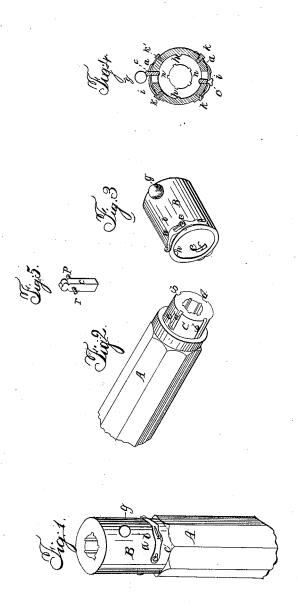
J H. RECTOR.

${\bf Muzzle\text{-}Loading\ Fire\text{-}Arm}.$

No. 5,402

Patented Dec. 18, 1847.



UNITED STATES PATENT OFFICE.

JOHN H. RECTOR, OF SYRACUSE, NEW YORK.

MUZZLE FOR RIFLES.

Specification of Letters Patent No. 5,402, dated December 18, 1847.

To all whom it may concern:

Be it known that I, John H. Rector, of Syracuse, in the county of Onondaga and State of New York, have invented a Mov5 able Protecting Muzzle-Piece for Rifles or Creased Guns; and I do hereby declare the following to be a full, clear, and exact description of the construction and operation thereof, reference being had to the accompanying drawings, making a part of this specification.

Similar letters refer to corresponding

parts in all the figures.

It is found in practice, that the muzzles of rifles, constructed in the ordinary manner, soon become defaced and injured by the friction of loading the same, which causes the ball to be diverted from its true course

as it leaves the gun.

The nature of my invention consists in adopting, accurately fitting, and securing a movable creased muzzle piece to rifled guns, in such a manner that it can be easily removed, and quickly and securely replaced again upon the same; for the purpose of protecting the end of the bore of the rifle from the injurious effects of friction in loading the muzzle piece to remain on the rifle barrel in hunting and ordinary shootso ing, and removed when great accuracy of shot is desired.

In the accompanying drawings A, is a section of a rifle broken off near the muzzle, and B, is the movable protecting muzzle

35 piece.

C, is a neck formed on the end of the rifle barrel, which fits accurately into an enlargement in the inner end of the movable muz-

zle piece.

b, b, are longitudinal guiding grooves cut into the neck C, into which the knobs h, h, projecting from the inner surface of the enlarged bore of the muzzle piece, accurately fit. The muzzle piece B, has creases in its
smaller bore exactly corresponding with the creases in the bore of the rifle; the knobs h, h, fitting into the grooves b, b, guide the same so as to bring the creases in the bore of the one exactly opposite those in the bore of the other.

The muzzle piece B, is secured to the rifle barrel in the following manner. Rectangular longitudinal grooves d, d, are cut into the neck C, each one having a lateral groove e, diverging from its inner end; as represented in Figure 2 into these grooves the

bolts c, c, passing through the slots n, n, in the enlarged bore of the muzzle piece accurately fit. When the bolts c, c, are slipped to one end of the slots n, n, they are brought 60 opposite the ends of the grooves d, d; when the muzzle piece is placed on the neck of the rifle, the bolts c, c, are pressed to the opposite ends of the slots n, n, and into the lateral grooves e, e; by which means the muzzle 65 piece is securely confined to the rifle barrel. The lateral grooves e, e, are inclined sufficiently from a right angle to cause the bolts c, c, in passing into them, to draw the muzzle piece inward and cause it to fit closely 70 against the end of the rifle barrel. The bolts c, c, are retained in their position at either end of the slots n, n, by means of the springs a, a. The springs a, a, are secured to the periphery of the muzzle piece, close to its 75 inner end, by the screws k, k; the screws k, k, secure one end of each spring a, permanently and the springs k', k', pass through slots in their opposite ends, allow-

ing them a little play.

In the center of each spring a, slots i, are former (exactly over, and parallel with the slots n, n, in the muzzle piece), through which the heads of the bolts c, c, pass; the arms p, p, projecting from each side of the 85 bolts, pass under the springs a, a; there is a sharp inward curve in the center of each spring -a, extending the length of the slots i, i, which securely retains the arms p, p, of the bolts at each end of the same; 90 and consequently secures the bolts (c, c), at each end of the slots i, i, in the springs, and

the slots n, n, in the muzzle piece.

What I claim as my invention and desire to secure by Letters Patent, is—

The adapting, accurately fitting and securing, a movable protecting muzzle piece to the end of the bore of a rifle, (or creased gun), in such a manner that it can be easily and quickly removed for firing, and as readily replaced and secured for reloading the rifle, by means of the guiding grooves b, b, knobs, h, h, the longitudinal grooves d, d,—connected to the lateral inclined grooves e, e,—the sliding bolts c, c, the slots n, n, the springs a, a,—with the curved central slots i, i,—combined with each other and operating substantially as herein set forth.

JOHN H. RECTOR.

Witnesses:

COURTLAND BATES, WM. A. GROVES.