H. BERDAN.

Gun Wiper.

No. 49,848. Patented Sept. 12, 1865.

Fig. 2.

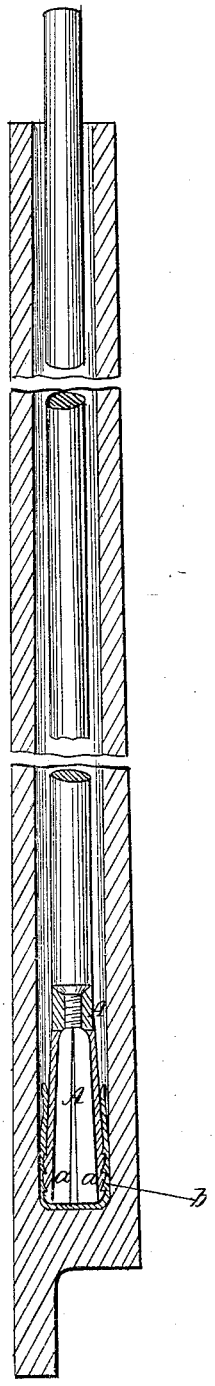

Fig. 1.

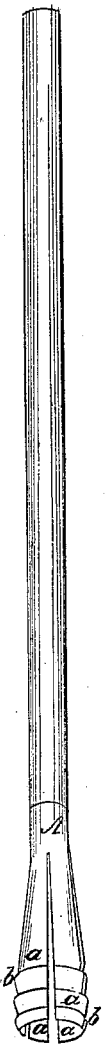

Fig. 3.

Witnesses

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HIRAM BERDAN, OF NEW YORK, N. Y.

IMPROVEMENT IN GUN-WIPERS.

Specification forming part of Letters Patent No. **49,848**, dated September 12, 1865.

To all whom it may concern:

Be it known that I, HIRAM BERDAN, of the city, county, and State of New York, have invented a new and useful Improvement in Gun-Wipers; 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 drawings, forming part of this specification.

The ordinary gun-wiper is composed of a solid piece of metal or wood which is attached by screw to the extremity of the ramrod or forms a part of the ramrod, and is notched or provided upon its exterior with inclined teeth or burrs which catch into and hold the patch of cloth used in wiping out the gun. The diameter of such gun-wipers being fixed and unyielding, it follows that they must be nicely proportioned in size to the diameter of the gun-barrel in which they are to be used; and it is also necessary that the cloth patch which is employed should be of a certain and even thickness; otherwise the cleaning of the interior of the gun-barrel cannot be thoroughly done. In military service it is not always possible for the soldier to provide cloth of the proper thickness or quality for patches, but he is compelled to make use of rags or any fibrous material that may happen to be at hand, and it therefore results that the gun cannot be properly cleaned. The same difficulties are experienced by huntsmen and others. There are also some kinds of gun-barrels which are provided with a counter-bore or charge-chamber at the rear of the barrel proper, which counter-bore is of a larger diameter than the barrel and cannot be reached from the breech. It is obvious that with the common gun-wiper it would almost be impossible to clean the counter-bore of such guns, because, if the wiper fits properly into the gun-barrel it will be too small for the counter-bore and the cleaning-patch will become detached from the wiper when the latter reaches the counter-bore. On the other hand, if the patch is too thick it is apt to become arrested by the presence of foul matter in the gun, rendering the further movement of the wiper and its rod a matter of great difficulty.

The object of this improvement is to overcome the above difficulties; and to this end I so construct the gun-wiper that its exterior surface shall yield or spring in such a manner as always to press the cloth patch, whatever its thickness, tightly against the interior surface of the gun-barrel or counter-bore.

Referring to the drawings, Figure 1 is a perspective view of my improvement. Fig. 2 is a side sectional elevation of the same applied within a gun-barrel. Fig. 3 is a view of the bottom of my improvement.

The principal difference between my improved gun-wiper and that ordinarily employed is that I hollow or bore out the body A of the wiper so that it resembles a hollow conical cylinder, and I slot or divide the lower portion of the cylinder so as to form separately-acting leaves or springs *aaaa*. The wiper thus made has the exterior surfaces of its springs provided with suitable points, notches, or burrs, *b*, by which the cloth patch is retained upon the wiper in the usual manner.

It will be readily understood that when a wiper of this improved construction is introduced within a gun-barrel the spring-leaves *a* will adjust themselves to the walls of the gun, and will tightly press the patch against the interior surface of the barrel and effect the cleaning thereof in the most thorough manner. It will also be observed that the particular thickness of the cloth patch will make but little difference in the operation of cleaning, and that patches of different thickness can be readily and successfully used.

My improved wiper may also be employed in gun-barrels of varying diameters; and the improvement may also be successfully used to clean the counter-bores of guns, because when the wiper has been pushed through the barrel proper it expands on entering the enlarged counter-bores and firmly presses the cleaning-patch against the walls of the counter-bores.

My improvement may form a part of the ramrod or may be attached to any suitable handle, and may be fastened by screw to the ordinary ramrod in use in the military service. The upper part of my improved wiper may be fitted with a screw-thread, so as to fit upon the ordinary ball-extracting screw with which the ramrods of sporting rifles and shot-guns are commonly provided.

My improvement is applicable for use in cleaning the barrels and chambers of cannons, guns, pistols, and fire-arms of every description.

I disclaim the invention of a gun-scraper having expanding springs and an annular clamp so made that when the scraper is thrust down upon the bottom of the barrel the clamp will be loosened and the scrapers allowed to act when the device ascends. It is impossible to use a patch or to wipe the barrel with this device.

Having thus described my invention, I claim, and desire to secure by Letters Patent, as a new article of manufacture—

The expanding gun-wiper constructed with elastic leaves grooved upon their exterior surfaces, as herein specified.

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Witnesses:
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WM. F. MCNAMARA.