(No Model.)

W. J. KRIZ.

BREECH LOADING FIRE ARM.

No. 345,789. Patented July 20, 1886.

Fig. 1.

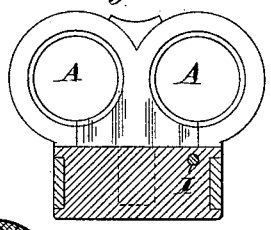


Fig. 2.

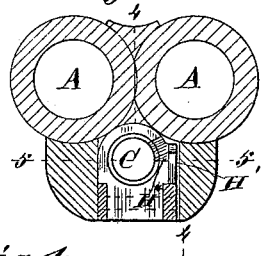


Fig. 3.

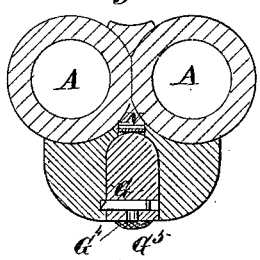


Fig. 4.

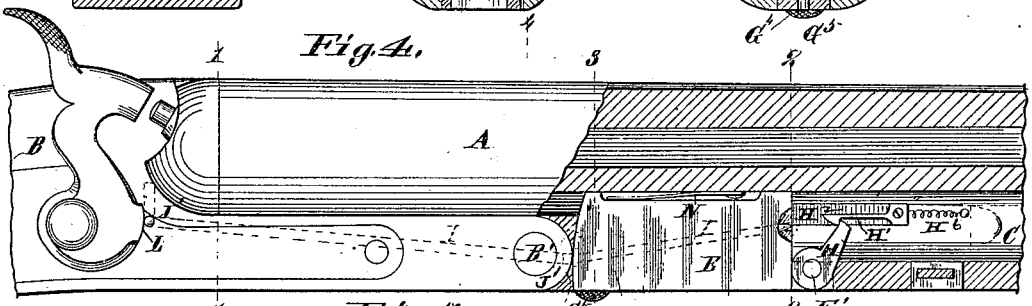


Fig. 5.

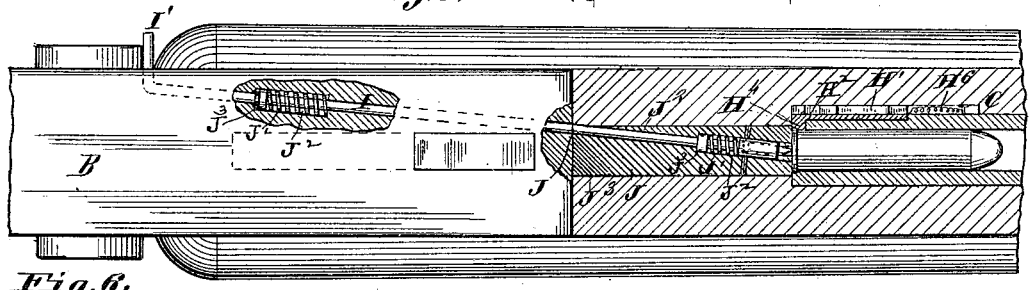


Fig. 6.

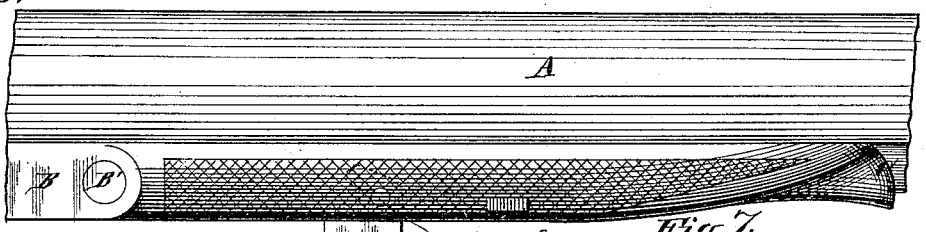


Fig. 8.

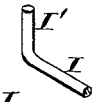


Fig. 9.

