

(No Model.)

2 Sheets—Sheet 1.

C. A KING.

REBOUND MECHANISM FOR BREECH LOADING GUNS.

No. 412,340.

Patented Oct. 8, 1889.

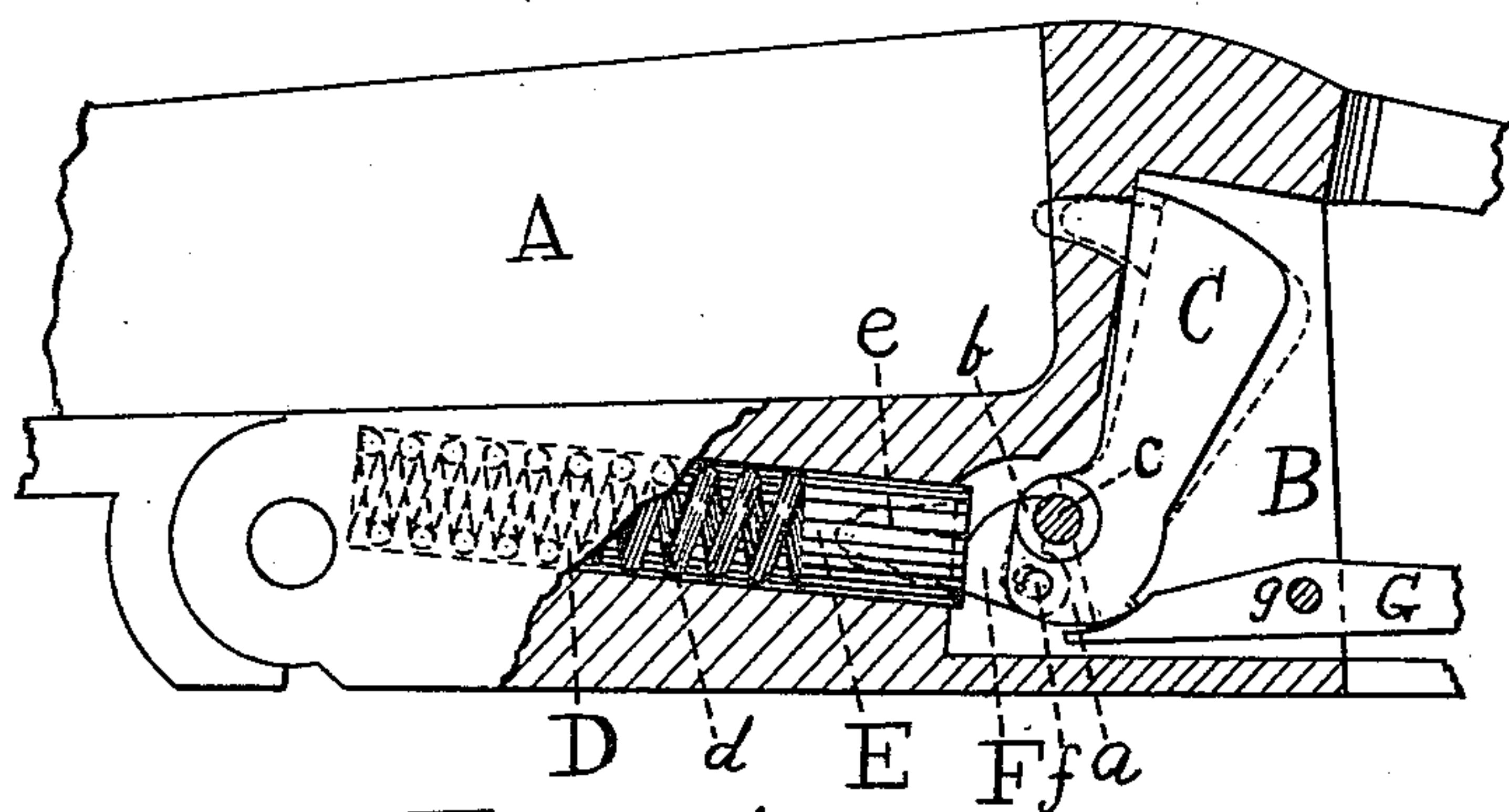


FIG. 1.

