B. L. BUDD.

IMPLEMENTS FOR CLEANING CARTRIDGE-SHELLS.

No. 182,353. Patented Sept. 19, 1876.

Fig. 1.

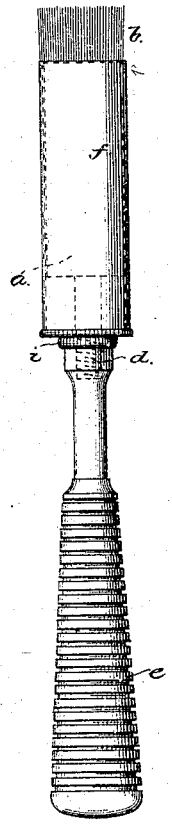
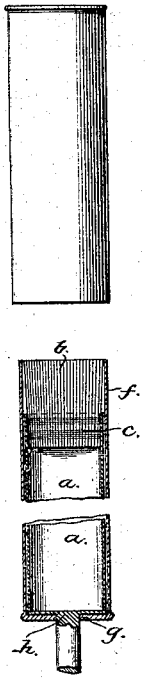


Fig. 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN IMPLEMENTS FOR CLEANING CARTRIDGE-SHELLS.

Specification forming part of Letters Patent No. **182,353**, 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 Cartridge-Shell 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 for cleaning the shells for cartridges, which may be of such convenient form as to be at all times available.

After firing, there of course remains in the shell the products of combustion of the gunpowder, consisting, chiefly, of the sulphuret of potassium, which, being a hygroscopic substance, absorbs, particularly in sea-shooting, a large amount of moisture, and, in some cases, renders the shell unfit for a fresh charge of powder.

To enable the sportsman readily to clean his shells is one of the objects of this invention.

The invention consists of a metal tube or cylinder, *a*, Figure 1, provided at one end with a suitable brush, which may be made either by filling perforations in a suitable block or plug with bristles, in the manner in which wooden-back brushes are ordinarily made, or, what I prefer, by filling the tube with a bundle of bristles, *b*, and securing them in the tube by a suitable cement, *c*, which requires heat to render it fluid—as pitch, resin, shellac, or the like. This tube is closed at its lower end and terminates in a screw, *d*, upon which fits a suitable handle, *e*. The bristles standing out at an angle with the tube containing them, of course prevents the introduction of the brush into the shell, (a representation of which is seen at Fig. 2.) Over the tube containing the bristles is fitted a second tube, *f*, provided with a flange at its bottom, of such diameter that it will pass easily into the cartridge-shell, open at its upper, and closed at its lower, end with a perforated bottom, as seen at *g*, which allows the tube to play up and down upon the shank *h*. This tube is prevented from dropping off when the handle is unscrewed by the small nut *i*.

It will now be seen that if the outer tube is shoved up so as to cover the bristles, as seen at Fig. 3, the brush so covered may be readily introduced into the shell; then, if the outer tube or sheath is drawn back, it allows the bristles to spread, as is seen in Fig. 1, and fill the cartridge-shell. A few turns of the brush will, if the residuum remaining in the shell be dry, loosen it all, and upon withdrawing the brush and inverting the shell, the soiling all drops out.

Should the residuum be damp, or should it have accumulated to a considerable extent from frequent use and infrequent cleaning, the brush may be used with water and a thorough cleansing produced, after which the shells may be dried by placing them in the sun or in a warm place.

I do not limit myself to the use of a continuous cylinder to clamp the bristles, as it is obvious that the same effect may be produced by a ring or skeleton frame adapted to be projected to clamp the bristles, and retracted after their introduction into the chamber of the cartridge-shell.

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

1. The brush *b*, in combination with the sheath *f*, substantially as described, and for the purposes set forth.

2. A cartridge-shell cleaner, consisting of a brush provided with a device which may be projected to clamp the bristles for introduction into the shell, and then withdrawn to allow them to be spread for use.

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Witnesses:

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OGDEN D. BUDD.