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J. H. WESSON & H. W. BULL.

REBOUNDING MECHANISM.

APPLICATION FILED MAR. 1, 1905.

Fig. 1.

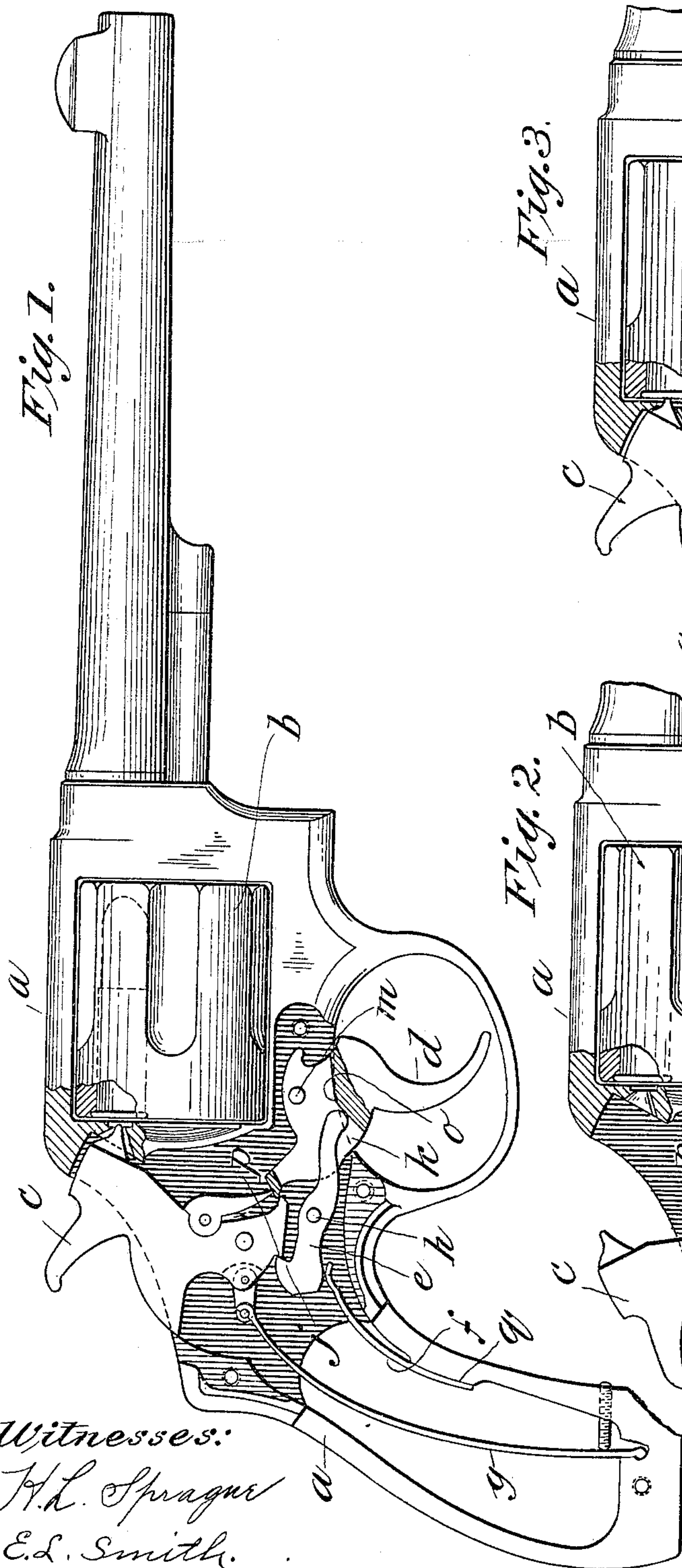


Fig. 3.