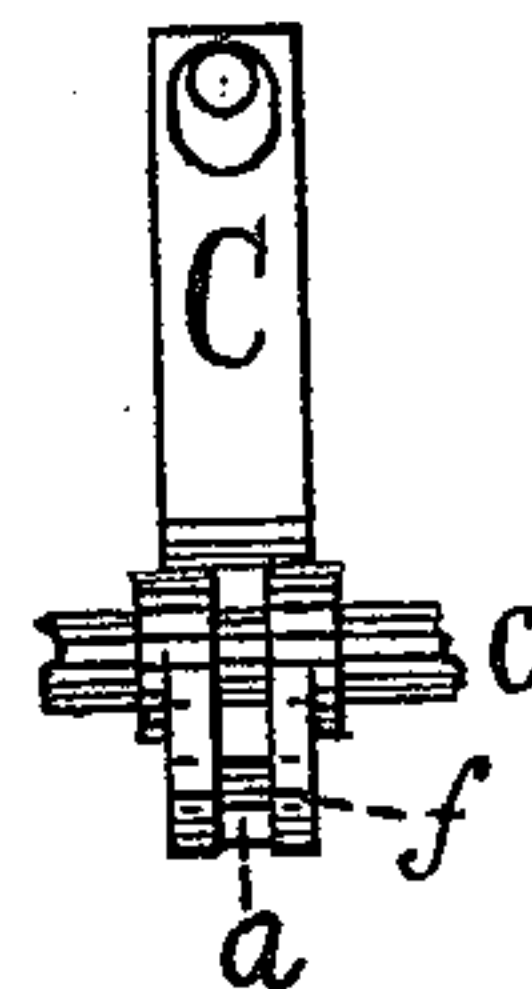


FIG. 3.

