

(No Model.)

2 Sheets—Sheet 1.

T. PERKES.

EJECTOR MECHANISM FOR BREECH LOADING GUNS.

No. 476,485.

Patented June 7, 1892.

Fig. 1

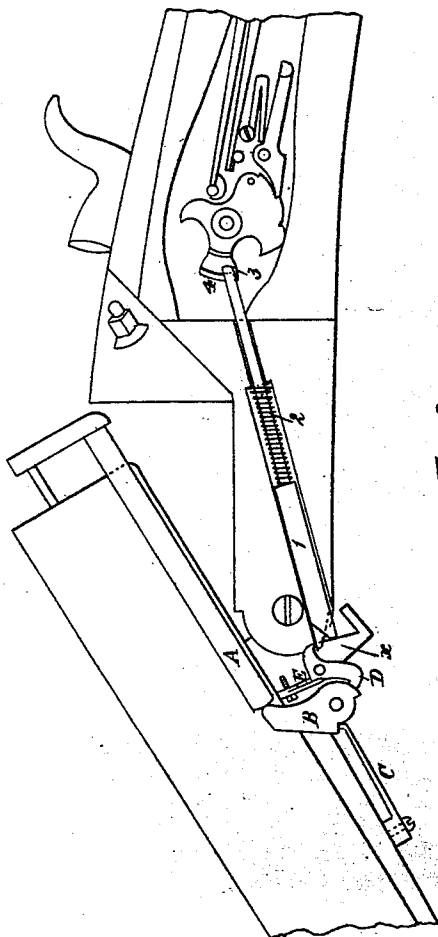


Fig. 2.

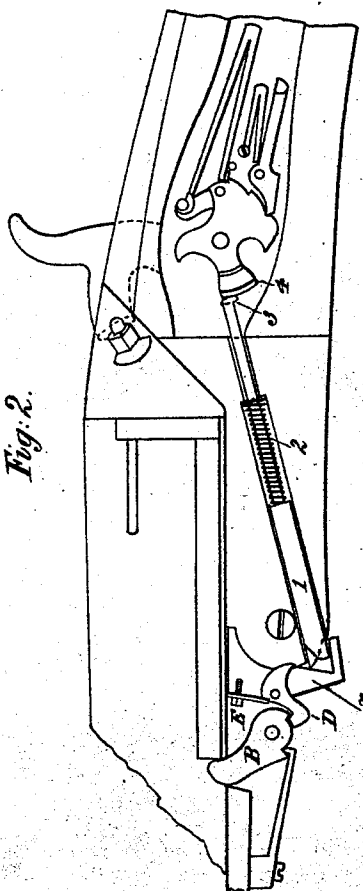


Fig. 1^a



Witnesses:
Aug. Shirley Bowden
A. F. Bowden.

Inventor:
Thomas Perkes

(No Model.)

2 Sheets—Sheet 2.

T. PERKES.

EJECTOR MECHANISM FOR BREECH LOADING GUNS.

No. 476,485.

Patented June 7, 1892.

Fig. 3.

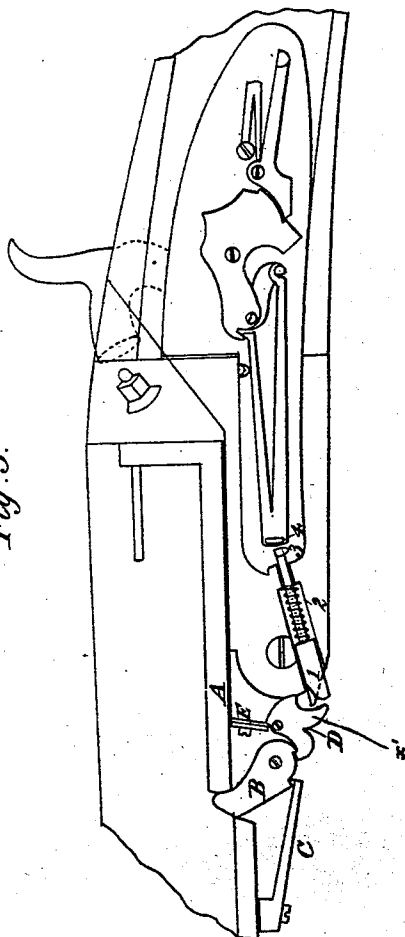
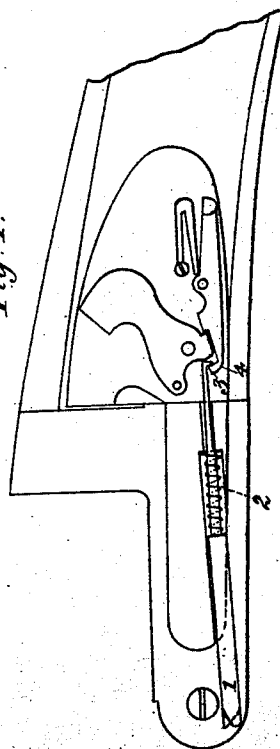


Fig. 4.



Witnesses
Thos. Perkins
A. F. Bowdoin

Inventor.
Thomas Perkes

UNITED STATES PATENT OFFICE.

