

(No Model.)

W. H. FERRIS.
GUN CLEANER.

No. 481,858.

Patented Aug. 30, 1892.

Fig. 1.

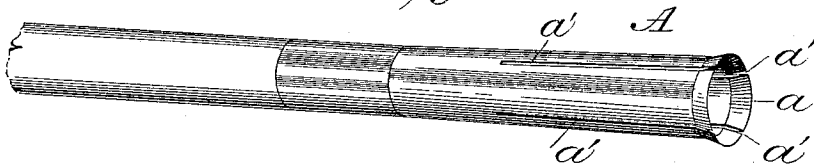


Fig. 2.

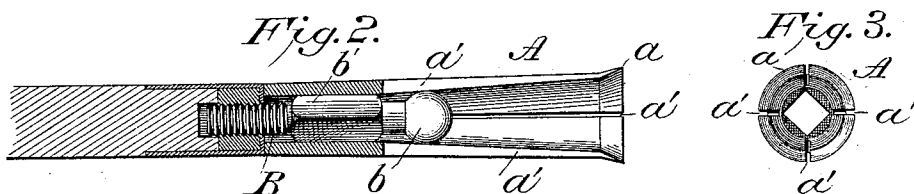


Fig. 3.

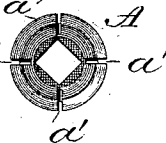


Fig. 4.

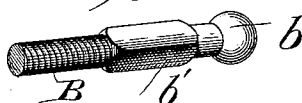
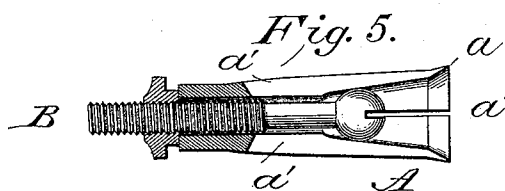


Fig. 5.



Witnesses

L. S. Elliott.

E. M. Johnson.

Will H. Ferris.

Inventor

by *[Signature]*
Attorney

UNITED STATES PATENT OFFICE.

WILL H. FERRIS, OF FRANKLINVILLE, NEW YORK.

GUN-CLEANER.

SPECIFICATION forming part of Letters Patent No. 481,858, dated August 30, 1892.

Application filed April 28, 1892. Serial No. 430,976. (No model.)

To all whom it may concern:

Be it known that I, WILL H. FERRIS, a citizen of the United States of America, residing at Franklinville, in the county of Cattaraugus and State of New York, have invented certain new and useful Improvements in Gun-Cleaners; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in gun-cleaners.

The object of the invention is to provide an improved gun-cleaner which will consist of but few parts and which will remove the burned powder and lead from the barrel of a gun in an effective manner; and it consists in the construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view. Fig. 2 is a longitudinal sectional view, and Fig. 3 is an end elevation. Fig. 4 is a detail perspective view of the bolt detached. Fig. 5 is a sectional view of a modification.

The essential parts of the cleaner consist of an expansible head constructed to receive a bolt, said bolt being adapted to engage with the cleaning-rod.

A designates the head, which is made up of a single piece of suitable metal, which is flared at one end, as shown at *a*, to provide an edge which will engage with the interior of the barrel of the firearm. This head is provided with longitudinal slits *a'*, which gives the required degree of expansibility to the lower portion of the head. The inner portion of the head is conical or tapered and converges toward a rectangular aperture in the end of the cleaner opposite the flanges *a*. The bolt B has a rounded head *b* and a rectangular portion *b'*, which engages the rectangular aperture in the head A, and beyond the rectangular portion the bolt is screw-threaded for engagement with the cleaning-rod. It will be noticed that by this construction the cleaner

can be expanded by simply turning the cleaning-rod, so as to draw the head and expand the spring members of said head. This is done for giving the desired degree of pressure against the inner side of the barrel, so as to remove lead, burned powder, or rust therefrom.

In the accompanying drawings the modifications referred to are of substantially the same construction, except that I may dispense with the rectangular aperture and rectangular portion on the bolt and may connect the cleaning-rod to the bolt or use a nut upon said bolt, and when such a nut is employed the bolt is apertured for the reception of a cord for drawing the cleaner through the gun-barrel. It will be observed that the flanges *a* are simply formed on the head by cutting away the metal of said head or bending the lower ends slightly outward, so that a chisel cutting-edge will be formed on the end of the cleaner, which will remove such substances as may adhere to the inner portion of the barrel, and the rod is shoved through the barrel. It will also be observed that the head of the bolt used for expanding the spring members of the head lies at a considerable distance from the end of said head, so that the spring members will give to the desired degree and will not be liable to injure the barrel.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a gun-cleaner, the combination of a head having spring-arms or scraping portions formed integral therewith and an expanding bolt to which the cleaning-rod is adapted to be directly attached, substantially as shown, and for the purpose set forth.

2. In a gun-cleaner, the combination of a head having spring members integral therewith, a headed bolt for expanding said spring members, said bolt being adapted to slide in the head and pass beyond the same for engagement with a cleaning-rod, substantially as shown, and for the purpose set forth.

3. In a gun-cleaner, the combination of a head made up of a single piece and provided with longitudinal slits to provide expansible spring members, said head having a tapered aperture substantially circular in cross-section and a rectangular aperture, and a bolt

having a rounded head and a rectangular portion adjacent thereto, substantially as shown, and for the purpose set forth.

4. In a gun-cleaner, the combination of a
5 head provided centrally with a tapered aperture, slits dividing the tapered portion of the head into spring members, the lower end of said members having outwardly-projecting flanges, an expanding bolt having a rounded

head and a threaded end which projects beyond the end of the cleaner for engagement with the cleaning-rod, substantially as shown.

In testimony whereof I affix my signature in presence of two witnesses.

WILL H. FERRIS.

Witnesses:

J. D. CASE,

E. D. SCOTT.