(No Model.)

J. E. GAGE.

MEANS FOR ATTACHING FORE END STOCKS TO GUN BARRELS.

No. 409,188. Patented Aug. 20, 1889.

Fig. 1.

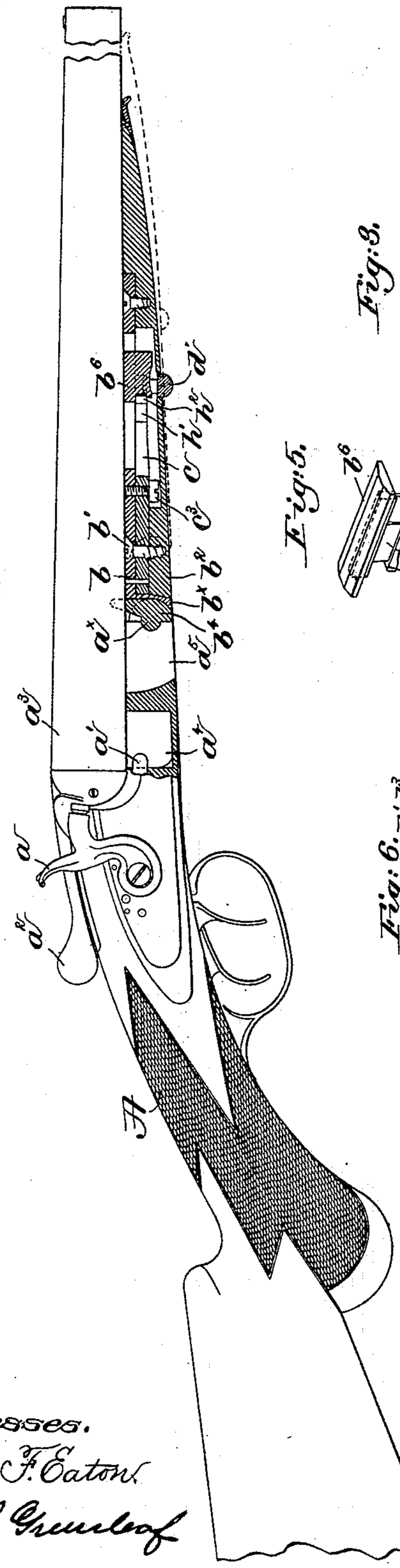


Fig. 3.

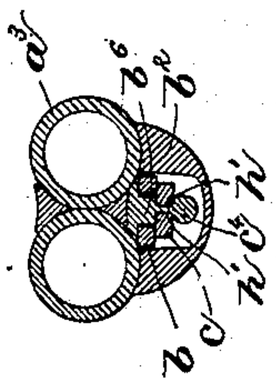


Fig. 4.

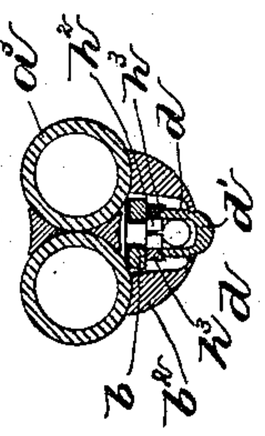


Fig. 5.

Fig. 6.

Fig. 8.

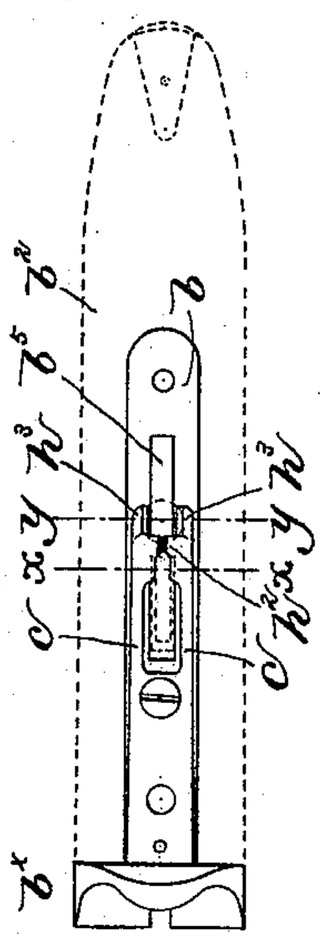
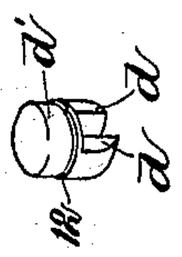


Fig. 7.



Witnesses.
Howard F. Eaton.
Fred. S. Greenleaf

Inventor.
James E. Gage.
By Lumby & Gregory
Attys.

UNITED STATES PATENT OFFICE.

JAMES E. GAGE, OF CONCORD, NEW HAMPSHIRE.

MEANS FOR ATTACHING FORE-END STOCKS TO GUN-BARRELS.

SPECIFICATION forming part of Letters Patent No. 409,188, dated August 20, 1889.

Application filed November 24, 1888. Serial No. 291,790. (No model.)