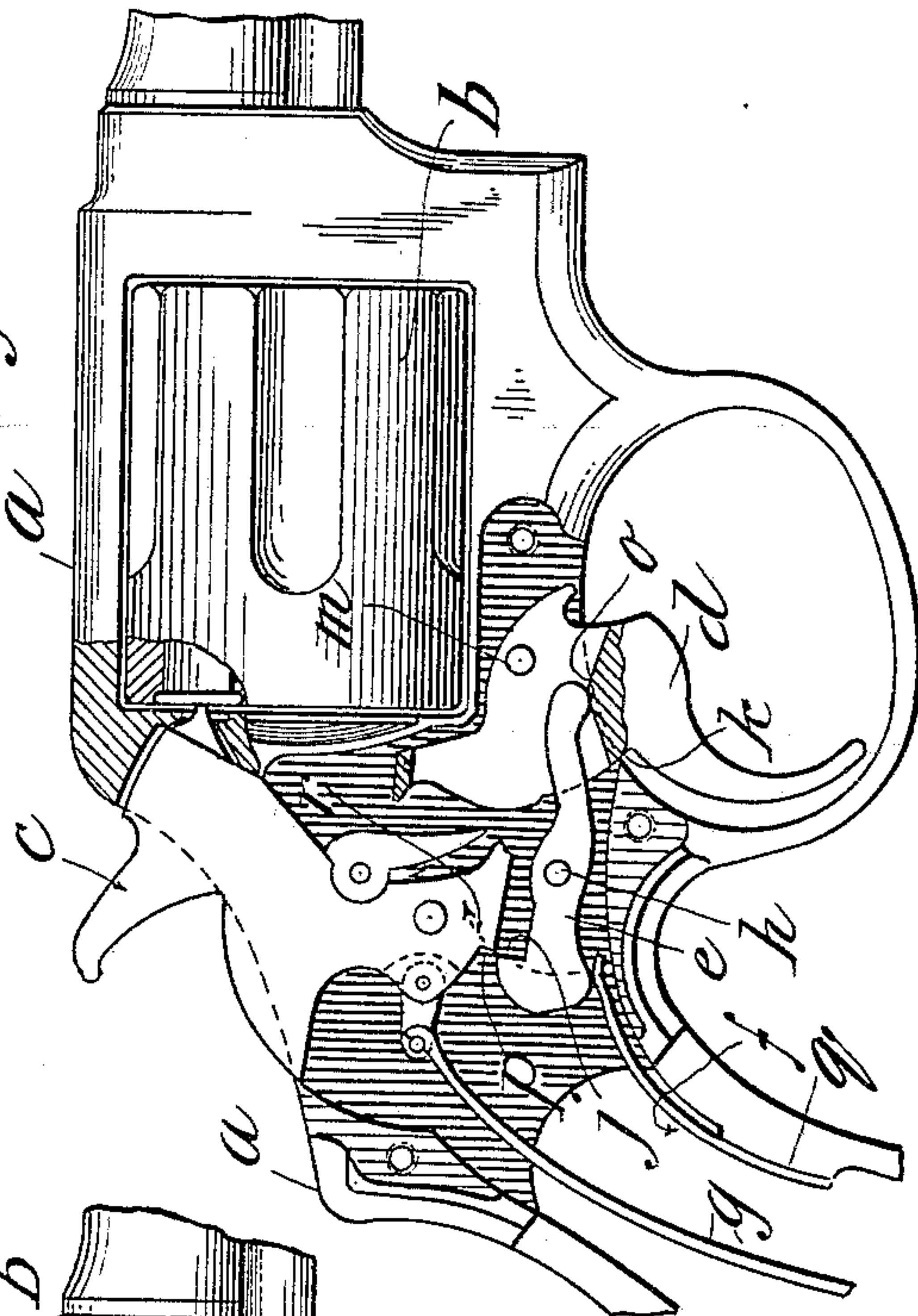
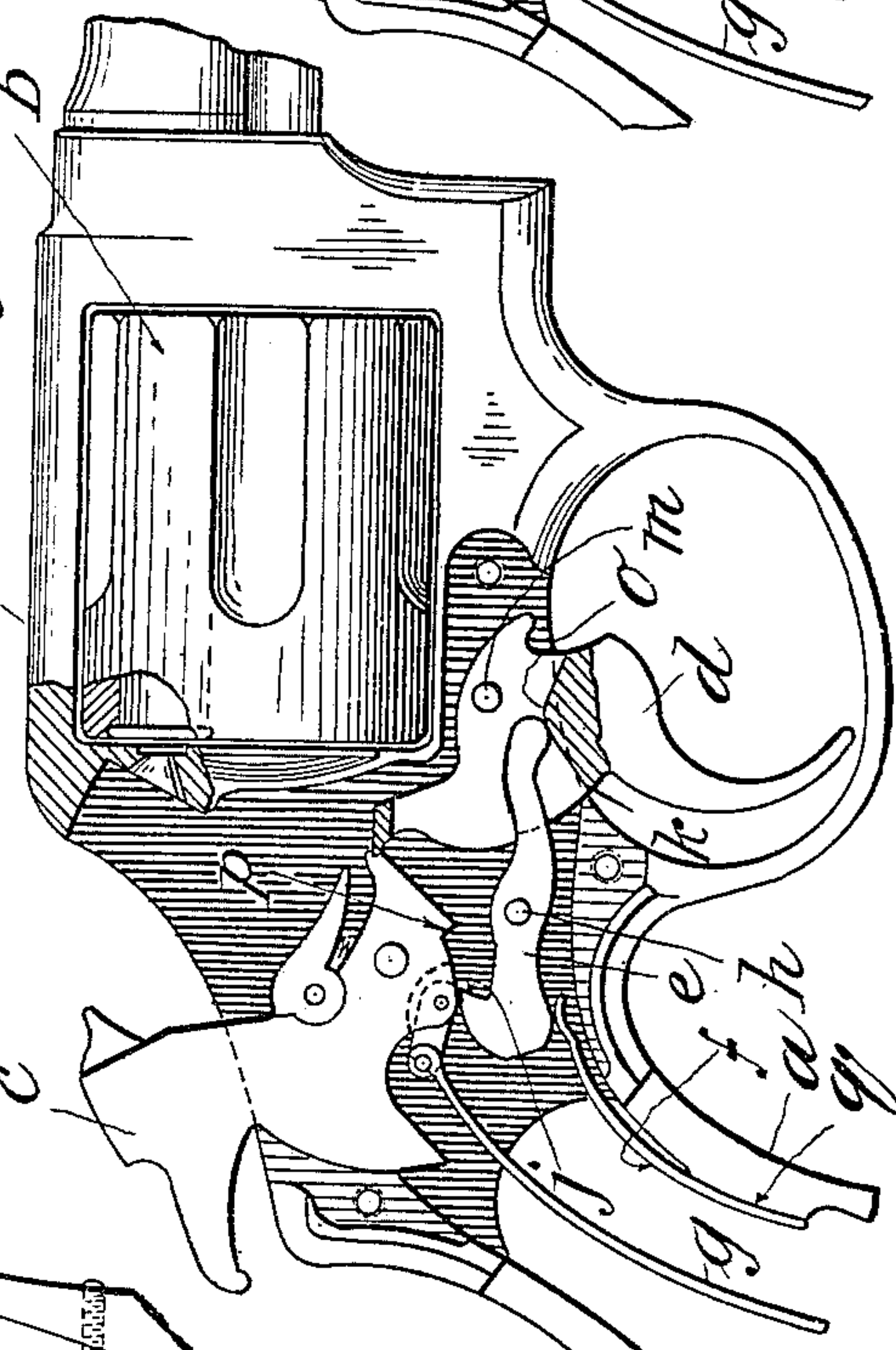


