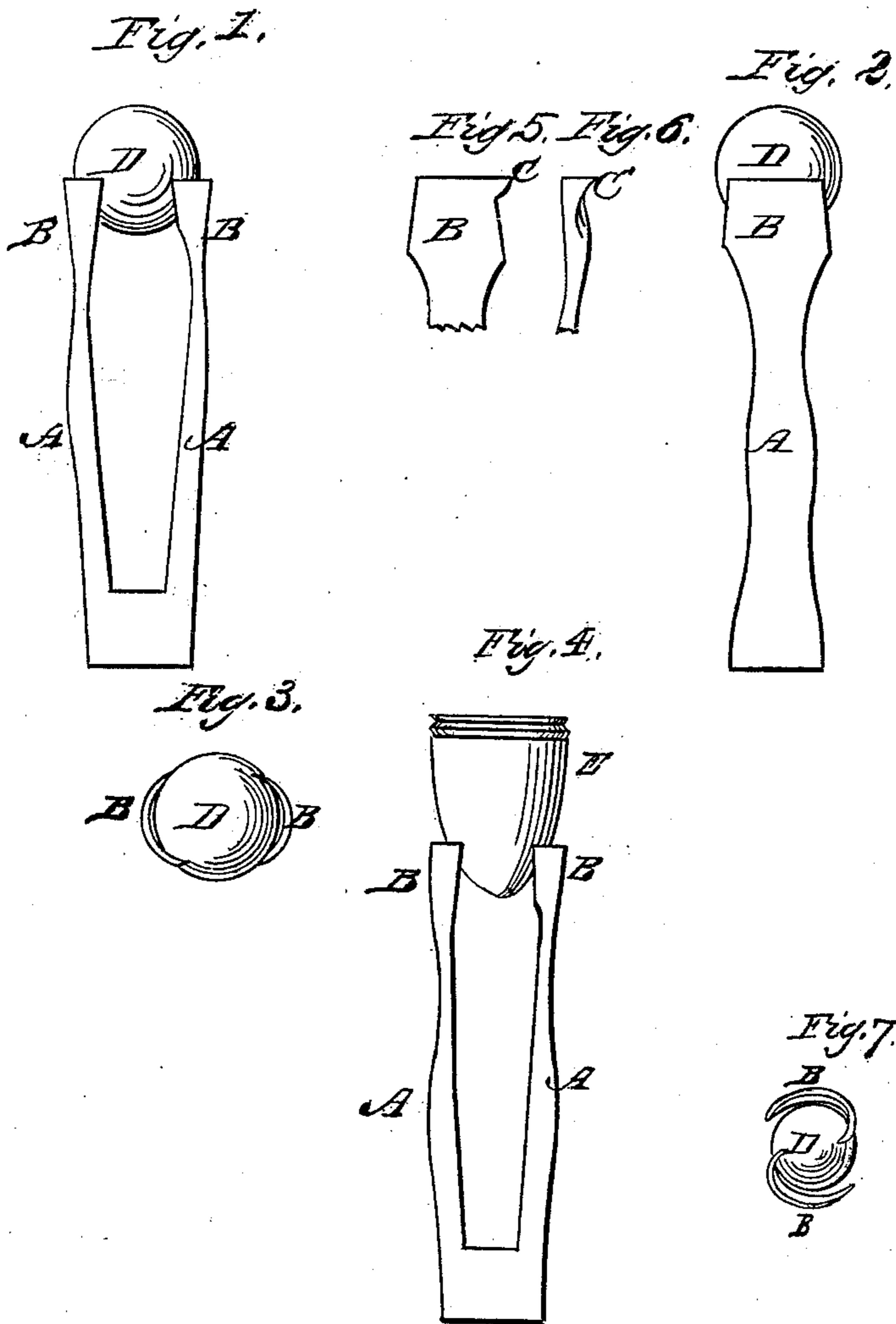


J. J. ALISES.
Ball-Screw for Fire-Arm.

No. 44,586.

Patented Oct. 11, 1864.



Witnesses.
Chas. M. Lill
J. J. Alises

Inventor.
J. J. Alises

UNITED STATES PATENT OFFICE.

JOHN J. ALISCS, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN BALL-SCREWS FOR FIRE-ARMS.

Specification forming part of Letters Patent No. 44,586, dated October 11, 1864.

To all whom it may concern:

Be it known that I, JOHN J. ALISCS, of Washington, in the District of Columbia, have invented a new and useful Improvement in Ball-Screws for Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an edge view of my invention attached to a musket-ball. Fig. 2 is a side view of the same. Figs. 3 and 7 are end views of the same. Fig. 4 is an edge view of my invention attached to a Minié ball. Fig. 5 is a side view of a detached portion of my invention. Fig. 6 is an edge view of the same. Fig. 7 is an end view of the same.

The invention consists of a pair of steel nippers projecting from a metal tube of a diameter somewhat smaller than that of the gun it is intended to fit. At their lower ends these nippers are gouge-shaped, so that they may fit closely around the ball to which they may be applied, and at their lower opposite corners they are provided with a peak or horn, which is so inclined that when a slight turning motion is given to the hammer (to which the tube at the upper end of the nippers is secured when they are to be used) each of the said horns will be forced into the ball, and thus a firm hold will be obtained upon it. The gouges at the lower ends of the nippers are also intended to subserve the important purpose of removing the incrustations which invariably "foul" the interior of a gun-barrel after several discharges, insomuch that in battles guns often become entirely useless until cleaned, which can be very quickly and effectually performed by the use of these gouges.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A A represent the nippers, each of which may be two inches in length, one-fourth of an inch at its widest part, and somewhat less at its narrowest part, as shown in Fig. 11. Each

nipper also varies in thickness, being thickest at its upper end and gradually tapering therefrom. The object of these variations in width and thickness is that the nippers may have sufficient elasticity.

B B represent the gouges; C C, the horns or prongs. These gouges are to be made blunt at their corners and edges, so that when used to clean a gun they may not cut away any portion of its interior, whereas the horns or prongs should be sharp, so that they may readily penetrate the ball to which they may be applied. At the same time they should be sufficiently bent inward to prevent them from marring the interior of the barrel.

The tube from which the nippers project is provided with a female screw. Upon the little end of the rammer there should be a male screw of corresponding size, so as to allow the nippers to be firmly fastened upon the rammer when they are to be used. The spread of the nippers should be a little greater than the bore, so that when they are introduced therein the gouges may fit closely to the interior surface of the barrel, and when forced to the bottom thereof effectually remove whatever foulness may have collected thereon.

When it is desired to remove the charge, the gouges should be forced down to a close embrace of the ball, when, by means of the usual cross-bar inserted in the head of the rammer, the horns or prongs may be turned into the ball, so as to secure a very firm hold, by means of which the ball can be withdrawn the more easily, from the fact that the foulness, which forms a serious obstacle to the withdrawal of the ball, has been previously removed.

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

The nippers A A and gouges B B, in combination with the horns C C, substantially as and for the purpose set forth.

WM. J. ALISCS.

Witnesses:

EDM. F. BROWN,
MAYO M. LILLY.