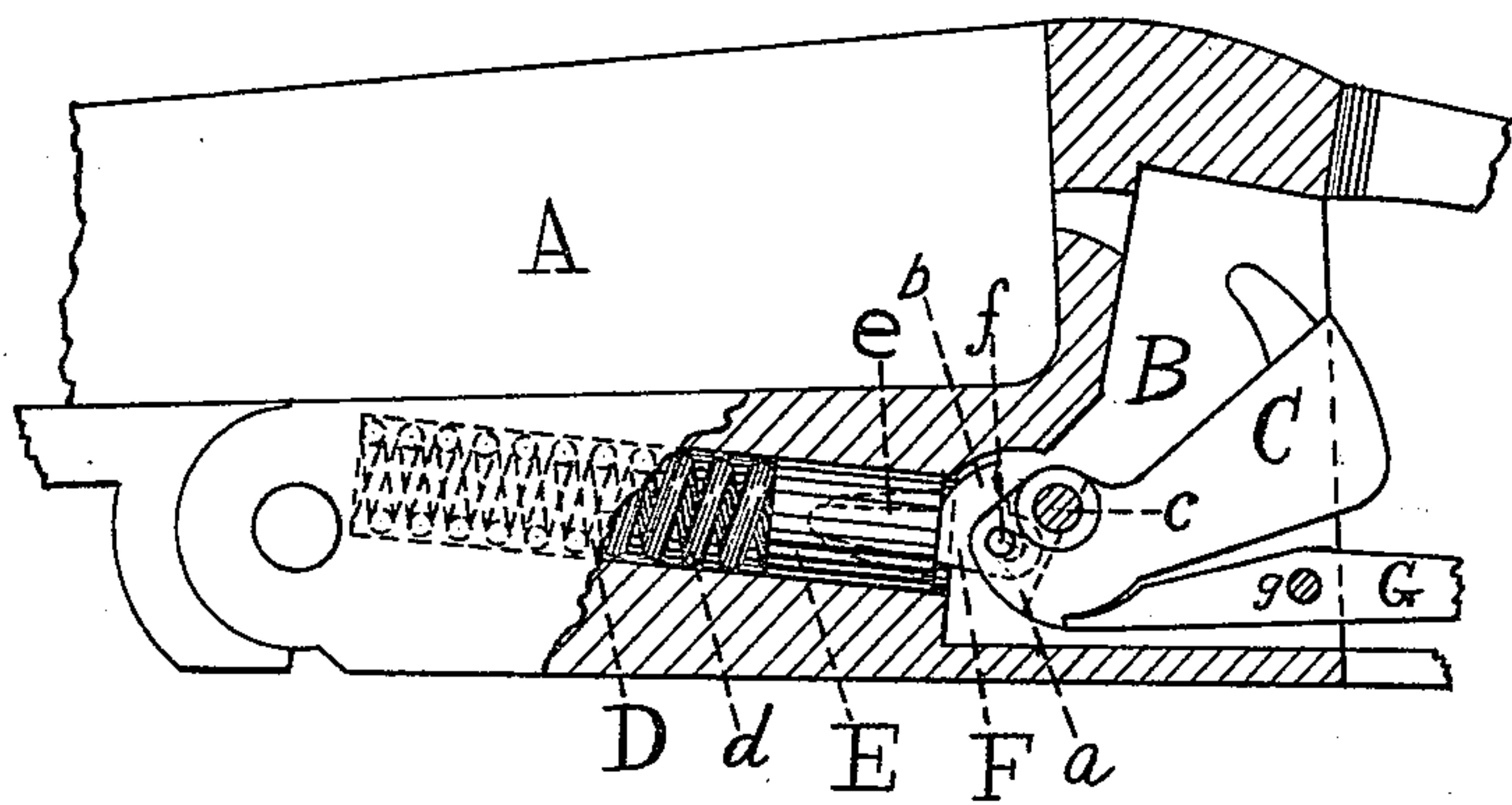


FIG. 2.

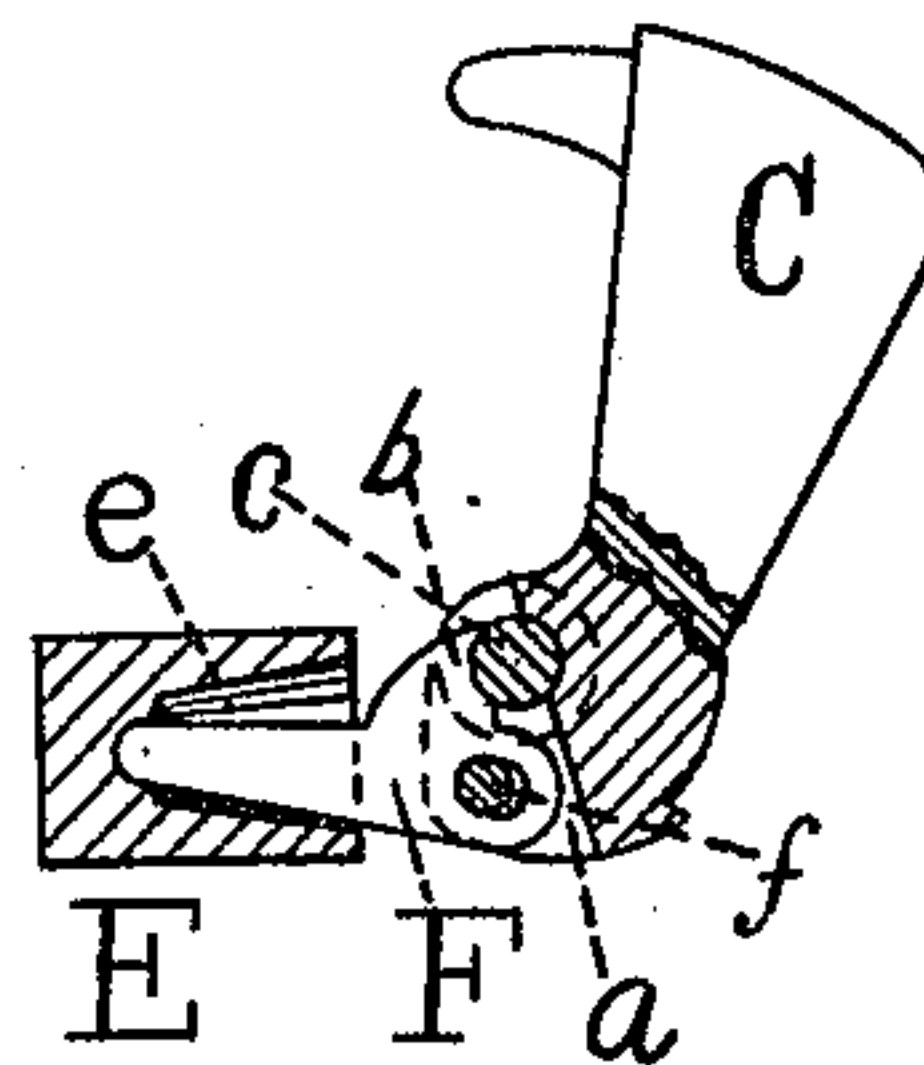


FIG. 4.

WITNESSES.

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(No Model.)

