

No. 688,383.

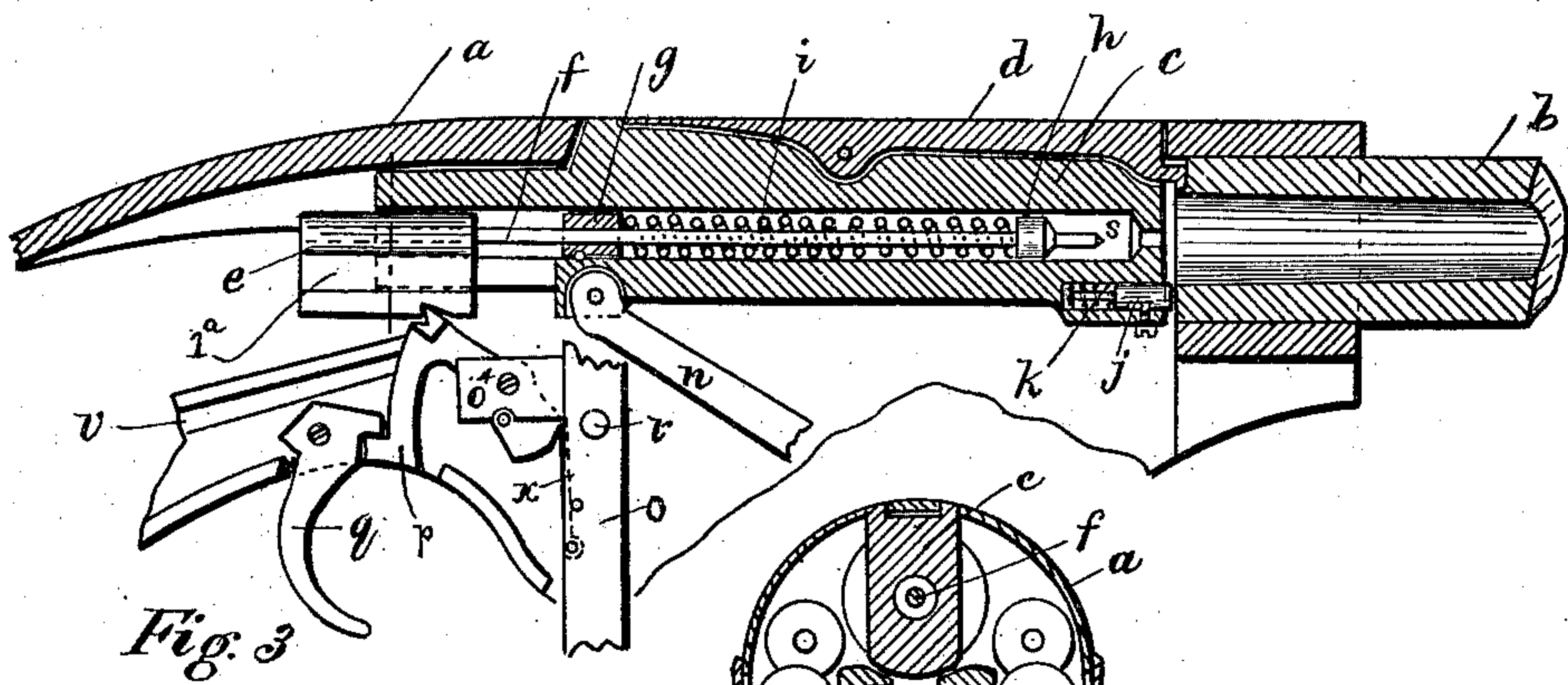
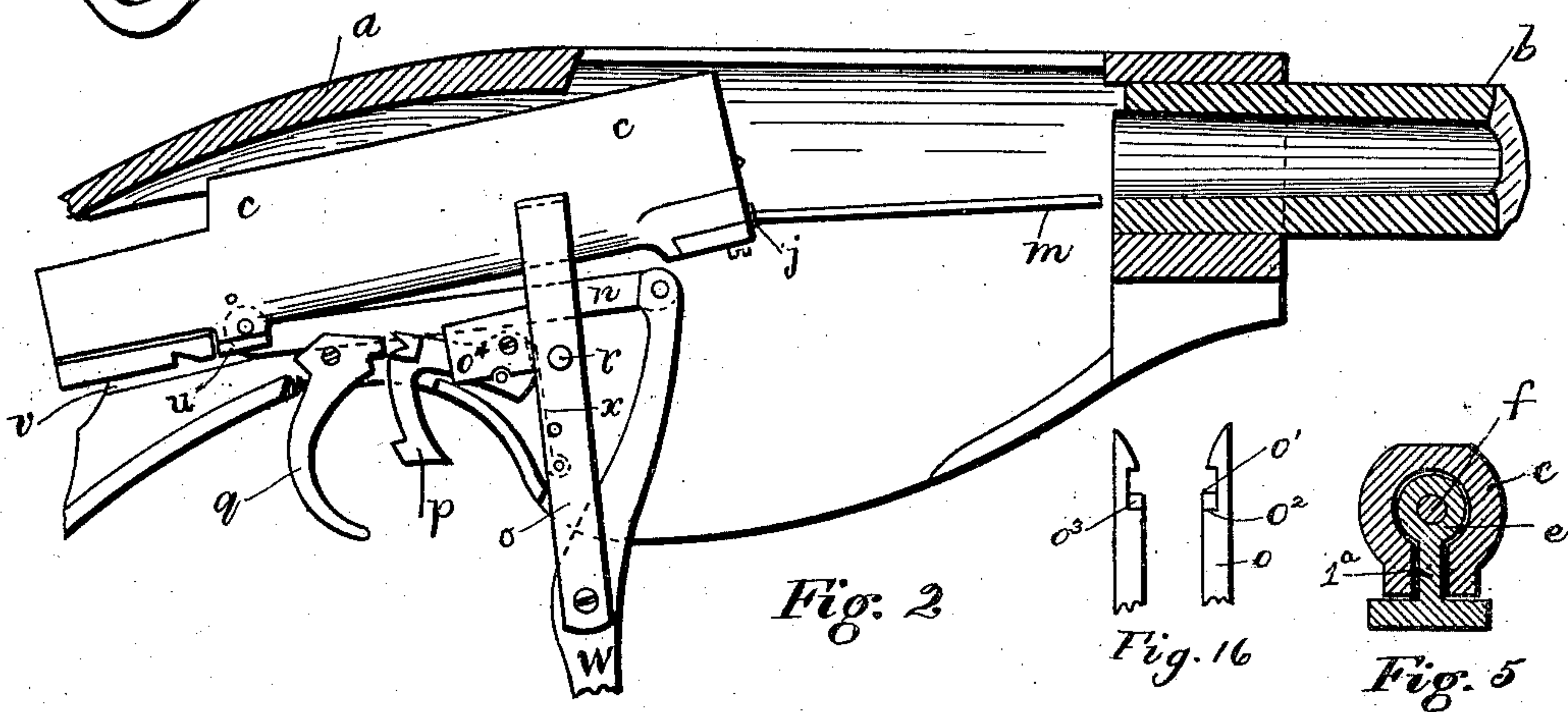
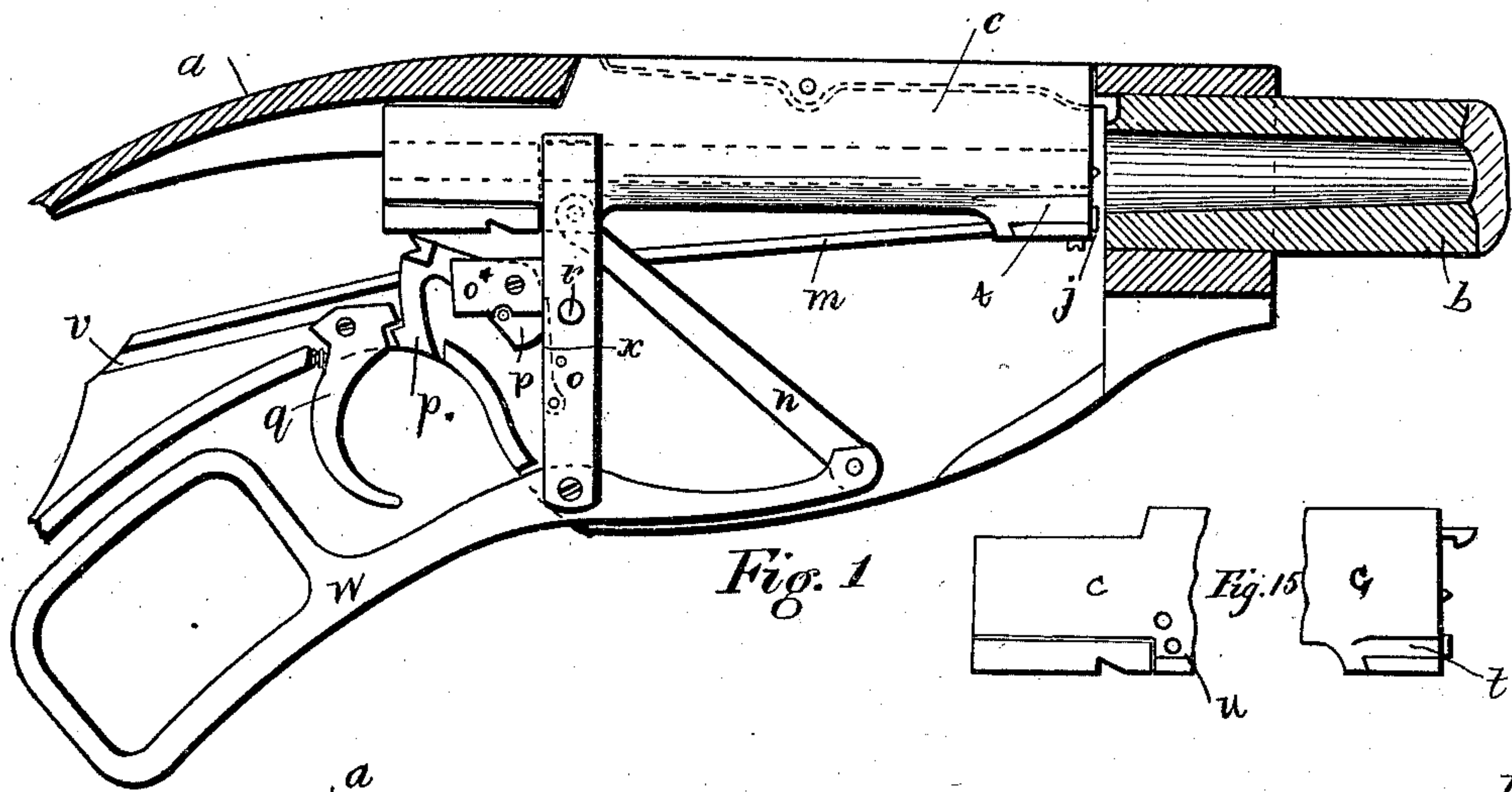
Patented Dec. 10, 1901.