Fig. 2.



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UNITED STATES PATENT OFFICE.

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REBOUNDING MECHANISM.

No. 835,380.

Specification of Letters Patent.

Patented Nov. 6, 1906.

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To all whom it may concern:

Be it known that we, JOSEPH H. WESSON and HARCOURT W. BULL, citizens of the United States of America, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Rebounding Mechanism, of which the following is a specification.

This invention relates to improvements in 10 revolvers, and particularly to rebounding mechanism, and is in the nature of an improvement on United States Letters Patent issued to Joseph H. Wesson on September 2, 1902, and numbered 708,437. In this prior 15 patent the rebounding member is pivoted to the hammer, and for its proper operation it depends upon a rather close fit in the hinged joint whereby it is connected to the hammer.

The object of this invention is to provide 20 means whereby the rebounding lever may be pivotally supported on the frame and held positively out of the path of movement of the shoulder on the hammer with which it engages upon the fall of the hammer, one 25 spring serving both for the rebounding-lever and the trigger.

The invention consists in the construction set forth in the following specification and clearly pointed out in the claims.

30 In the drawings forming part of this application the invention is shown as applied to a revolver of the solid-frame type; but the invention is not restricted to any particular type.

35 In the drawings, Figure 1 is a side elevation of a revolver with the cheek-piece and side plate removed, showing the hammer in rebounded position, certain parts being shown in section. Fig. 2 is a similar view 40 showing the parts in the position they occupy when the hammer is cocked. Fig. 3 is also a view similar to Fig. 1, but in which the parts are shown in the position they occupy when the hammer has fallen and just prior 45 to the actuation of the rebounding device to retract the hammer.

Referring now to the drawings, *a* indicates the frame of the revolver; *b*, the cylinder; *c*, the hammer; *d*, the trigger; *e*, the 50 rebounding lever; *f*, the spring therefor, and *g* is the mainspring. The spring *f* also constitutes the trigger-spring.