2 Sheets—Sheet 2.

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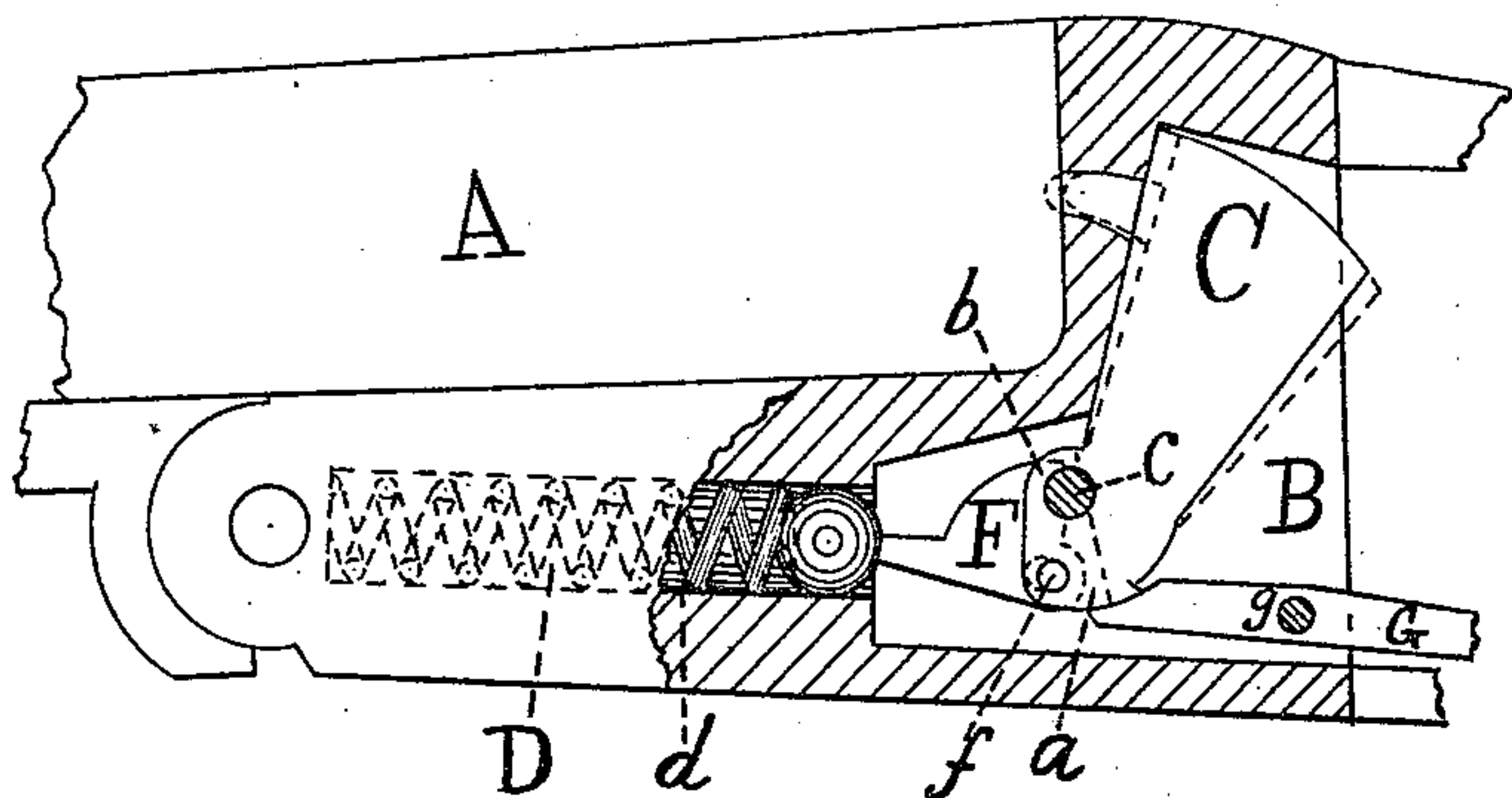


FIG. 6.

FIG. 7.