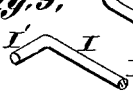


Fig. 10

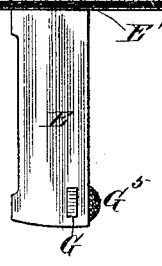


Fig. 11.

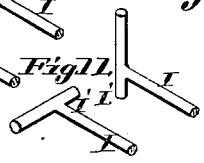
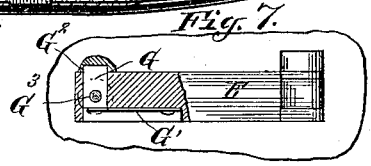


Fig. 7.



Attest:
Charles Pickles
F. A. Hopkins.

Inventor:
Wm J. Kriz
By Knight Bros
Attys

UNITED STATES PATENT OFFICE.

WILLIAM J. KRIZ, OF ST. LOUIS, MISSOURI.

BREECH-LOADING FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 345,789, dated July 20, 1886.

Application filed February 26, 1886. Serial No. 193,356. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. KRIZ, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Fire-Arms, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is an end view of the shot-barrels, showing the stock in section, taken on line 1 1, Fig. 4. Fig. 2 is a transverse section taken on line 2 2, Fig. 4. Fig. 3 is a similar view taken on line 3 3, Fig. 4. Fig. 4 is a detail view, part in side view and part in longitudinal section, taken on line 4 4, Fig. 2. Fig. 5 is part in bottom view and part in longitudinal section, taken on line 5 5, Fig. 2. Fig. 6 is a detail side view with the extractor and loading-block of the rifle in open position. Fig. 7 is a detail bottom view, part in section, showing the manner of holding the loading and extractor block in its closed or normal position. Figs. 8, 9, 10, and 11 are detail perspective views of the firing-pin of the rifle-barrel.

My invention relates to a fire-arm having two shot-barrels and a rifle-barrel, the rifle-barrel being located between and beneath the shot-barrels; and my invention consists in features of novelty, hereinafter fully described, and pointed out in the claims.

Referring to the drawings, A represents the two shot-barrels, which may be of any ordinary construction, and may be connected to the stock B of the fire-arm in any suitable manner, it having a hinged connection at B′ with the stock, as usual.

C represents the rifle-barrel, which does not extend to the breech end of the shot-barrels, as shown in Figs. 4 and 5, and which is fired from the same hammer or hammers as the shot-barrels, or one of them. The rifle-barrel is secured to and beneath the shot-barrels, and may be connected thereto in any manner desired; or it is possible that it may be formed in one piece with the shot-barrel. Access is given to this barrel, to load it, by means of a block, E, hinged at E′, which is capable of being opened down into the position shown in Fig. 6, to allow access to the breech end of the barrel for the purpose of loading it. It is held in its upper position by means of a suitable spring-catch, the form of catch I have shown consisting of a pin, G, connected to the block E by a spring, G′, and which (when the block is closed) enters a recess, G^2, (see Fig. 7,) in the wall of the opening that receives the block. This pin G may be pulled back to release the block and allow its free end to drop down by means of a projection, G^3, that extends through an opening, G^4, in the block, and which has a head, G^5, on its lower end. The projection is simply forced to one side to allow the pin G to be released from the notch or socket G^2, and when this is done the free end of the block will move downward, opening the space through which the rifle-barrel is charged. As the breech-block E the of the rifle-barrel moves from its normal position, a dog, H, thereon comes against a spring, H′, secured to an extractor, H^2, held in the breech-piece of the fire-arm, as shown in Figs. 2 and 4, the extractor having an extension, H^4, that extends over and engages the rim of the cartridge to extract it. (See Figs. 2 and 5.) When the block E opens past a certain distance, the dog H slips off the spring H′, so that the movement of the extractor ceases, and it is then pulled back to its normal position by a spring, H^6, (see Figs. 4 and 5,) the spring connecting the inner end of the extractor to the breech-piece of the fire-arm or to the side of the rifle-barrel, if preferred. To throw the free end of the block E downward when the catch G is released, I secure a spring, N, to the under-side of the shot-barrels, the free end of which bears against the block E, and throws it outward when the spring-catch is released.

