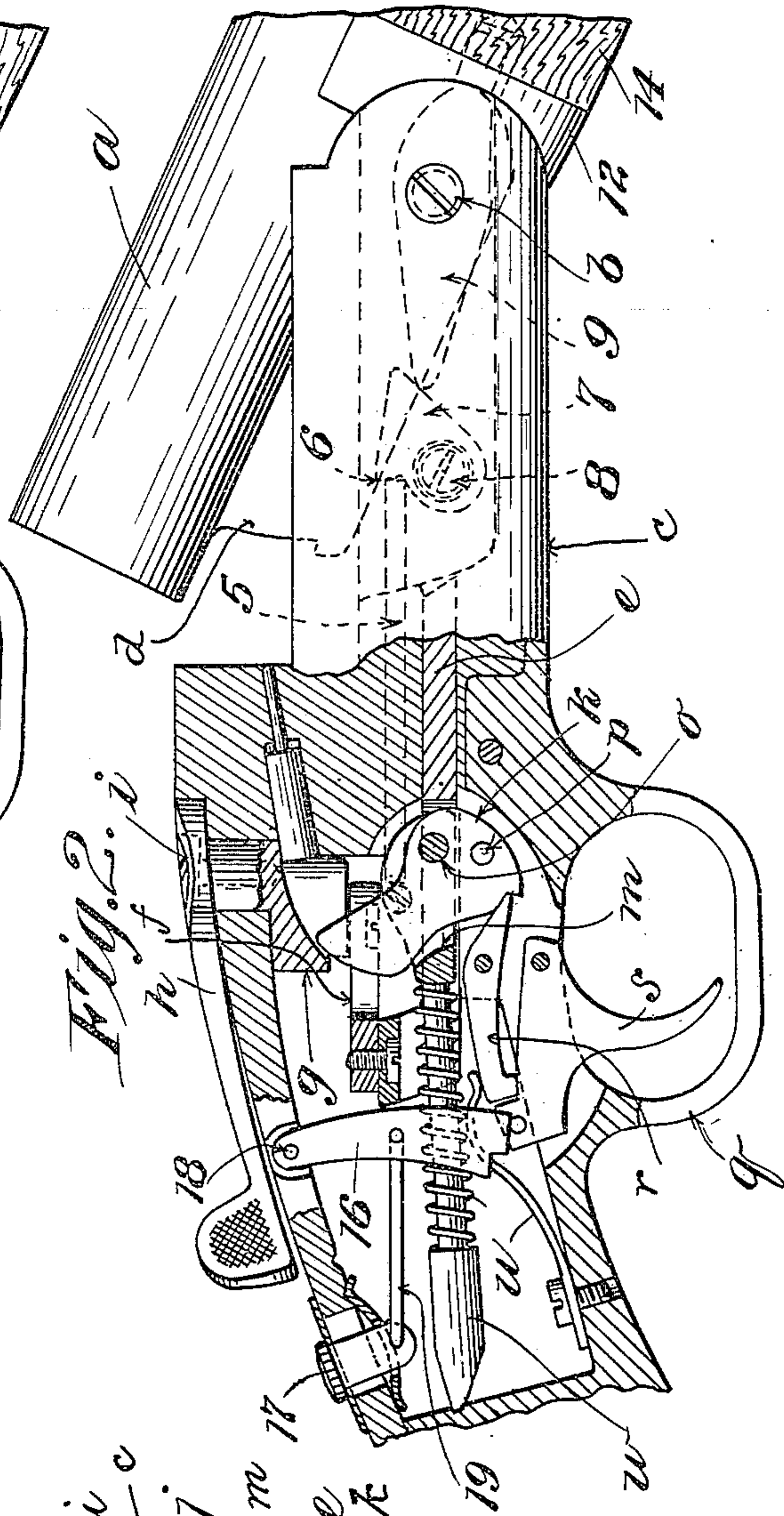
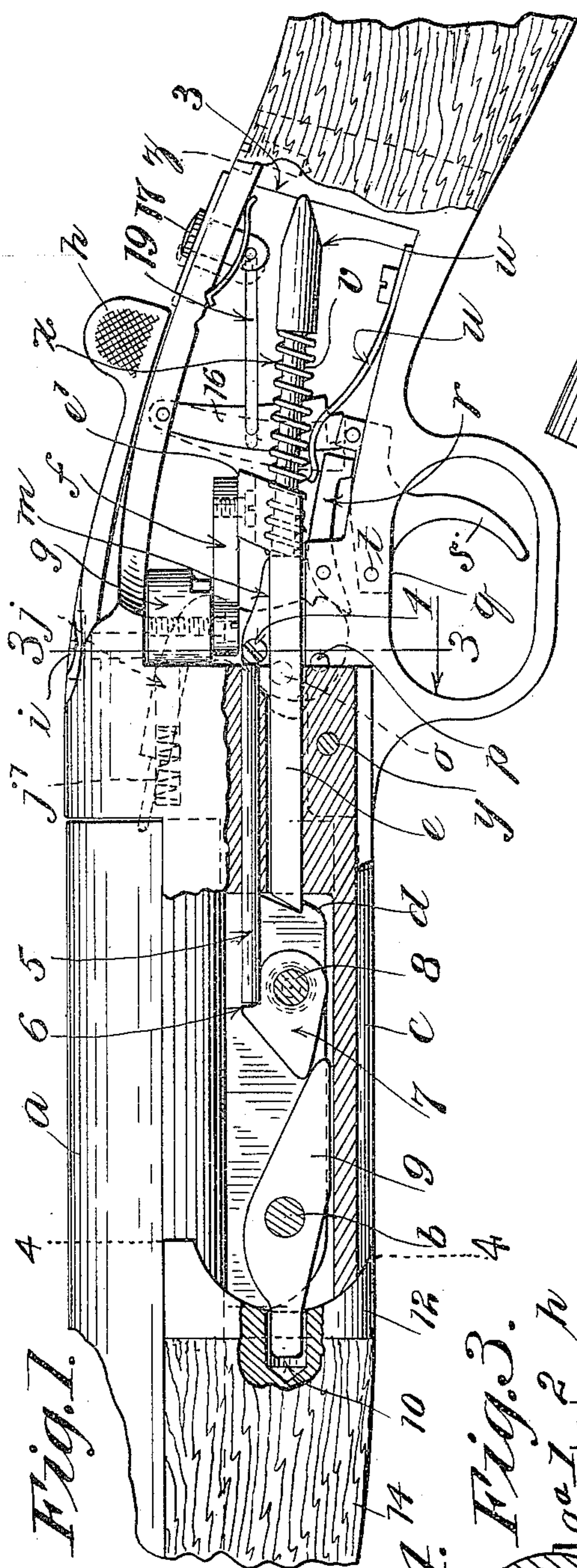