C. C. BROOKS.
MAGAZINE GUN.

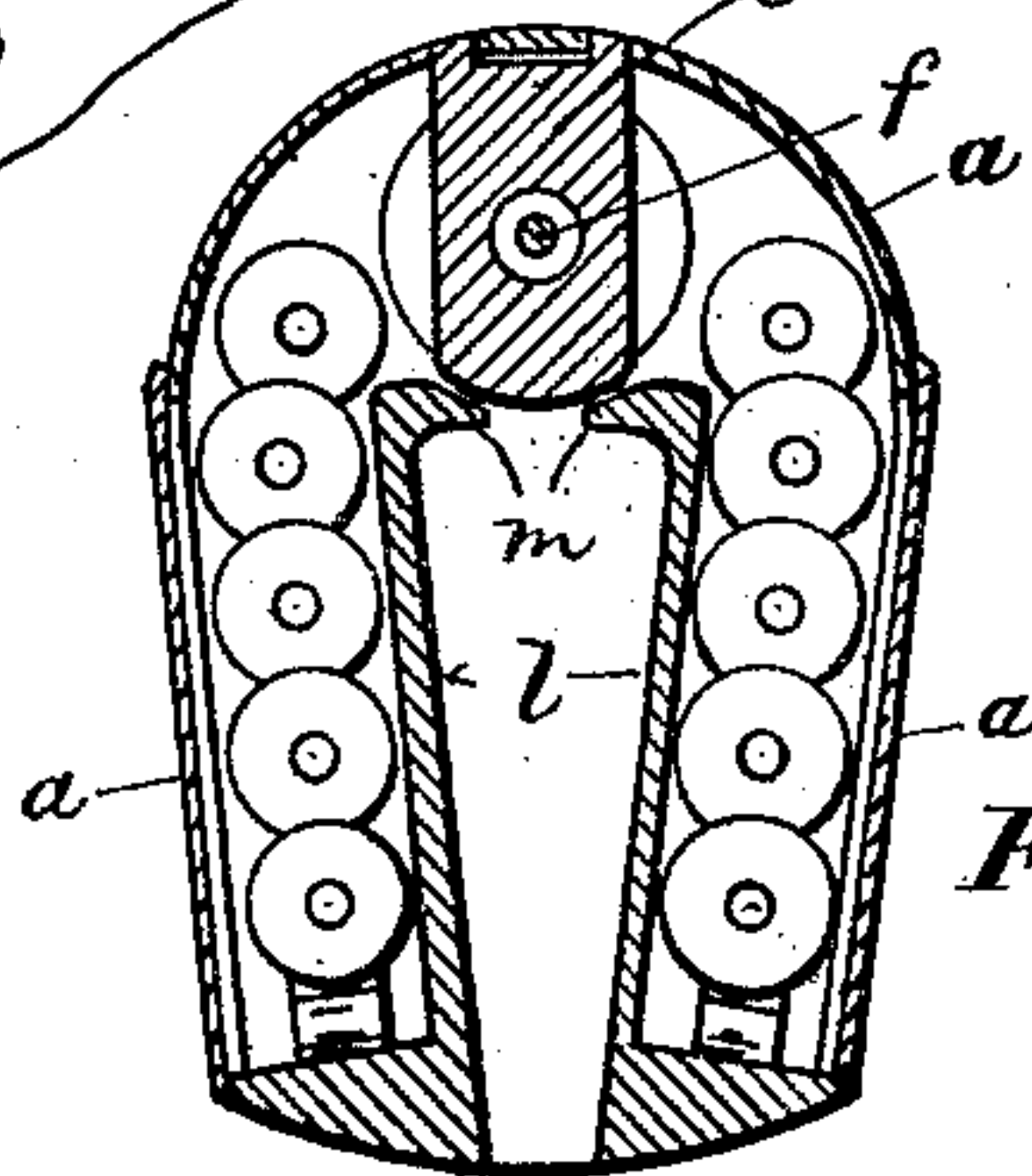
(Application filed Dec. 31, 1897.)

(No Model.)

3 Sheets—Sheet I.



Witnesses:
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3 Sheets—Sheet 2.

