(No Model.)

H. W. EGLI.

CLEANING DEVICE FOR GUN BARRELS.

No. 602,937. Patented Apr. 26, 1898.

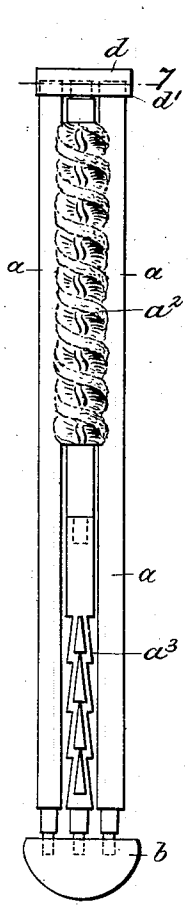


Fig. 6.

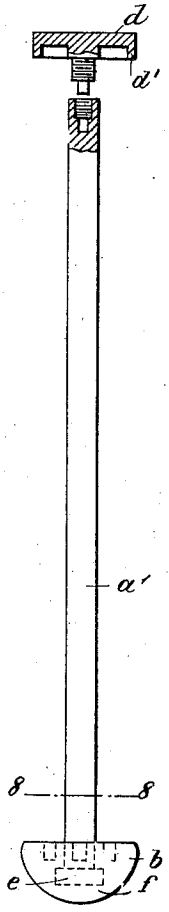


Fig. 3.



Fig. 2.

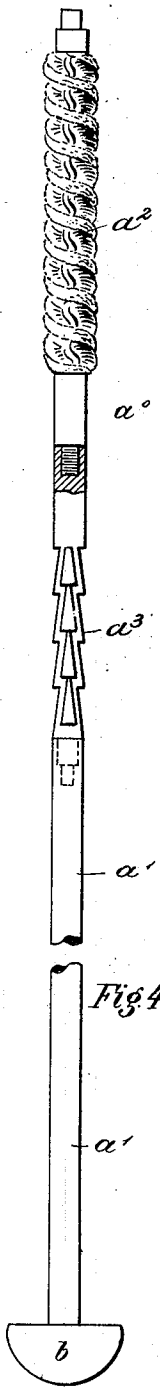


Fig. 4.

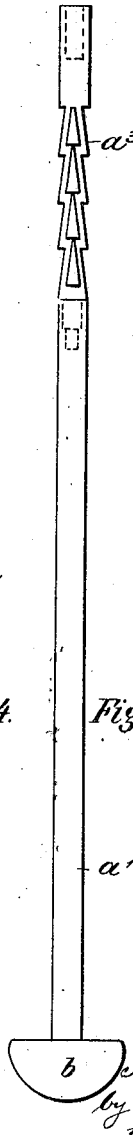


Fig. 5.

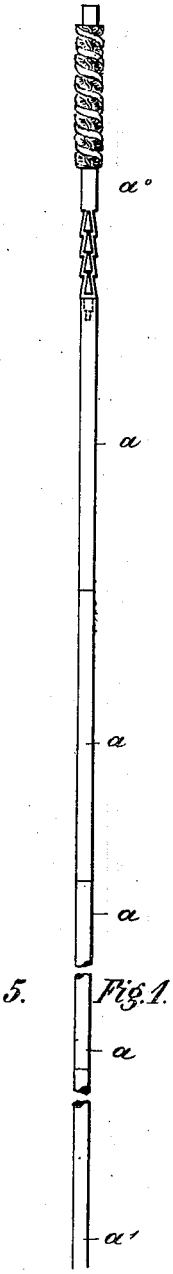


Fig. 1.

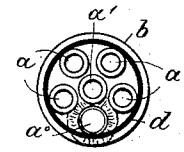


Fig. 7.

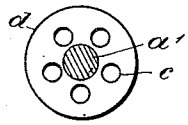


Fig. 8.

Witnesses.
A. Raymond Glovetzner.
N. Mitchell

Inventor.
Hans Walter Egli
by Max Georgii
his Attorney

UNITED STATES PATENT OFFICE.

HANS WALTER EGLI, OF ZURICH, SWITZERLAND.

CLEANING DEVICE FOR GUN-BARRELS.

SPECIFICATION forming part of Letters Patent No. 602,937, dated April 26, 1898.

Application filed November 17, 1897. Serial No. 658,866. (No model.)

To all whom it may concern:

Be it known that I, HANS WALTER EGLI, a citizen of Switzerland, residing at Zurich, Switzerland, have invented certain new and useful Improvements in Cleaning Devices for Tubular Articles; 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.

My invention relates to an improvement in cleaning devices for tubular articles, such as firearms and the like.

The object of my invention is to provide a cleaning device whose length can be altered as may be necessary to clean firearms whose bores are of different lengths and which when not in use may be readily packed into a compact form in a manner which avoids the necessity of employing a separate casing or box to hold the various parts.

With this object in view my invention consists in the features, details of construction, and combination of parts which will be hereinafter described in connection with the accompanying drawings and then particularly pointed out in the claims.

In the drawings, Figure 1 is an elevation of my device in condition for cleaning a long bore, such as the barrel of a rifle or the like. Fig. 2 is a detail view, partly in section, illustrating one division of the cleaning rod; Fig. 3, a similar view illustrating the terminal division of the cleaning-rod, which is provided with the head or handle, the cap employed in connection with my device being illustrated in position for screwing into the end of said terminal division. Fig. 4 is a view similar to Fig. 1, illustrating the device in condition for cleaning a short bore, such as the barrel of a pistol or the like. Fig. 5 is a view similar to Fig. 4 with the cleaning-brush removed. Fig. 6 is an elevation showing the device as it appears when packed for transportation or storags—that is to say, when not in use; Fig. 7, a cross-section of the same on line 7 7, Fig. 6. Fig. 8 is a section on the line 8 8, Fig. 3. In these views Fig. 1 is on a reduced scale compared with the others.

