

F. I. JOHNSON.
FIREARM.
APPLICATION FILED APR. 8, 1907.

1,004,172.

Patented Sept. 26, 1911.

Fig. 1.

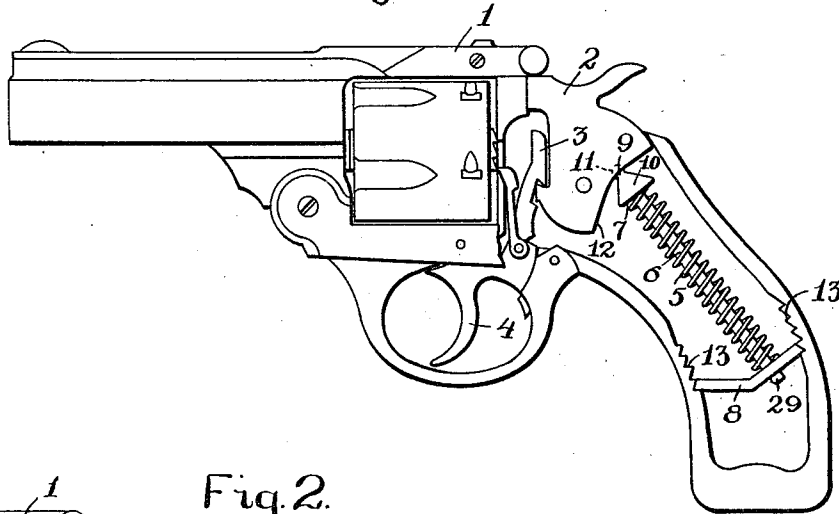


Fig. 2.

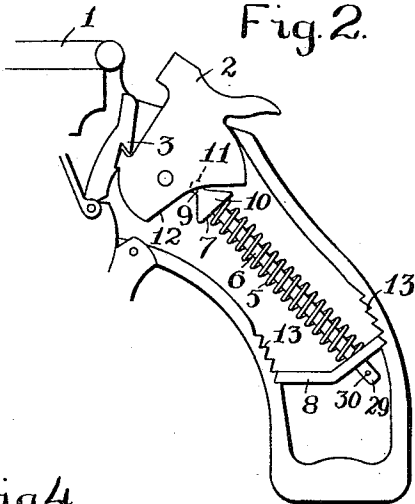


Fig. 3.

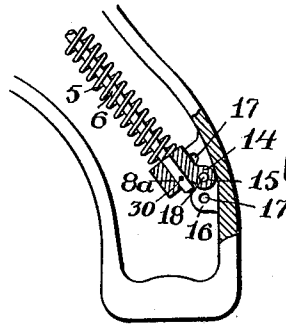


Fig. 4.

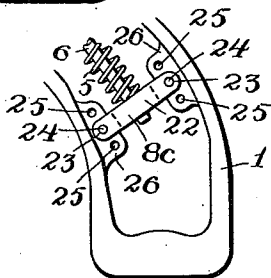
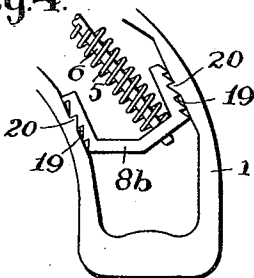
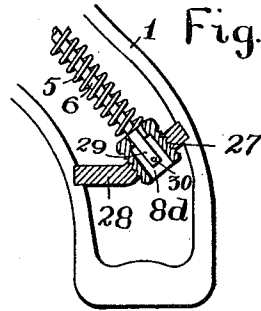


Fig. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

FREDERIC I. JOHNSON, OF FITCHBURG, MASSACHUSETTS.

FIREARM.

1,004,172.

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To all whom it may concern:

Be it known that I, FREDERIC I. JOHNSON, a citizen of the United States, residing at Fitchburg, in the county of Worcester and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Firearms, of which the following is a specification, accompanied by drawings forming a part of the same, in which—

Figure 1 is a side view of a revolver embodying my invention. Fig. 2 is a side view of a portion of the same showing the hammer cocked, and Figs. 3, 4, 5 and 6 show alternative methods of adjusting the abutment plate.

Similar reference letters and figures refer to similar parts in the different views.

My invention relates to improvements in hammer springs for fire arms, and it consists in the construction and arrangement of parts as hereinafter described and pointed out in the annexed claims.