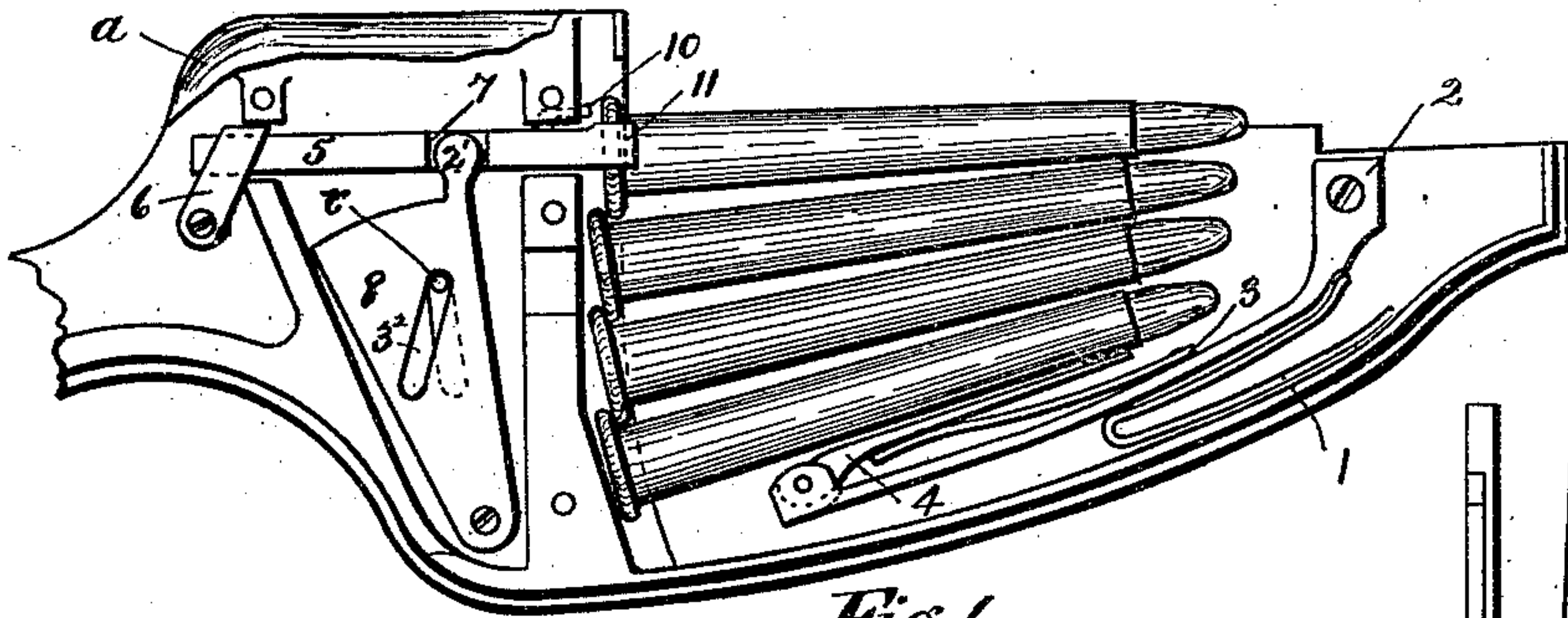


Fig. 6

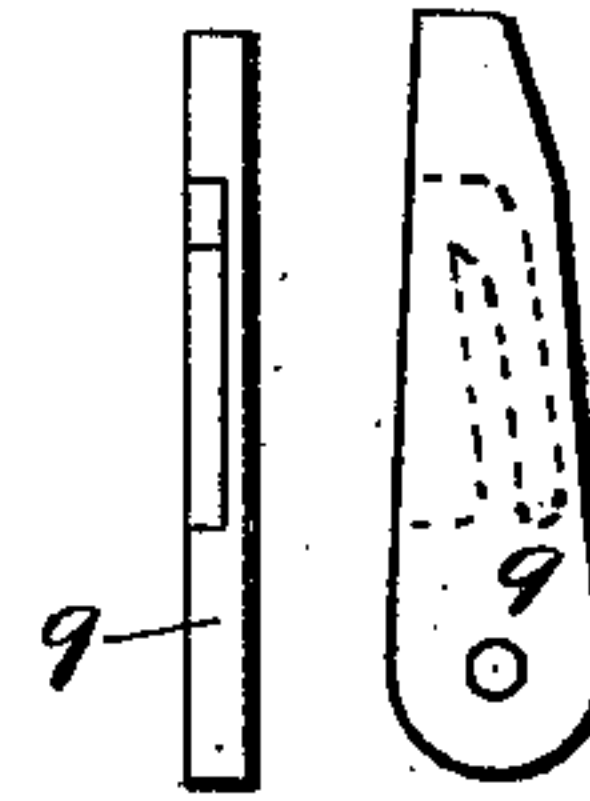


Fig. 13 Fig. 14

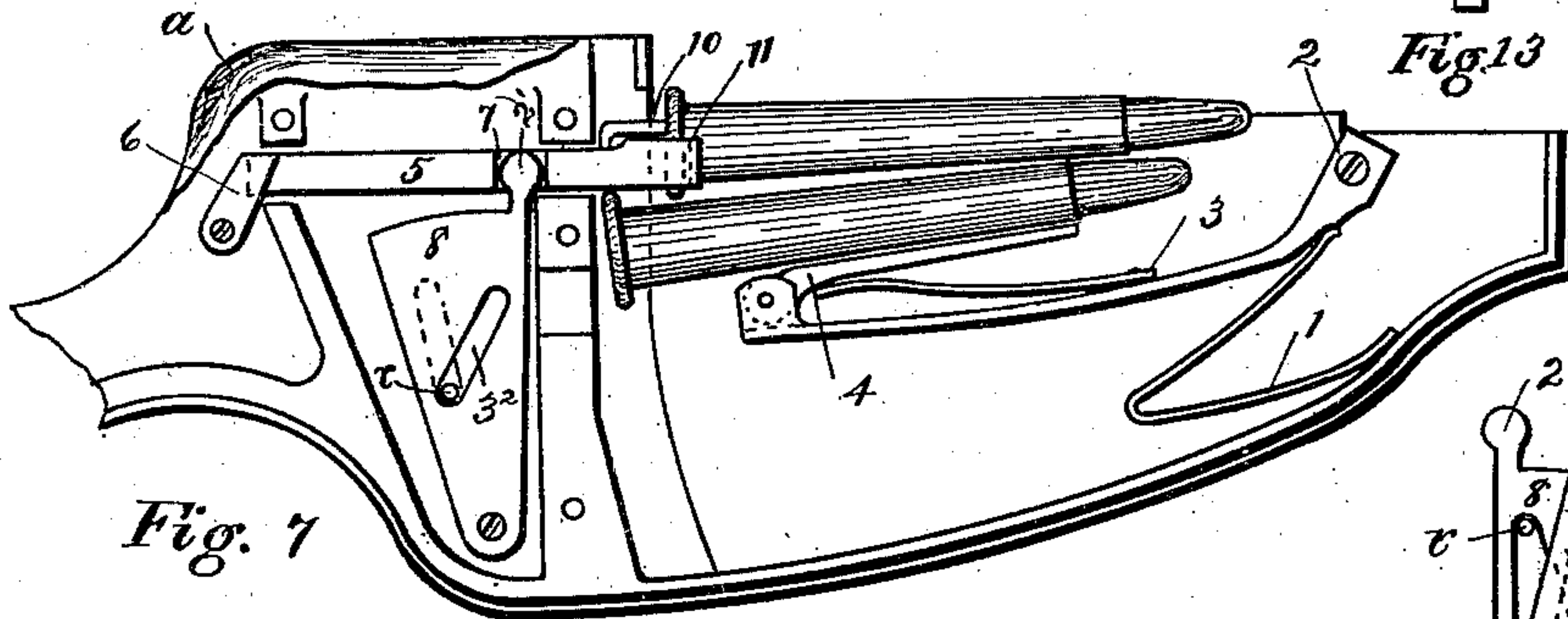


Fig. 7

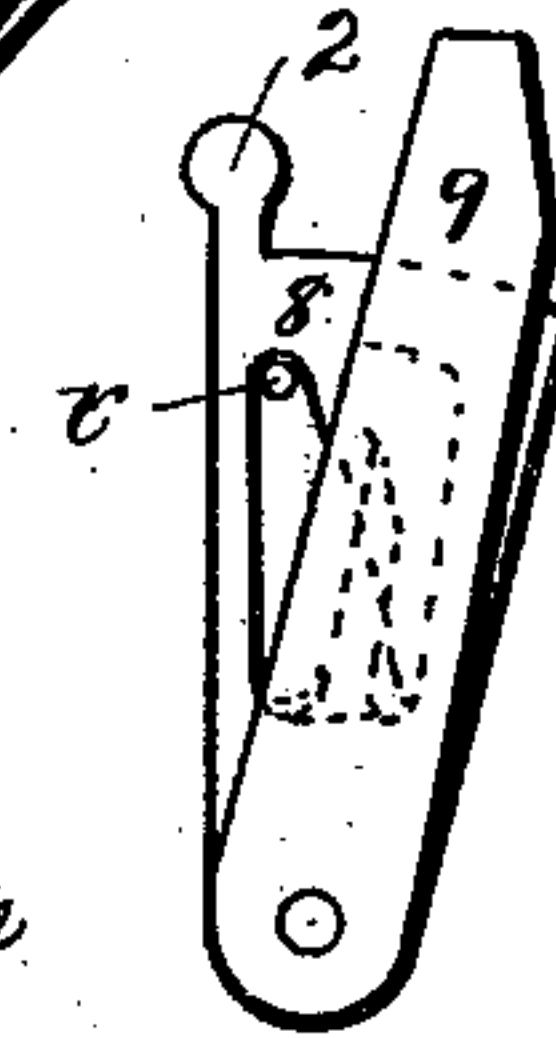


Fig. 12

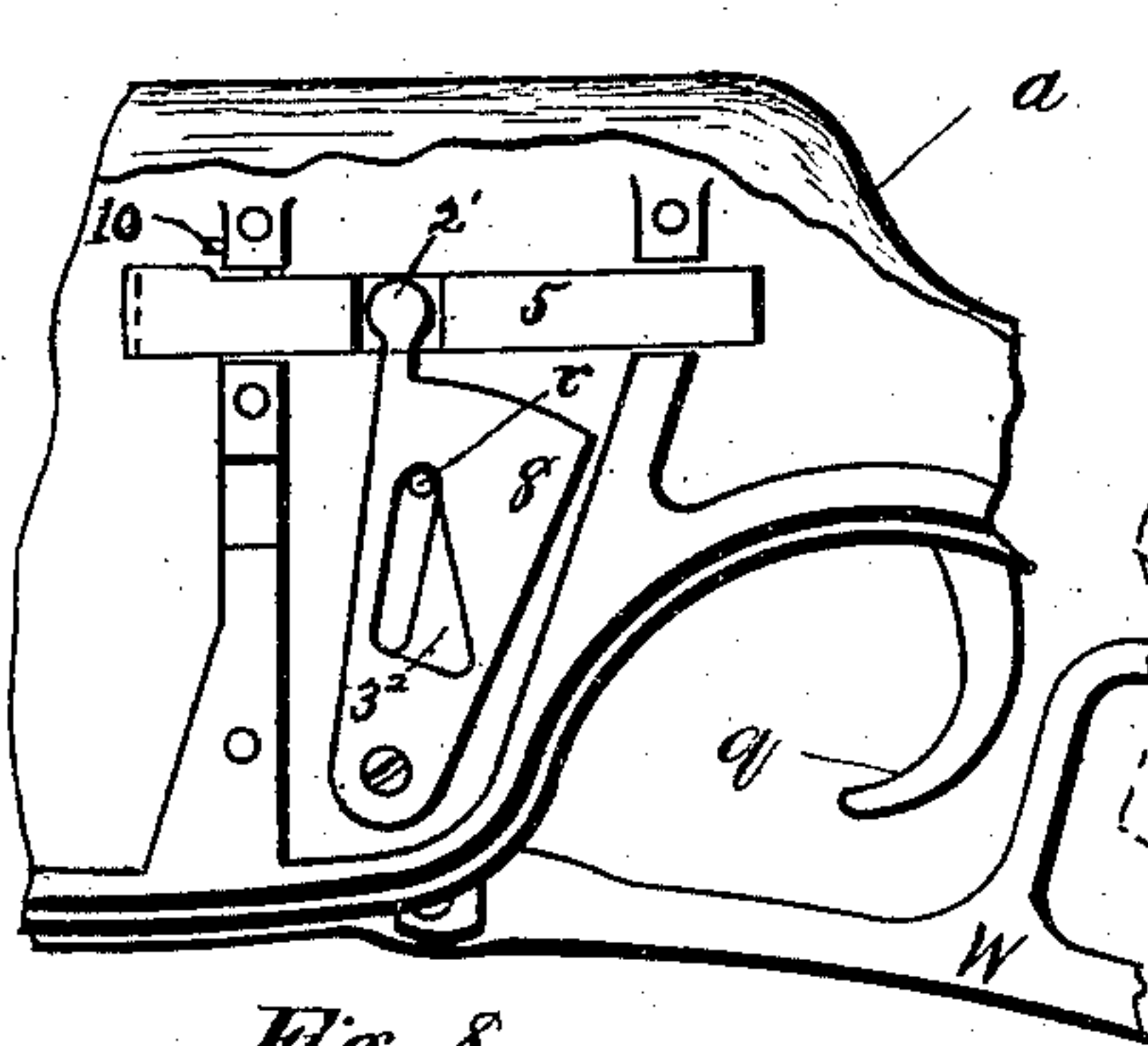


