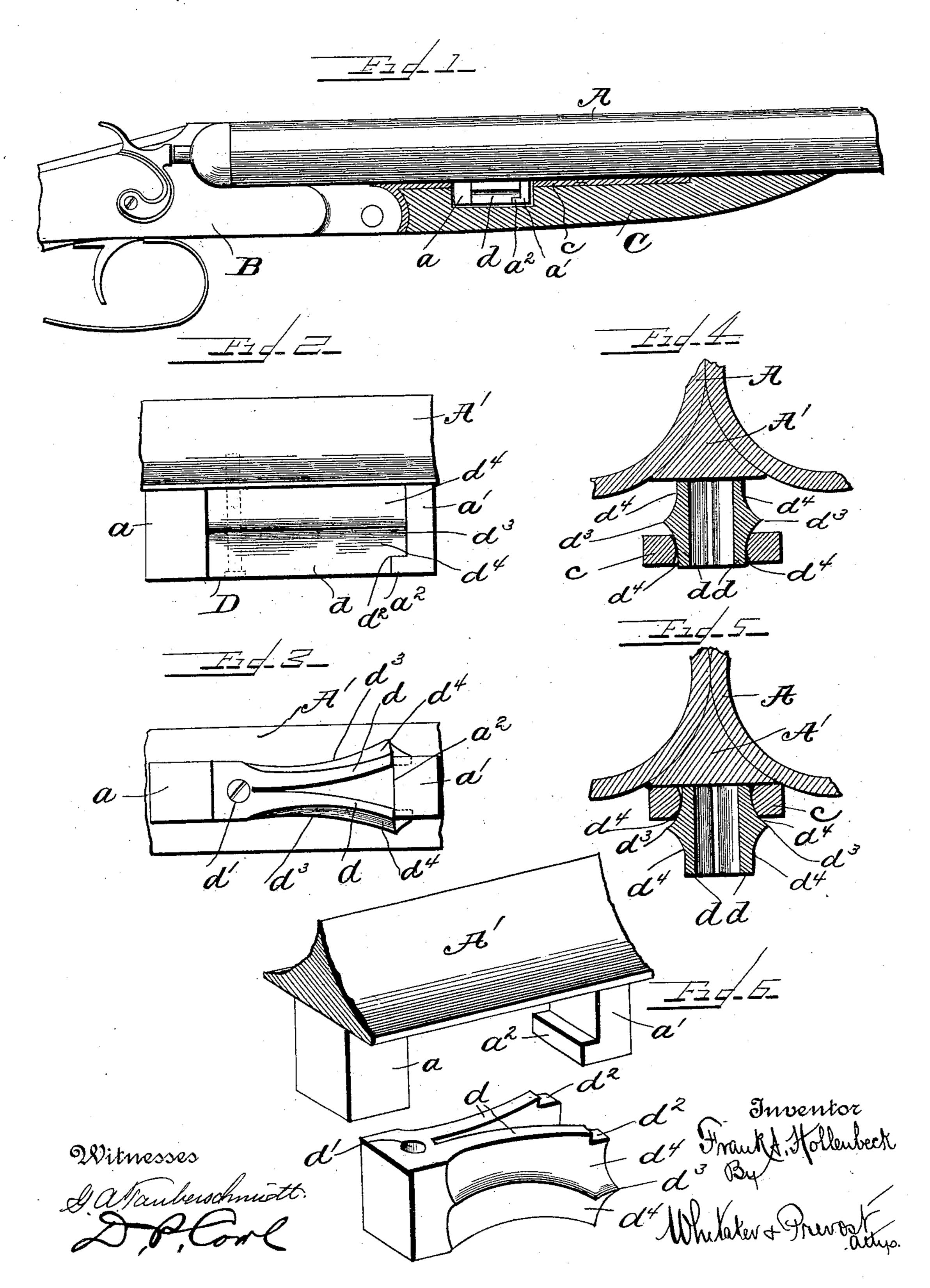
(No Model.)

## F. A. HOLLENBECK. FORE END FASTENING FOR GUNS.

No. 522,594.

Patented July 10, 1894.



## United States Patent Office.

FRANK A. HOLLENBECK, OF SYRACUSE, NEW YORK, ASSIGNOR TO THE SYRACUSE ARMS COMPANY, OF SAME PLACE.

## FORE-END FASTENING FOR GUNS.

SPECIFICATION forming part of Letters Patent No. 522,594, dated July 10,1894.

Application filed June 10, 1893. Serial No. 477,181. (No model.)

To all whom it may concern:

Beit known that I, Frank A. Hollenbeck, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Fore-End Catches; 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.

My invention is an improved catch or retaining device for holding the fore end of a breech loading gun in operative relation with respect to the barrels and stock and it consists in the novel features hereinafter described reference being had to the accompanying drawings which illustrate one form in which I have contemplated embodying my invention and said invention is fully disclosed in the following description and claims.

The object of my invention is to provide a catch for securing the fore end to the barrels, the said catch comprising a pair of spring arms each provided with a retaining rib to 25 engage a portion of the fore end, and a retreating cam face above and below said rib, so that the fore end may be placed in engagement with the catch and locked in position by simply pressing the fore end against -30 the barrels, and removed by drawing it away from the barrels, the cam faces operating to force the spring arms inward to allow the fore end to slip on or off. The cam faces will also enable the catch to hold the fore end close 35 against the barrels, when the fore end is in operative position.