To all whom it may concern:

Be it known that I, JAMES E. GAGE, of Concord, county of Merrimac, State of New Hampshire, have invented an Improvement in Breech-Loading Guns, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to improve that class of breech-loading guns in which the barrel of the gun is retained in position on the stock by means of a hand-piece applied to the under side of the barrel. In this class of guns, so far as I am aware, the barrel cannot be detached from the stock to pack or clean the gun except after the removal of the hand-piece from the barrel. The detaching of the hand-piece prior to removing the barrel from the stock and the application of the hand-piece to the barrel when the gun is to be assembled, besides being inconvenient, frequently cause the loss of valuable time, and frequently the hand-piece is dropped and sometimes lost. To obviate this trouble, I have so constructed the hand-piece that it may be permanently attached to the barrel, and so that the hand-piece needs only to be slid longitudinally when it is desired to remove the barrel from the stock, or vice versa.

My invention consists in the combination, with a barrel and stock and a shoe attached to the barrel, of a sliding hand-piece and a locking device consisting of spring-arms attached to the said hand-piece to engage the said shoe to retain the said hand-piece upon the barrel when the barrel is removed from the stock, and the releasing device to act on the said spring-arms, substantially as will be described.

Figure 1 in elevation and section shows a sufficient portion of a double-barrel gun to enable my invention to be understood. Fig. 2 is an under side view of the hand-piece and the metallic bar attached thereto, the hand-piece being shown in dotted lines; Fig. 3, a transverse section of the entire gun, the section being on line $x\,x$, Fig. 2, the barrel being in firing position; Fig. 4, a similar transverse section on the line $y\,y$. Fig. 5 shows separately the guide projection or shoe attached to the under side of the barrel and co-operating with the spring-jaws, to be described, attached to the metal bar secured to the sliding hand-piece. Fig. 6 shows the locking device by itself. Fig. 7 shows the push-button detached.

The stock A, provided with a gun-lock, and the barrel a^3, having the lugs a^4 a^5, each provided with a recess, the recess in the lug a^4 to be engaged by a dog a', actuated by the lever a^2 on the breech-block, while the recess of the lug a^5 engages a round pin $a^\times$ of the breech-block, are and may be all as usual in breech-loading guns.

My invention is shown as embodied in a double-barreled gun.

The hand-piece b^2 has connected to it, as by screw b', a slotted metallic bar b, having at its end next the breech a concaved head $b^\times$, which, when the barrel is in firing position, engages the convexed end b^4 of the breech. The under side of the barrel a short distance in advance of the lug a^5 has fixed to it a guide-block b^6, having a web or shoe c^4, provided with a heel c^6, the edge of the said web farthest from the breech being beveled or made thin to easily enter between and spread apart the spring-arms c of the locking device secured by the screw c^3 to the metallic bar b. The inner sides of the spring-arms of the locking device are so shaped as to leave a space h, shoulders h' h', with a narrower space between, two locking projections h^2 h^2, and beveled fingers h^3 h^3.

The hand-piece is applied to the barrel when the barrel is detached from the stock, the portion b^5 of the slot in the metallic bar b being then slipped down over the shoe c^4, leaving the heel c^6 of the shoe just in front of the projections h^2.

The hand-piece having been so placed in position, is moved slightly forward until the projections h^2 come above the heel c^6, which prevents the hand-piece from dropping off the shoe.

The hand-piece, as shown, has a push-button d'. (See Figs. 4 and 7.) This push-button has a shoulder 12 to prevent it from dropping through the hole in the hand-piece, in which hole it is fitted loosely, and the said button has two beveled prongs d d, which, when the button is pushed in toward the barrel, act upon the beveled inner faces of the fingers h^3, thus spreading the spring-arms of

the locking device, and then the hand-piece is further moved toward the outer end of the barrel until the shoe referred to passes into the large space *h* between the spring-arms of the locking device and strikes the end of the slot in the metallic bar *b* nearest the breech. In this condition the hand-piece is securely locked to the barrel, and the barrel may be applied to the stock in usual manner and be secured to the stock by sliding the hand-piece toward the breech far enough to cause the concaved head $b^{\times}$ to meet the convexed face b^4. In this position of the hand-piece the heel c^6 of the shoe overlaps the locking projections h^2.

To detach the barrel from the stock, the operator will press upon the push-button, spread apart the spring-arms of the locking device, and push the hand-piece toward the outer end of the barrel until the beveled end of the shoe stands in the narrow space of the jaws. In this condition the hand-piece is left securely held upon the barrel.

If it be desired to remove the hand-piece from the barrel after removing the barrel from the stock, the hand-piece will be moved longitudinally backward as far as possible toward the rear end of the barrels, or until the projections h^2 pass the heel c^6 of the shoe, the hand-piece at such time being free to be removed.

I claim—

1. In a breech-loading gun comprising a barrel and a stock, the combination, with a shoe b^6, secured to the barrel, of a sliding hand-piece provided with a locking device consisting of spring-arms permanently attached to the hand-piece to engage the said shoe and secure the hand-piece to the barrel, and a releasing device, substantially as described, to operate upon the spring-arms and disengage them from the said shoe, substantially as and for the purpose specified.

2. In a breech-loading gun comprising a barrel and a stock, the combination, with a shoe b^6, of a hand-piece provided with a locking device consisting of spring-arms to engage the said shoe and lock the hand-piece to the barrel, and a releasing device consisting of the thumb-piece d', provided with the beveled arms *d*, to engage the spring-arms, substantially as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES E. GAGE.

Witnesses:
J. H. ALBIN,
JAMES H. MORRIS.