Fig. 8

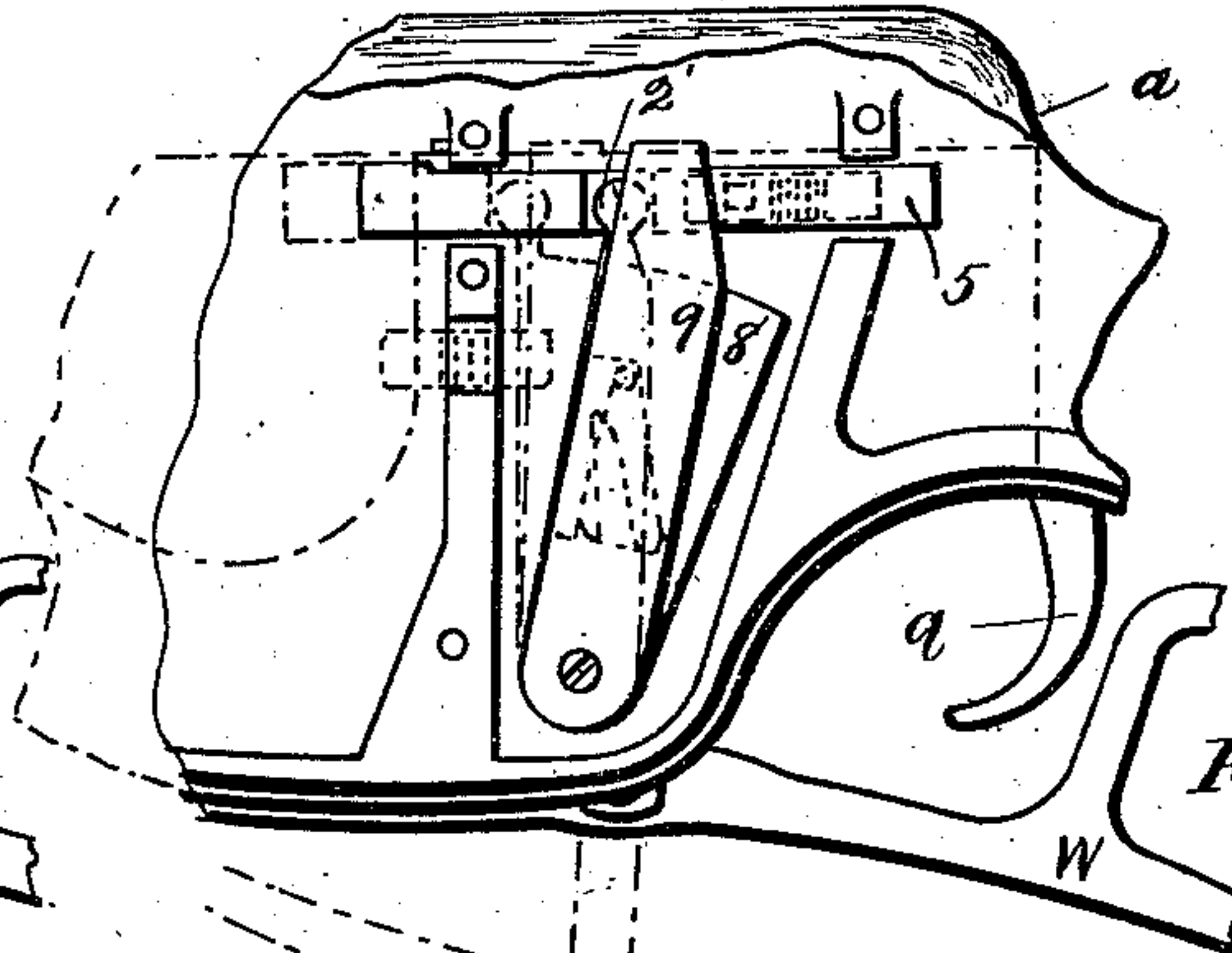


Fig. 9

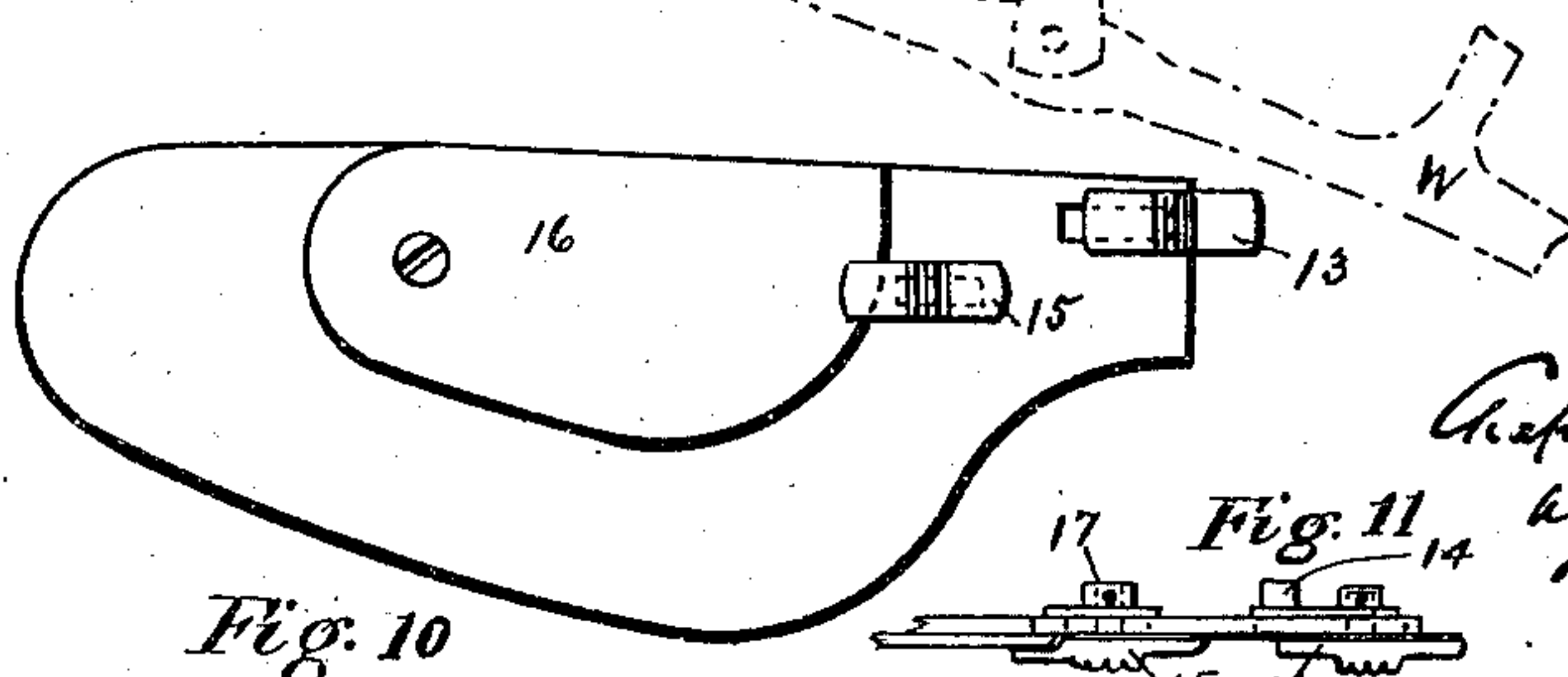


Fig. 10

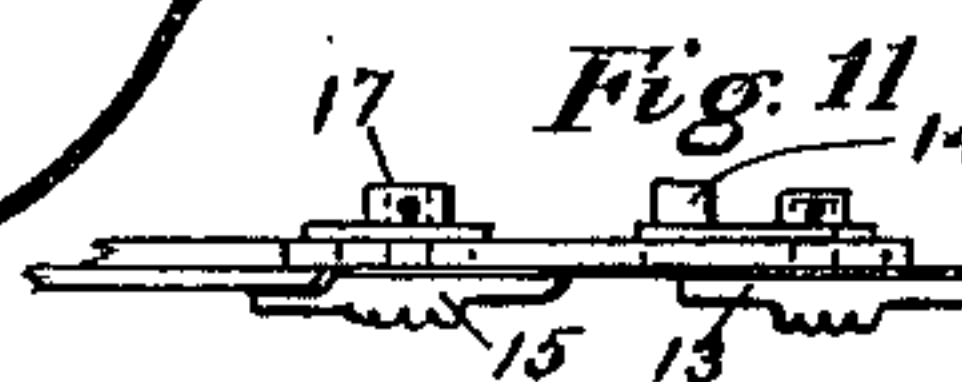


Fig. 11

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No. 688,383.

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C. C. BROOKS.
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(Application filed Dec. 31, 1897.)

(No Model.)

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Fig. 17.