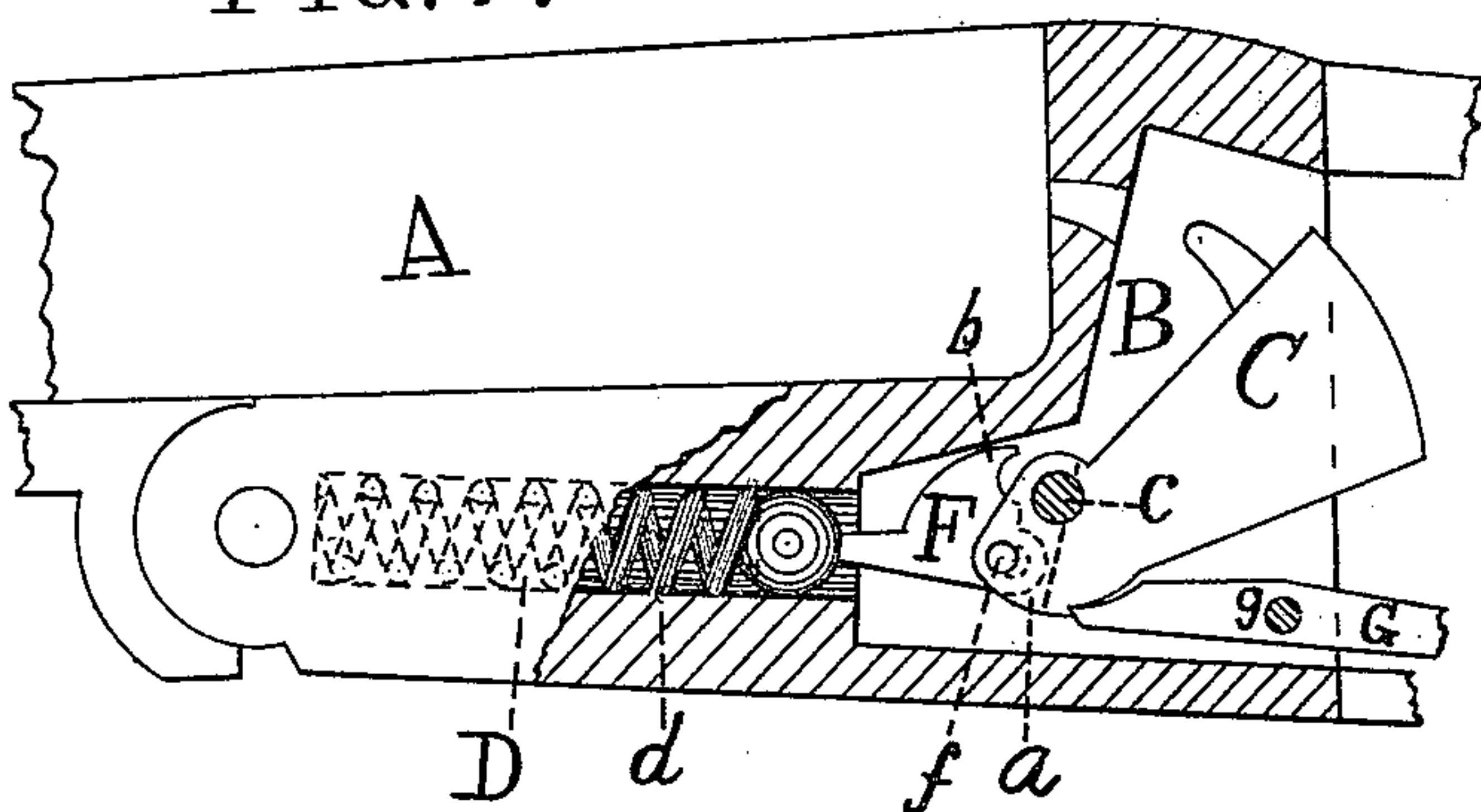


FIG. 8.