No. 840,507.

PATENTED JAN. 8, 1907.

O. F. MOSSBERG.  
BREECH LOADING FIREARM.  
APPLICATION FILED JULY 1, 1904.



Witnesses:  
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Fig. 2.

FIN.

qaz2w

22

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by *Chapman &*  
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# UNITED STATES PATENT OFFICE.

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## BREECH-LOADING FIREARM.

No. 840,507.

Specification of Letters Patent.

Patented Jan. 8, 1907.

Application filed July 1, 1904. Serial No. 214,992.

*To all whom it may concern:*

Be it known that I, OSCAR F. MOSSBERG, a citizen of the United States of America, residing at Chicopee Falls, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Breech-Loading Firearms, of which the following is a specification.

This invention relates to breech-loading firearms of the breakdown type, the object of the invention being to provide improvements in the cocking mechanism for the hammer whereby said mechanism may be operated by the tipping-down movement of the barrel, a further object of the invention being to provide certain improvements in the general construction and arrangement of the parts of the cocking mechanism relative to the mechanism for locking the barrel in firing position, whereby compactness and easy assemblage of the parts are attained; and the invention consists in the construction set forth in the following specification and clearly pointed out in the claims appended thereto, the improvements being illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation, partly in section, of a firearm in which the invention is embodied, the parts being shown with the hammer and the barrel locked in firing position, the plane of the section being on line 1 1, Fig. 3. Fig. 2 is a vertical sectional elevation of the firearm taken from the opposite side to that shown in Fig. 1, the parts being in the position they would occupy when the barrel is tipped down, the plane of the section being on line 2 2, Fig. 3. Fig. 3 is a transverse section on line 3 3, Fig. 1. Fig. 4 is an elevation of the forward end of the frame, showing the barrel in section, the plane of the section being on line 4 4, Fig. 1.