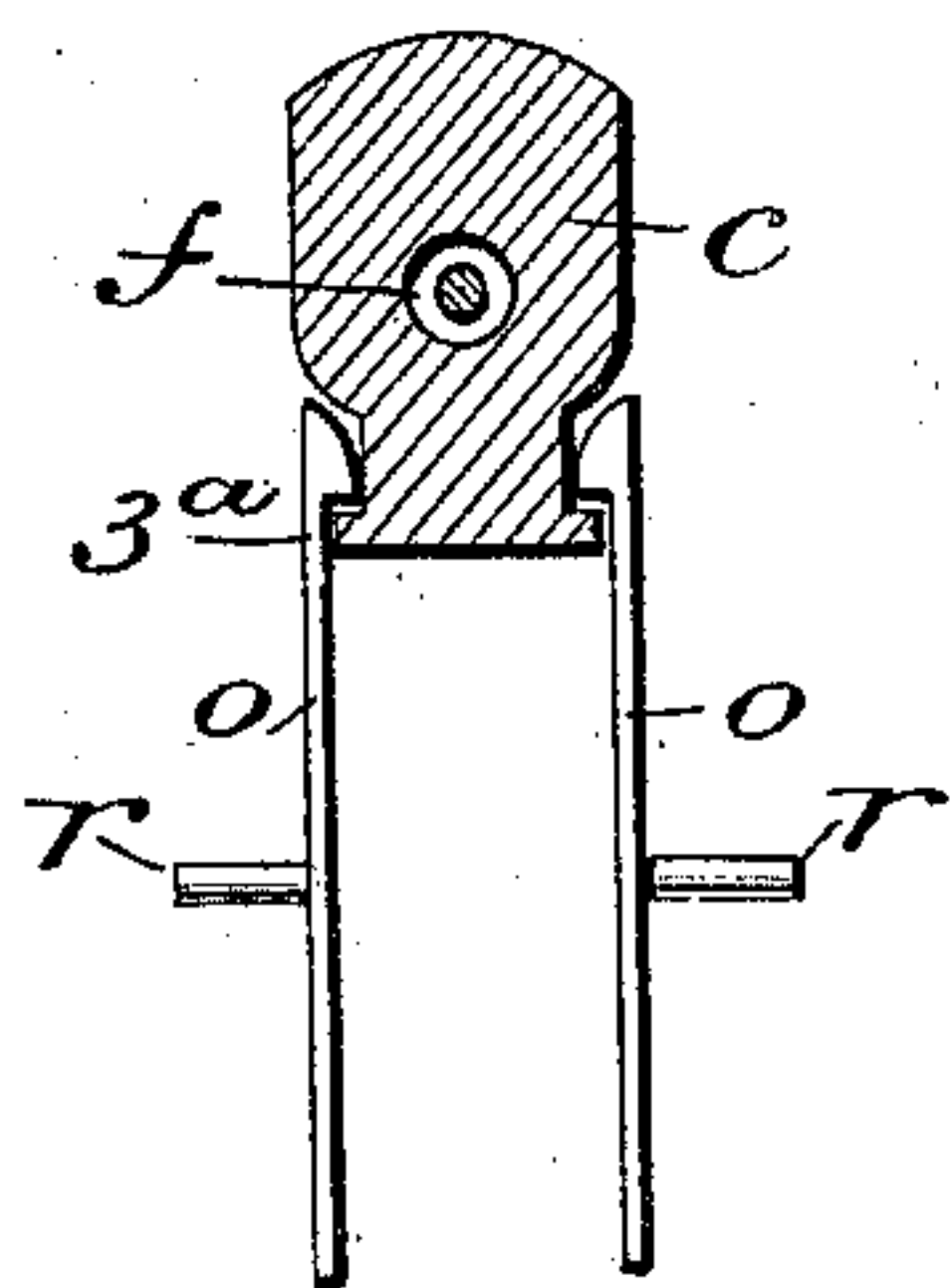


Fig. 18.

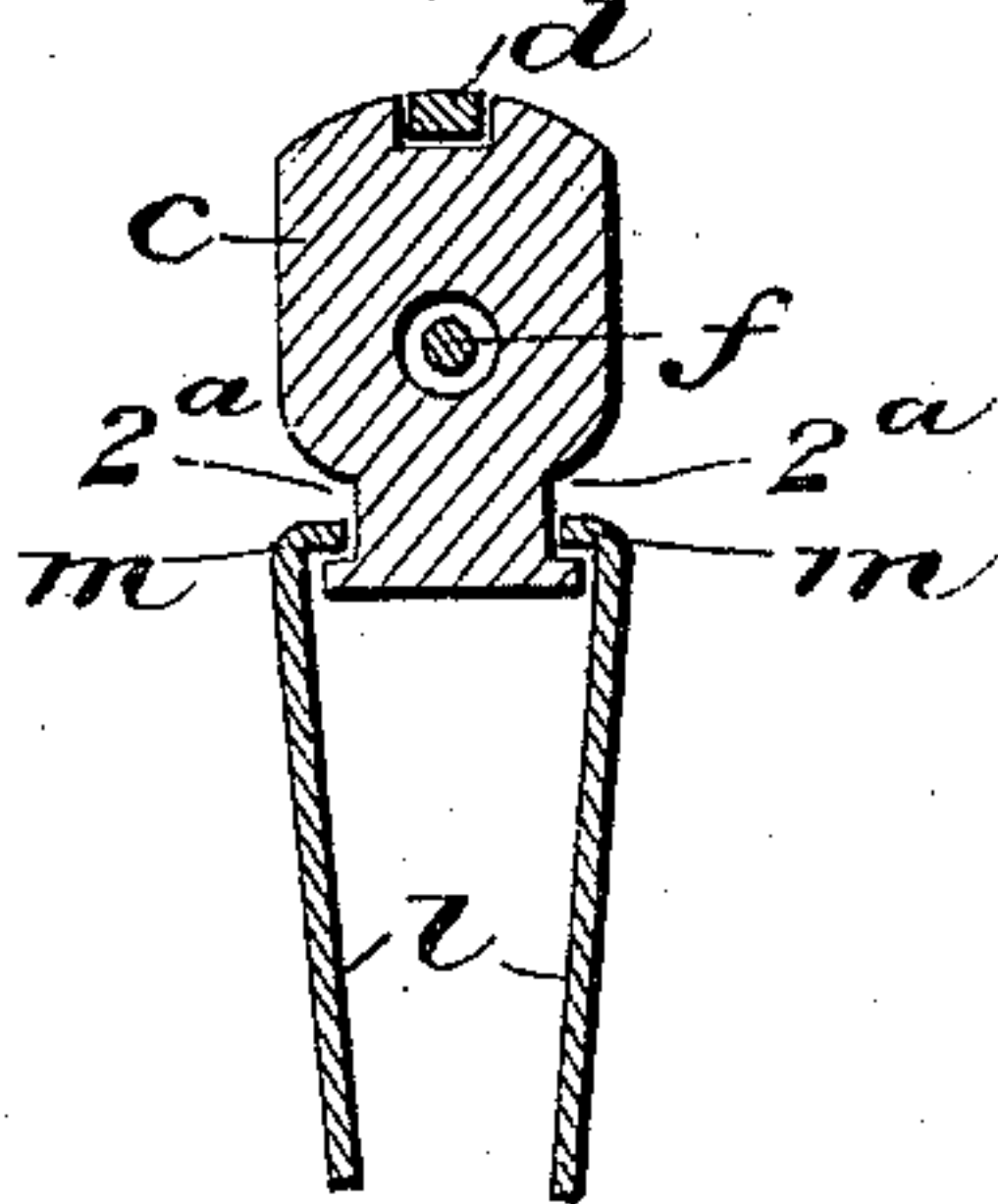
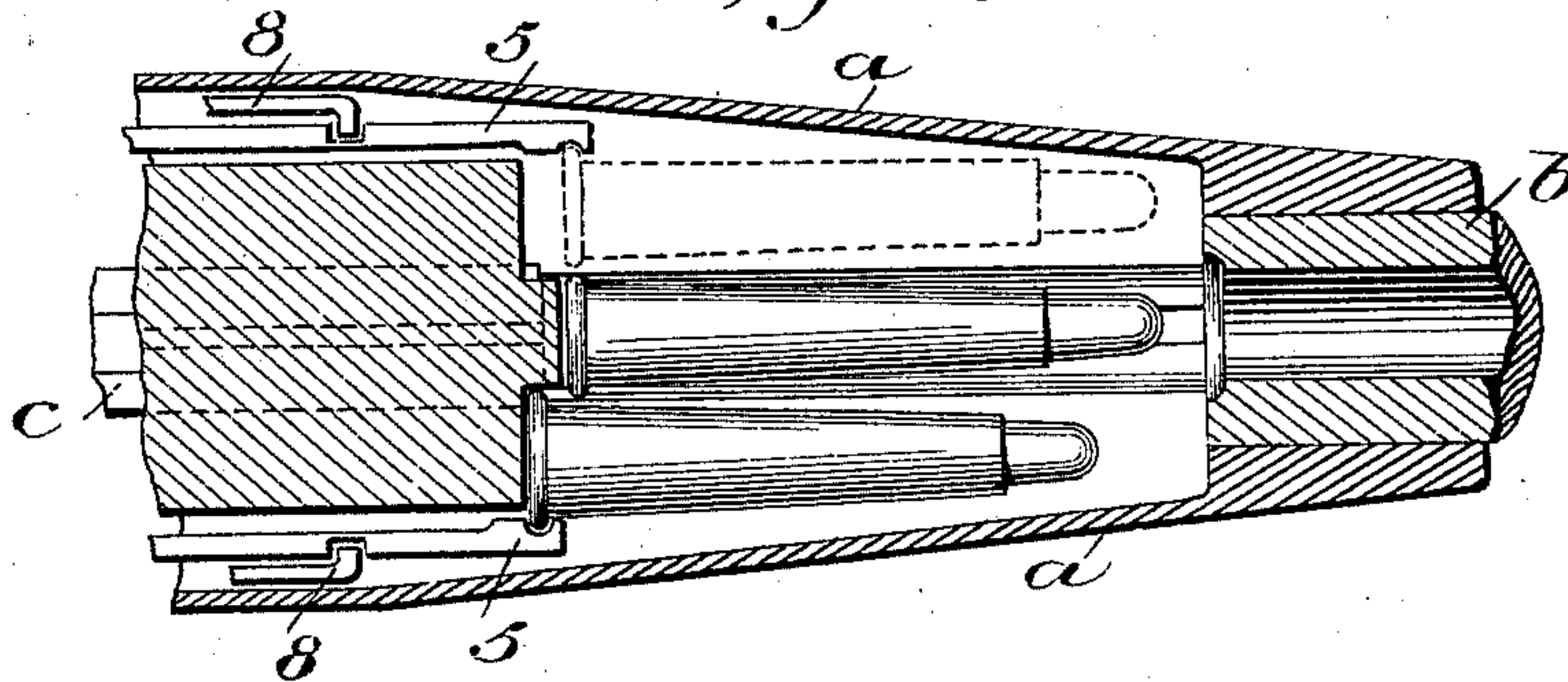