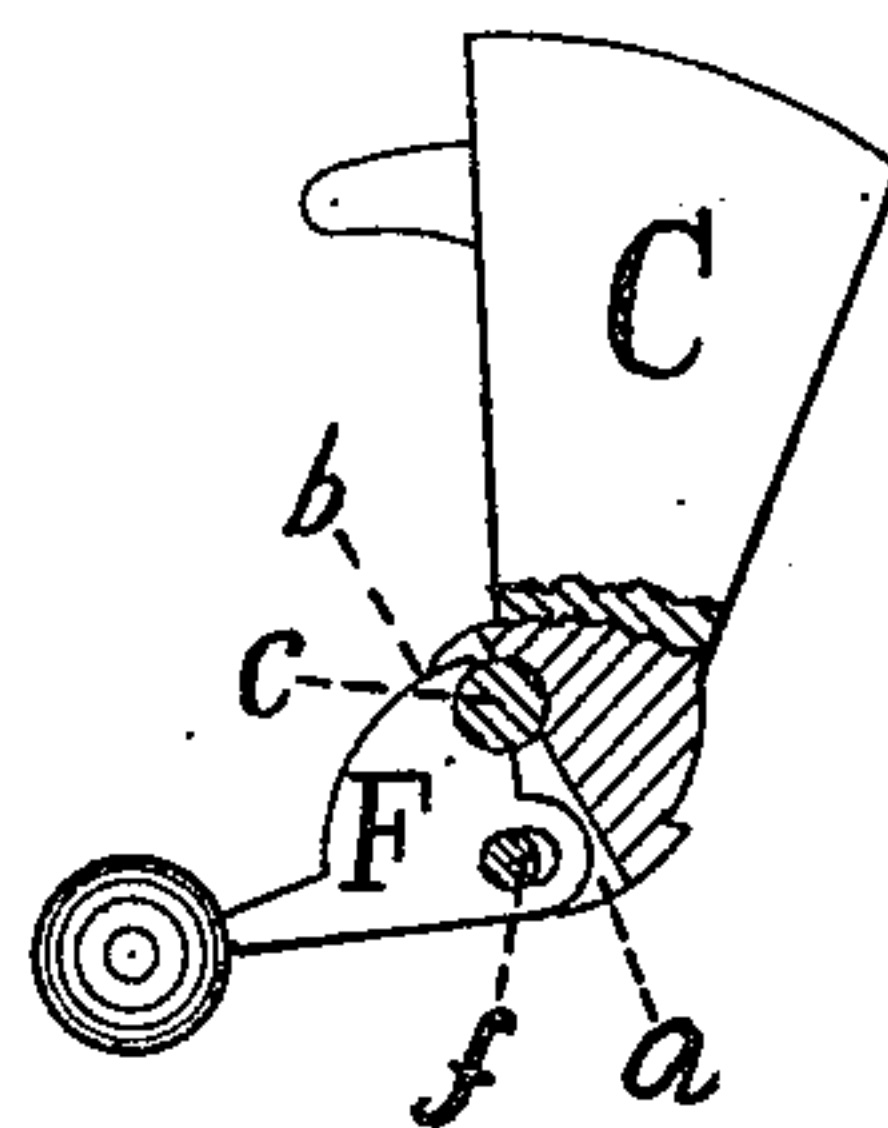
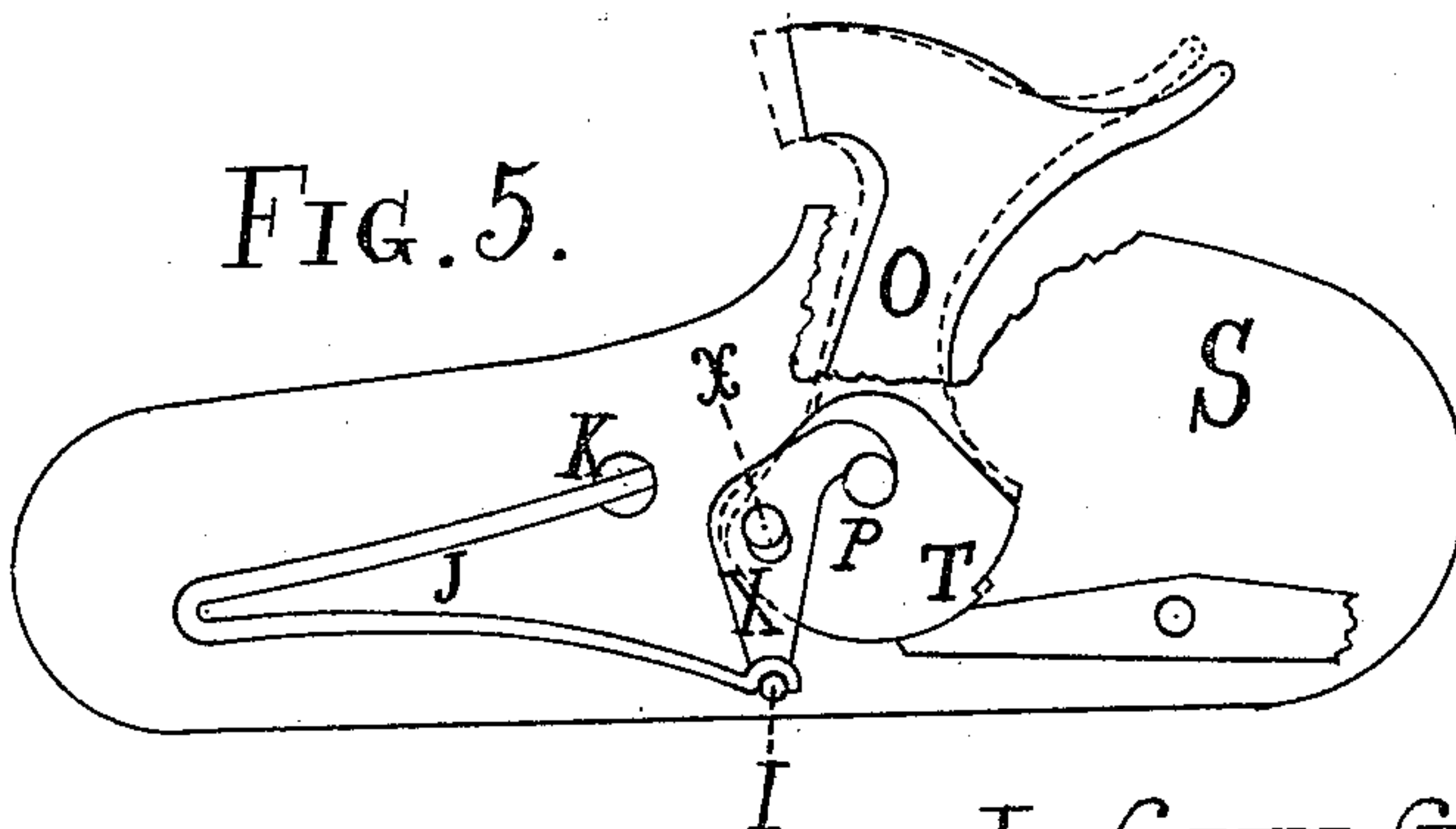


