

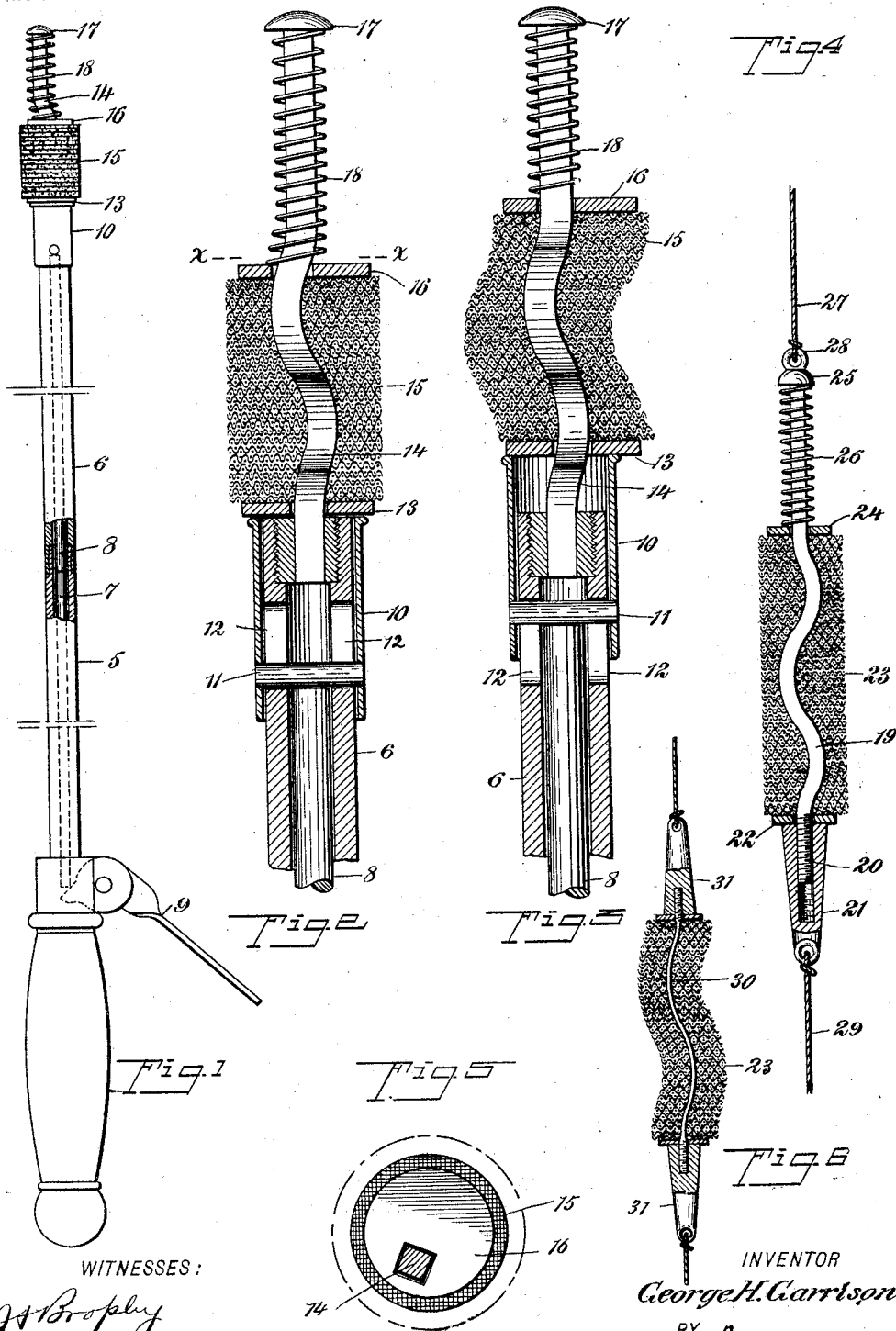
No. 707,913.

Patented Aug. 26, 1902.

G. H. GARRISON.
GUN CLEANER.

(Application filed Apr. 12, 1902.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE HENRY GARRISON, OF BUCODA, WASHINGTON.

GUN-CLEANER.

SPECIFICATION forming part of Letters Patent No. 707,913, dated August 26, 1902.