Fig. 19.



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Inventor:

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UNITED STATES PATENT OFFICE.

CHAPIN C. BROOKS, OF WILTON, MAINE.

MAGAZINE-GUN.

SPECIFICATION forming part of Letters Patent No. 688,383, dated December 10, 1901.

Application filed December 31, 1897. Serial No. 664,802. (No model.)

To all whom it may concern:

Be it known that I, CHAPIN C. BROOKS, a citizen of the United States, residing at Wilton, in the county of Franklin and State of Maine, have invented certain new and useful Improvements in Magazine-Guns; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to

which it appertains to make and use the same. My invention relates to magazine-guns; and it consists in providing a magazine on either side of the bolt and other firing devices in a device for locking and unlocking one of the magazines, so that it can be thrown in or out at will, and in means for operating the magazines and firing the gun. The stock and barrel of the gun are of ordinary construction.

In the drawings, Figure 1 is a side elevation of the bolt, operating-lever, and other parts of the firing device, the frame and barrel being shown in vertical section. Fig. 2 is the same with the bolt retracted. Fig. 3 is the same, showing the bolt in vertical longitudinal section with the gun locked. Fig. 4 is a transverse section of the magazine, showing the cartridges in place. Fig. 5 is a vertical transverse section of the breech-bolt with the cocking-head of the firing-pin inclosed. Fig. 6 is a side elevation of the right-hand magazine, the covering-plate being removed. Fig. 7 is the same, showing a cartridge in front of the bolt in position to be advanced into the barrel. Fig. 8 is a side elevation showing the operating mechanism of the left-hand magazine, the arm 9 being removed. Fig. 9 is the same with arm 9 in place. Fig. 10 is a side elevation of the plate of the left-hand magazine. Fig. 11 is a detail showing the edge view of the buttons or slides for opening and locking or unlocking the left-hand magazine, respectively. Fig. 12 is a detail of the lever 8 and arm 9. Fig. 13 is an edge view of the arm 9; Fig. 14, an elevation of the same, showing the slot on the inner side thereof in dotted lines. Fig. 15 is a detail showing a side elevation of the ends of the breech-bolt *c*. Fig. 16 is a rear elevation of the arms *o*; Fig. 17, a vertical cross-section of the rear end of the breech-bolt and the arms *o*; Fig. 18, a vertical cross-section of the front of the breech-bolt and the flanges *m m*

and the inner walls 1. Fig. 19 is a horizontal section of the barrel and part of the frame.

Referring to the drawings, *a* represents the frame, *b* the barrel, and *c* the block or breech-bolt. The construction of the breech-bolt is shown in Fig. 3 and also in detail in Fig. 15. In a longitudinal slot in the upper side is placed the extractor *d*, which is pivoted by a pin in the lower part of the slot and has at the forward extremity a hook which acts as a cartridge-retractor. Below the extractor *d* the breech-bolt is provided with a bore *s*, passing from end to end, in which are placed the firing-pin and its cocking-head. The cocking-head *e* is shown in Figs. 3 and 5, and consists of a cylinder of such size as to easily play in the bore *s*, and it is provided at its lower edge with an inverted-T-shaped piece *1^a*, as shown in Fig. 5. The office of this last-named piece is to carry the notch which receives the sear *p*, hereinafter described.

The firing-pin *f* is a rod fixed to the cocking-head *e* and extends forward within the bore *s*. Near its forward end it is provided with a collar *h*, rigidly attached to it, while somewhat in the rear of the collar *h* is the block *g*, being secured to the bolt by a pin or similar device. Between the collar *h* and the block *g* the pin *f* is surrounded by the coil-spring *i*.

In the lower edge of the forward end of the breech-bolt *c* is a slot containing a coil-spring *k* and the pin *j*, the latter being so secured in the slot as to permit of a limited movement out of and beyond the forward end of the breech-bolt *c*. The breech-bolt is also provided below and on either side of the pin *j*, just described, with slots *2^a*, which receive the flanges *m m* (see Fig. 18) of the upper edge of the inner wall of the magazine. Referring to Fig. 15, it will be noticed that the breech-bolt *c* is provided also with a projection *u* on either side, which is received in a longitudinal slot *v* in the rearward extension of the walls of the frame.