FIG. 5.



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REBOUND MECHANISM FOR BREECH-LOADING GUNS.

SPECIFICATION forming part of Letters Patent No. 412,340, dated October 8, 1889.

Application filed April 17, 1889. Serial No. 307,590. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. KING, a citizen of the United States, residing at Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Breech-Loading Fire-Arms; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification, and represent, in—

Figure 1, Sheet 1, a longitudinal section cutting through the center of the recess in which the spring and hammer are confined, the spring, hammer, and intermediate parts being shown in elevation. The hammer is represented as touching the battery or recoil-plate, from which it may rebound by reason of the concussion to the position denoted by the dotted lines. Fig. 2 is the same section, showing the position of the parts when the hammer is retained in the cocked position. Fig. 3 is a front elevation of the hammer, the pivot for securing the strut, and a portion of the pivot or screw upon which the hammer is hung being shown in position. Fig. 4 is a detached view of the rebounding mechanism, the follower and hammer being sectioned, the strut being shown in elevation. Fig. 5, Sheet 2, is another form which my invention may assume when applied to that class of fire-arms in which a leaf-spring is used and a tumbler is employed instead of the strut being connected directly to the hammer. Figs. 6 and 7 are the same section and represent a modification of the mechanism shown in Figs. 1 and 2. Fig. 8 is a view in elevation of the rebounding mechanism shown in Figs. 6 and 7.

This invention relates to improvements in that class of breech-loading fire-arms commonly called "hammerless" or "concealed-hammer" guns. It is more particularly designed for use in this class of guns, but is equally as applicable to other arms.

The object of this invention is to provide a means for automatically withdrawing the hammer-nose from contact with the cap or

shell of the cartridge prior to opening the breech, and is designed as an improvement upon the means shown in the patent granted to me and bearing date of August 16, 1887, No. 368,401; and it consists in certain details of construction and arrangements of parts, to which reference will be more fully hereinafter made, and pointed out in the claims.

In the drawings, A is the barrel, and B the frame, of a breech-loading gun of usual construction.

C is the hammer and *c* the pivot upon which the hammer is hung.

D is a longitudinal hole or recess formed in the frame for the reception of a helical spring *d*. A follower E, having a recess *e*, is also fitted to work within the recess D, its forward end resting against the rear end of the spring *d*. A longitudinal groove or channel is formed in the hammer, as at *a*. An arm or strut F is hung to the hammer by its rear end being placed within the recess *a* in the hammer C, and a pivot passed through the said hammer and a hole in the rear end of said strut, as shown at *f*. An upwardly-projecting lug or stop *b* is formed upon and near the rear end of the strut F. The forward end of the said strut projects within and takes seat at the forward end of the recess *e* in the follower E. The hole at the rear end of the strut, through which the pivot *f* passes, is elongated to admit of the free forward and backward movement of the hammer after the other parts have been brought to rest by the stop *b* abutting against the hammer-screw *c*. The usual sear G is pivoted at *g* for the purpose of retaining the hammer in a cocked position. The usual trigger is employed to release the sear, and its operation is thought to be too well understood to require illustration.