I represents the firing-pin of the rifle-barrel. I make this in two parts, one part extending from the hammer to the point indicated at J, Figs. 4 and 5, and the other part extending from there to the cartridge or to the breech end of the rifle-barrel. These pieces are held back away from the cartridge until struck by the hammer by means of springs J′, fitting in sockets J^2 of the block E and stock B, the pin having collars J^3, against which one end of the springs bear. The other end of the springs bear against the ends of the sockets J^2. The outer part of the firing-pin extends, as stated,

from the point indicated at J to the hammer, and where it bears against one of the hammers the latter has a smooth surface, L, for striking the pin. This end of the pin is turned over, as shown at I', Figs. 8 and 9, for the purpose of affording means for the hammer to strike it and force it forward. When it is turned up into the position shown in dotted lines in Figs. 4 and 8, the hammer, when operated to fire the shot-barrels, will not operate the firing-pin, and consequently will not fire the rifle-barrel, but when it is turned down into the position shown in Fig. 9 the part L of the hammer will strike the out-turned end I' of the rod I and fire the rifle-barrel.

In Figs. 10 and 11 I have shown a cross-head upon this head of the firing-pin, the object being to provide a means for operating the pin in hammerless guns. The long end of the head extends through an opening in the stock of the gun, and when it is turned into the position shown in Fig. 10 the rifle-barrel will not be fired; but when it is turned into the position shown in Fig. 11 the short end of the head will be brought in front of the hammer of the rifle-barrel, and the pin will be operated and the rifle-barrel fired.

I claim as my invention—

1. A fire-arm having a stock, a long barrel hinged thereto, a short barrel secured to said long barrel and terminating between the hinge and the muzzle end of the long barrel, a breech-block located between the rear end of said short barrel and said hinge, a hammer, and firing-pins, all constructed and arranged, substantially as and for the purpose set forth.

2. In a fire-arm, the combination, with the barrel and the sliding extractor H', having the spring-catch H^2, of the breech-block E, hinged at its forward extremity, and having the dog or finger H projecting therefrom for engaging said spring-catch, substantially as set forth.

3. The combination of the barrel, the extractor H', the spring-catch H^2, secured to the said extractor, the retracting-spring H^6, the breech-block E, hinged at its forward extremity, and the dog H, projecting from said breech-block and engaging said spring-catch, substantially as and for the purposes set forth.

4. In a fire-arm, the combination, with the stock and the barrels hinged thereto, one of said barrels terminating at its rear end in front of said hinge, of a hammer and a firing-pin extending from said hammer to said short barrel, said firing-pin being divided at the hinge-joint, substantially as and for the purpose set forth.

5. In a fire-arm, the combination, with the barrel and the hinged breech-block recessed substantially as described, of the plate-spring G', secured thereto, the pin G, projecting laterally from said spring, the head G^5, the recess G^2, for the reception of the end of said pin, and the spring N, bearing upon the top side of said block between its hinged and free extremities, substantially as and for the purposes set forth.

6. The combination, with the stock and the barrels hinged thereto, one of said barrels terminating at its rear end in front of said hinge, of a breech-block hinged at its front end at the rear end of said short barrel and terminating at its rear end at the hinge-joint, a hammer, and a firing-pin extending to said short barrel, said firing-pin being divided at the hinge-joint, substantially as set forth.

7. In a fire-arm, the combination, with the stock, the hammer, the barrel C, and the hinged breech-block E, of the firing-pin formed in two parts, one of which is carried by said breech-block, and a spring for holding each part in its retracted position, substantially as set forth.

WILLIAM J. KRIZ.

In presence of—
GEO. H. KNIGHT,
JOSEPH WAHLE.