There is no novelty in the construction of the revolver outside of the rebounding lever

e and its combination with the other parts 55 with which it coöperates. This lever, as shown in the various figures of the drawings, is pivotally supported on the frame on the pin *h*, and the rear upper end thereof is provided with a hook *j*. The other end of the 60 lever extends forwardly of its pivot and into a slot *k*, which extends through the trigger in the plane of the swinging movement of the latter, the trigger being hung on a pin *m*. In cutting this slot *k* in the trigger the lower 65 border thereof is formed with a high point *o* thereon, from which point the border is sloped away on an incline toward the front and rear edges of the trigger, the high point *o* being so located that when the trigger is pulled, 70 as in the act of cocking the hammer, it will swing under the forward end of the rebounding-lever *e*, which extends into said slot *k* in the trigger, and hence depresses the rear end of the lever, carrying it away from and below 75 the shoulder *p* on the lower edge of the hammer, thereby compressing the spring *f*, the lower end of which is secured to the frame, as at *q*, and the upper free end of which is located under the rear end of the 80 rebounding lever. Thus starting from the position which the parts occupy in Fig. 1 the forward end of the rebounding lever will lie on the inclined lower border of the slot *k* to the rear of the high point *o* referred to, and 85 if the trigger be pulled to cock the hammer this high point simultaneously with the backward swing of the upper end of the hammer will cam the rear end of the rebounding lever downward, as shown in Fig. 2, and if 90 the trigger be pulled far enough to allow the hammer to fall the rear end of the rebounding lever will by the contact of the forward end thereof with the trigger be positively held down in the position shown in Fig. 3, to 95 the end that when the hammer falls and strikes a cartridge the relation of the shoulder *p* on the lower edge of the hammer and the hook *j* of the cocking-lever will be that shown in said Fig. 3. 100

Preferably the plane of the shoulder *p* and the plane of the hooked end *j* of the rebounding lever are so located that when the hooked end *j* is swung upward by the spring *f* to the position shown in Fig. 1 in engagement with 105 said shoulder these planes will be parallel.

It will be seen that by reason of the location of the rebounding lever *e* relative to the

trigger *d* and to the spring *f* the latter acts as a trigger-spring through the medium of the rebounding lever *e*. Therefore after the trigger has released the hammer if pressure on the trigger be relieved the spring *f* in throwing upward the rear end of the lever *e* will effect the forward swinging movement of the trigger, because of the bearing of the forward end of the rebound lever on the inclined portion of the bottom of the slot *k* in the trigger, which extends from the high point *o* downwardly and rearwardly, this point of bearing on the trigger lying to the rear of the pivotal point *m* of the latter.

It is seen by an examination of the position of the parts in Fig. 3 that when the trigger is released the point of the hook *j* will be swung upwardly through the arc of a circle indicated by the dotted line *r* and into engagement with the shoulder *p*, and this movement will carry the lower end of the hammer forward far enough to withdraw the nose of the hammer into the recoil-plate, as shown in Fig. 1, and when in this position the hook *j* and the shoulder *p* will be interlocked and any attempt to force the hammer forward will result in a straight pull on the pivot-pin *h* of the rebound-lever, and therefore but a relatively light pressure beneath the rear end of the rebounding lever is required to maintain this interlocking relation of the latter with the hammer, the spring *f* being quite sufficient for this purpose.

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

1. A rebounding mechanism comprising a trigger having a recess therein, the lower border of which trends downwardly and rearwardly, a rebounding lever pivotally supported back of the trigger, the forward end of the lever bearing on the lower border of the recess and adapted for movement on the downwardly and rearwardly trending portion of the recess, and the rear end of the lever provided with an upwardly-extending hook; a spring under said rear end of the rebounding lever and serving as the trigger-spring, a hammer pivotally supported above the lever

and having a shoulder on the lower edge thereof with which said hooked end of the lever engages after firing, the rearward swing of the trigger serving to cam the rear end of the lever out of the path of movement of said shoulder.

2. A rebounding mechanism comprising a trigger having a recess therein, the lower border of which trends downwardly and rearwardly, a rebounding lever pivotally supported back of the trigger, the forward end of the lever bearing on the lower border of the recess, and the rear end of the lever being provided with an upwardly-extending hook; a spring under said rear end of the rebounding lever, and serving as a trigger-spring, a hammer pivotally supported above the lever, and having a shoulder on the lower edge thereof with which said hooked end of the lever engages, the upward movement of said hooked end of the lever serving to swing the lower end of the trigger forward and to simultaneously swing the upper end of the hammer rearwardly.

3. A rebounding mechanism for revolvers comprising a trigger having a recess therein, the lower portion of the recess having a crown portion and a rearwardly-inclined surface, a rebounding lever pivoted in the frame and in rear of the trigger, said lever having its forward end bearing on the rearwardly-inclined surface of the trigger and the rear end of the lever provided with a hook, a hammer pivotally supported above the lever and having a shoulder thereon, a spring under the rear end of the rebounding lever and serving also as a trigger-spring to force the rear end of the lever upward and the forward end downward against the inclined surface whereby the trigger is thrown forward and whereby the hook on the rear end of the lever is thrown into locking engagement with the shoulder on the hammer, and accidental discharge prevented.

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