Referring now to the drawings, *a* indicates the barrel, which is pivotally supported on the pin *b*, extending transversely through the forward end of the frame of the firearm, (indicated by *c*.) The barrel is provided with the usual lug *d* on the under side thereof, with which the slidable locking-bolt *e* engages to hold the barrel in locked position. This locking-bolt consists of a flat bar having an upstanding boss *e'* on its rear end, a link *f* pivotally engaging this boss and extending

to the rotatable stud *g*, with which it is connected at one side of its center, as shown in Fig. 3. The stud is rotated by the top lever *h*, connected with the upper end of the stud *g*, which extends through the frame, a screw *i* serving to secure the top lever on the squared end of said stud. That side of the stud opposite to which the link *f* is secured has a shoulder thereon against which bears a spring-plunger *j*. (Shown in dotted lines only in Figs. 1 and 3.) This plunger is located in the frame of the arm in such position that when the top lever *h* is swung to one side, as in Fig. 2, to operate the barrel-locking bolt *e* the plunger will be pushed into its hole in the frame, compressing the spring *j'* behind it, the latter being stiff enough to snap the lever *h* back to position when the latter is released.

From a point just forward of the breast of the hammer *k* the barrel-locking bolt *e* is slotted to receive the slidable hammer-block *m*, the latter being also slotted from the forward end rearwardly to receive the hammer, the latter and the block *m* being pivotally connected by a pin *o*, the hammer itself being pivoted on the pin *p* in the upper edge of the trigger-guard *q*, which is milled out to receive it and the sear *r*. The trigger *s*, pivoted at *t*, bears against the rear end of the sear, as shown in Figs. 1 and 2, the spring *u*, serving as sear and trigger spring, bearing down on the sear above the trigger.

The pin *v* bears in a recess in or is secured to the rear end of the hammer-block *m* and extends into the socketed piece *w*, and between the end of this last-named piece and the hammer-block is located the spiral spring *x*. If now the hammer-block be forced back, it will swing the hammer back with it until the latter is engaged by the sear and held in cocked position.

It will be noted that the hammer, hammer-block, the mainspring and its accessories, and sear and trigger are all mounted on the trigger-guard and may be removed as one piece, the trigger-guard constituting a portion of the under side and rear end of the frame of the arm, the guard being secured to the other part of the frame by means of a pin *y* passing through the frame and the forward end of the guard and the screw *z* passing



through the rear end of the upper portion of the frame into the post 3 at the rear end of the trigger-guard.

Means are provided to slide the hammer-block *m* rearwardly along the upper edge of the trigger-guard to cock the hammer, as follows: A suitable abutment, as the pin or screw 4, is secured in the side of the hammer-block *m*, and a plunger 5 is slidably supported in the frame of the arm, as shown in Fig. 1 most clearly, in such position that its end will bear against the abutment 4 on the hammer when the latter is down. This plunger 5, lying in substantial parallelism with the barrel, extends forwardly in the frame, one side of the lug *d*, with its opposite end, bearing against a shoulder 6 on the arm 7, which is pivotally supported on the pin 8 in the frame. As shown in Fig. 4, the wall of the recess in the frame which receives the lug *d* on the under side of the barrel has formed therein a groove 9<sup>a</sup>, in which the arms 7 and 9 are located and into one end of which the plunger 5 extends.

On the pin *b* is the arm 9, one end of which extends rearwardly and beneath one end of the arm 7, the other end of which extends beyond the forward edge of the frame and into a socket 10, formed in the metal shoe 12 on the rear end of the fore-end 14 of the stock. It is thus seen that the forward end of the arm 9 extends across the hinge between the fore-end and the end of the frame, whereby when the barrel is tipped down this forwardly-projecting edge of the arm 9, which may be tipped down also, and the arm 7 swung to the position shown in Fig. 2 in dotted lines, which movement will cock the hammer through the medium of the plunger 5, which is thrust rearwardly against the screw or abutment 4 on the hammer-block, forcing the latter back and moving the hammer *k* to cocked position.

A safety-catch 16 is provided which is operated by the rearward movement of the barrel-locking bolt *e* to block the trigger, thus rendering it impossible to fire the gun until the slide 17 has been pushed forward to swing the safety-catch out of locking engagement with the trigger. This catch is pivoted to the frame at 18 and hangs close to the rear end of the barrel-locking bolt *e*, as shown in the drawings, whereby when said bolt is moved rearwardly like movement will be imparted to the catch, and at the same time, by means of the rod 19, rearward movement will be imparted to the slide 17.

By reason of the weight and length of the barrel the cocking of the hammer is very easily effected when the barrels are tipped down. The working parts of this cocking mechanism are all accessible and easily removable, as also are all of the parts associated with the trigger-guards, whereby the arm may be readily taken apart for cleaning.

