

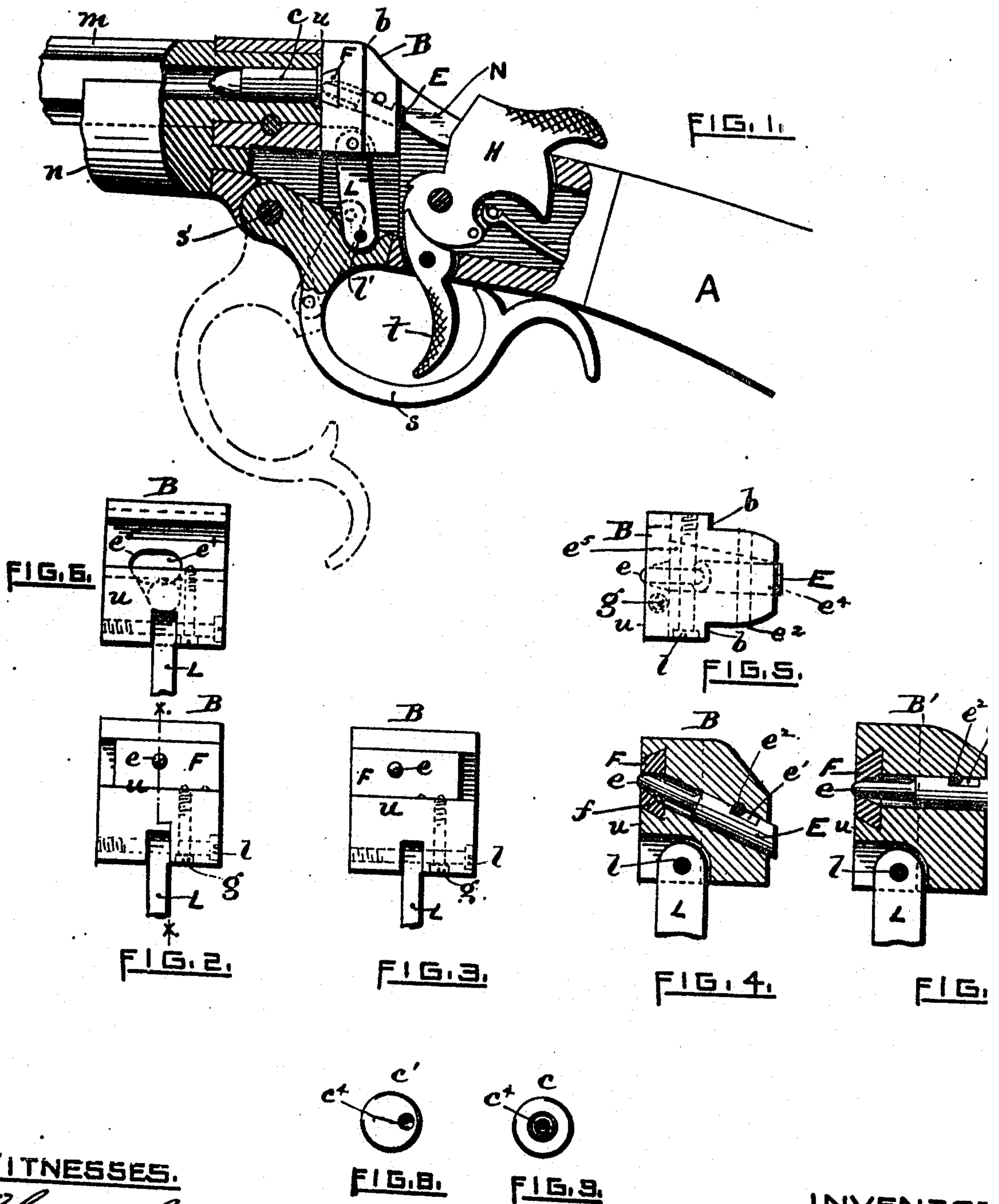
(No Model.)

W. H. DAVENPORT.

FIRE ARM.

No. 326,276.

Patented Sept. 15, 1886



WITNESSES.

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UNITED STATES PATENT OFFICE

WILLIAM H. DAVENPORT, OF UXBRIDGE, MASSACHUSETTS.

FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 326,276, dated September 15, 1885.

Application filed June 3, 1885. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. DAVENPORT, a citizen of the United States, residing at Uxbridge, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Fire-Arms; and I do hereby 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 letters or figures of reference marked thereon, which form a part of this specification.

My present invention relates to rifles; and it consists, essentially, in the novel construction of the breech-block, whereby the firing-pin is adapted to be readily adjusted therein for the purpose of converting the rifle into a "center-fire" or "rim-fire," as desired.

The object of my invention is to provide a rifle with mechanism whereby it can be used both for center and rim fire cartridges, the same being effected by simple and efficient means.

In the accompanying sheet of drawings, Figure 1 represents (reduced) the rear portion of a rifle in partial central section, showing the breech-block, hammer, &c., in position for firing, as in use. Fig. 2 is a front view of the breech-block, showing the firing-pin adjusted therein for center-firing. Fig. 3 is a similar view showing the firing-pin adjusted for lateral or rim firing. Fig. 4 is a transverse sectional view on line *xx* of Fig. 2. Fig. 5 is a plan view of the breech-block embodying my invention. Fig. 6 is a front view of the breech-block, the firing-pin and its holder being removed. Fig. 7 is a sectional view similar to Fig. 4, the firing-pin, however, being in a horizontal position, or in line with the longitudinal axis of the barrel. Figs. 8 and 9 represent end views of shells adapted for rim and center firing, respectively.