THOMAS PERKES, OF LONDON, ENGLAND.

EJECTOR MECHANISM FOR BREECH-LOADING GUNS.

SPECIFICATION forming part of Letters Patent No. 476,485, dated June 7, 1892.

Application filed March 24, 1891. Serial No. 386,282. (No model.)

To all whom it may concern:

Be it known that I, THOMAS PERKES, a subject of the Queen of Great Britain, residing at 70 Osnaburgh Street, Regents Park, London, England, have invented new and useful improvements in Breech-Loading Small-Arms, of which the following is a specification.

My invention relates to improvements in that class of breech-loading small-arms known as "ejector-guns;" and the objects of my improvements are, first, to provide improved means for actuating the ejecting mechanism of such guns, and, second, to facilitate the converting of non-ejector guns into ejector-guns. I attain these objects by providing each barrel of the gun with an actuating rod or slide fitted in the action or on the lock-plate and operated by a projection formed on any convenient part of the lock-work of the gun, such as the tumbler, mainspring, sear, or swivel, according to the particular construction of gun to which my improvements are applied.

My invention will be hereinafter fully described, and its novel features carefully defined in the claim.

In the accompanying drawings, Figures 1 and 2 show side elevations of a back-action ejector-gun in the fired and closed positions fitted with my improvements. Fig. 1^a is a plan view showing the hooked end of the actuating-rod and the tumbler provided with a beveled projection. Fig. 3 shows a side elevation of a fore-action ejector-gun so fitted, the actuating mechanism being shown in the operating position. Fig. 4 is a detail view showing the application of my invention to a gun that is cocked by tilting the barrels.

Figs. 1 and 2 show an actuating-rod operated by a projection on the tumbler. A is the extractor; B, ejecting-lever; C, ejector-spring; D, catch, and E catch-spring. These various parts are hereinafter referred to as the "ejecting mechanism." 1 is the actuating-rod, working to and fro in a recess in the action and fitted with a coiled spring 2 or with any other suitable spring. The back part of the rod or slide 1 is smaller than the front part, or it is cut or filed away, so that its rear end, which terminates in a hook 3, is springy. A projection 4 is formed on the tumbler or other sliding part of the lock-work, and the hook 3 and the projection 4 have their edges beveled or

rounded off, so that when the rod 1 is pushed rearwardly with some considerable force against the projection 4 the rear end of the rod will spring aside and permit the hook 3 to engage with the projection 4, as shown in Fig. 1^a. When the hammer falls on the nipple of the gun, as in firing the gun, the motion of the tumbler or other part provided with the projection 4 slides the said projection 4 out of engagement with the hook 3 and the rod 1 is suddenly propelled forward by the spring 2 into the position shown in Fig. 2. The rod 1 is temporarily held, but not firmly secured, in this position by the pressure of the end of the hook against the projection 4, which passes behind it on the rebound of the tumbler. When the breech is opened, as shown in Fig. 1, the catch D first strikes upon the upper edge of the front end of the rod 1 and releases the ejector mechanism, which works automatically and throws out the cartridge-case. The continued opening motion of the barrel brings the fore end *x*, which projects from the barrel, as shown in Figs. 1 and 2, or the projection *x'* on the catch, as shown in Fig. 3, into contact with the lower edge of the front end of the rod 1 and the rod is pushed back with sufficient force to cause the hook 3 to re-engage with the projection 4. The breech can then be opened and closed as often as desired without actuating the ejector mechanism until the hammer is let fall on the nipple, as in the act of firing.

Fig. 3 shows the projection 4 formed on the turn of the mainspring, so that when the gun is fired the tooth 3 is released from such projection by the expansion of the mainspring on the falling of the tumbler, and the actuating-rod is carried forward into an ejecting position by the spring 2, as previously described. The tumbler then returns and the rear end of the rod takes a bearing against the projection 4, while its fore end actuates the ejecting mechanism in the manner already described.

Fig. 4 shows the projection 4 formed on the nose of the sear, which is slightly prolonged for that purpose. The tooth 3 is shown engaging with such projection, the tumbler being at full-cock and the sear in the bent, the gun having been opened and the rod pushed back into a neutral position. On firing the gun the sear is withdrawn from the bent and

the rod is released and pressed forward into an ejecting position by the spring 2, while the projection 4 acts as a bearing for the rear end of the rod when acting upon the ejecting mechanism in the manner already described. A detail view only is given of this arrangement, as the construction and operation thereof will be readily understood.

What I claim is—

10 In breech-loading small-arms, the combination, with an automatic ejector mechanism carried by the barrel and provided with a catch or sear D and a lock mechanism provided with a sliding projection 4, substantially

as set forth, of a spring-actuated sliding piece 15 1 for the said catch to strike when the breech is partially opened after firing, thereby permitting the ejector mechanism to operate, said sliding piece being provided with a springy and hooked rear end adapted to be forced 20 back into engagement with the said projection when the breech is fully opened, substantially as and for the purpose set forth.

THOMAS PERKES.

Witnesses:

AUGS. SHIRLEY BOWDEN,
Patent Agent, London, England.
A. F. BOWDEN.