No. 761,463. PATENTED MAY 31, 1904.

C. P. FAY.

BREECH LOADING FIREARM.

APPLICATION FILED JULY 24, 1902.

NO MODEL.

Fig. 1.

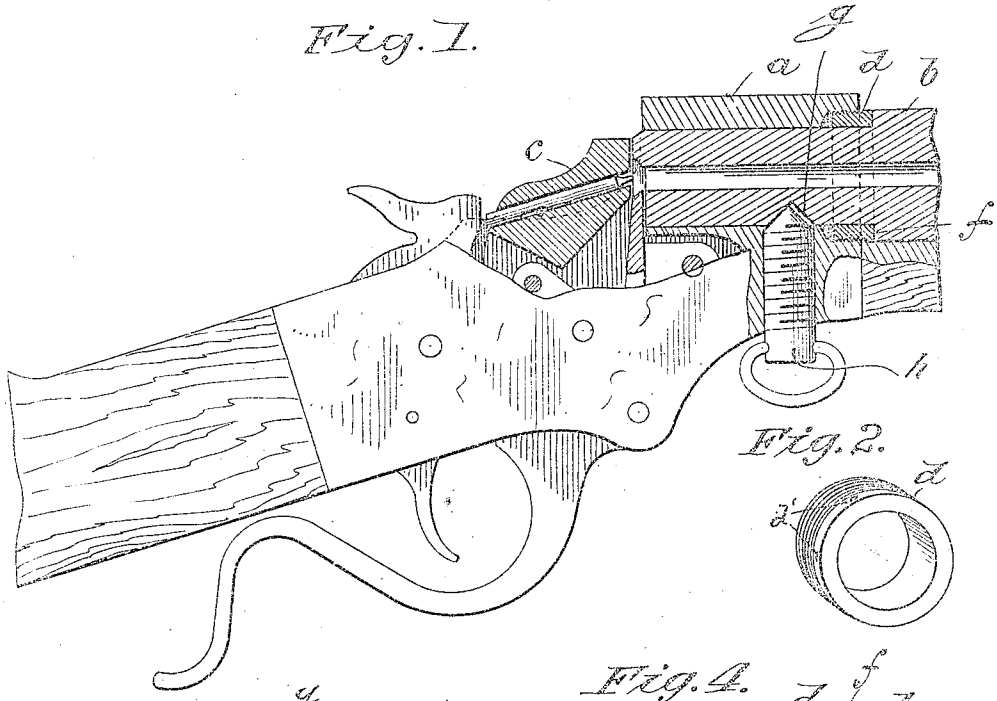



Fig. 2.




Fig. 3

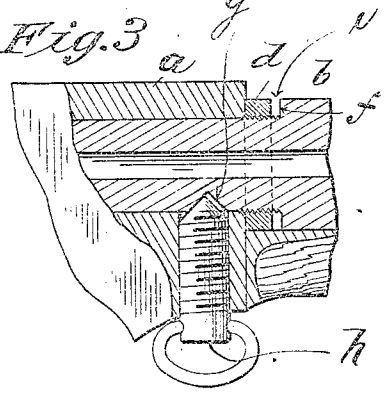
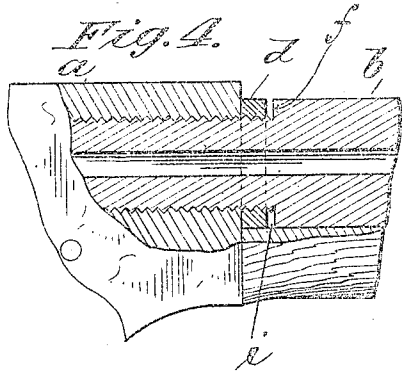



Fig. 4.




Witnesses:
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# UNITED STATES PATENT OFFICE.

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## BREECH-LOADING FIREARM.

SPECIFICATION forming part of Letters Patent No. 761,463, dated May 31, 1904.

Application filed July 24, 1902. Serial No. 116,800. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES P. FAY, 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 improvements in firearms, and has for its particular object the provision of means for effecting the longitudinal adjustment of the barrel with reference to the frame in which it is supported, whereby any wear of the end of the barrel against which the breech-block is forced to close the breech or of the face of the breech-block may be taken up.

In take-down guns of the type to which this invention is particularly applicable the barrel is inserted in the frame of the arm up to a shoulder on the barrel, the rear end of the latter projecting through the frame, to the end that the breech-block may be forced against the rear end of the barrel. Eventually the end of the barrel or the face of the breech-block wears away sufficiently to prevent a close contact between the breech-block and the end of the barrel and there is no means whereby this defect may be remedied without sending the arm back to the shop. My invention, however, provides means for overcoming this objection, and the means for attaining this end are fully set forth in the following specification and fully illustrated in the accompanying drawings, in which—

Figure 1 shows a breech-loading gun in side elevation, partly in section, having my invention applied thereto. Fig. 2 is a perspective view of a nut or bushing adapted to be screwed into the forward end of the frame. Figs. 3 and 4 each illustrate a modification of the construction shown in Fig. 1.

In the drawings, *a* may indicate the frame of the arm; *b*, the barrel; *c*, the breech-block, and *d* a nut or bushing which screws into the forward end of the frame and constitutes an adjustable abutment against which the barrel may come to a bearing, whereby the extent of its projection beyond the rear end of the frame *a* may be determined. The barrel *b* is turned down at its rear end to fit closely into the frame of the arm, which is bored out to receive it, and the internal diameter of the bushing *d* is the same as the diameter of the bore in the frame which receives the turned-down end of the barrel. In the under side of the barrel there is formed a cone-shaped recess *g*, into which the beveled end of a screw *h*, which is threaded into the frame beneath the barrel, may enter. In manufacturing the firearm the location of the recess *g* is such that when the rear end of the barrel is properly adjusted relative to the breech-block the apex of said conical recess will be forward of the beveled point of the screw *h*, as shown in Figs. 1 and 3, to the end that the point of said screw may bear only against the rear side of said recess. If now the nut *d* is screwed into the frame more or less, the screw *h* may be turned up to force the barrel still farther toward the breech-block to compensate for any wear that may have taken place.

In Fig. 3 instead of the bushing *d* being threaded into the frame *a* it is internally threaded in the form of a nut and screwed onto the barrel in proximity to the shoulder *f* thereon, between which, however, and the side of the nut a space *i* is left. The space of course is much exaggerated in the drawings. The nut *d* in this construction serves the same purpose as when in the shape of a bushing it is screwed into the end of the frame, as in Fig. 1. In one case the barrel comes up against the end of the bushing, which is screwed into the frame, and in the other case the nut which is screwed onto the barrel comes up against the end of the frame. The preferred construction is that shown in Fig. 1.

In Fig. 4 there is shown a second modification, which is in all respects like that shown in Fig. 3 with the exception that the barrel screws into the frame instead of being held therein by a screw *h* entering the recess in the under side of the barrel.

To provide convenient means for screwing up the bushing or nut *d*, holes *d'* may be provided around the forward edge thereof for

the insertion of a pin or spanner, or any other suitable means may be resorted to to provide for the easy adjustment of the bushing or nut.

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

The combination with the frame of a fire-arm having a smooth barrel-receiving hole therein, of a barrel having a turned-down end adapted to slide into said hole; a bushing screwing into one end of said hole against which a shoulder at the turned-down end of the barrel abuts, and a conically-pointed screw in the frame at right angles to the barrel, adapted to enter a depression in the latter to hold the barrel against said bushing.

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