The following is a detailed description of the improvements hereinafter claimed:

A, again referring to the drawings, designates a rifle of the ordinary type, (the breech portion thereof being, however, only represented,) having the barrel *m*, breech-frame *N*, hammer *H*, trigger *t*, swinging guard *s*, and

breech-block link *L* connecting said all as usually constructed.

B designates the breech-block mounted in the frame *N*, and connected to the link *L* by means of the screw-threaded removal *z*, the general form and arrangement of the breech-block being as common to this class of rifles or fire-arms.

F is a steel plate fitted into and secured to the face *u* of the breech-block at right angles to the axis of the barrel, forming the base of the counterbore, *s*, being about one-eighth of an inch shallower than the horizontal face of said block.

E is the firing-pin, of ordinary construction, the same being cylindrical and its forward portion reduced in diameter to terminate in the rounded point *e*. An aperture, *e'*, is formed in the breech-block at an angle with its face *u*, (see Figs. 2 and 3) for the purpose of receiving said firing-pin, the central line of the hole being in the vertical central plane as is the axis of the barrel. One of the lateral sides of said block is made tapering or diverging from the rear point thereof, thus forming the edge of the opening *e'* at the front of the block, shown in Figs. 5 and 6.

The steel plate *F* is drilled to receive the small or front end, *e*, of the firing-pin, said hole being in line with the aperture *e'* before described, and extending rearward in a funnel or cone shape form, as shown in Fig. 4. Now, when the right-hand end of the plate *F* is placed flush with the corresponding edge of the block *B*, as shown in Figs. 2 and 5, the firing-pin *E* is then in position for central firing, the screw-threaded removal *z* serving to retain the plate in position. When placing and securing the plate *F* on the opposite side or edge of the block, as shown in Fig. 3, the firing-pin is then in position to be used for rim-fire cartridges.

A pin, *e''*, passing transversely through the block *B*, in connection with the flatter portion *e'* of the firing-pin, serves to limit the longitudinal movement of the latter, and at the same time prevents its axial motion.

B', Fig. 7, represents the breech-block with the firing-pin mounted therein diagonally in line with the bore of the rifle-barrel.

The operation of the device may be substantially described as follows: Assuming now that shells *c*, having center caps, are to be used in said rifle *A*, the forward end, *e*, of the firing-pin would then be in the position shown in Fig. 2—i. e., in line with the center of the barrel and the link *L*. After exploding the shell, by means of the hammer striking against the projecting rear portion of the firing-pin, the breech-block is depressed by means of the guard *S* and its connection *L*, (see dotted-line position, Fig. 1,) thereby adapting the shell to be withdrawn and a new one inserted within the barrel, after which the parts are returned to their normal position, as shown.

In order to adapt the rifle to explode a rim-fire shell, *c'*, the lower screw-threaded pin, *l'*, of the link *L* is removed, thereby permitting the breech-block, &c., to be withdrawn. The binding-screw *g* is then loosened and the plate *F* carried to the left and secured in position by means of said screw *g*, as fully shown in Fig. 3. The whole is then replaced within the breech-frame *N* and connected with the guard *S*, as before, the rear end of the firing-pin in both cases remaining unchanged with relation to the hammer *H*.

By means of this invention I am enabled to combine in one breech-block means for producing both central and rim firing, thereby dispensing with an extra breech-block and firing-pin, which otherwise would be required to be furnished with the rifle.

It is obvious that the plate *F*, or its equivalent, may be adjustably secured to the face of the block *B* in a direction at right angles to the position as drawn, thereby adapting the firing-pin to engage the cap or fulminate of the shell in a vertical plane; or, in other words, the breech-block may be constructed so as to permit the end *e* of the firing-pin to be adjusted vertically, in lieu of the lateral adjustment, without departing from the spirit of the invention.

A coiled spring may be employed the firing-pin rearwardly, although in most instances I prefer to use the device without the spring.

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

1. The sliding breech-block having the firing-pin mounted therein, substantially as before described, in combination with the apertured plate adjustably secured to the face of said block, as and for the purpose hereinbefore set forth.

2. In a rifle, the breech-block having the firing-pin mounted therein, and provided with the apertured plate secured to the face thereof, in combination with the swinging guard *S*, connecting said block and guard, substantially as shown, and for the purpose hereinbefore set forth.

3. The breech-block *B*, hereinafter described, having the elongated aperture therein, substantially in line with the barrel *m*, in combination with the apertured plate *F*, adjustably mounted to the face of said block, in combination with the guard *S*, connecting the block with the guard, substantially as shown, and for the purpose hereinbefore set forth.

4. The breech-block hereinbefore described, having the elongated aperture therein, and provided with the apertured plate adjustably secured to the face of said block, in combination with the firing-pin mounted within said block and provided with the adjustment by the forward end of the firing-pin, to be adjusted both for rim and center fire cartridges, substantially as shown, and for the purpose hereinbefore set forth.

In testimony whereof I have hereunto set my hand and seal, at New York, this 10th day of June, 1891.

WM. H. DAVIDSON

Witnesses:

GEO. H. REMINGTON,
CHARLES HANNIGAN.