

H. GREVE.

Gun Wiper.

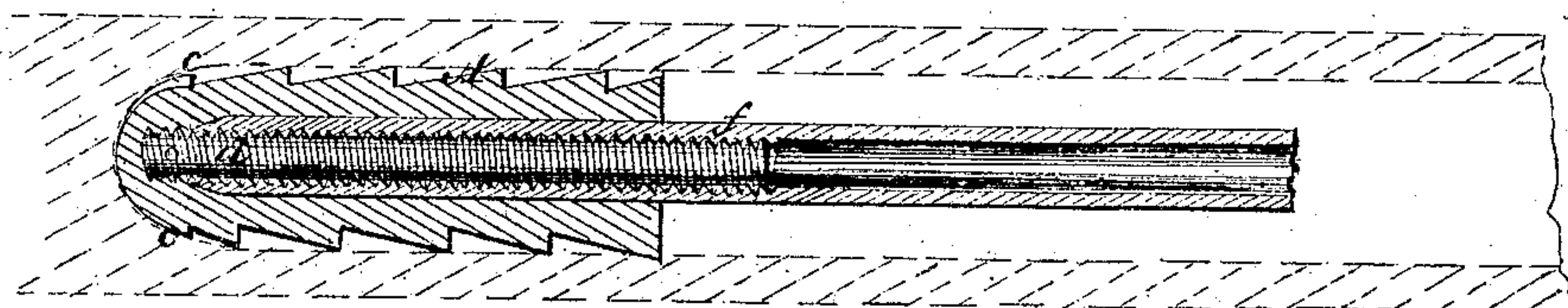
No. 101,997.

Patented April 19, 1870.

Fig. 1.



Fig. 2.



Witnesses:

S. S. Mabe
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Inventor:

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United States Patent Office.

HERMAN GREVE, OF SPARTA, WISCONSIN.

Letters Patent No. 101,997, dated April 19, 1870.

IMPROVEMENT IN GUN-WIPERS.

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, HERMAN GREVE, of Sparta, in the county of Monroe and State of Wisconsin, have invented a new and improved Gun-Wiper; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to a new gun-wiper for small-arms, and consists in an expanding and contracting cylindrical piece of vulcanized India rubber or other suitable substance, made hollow for the most part of its length, having a screw-plug arranged in the hollow and permanently connected at the bottom, and provided with spiral grooves on the exterior, which is dropped into the barrel, and expanded by a rod with a tubular end, having screw-threads fitted for the screw-plug, and screwed down therein, to expand the wiper against the wall of the barrel, and to turn it to scrape the foul matter adhering to the inner wall of the barrel into the grooves of the wiper, so that it may be drawn out when the wiper is withdrawn.

Figure 1 is a side elevation of my improved gun-wiper, and

Figure 2 is a sectional elevation of the same.

Similar letters of reference indicate corresponding parts.

A is the vulcanized India-rubber wiper, or it may be made of other material which will expand and contract.

It is provided with a deep, wide spiral groove, *b*, on the surface of the cylindrical part, and small ribs *c* at the lower rounded end, and a screw-threaded rod, *d*, is fitted in the bore, and secured at the bottom by pins or otherwise. This rod projects a short distance above the top of the wiper, for the reception of the

tubular end of the ramrod, which is threaded internally to screw down upon the rod, to the bottom of the bore of the wiper, for expanding it against the walls of the barrel of the gun, to cause it to press with sufficient force to scrape off the foul matter adhering thereto, and gather it in the groove *b*, to be drawn out when the wiper is withdrawn.

To prevent the wiper from turning when the end *f* is screwed down into the bore for expanding it, a sufficient end pressure is imparted to it through the rod to press the ribbed end into the chamber at the bottom of a smooth-bore, or to expand it into the grooves of a rifle-bore, so as to encounter resistance greater than the friction of screwing the rod in.

It will be seen that the wiper is expanded after being shoved into the barrel, and thus acts more effectually on the wall of the bore, removing the foul matter which is forced down in advance of the wiper.

The ribs *c* at the end are also intended to have sufficient spiral pitch to raise the substance that may be in the bottom of the chamber.

Having thus described my invention,

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

The spirally-grooved contracting and expanding wiper A, made of vulcanized India rubber or other suitable substance, and provided with the screw-threaded rod *d*, secured at the bottom of the central bore, and all adapted for the application of the internally screw-threaded tubular extension of the ramrod, all substantially as specified.

The above specification of my invention signed by me this 7th day of March, 1870.

HERMAN GREVE.

Witnesses:

GEO. W. MABEE,
ALEX. F. ROBERTS.