In the drawings I have shown my improved hammer spring applied to a revolver, but it is equally applicable to all classes of firearms.

Referring to the accompanying drawings 1 denotes the frame of the revolver and 2 denotes the hammer which is operated by a lifter 3 and trigger 4 in the well known manner.

5 is the hammer spring which is mounted on a thrust spindle 6 provided with a shoulder 7 to receive the thrust of the spring 5, the other end of which bears against an abutment plate 8 which is arranged to receive the force of the spring substantially at right angles to the axis of the spring. The spindle 6 is provided with a ball 9 on its end 10 which engages a socket 11 in the rear edge 12 of the hammer 2. As the hammer 2 is cocked the thrust spindle 6 is moved backward through a hole in the abutment plate 8 and the spring 5 is compressed between the shoulder 7 and the abutment plate 8. Rocking of the hammer 2 on the end of the spindle 6 is allowed by the movement of the ball 9 in the socket 11. When the hammer is released the spring 5 reverses the movement of the hammer and the revolver is fired in the usual manner. The force of the spring 5, applied to the shoulder 7, is exerted against the hammer in a line coincident with the axis of the spindle 6 which renders its operation certain and immediate, and this is assisted by the fact that the spring 5 is

also arranged to be in contact with the abutment plate 8 at right angles to the axis of the spring. I thereby obtain upon the hammer 2 a direct thrust of the spring 5 at right angles to the resisting surface of the abutment plate 8.

In order to adjust the tension of the spring 5 I have provided means for the adjustment of the abutment plate 8 toward or away from the hammer 2, thereby increasing or diminishing the length of the spring 5 as desired. In Figs. 1 and 2 I have shown the adjustment accomplished by a series of notches 13 in the frame which are arranged to be engaged in turn by the beveled end of the adjustment plate.

In Fig. 3 I have shown an abutment plate 8^a constructed in block form provided with an ear 14 provided with a hole 15. Upon one side of the frame I provide lugs 16, one of which is shown, provided with a series of holes 17, between which lugs 16, the ear 14 is held by means of a pin 18 engaging the holes in the lugs 16.

In Fig. 4 I have shown an abutment plate 8^b having bent ends provided with a series of notches 19 arranged to engage beveled projections 20 on the frame 1.

In Fig. 5 the abutment plate 8^c consists of a bar 22 provided with a hole 23 at each end, which is held by pins 24 in holes 25 in lugs 26 on each side of the frame.

In Fig. 6 a screw threaded block 8^d is provided, which is adjustable in a screw threaded hole 27 in a stationary bar 28.

I regard it as broadly new to furnish an adjustable abutment plate and any method of so doing would be within the spirit of my invention.

Each abutment plate, 8, 8^a, 8^b, 8^c, and 8^d is provided with a hole to receive the end 29 of the thrust spindle 6 and in which hole the spindle 6 has a sliding movement. When the hammer is cocked the end 29 of the spindle 6 is projected beyond the abutment plate, as shown in Fig. 2, and exposes a transverse hole 30 in the spindle 6. This hole 30 is provided to furnish a means of release for the hammer from the pressure of the spring; which is accomplished by inserting a pin in the hole 30 when the hammer is cocked, and preventing the thrust spindle from being drawn through the abutment plate when the trigger is pulled.

I claim,

1. In a fire arm, a frame having a series

of internal notches to receive the ends of an abutment plate adjustable in said notches, a pivoted hammer, a spindle slidable through said abutment plate and having one
5 end bearing against said hammer, and a spiral spring bearing against said abutment plate with its tension applied to force said spindle against said hammer.

2. In a fire arm, a frame, a pivoted hammer, a thrust spindle with a ball and socket connection between said hammer and one
10 end of said spindle, a series of internal notches on opposite sides of the frame, a removable abutment plate held in said notches
15 and having an opening for said thrust spin-

dle, and a spiral spring between a shoulder on said spindle and said abutment plate.

3. In a fire arm, a frame, a pivoted hammer, an abutment plate adjustably held by its opposite ends in said frame, a thrust
20 spindle slidable in said plate and bearing against said hammer, and a spring between said abutment plate and a shoulder on said spindle.

Dated this fifth day of April 1907.

FREDERIC I. JOHNSON.

Witnesses:

PENELOPE COMBERBACH,
RUFUS B. FOWLER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