The operating-lever *w* is shown in Figs. 1 and 2. To the forward end of the operating-lever *w* is pivoted the link *n*, the upper end of which link is pivoted to the under side of the breech-bolt *c*, near the rear end thereof. About midway of the operating-lever *w* it has pivoted to it the arms *o*, which are pro-

vided with elbows o^4 , extending backward, as shown in Fig. 2, and also with the pins r , projecting from the outer side of each. Above the elbows o^4 the arms o are provided with slots 3^a , as seen in Figs. 16 and 17. Between the elbows o^4 is pivoted the sear p , (see Fig. 2,) which is actuated by the spring x . (Shown in dotted lines in Figs. 1, 2, and 3.) The sear p is provided at the upper part with a notch to receive the projection or notch on the under side of the cocking-head e of the firing-pin and also with a notch at the lower extremity to receive the trigger q .

The magazines on either side are of similar construction and are shown in Figs. 6 to 14 of the drawings. In Figs. 6 and 7 is shown the right-hand magazine as I have constructed my gun. The magazine-box is exterior to that portion of the mechanism already described and is separated therefrom by plates, which form at once the outer sides of the compartment in which the firing mechanism is situated and the inner walls of the magazine. Within and at the lower edge of each magazine-box is a spring, one end of which impinges against the lower wall of the magazine and the other against the arm 2, which is pivoted near the upper and forward end of the magazine. To the lower end of the arm 2 is pivoted the finger 4, against which impinges the spring 3, which is rigidly attached to the upper surface of the arm 2.

The mechanism for advancing and throwing the cartridge in front of the breech-bolt c when the latter is retracted is situated in rear of the magazine-box. It consists of a cartridge-advancer 5, which is held in place in its appropriate slot by the spring 6 and the upper end or ear of the lever 8. The forward end of the cartridge-advancer 5 is provided with a curved pin 10 and a slotted lip 11, provided at the forward end of the cartridge-advancer. The arm 8 is pivoted at its lower end to the frame, as shown in Figs. 6 and 7 and is provided at its upper end with an ear 2' and also about midway of its length with a diagonal slot 3^2 . Through this slot projects the pin r upon the arm o , already described. (See Figs. 6 and 7.) The pin r passes through the slot in the frame behind the arm 8, said slot being shown in dotted lines in Figs. 6 and 7.

As stated above, the construction of the left-hand magazine is similar to that upon the right hand, with, however, means for locking and unlocking this magazine, so that the same may be thrown in or out of use at will. This device consists of the arm 9, button 13, and projection 14 on the same and a modification of the slot 3^2 . The arm 9 is pivoted outside the arm 8 by the same pivot and extends somewhat above the arm 8, as shown in Fig. 12. The button, as shown in Fig. 10, is upon the outside of the frame and carries on its inner side the projection 14, which projects through the frame in such manner as to be capable of contact with the arm 9. The button 15 also slides in the frame of the covering of the left-

hand magazine, as shown in Fig. 10, and serves the double purpose of locking the cover 16 to the magazine and by means of its projection 17 of throwing backward the arm 9. The slot 3^2 is modified, so that it has a triangular shape, the base of the triangle being at the bottom. (See Fig. 8.)

Means similar to those used for locking and unlocking the left-hand magazine may be used in connection with the right-hand magazine, thus enabling each of the magazines to be locked and unlocked at will, so that the gun may be used in connection with one or the other of the magazines or independently of either of them.

The operation of the gun is as follows: The cartridges are placed within the magazines, the first one placed upon the top of the finger 4, which is depressed to the lowest part of the magazine-box to receive it, the next upon the first, and so on until the requisite number is reached. A cartridge may also be placed through the opening in the top of the frame for the reception of the breech-bolt c , the latter being retracted and this cartridge discharged without operating the magazines, and the gun may be so used, keeping cartridges in the magazine in reserve; but assuming that the magazines are to be used and the cartridges have been inserted, the operation is as follows: The operating-lever w is drawn downward and forward, by means of which the breech-bolt c is retracted, drawing with it from the barrel the exploded shell by means of the hook upon the front portion of the breech-bolt c and the pin j , situated beneath it, the former withdrawing the cartridge and the latter as soon as it is relieved from the barrel throwing it out through the aperture in the upper part of the frame. The breech-bolt c is first drawn down by the arm o , the flanges u entering the slots 3^a until the flanges $m m$ enter the slots 2^a in the front of the breech-bolt, upon which flanges $m m$ it slides until the flange u upon the rear end of the breech-bolt enters the groove v . (See Figs. 1 and 2.) By the depression of the operating-lever w the arm o is drawn down, the arm 8 is moved forward by the movement of the pin r in the slot 3^2 , thus forcing forward the cartridge-advancer 5, which carries forward the upper cartridge into the position shown in Fig. 7, and when the breech-bolt c is fully retracted this cartridge, being forced upward by the arm 2 and finger 4 and springs, is at the same time carried inward out of the slotted lip 11 by reason of the inclined plane of the upper part of the frame. The operating-lever w is now drawn backward, carrying the bolt into its aperture and the notch in the cocking-head of the firing-pin into engagement with the sear, while the notch in the lower part of the sear is not brought into close contact with the notch in the trigger until the operating-lever w is drawn up close to the under part of the frame, so that the gun cannot be discharged unless the

hand not only operates the trigger, but also keeps the operating-lever in the position already described. The repetition of these movements will exhaust the right-hand magazine as the gun is shown constructed in the drawings. If it is desired to use the left-hand magazine, which up to this point we have assumed to be locked, it is unlocked and the cartridges rendered available. The breech-bolt *c* being pushed into its slot in the upper part of the frame and the gun fully closed, the button 13 is forced forward, causing the projection 14 to carry forward the arm 9, so that the pin *r* upon the arm *o* may enter the slot on the inner side of the arm 9, which causes the arm 9 to impinge against the cartridge-advancer 5, and thus operate the magazine, as has already been described. If it is desired at any time to relock the left-hand magazine or open the door of the magazine, this is accomplished by pushing backward the button 15, when the arm 9 is forced backward, thus carrying the pin *r* out of the slot of the arm 9 and also permitting the door 16 of the magazine to be opened.

It should be noted that by reason of the sear *p* being carried upon the arm *o* the latter can be operated by the trigger only when the operating-lever is not only brought up to but held firmly against the frame of the under side of the gun and when the aperture in the upper part of the frame is fully closed by the breech-bolt.

What I claim is—

35 1. In a breech-loading gun, the combination of a breech-bolt, an operating-lever, a link connecting said bolt and said lever, an arm pivoted to said operating-lever, a groove in said arm adapted to receive a short flange
40 upon said bolt, whereby said bolt may be de-

pressed at the same time that it is retracted, substantially as described.

2. In a breech-loading gun, the combination of a breech-bolt, an operating-lever, a link connecting said bolt and said lever, an arm 45 pivoted to said lever, said arm at its upper end having a groove adapted to receive a short flange upon said bolt and being also provided with a sear, whereby said sear is not brought within operative distance of the trigger, except when said operating-lever is held 50 closely to the frame, substantially as described.

3. In a magazine-gun having a receiver and a breech-bolt therein with means for retract- 55 ing the breech-bolt, a magazine on each side of said receiver, means within said magazines for feeding the cartridges therefrom, apertures at the top of said magazines through which the cartridges may be fed into the re- 60 ceiver upon the inner walls of said magazines; substantially as described.

4. In a gun provided with a breech-bolt, an opening in the frame to receive the same and means for retracting said bolt, magazines on 65 each side of said opening each consisting of an independent inner wall and of the outer frame of the gun, together with means in each of said magazines whereby the cartridges may be fed therefrom into said opening, the inner 70 walls of said magazines forming the bottom of said opening, substantially as described.

In testimony that I claim the foregoing as my invention I have hereunto set my hand this 28th day of December, A. D. 1897.

CHAPIN C. BROOKS.

In presence of—

GEO. E. BIRD,
M. C. LIBBY.