Referring to the said drawings, Figure 1 is a side elevation of a portion of a fire arm, showing the rear portion of the barrels, and the adjacent portion of the stock, the fore end being represented in section. Fig. 2 is a side view of the catch. Fig. 3 is a bottom plan view of the same. Fig. 4 is a transverse sectional view of a portion of the barrels, showing the catch and the plate secured to the fore end. Fig. 5 is a similar view showing the position of the parts when in operative position. Fig. 6 shows the parts of the device in detail.

In the drawings A represents the barrels and B the stock of a breech loading fire arm and C is the fore end all of said parts being

of usual construction. The fore end C is provided with the metallic plate c as usual extending longitudinally along the center of the said fore end adjacent to the barrels and provided with an oblong slot which engages the catch secured to the barrels. The fore end is hollowed out to form a recess to receive the catch as shown in Fig. 1 and the edges of the slot, which engage the catch are curved or 60 rounded as shown in Figs. 4 and 5.

In the central portion of the under side of the barrels is a longitudinal V-shaped rib A' which fits into the recess between the edges of the barrels, as usual, and has its outer face 65 flat as shown. This rib is provided with a pair of lugs adapted to pass into the recess in the fore end and are formed integrally with the rib A' or secured thereto in any desired way. The lug a is simply a cubical or 70 rectangular projection, against which the rear end of the catch proper abuts and might be dispensed with. The  $\log a'$  is adapted to engage the operative portions of the catch and is provided with an inwardly projecting 75 shoulder  $a^2$ , which engages the free ends of the jaws forming the catch, and holds them against movement away from the barrels when the fore end is removed. I therefore term this lug  $a^2$  the "retaining lug." The 80 catch or retaining device proper consists in this instance of a pair of spring jaws dpreferably formed in one piece as shown in detail in Fig. 6 by being split from an oblong block of metal leaving a butt or stem D pro- 85 vided with an aperture d' to receive a screw or bolt which secures it to the rib A' between the lugs a and a'. The jaws d d are provided with notched portions or offsets  $d^2$  which pass under the shoulder  $a^2$  of the lug a' and the 30 outer sides of these jaws are each provided with a central rib  $d^3$  from which extend two inclined or curved cam faces  $d^4 d^4$  to the upper and lower edges of the jaw.

The jaws are so formed that the distance 95 between the ribs  $d^3 d^3$  is greater than the width of the slot in the plate c of the fore end as is clearly shown in Fig. 4 in which the plate is shown in the position it occupies when the fore end is about to be pushed upon the catch. 100 As the fore end is pressed toward the barrels the curved edges of the slot will bear against

the cam faces  $d^4$   $d^4$  of the jaws and compress them so as to allow said slot to pass over the ribs  $d^3$   $d^3$  of the jaws, when the spring jaws will expand and the cam faces  $d^4$   $d^4$  adjacent to the barrels will draw the plate snugly against the barrels and hold the fore end in place. When it is desired to remove the fore end it is seized and drawn outwardly, when the edges of the slot will by engaging the cam faces of the jaws compress said jaws and al-

low the fore end to be withdrawn.

It will thus be seen that the spring jaws are each provided with a central retaining rib, and a cam face extending in each direction 15 from said rib, one pair of cam faces serving to compress the jaws and the other to press the fore end tightly against the barrels, when the fore end is forced upon said jaws, and the tension of the spring jaws will cause them to 20 exert a constant pressure upon the edges of the slot to hold the fore end in operative position. When the fore end is being withdrawn the jaws will be held by the shoulder  $a^2$  of the lug a', against being bent or strained as will 25 be readily seen, and thus the strain will be taken off of the bolt or screw by which the jaws are held in position.

I may if I prefer construct my improved catch with but one spring arm or jaw provided 30 with a central retaining rib, and oppositely inclined or cam surfaces, but I prefer to employ the construction hereinbefore described.

What I claim, and desire to secure by Let-

ters Patent, is—

35 1. The combination with the barrels and the fore end provided with a locking recess, of a spring jaw secured to the barrels, and provided with a retaining rib, and cam faces extending above and below said rib for engag-

ing an edge of said locking recess of the fore 40

end, substantially as described.

2. The combination with the barrels, and the fore end provided with a locking recess, of a pair of spring jaws secured at one end to the barrels, each jaw being provided at its free 45 end with a retaining rib and cam faces extending above and below said rib for engaging the locking recess of said fore end, and a supporting device for the free ends of said spring jaws substantially as described.

3. The combination with the barrels and the fore end provided with a locking recess, of a spring catch comprising a pair of spring jaws secured at one end to the barrels, each jaw being provided at its free end with a retain-59 ing rib and cam faces extending above and below said rib, for engaging the locking recess of the fore end, and a retaining lug secured to the barrels and having a part for engaging the free ends of said spring jaws sub-60

stantially as described.

4. The combination with the barrels and the fore end provided with a locking recess, of a catch comprising a pair of spring jaws united at one end and rigidly secured to the barrels, 65 each jaw having the outer face of its free end provided with a retaining rib, and a retreating cam face above and below to engage the edges of the locking recess of the fore end to facilitate attaching and removing the fore 70 end, substantially as described.

In testimony whereof I affix my signature in

presence of two witnesses.

FRANK A. HOLLENBECK.

Witnesses:

JESSIE KINGSBERY,

L. P. WHITAKER.