

F. A. DELAND.
Reamer for Shot-Guns.

No. 161,214.

Patented March 23, 1875

Fig. 1.

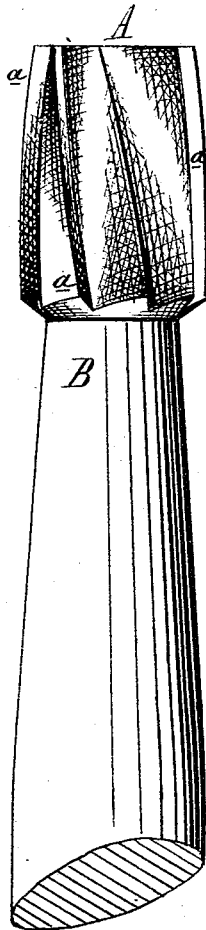


Fig. 3.

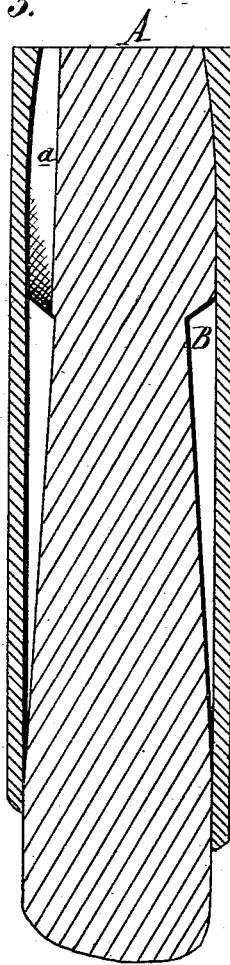
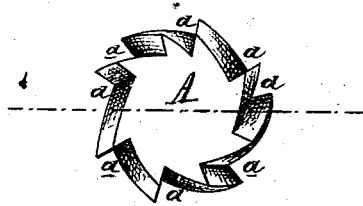


Fig. 2.



Attest:
Edward Parkeel.
Wm. S. Wheeler

Inventor:
F. A. Deland
By Atty
F. S. Sprague

UNITED STATES PATENT OFFICE.

FRANKLIN A. DELAND, OF MEMPHIS, ASSIGNOR OF ONE-HALF HIS RIGHT
TO ABNER C. HARRINGTON, OF LAPEER, MICHIGAN.

IMPROVEMENT IN REAMERS FOR SHOT-GUNS.

Specification forming part of Letters Patent No. 161,214, dated March 23, 1875; application filed
December 30, 1874.

To all whom it may concern:

Be it known that I, FRANKLIN A. DELAND, of Memphis, in the county of St. Clair and State of Michigan, have invented an Improved Reamer for Shot-Guns, of which the following is a specification:

The nature of my invention relates to the peculiar construction of a reamer for boring and finishing of the barrels of shot-guns with a contraction at the muzzle, so as to cause such guns to shoot close.

The invention consists, first, in making the reamer in the form of a truncated parabolic cone; and, secondly, in fluting the cutters of said reamer at varying angles with each other, so as to impart a smoothly-finished surface to that part of the barrel reamed by it.

Figure 1 is a side elevation. Fig. 2 is an end elevation. Fig. 3 is a longitudinal section of a gun-barrel with the reamer in place, showing the contracted muzzle reamed in it by the tool.

In the drawing, A represents a reamer in the form of a truncated parabolic cone, mounted on the end of a tapered shank, B. The cutters *a* are inclined or diagonal to the axis of the tool, except one or two at each side

diametrically opposite each other, the intervening flutes being inclined at varying angles.

The gun-barrel to be finished is reamed out with a cylindrical reamer from the breech through the bore to a point distant from the muzzle the length of this reamer, which is then inserted and rotated, and gradually advanced until its outer end is flush with the muzzle, finishing the barrel with a contracted muzzle, which, as is well known, will prevent the shot discharged from scattering, and thus cause the gun to shoot close.

The flutes, being arranged as described, will finish the muzzle smoothly, as each flute will remove any tool-mark left by the preceding one, as it crosses the same at an angle and shears it away.

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

The truncated conical reamer A, having its flutes or cutters *a* disposed at various angles, substantially as and for the purpose set forth.

FRANKLIN A. DELAND.

Witnesses:

H. C. MANSFIELD,
FRANK ROBERTS.