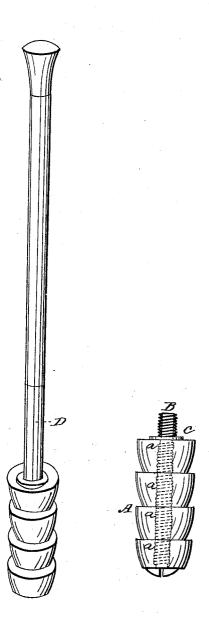
C. F. GILLETTE.
Gun Wiper.

No. 99,557.

Patented Feb. 8, 1870.



Witnesses: 14. a. Daniels a J. Hauter Inventor: lo . F. Gillette by loh. S. Whitman ettye

## United States Patent Office.

## C. F. GILLETTE, OF SPARTA, WISCONSIN.

Letters Patent No. 99,557, dated February 8, 1870.

## IMPROVED GUN-WIPER

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, C. F. GILLETTE, of Sparta, in the county of Monroe, and State of Wisconsin, have invented a new and useful Improvement in Gun-Wipers; and do hereby declare that the following description, taken in connection with the accompanying plate of drawings hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvement, by which my invention may be distinguished from others of a similar class, together with such parts as I claim and desire to secure by Letters Patent.

My invention relates to that class of devices made

use of for cleansing gun-barrels; and

The nature of my improvement consists in constructing a gun-wiper of vulcanized India rubber of a peculiar form, and in combining the same with a screwspindle and nut, in the manner hereinafter described.

In the accompany plate of drawings, which illustrate my invention, and form a part of the specification thereof, and in which corresponding parts are represented by similar letters—

Figure 1 is a view of my invention attached to a ramrod; and

Figure 2 is a detached view of the same.

The construction, operation, and arrangement of the different parts of my invention are as follows, to wit:

A is a solid cast piece of vulcanized rubber, composed of a series of burrs or inverted truncated cones, a a a a', the bottom one of which, a', is of less altitude and more limited circumference about the base than the others, so that in passing down the bore of the gus, it will not push the smut or impurities which result from rapid discharges, into the bottom thereof.

The said piece A is provided with a cylindrical bore, through which passes the screw-spindle B, which is secured firmly to the piece A, by means of the nut C.

By screwing the nut C closely against the said piece A, the same may be laterally expanded, and thus adjusted to the calibre of the gun-bore used.

The said spindle is attached to the ramrod by means

of a female screw cut in the metallic ferrule  ${\bf D}$  to fit the thread upon the said spindle.

The operation of my invention is as follows:

The wiper having been attached to the end of the ramrod by means of the appliances aforesaid, it is inserted into the muzzle of the gun, and forced to the bottom of the bore thereof, the notches a touching slightly the interior surface of the said barrel. The said wiper is then withdrawn and the truncated cones a a a a are laterally expanded by the friction of the same with the walls of the barrel, causing the notches to catch and bear upward all impurities, and discharge the same at the muzzle.

The advantages of my invention are obvious when contrasted with the ordinary gun-wipers in use, which consist of a solid piece of metal, provided with burrs or notches designed to catch into the cloth-patch made use of in cleansing the bore.

As the diameter of the bore is fixed and unchangeable, it is requisite, in using the ordinary wiper, to manufacture it of a size to exactly fit the bore for which it is intended.

It is also necessary to use a patch of a certain determinate thickness. In the military service, this occasions, often, serious inconveniences.

Having thus described the nature, construction, and operation of my invention, I will proceed to indicate, in the following clauses, what I claim as new, and desire to secure by Letters Patent.

1. The wiper A, composed of vulcanized rubber, and consisting of the truncated cones a a a a', when constructed and arranged to operate substantially as herein described.

2. The wiper A, constructed as aforesaid, the screw-spindle B, and nut C, when combined and arranged to operate as described.

C. F. GILLETTE.

Witnesses:

S. M. DICKINSON, O. D. RANDALL.