The operation of the device is as follows: The parts being in the positions shown in Fig. 2, Sheet 1, the sear is operated to release the hammer, when the spring *d* acts to rotate the hammer by means of the intervening follower and strut, until the upwardly-projecting lug or stop upon the strut abuts against the hammer screw or pivot and arrests the further movements of the parts, with the exception of the hammer, which the elongated hole in the strut allows to advance by its momentum

until it strikes the cap of the cartridge or the recoil-plate, from which it may rebound and is held by the sear, which bears upon the hammer when the trigger is released.

5 The operation of the device shown in Figs. 6 and 7, Sheet 2, is substantially the same as that of the device hereinbefore described, and illustrated in Figs. 1 and 2. A ball is formed upon the forward end of the strut F in Figs. 10 6, 7, and 8, and is designed as a substitute for the follower shown in Figs. 1, 2, and 4, Sheet 1.

In Fig. 5, Sheet 2, S is an ordinary lock-plate, and J the ordinary leaf-spring pivoted to the lock-plate at K. A shaft or pivot P 15 passes through the lock-plate and takes bearing therein. The hammer O is secured to one end of the said shaft, and a tumbler T is secured to the opposite end of said shaft and on the opposite side of said lock-plate. A 20 stirrup X is pivoted to the tumbler T, as shown at x. Its downwardly-projecting arm is provided near its end with a lug or pin, upon which the free end of the spring rests, as at I. The upwardly-projecting arm forms 25 a hook or stop, which contacts with and rests upon the hammer screw or pivot and limits the downward movement of the spring.

This form of gun-lock is so common that detailed illustration and more explicit ex- 30 planation is deemed unnecessary, further than to say that the hole in the stirrup, by which it is pivoted to the tumbler, being elongated admits of the free forward and backward movement of the tumbler and ham- 35 mer after the movement of the spring has been stopped by the hook upon the stirrup contacting with the shaft upon which the hammer and tumbler are secured. The operation of all the parts is substantially the same as 40 those of the devices hereinbefore described.

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

1. In a rebounding device for breech-load- 45 ing fire-arms, a strut pivoted near one end to the tumbler or hammer, the opposite end of said strut being seated against the end of the mainspring, said strut being provided with a projecting lug or stop adapted to limit its 50 movement by contact with the pivot upon which the tumbler or hammer is hung, and a sear adapted to retain the hammer in its normal position by reason of frictional contact,

all arranged to operate substantially as de- scribed, and for the purpose set forth. 55

2. In a rebounding device for breech-load- ing fire-arms in which the barrel is hung for- ward to be tilted up at the breech in opening, the combination therewith of a hammer hung 60 to the frame at the rear of the barrel, a longi- tudinal recess in the frame, a spring in said recess, a strut pivoted to the tumbler or ham- mer, its free end extending within and rest- ing against the rear end of said spring, the said strut being provided with a projecting 65 lug or stop adapted to limit its rearward movement by contact with the pivot upon which the tumbler or hammer is hung, an elongated hole or slot in the rear end of said strut to admit of the free forward and 70 backward movement of the hammer after the other parts have stopped, and a sear adapted to retain the hammer in its normal position by reason of frictional contact, all arranged and operating substantially as shown, and for 75 the purpose set forth.

3. In a breech-loading fire-arm in which the barrel is hung forward to be tilted up at the breech in opening, the combination therewith of the hammer hung in the frame at the rear 80 of the barrel, a longitudinal recess in the frame forward of the hammer and in line be- low the pivot of the hammer, a helical spring in said recess, a follower in said recess and resting against the rear end of said spring, 85 the said follower constructed with a recess from its rear end inward, and a strut hung by its rear end to the hammer below its pivot and extending into the recess in the follower, the forward end of the strut taking seat at 90 the forward end of the recess and near the forward end of the follower, the said strut being provided near its rear end with an up- wardly-projecting lug or stop adapted to limit its rearward movement by contact with 95 the hammer screw or pivot, an elongated hole in said strut to admit of the free forward and backward movement of the hammer after the strut has stopped, substantially as shown and described. 10

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES A. KING.

Witnesses:

CHAS. W. KING,
RALPH A. PALMER.