While the invention is in this application embodied in a single-barrel gun, it is apparent that it would be equally applicable to a double-barrel gun without material change.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a breech-loading firearm of the break-down type, a frame, a hammer, a barrel hinged to the forward end of the frame, an arm carried by said hinge and in the horizontal plane of the pivot, a second arm adjacent thereto and engaging the first arm, a suitable lock mechanism for the barrel in said frame and including a hammer-block, and a cocking mechanism for the hammer operatively disposed in relation to the second arm and engaging the hammer-block whereby the tipping movement of the barrel will effect the cocking of the hammer.

2. The combination with the frame of a breech-loading firearm, of a barrel hinged in the forward end thereof, a hammer in the frame, a hammer-block, a plunger 5 extending from the forward edge of the hammer-block and toward the forward end of the frame, and the arms 7 and 9 operatively disposed between the forward end of said plunger and the pivotal point of the barrel, the arm 7 having a shoulder thereon and engaged by the forward end of the plunger and its rear end engaging the hammer-block, the hammer being pivoted to the hammer-block and the frame whereby the swinging movement of the barrel will actuate said arms and said plunger to effect the cocking of the hammer at the same time.

3. In a breech-loading firearm of the break-down type, a frame, a hammer pivoted to same, a hammer-block pivoted to the hammer, a barrel hinged in the forward end of the frame and having a socket adjacent said pivot, an arm supported in the frame on the axis of the hinge between the barrel and frame and extending forward of the axis and engaging said socket, one end of said arm engaging the barrel; a second arm, and mechanism operatively disposed relative to the opposite end of said second arm and to the hammer and hammer-block whereby the swinging of the barrel on its hinge will effect the cocking of the hammer.

4. A breech-loading firearm comprising a frame, and a barrel hinged to the forward end of the latter; a bolt in the frame parallel with the barrel to lock the latter in firing position; a hammer pivotally supported in the frame, a slidable hammer-block pivoted to the hammer and a cocking mechanism operated by the tipping movement of the barrel in the frame to move said hammer-block, to effect the cocking of the hammer, the latter and said hammer-block extending through a slot in said bolt.

5. In a breech-loading firearm of the break-



down type, a frame, a barrel pivoted in the forward part thereof, a hammer and a hammer-block pivoted to each other, a double-armed lever pivoted on the barrel and extending in opposite directions, one of the arms engaging a socket in the fore-end of the stock and the other arm extending rearward and engaging a second arm, said second arm engaging one end of a plunger, the opposite end of the plunger being connected to the hammer-block whereby when the barrel is tipped down the hammer will be thrown into a cocked position.

6. A breech-loading firearm comprising a frame, a barrel pivoted thereto, an element having oppositely-extending arms mounted on the pivot thereof, a second element having a shoulder and pivoted in the frame and adapted to engage one of the arms of the first-mentioned element, a locking mechanism for the barrel, a hammer-block mounted within the locking mechanism, a hammer, a plunger, one end of which is in engagement with the shoulder of the second-named element and the opposite end engaging the hammer-block, whereby when the barrel is tipped the hammer is placed in firing position.

7. A breakdown firearm, a barrel pivoted to the frame thereof, a slotted sliding locking-bolt, a hammer, a slotted hammer-block mounted within the locking-bolt, a plunger for cocking the hammer, one end engaging the hammer-block and the other a shoulder in a pivoted arm, said pivoted arm being

operated by the movement of the barrel whereby upon the downward movement of the barrel the plunger will operate the hammer-block, and place the hammer in cocked position.

8. In a firearm of the breakdown type, a frame, a barrel pivoted thereto, a double-armed lever carried by the pivot, a second lever engaging the rearwardly-extending arm of said lever and having a shoulder thereon, a slotted locking-bolt, a slotted hammer-block located within the locking-bolt and having an abutment, a hammer pivoted to the hammer-block and located within the same and also pivoted to the frame, a plunger extending between the shoulder on the last-mentioned lever and the abutment on the hammer-block whereby when the barrel is tipped, the hammer is placed in firing position as described.

9. A breech-loading firearm of the breakdown type, a slotted locking-bolt, a hammer, a hammer-block, a lever on the pivot-bolt of the barrel, the hammer, and hammer-block being mounted within the locking-bolt and the hammer being pivoted respectively to the frame and hammer-block, and means located between the said block and hammer to effect the cocking of the hammer when the arm is broken.

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