Referring to the drawings, a' is a terminal or handle division provided with a handle b, which may be attached to said terminal division in any desired manner and which is provided on its inner face with a plurality of recesses or sockets c for a purpose hereinafter referred to.

a are intermediate divisions, and a^0 is a cleaning-division, which comprises a brush a^2, formed in the usual manner.

a^3 is a cleaning-division comprising a scraper device particularly adapted for scraping the lead from the barrel of the firearm in a well-known manner. These various divisions are united in a detachable manner, preferably by means of a screw-threaded stud on one end of one of the divisions, which stud is adapted to be threaded into a socket formed in the corresponding opposite end of the adjacent division. In Fig. 4 this screw-threaded stud is illustrated as reaching to the bottom of the socket. The other joints, however, are all somewhat modified from this construction, the stud having its end reduced to form a nipple, which is arranged to enter an unthreaded extension of the socket, as will be clear from Fig. 2.

In the drawings I have illustrated a cleaning device which comprises four intermediate divisions a; but it is obvious that more or less divisions may be employed in connection with a structure embodying my invention without departing from the essence thereof.

In addition to the parts thus far described I employ a securing device adapted to be attached to one end of the terminal division a', this securing device being preferably in the nature of a cap d, provided with a screw-threaded stud arranged to enter the threaded socket in the end of said terminal division a', whereby the cap is held to said terminal division. This cap has an inwardly-projecting means for retaining the other divisions of the cleaning device, said means being in this case in the form of an annular inwardly-projecting flange d'.

To use my improved device for cleaning a long bore, such as a rifle-barrel, the intermediate divisions are screwed together and to the terminal division. The cleaning-divisions are then united and connected to the adjacent intermediate divisions. The rod will then be in the condition shown in Fig. 1, where a brush is shown at the end ready for brushing out the interior of the desired bore.

If, however, it is desired to employ only the scraping device, the division carrying the brush may be removed by unscrewing it from the cleaning-division comprising the scraper.

To make the cleaning device applicable for use in cleaning short bores, one or more or all of the intermediate divisions may be removed as is necessary to reduce the cleaning device to a convenient length.

In Fig. 4 I have shown the invention as arranged for cleaning a short bore, such as a chamber of a revolver or the like. In this case if it is desired to use only the scraper the brush-division a^0 may be removed, when the invention will appear as in Fig. 5.

When not in use, the plurality of divisions may be disconnected, with the exception of the two cleaning-divisions, which are allowed to remain united, the total length of the said cleaning-divisions being equal to the length of each intermediate division. The nipples on the ends of the intermediate divisions and on the end of the cleaning-division carrying the scraper are inserted into the recesses or sockets *c*, formed in the inner face of the handle *b*, the various divisions lying parallel to each other. The cap *d* is then secured to the terminal division a' by screwing its threaded stud into the corresponding socket in the end of said terminal division, whereby the inwardly-projecting annular flange is brought down over and outside of the ends of the said intermediate divisions *a* and of the brush-division a^0, thus holding all the parts together in a secure manner.

From the description given it will be seen that my cleaning device, broadly speaking, comprises a terminal division provided with means for securing one end of the intermediate and cleaning divisions and a securing device arranged to be attached to the opposite end of said terminal division and capable of holding the other ends of said intermediate and cleaning divisions.

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

1. In a cleaning device of the class described, the combination with a plurality of divisions arranged to be detachably connected end to end, of means secured to one of said divisions for receiving one end of each of the other divisions, and a securing device arranged to be detachably connected to one of said divisions at the end opposite said means and to engage the corresponding ends of the other divisions, substantially as described.

2. In a cleaning device of the class described, the combination with a terminal division having a handle secured at one end, of a securing device arranged to be detachably connected to the opposite end of said terminal division, a cleaning-division and a plurality of intermediate divisions arranged to be secured between the handle and the securing device and to be connected end to end in a detachable manner, substantially as described.

3. In a cleaning device of the class described, the combination with a terminal division having a handle provided with a plurality of recesses in its inner face, a plurality of intermediate divisions each provided with a threaded stud arranged to enter a socket in the corresponding opposite end of the adjacent division, and a cleaning-division arranged to be connected to the intermediate divisions, said cleaning and intermediate divisions being arranged to enter the recesses in the handle, of a securing device provided with a stud adapted to be threaded into one end of the terminal division and arranged to engage the intermediate and cleaning divisions whereby all the parts are held in a compact form.

4. In a cleaning device of the class described, the combination with a plurality of intermediate divisions and a terminal division provided with means for holding one end of each of the other divisions, of a pair of cleaning-divisions arranged to be detachably connected to each other, said cleaning-divisions when united being equal in length to each intermediate division and arranged to be held at one end by the handle, and a securing device arranged to engage one end of the terminal division and to hold the corresponding ends of the intermediate divisions and one end of the cleaning-divisions whereby all the parts are held in a compact form.

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

HANS WALTER EGLI.

Witnesses:
OTTO STEIGER,
H. LAHKORF.