

B. L. BUDD.
GUN-CLEANER.

No. 182,352.

Patented Sept. 19, 1876.

Fig. 1.



Fig. 2.

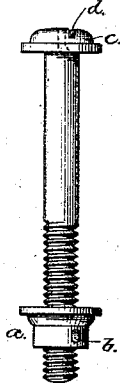


Fig. 3.

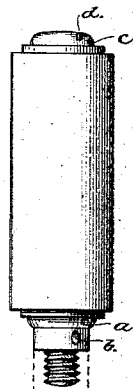


Fig. 5.

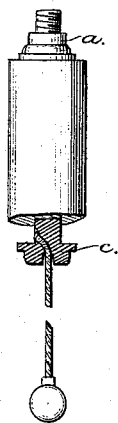
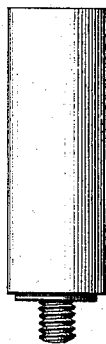


Fig. 4.



Attest:

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UNITED STATES PATENT OFFICE.

BERN L. BUDD, OF FAIRFIELD, CONNECTICUT.

IMPROVEMENT IN GUN-CLEANERS.

Specification forming part of Letters Patent No. **182,352**, dated September 19, 1876; application filed September 2, 1876.

To all whom it may concern:

Be it known that I, BERN L. BUDD, of the town and county of Fairfield, and State of Connecticut, have invented a new and useful Improvement in Gun-Cleaners, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to produce a suitable instrument, or a series of them, with which a shot-gun or rifle may be readily and satisfactorily cleaned and preserved from the action of rust, and which may be at all times ready for use.

I first procure the finest wool, which I cause to be felt by the ordinary means. This may be in thickness varying from an inch to an inch and a half or two inches. Then I cut the cleaners from this felt with a suitable cutter, which first cuts the central hole for the pin which passes through it, and after this hole is partially cut, the cutter serving as a "pilot," is followed by a second cutter, which cuts out the felt concentric with the inner hole. The felt then presents the appearance as seen in Figure 1. This is used in connection with a pin provided at one end with a flanged head, and at the other with a thread upon which travels a nut, as seen at Fig. 2. The nut *a* is provided with a hole, *b*, in which a wrench may be inserted, and the head *c* has across its surface a slot, *d*, which may be held by a screw-driver or other suitable implement to prevent the felt from turning upon the pin when tightening up the nut, and which may likewise serve to assist in uniting the device to a cleaning-rod. The eye or hole through the center of the felt is of such diameter that it may fit easily over the shank of the pin to which it is applied, or removed for exchange by unscrewing the nut, and upon which it is held and adjusted, as occasion requires, by loosening or tightening said nut. The threaded end of the pin, after the nut has been sufficiently screwed up, may be further used to adapt the cleaner to the socket of the cleaning-rod ordinarily in use. The completed cleaner is shown at Fig. 3.

Fig. 4 shows the cleaner for a muzzle-loading piece, which has no metal at its lower end, but is fastened upon the pin, either with a

suitable cement or by running a small pin through the felt and through the central pin, or by sewing it on with a needle and thread. This allows the cleaner to pass to the extreme bottom of the barrels of a muzzle-loading gun, and insures the cleansing of the inside of the breech-pin.

Fig. 5 shows a cleaner provided with a string and weight. The string is attached to the cleaner by passing it through a perforation in the slotted head of the pin, and knotting it upon the under side of said head, the hole in which is suitably countersunk to receive the said knot. This form of the cleaner may be carried to the field, and where the gun from frequent firing becomes foul, by merely drawing the cleaner through the barrels the fouling may be readily removed and the shooting continued.

It will, of course, be seen that the semi-elastic nature of the felt allows of a much longer continued use of the cleaner, inasmuch as when the diameter of the felt is diminished by wear a tightening causes it to expand and fill the bore of the gun as when originally made.

In cleaning a gun I ordinarily use a series of six of these felt cleaners, each one for a different purpose. In doing this there may be for the six felts a single pin only, which may be removed from one and applied to the others in succession; but it is preferable to have each felt provided with its own pin and made complete in itself. For instance, cleaner No. 1 is thoroughly wetted with water, and then made as dry as possible by squeezing it in the hand. This is then screwed onto the end of the cleaning-rod and drawn once or twice through the barrels of the gun, if the same be a breech-loader, or carried down to the bottom of the barrels if it be a muzzle-loading piece. This of course removes the soiling, composed chiefly of the sulphuret of potassium, the residuum of the combustion of the powder. The cleaner or swab is then unscrewed and No. 2 substituted in its place, which is now passed through the barrels for the purpose of drying them. If, now, an examination of the barrels reveals the fact that any rust or permanent stains of any kind remain in the inner surface of the barrel, then

cleaner No. 3 is screwed onto the rod. This cleaner is saturated with a mixture of a suitable grease or oil (vaseline I prefer) with the finest washed emery. If this is drawn through the barrels the stains will soon be removed. Should there be no such spots, then cleaner No. 4, which is saturated with vaseline and crocus or rouge, may be used. This polishes the barrel and tends to prevent the formation of spots of rust or stains. This is then followed with cleaner No. 5, which is known as the "wiper," which removes any residue of grease and emery or crocus there may be remaining, and finally, cleaner No. 6, which is saturated with vaseline, is drawn through the barrels, which thoroughly coats them and prevents the formation of rust. Cleaners Nos. 1, 2, and 5 should be thoroughly washed with soap and warm water, and dried. After using, no matter how much soiled they may become, they will by this means be made as clean as when new. Cleaners Nos. 3, 4, and 6, if vaseline, which never becomes rancid, is used, need never be washed, as the more thoroughly saturated they become the more valuable they are for the purposes used.

The cleaning of a gun, after use by the method described, occupies not more than five minutes. The implements are always at hand and ready for the work, and the cleaning made so easy that one having a set of cleaners will rarely, if ever, put his gun aside without first cleaning it. The use of rags, waste, tow, and the like, is done away with, and the cleaners do the required work in a much more satisfactory manner.

I am aware that india-rubber and similar soft elastic material have been used in gun-wipers, and such I do not claim; but the use of my prepared felt for this purpose obviates

difficulties and presents decided advantages over those articles, inasmuch as the felt will wash, absorb and retain the different cleaning and polishing ingredients, such as water, oil, vaseline, emery, &c., presenting at the same time a smooth, even surface, while the rubber and like substances do not possess the properties of absorption and retention, which properties are essential to a successful operation of my prepared wiper.

It is not necessary to the successful use of my invention that the swab be of a precisely cylindrical form, though I have indicated that as preferable.

Having thus described the construction and use of my invention, what I claim, and desire to secure by Letters Patent, is—

1. A prepared swab of felt, constructed substantially as described, and adapted for use in a gun-cleaner.

2. In a gun-cleaner, a pin provided at one end with a slotted head perforated to receive a cord, and at the other with a removable adjusting and holding nut, substantially as and for the purpose described.

3. The combination of the cylinder or washer, of prepared felt, with the pin headed and slotted at one end, and at the other carrying the holding and adjusting nut, and adapted to screw into the ordinary cleaning-rod, substantially as and for the purpose described.

4. A gun-cleaner consisting of a cylinder of prepared felt mounted upon a metal shank, adapted for attachment to a string or cleaning-rod, and provided with a suitable clamping device, substantially as set forth.

BERN L. BUDD.

Witnesses:

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OGDEN D. BUDD.