Application filed April 12, 1902. Serial No. 102,552. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HENRY GARRISON, a citizen of the United States, and a resident of Bucoda, in the county of Thurston and State of Washington, have invented a new and Improved Gun-Cleaner, of which the following is a full, clear, and exact description.

This invention relates to improvements in devices for cleaning the interior of gun-barrels, the object being to provide a simple means for expanding the swab while operating in a gun-barrel.

I will describe a gun-cleaner embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation, partly in section, of a gun-cleaner embodying my invention. Figs. 2 and 3 are sectional details showing different positions of the swab. Fig. 4 is a section showing a modification. Fig. 5 is a section on the line *xx* of Fig. 2, and Fig. 6 is a section showing another modification.

The cleaner comprises a tubular handle, preferably consisting of sections 5 6, having screw-thread engagement one with the other. Movable in the rod or handle 5 6 is a push-rod consisting of two sections 7 8, which at the lower end is engaged by an operating-lever 9. Movable on the end of the rod is a sleeve 10, which has connected to it a pin 11, the said pin extending through opposite slots 12 in the rod. Extended from the end of the rod-section 8 and through an opening in a disk 13, mounted loosely on the end of the sleeve 10, is a core 14, which is vermicular in form. Mounted on this core is the swab, consisting of a series of disks 15, formed of metal fabric. The core 14 also extends through an opening in a disk 16 on the outer end of the swab, and between the said disk 16 and the head 17 on the core is a coiled spring 18. The core 14, especially the portion thereof within the swab, is made resilient, so as to slightly yield or expand during the movements of the swab through a gun-barrel, permitting the swab to pass obstructions—such, for instance, as lead or hard burned powder.

In the operation of this device when the swab is inserted the lever 9 is to be operated, so that the inner rod will force the sleeve 10 outward, consequently compressing the swab material longitudinally of the core. By this compression and owing to the shape of the core the swab will be circumferentially expanded by moving the component parts out of alinement, as indicated in Fig. 3.

In Fig. 4 I have shown the vermicular core 19 as provided at one end with a thread 20 to receive the interior thread of a sleeve 21. On the end of this sleeve is a disk 22, having an opening through which the core passes, and on this disk one end of the swab 23 rests, the other end of the swab engaging with a disk 24, having an opening through which the core passes, and between this disk 24 and the head 25 on the end of the core is a spring 26. A cord 27 is connected to an eye 28 on the end of the core, and connected to an eye on the end of the sleeve 21 is another cord 29. By means of these cords the swab may be drawn back and forth through a gun-barrel, and, obviously, the swab may be adjusted to the bore of the gun by turning the sleeve 21, which compresses the swab material, on the core. This core also will be made resilient for the purpose before described.

In Fig. 6 I have shown a device somewhat similar to that of Fig. 4; but the core 30 is flat and sleeves 31 are engaged with each end of it. By drawing tightly on the two cords the core will be extended and the diameter of the swab will be reduced.

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

1. In a gun-cleaner, a swab, and a resilient vermicular core extended lengthwise through the swab, substantially as specified.

2. In a gun-cleaner, a swab, a vermicular core on which the swab is mounted, and means for moving the swab lengthwise of the core, whereby the swab may be caused to take the form of the core to increase its diameter, substantially as specified.

3. In a gun-cleaner, a swab formed of a plurality of disks, a vermicular spring-yielding core in the swab, and means for moving the swab lengthwise of the core, whereby the

disks may be thrown out of alinement to increase the diameter of the swab, substantially as specified.

4. In a gun-cleaner, a swab consisting of
5 disks formed of metal fabric, a vermicular
core extended through the swab, a disk on the
end of the swab having an opening, the core
being extended through the opening, a spring
arranged between said disk and a head on the
10 end of the core, and means at the opposite
end of the swab for moving it on the core to
force the disks out of alinement, substan-
tially as specified.

5. In a gun-cleaner, a tubular rod, a push-
15 rod movable therein, a sleeve movable on the
end of the tubular rod and adapted to be

moved by the push-rod, a perforated disk ar-
ranged loosely on the end of the sleeve, a
vermicular core extended through the perfo-
ration of the disk, a swab material on said 20
core, a perforated disk engaging with the
outer end of the swab and through which the
core passes, and a spring arranged between
said last-named disk and a head on the end
of the core, substantially as specified. 25

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

GEORGE HENRY GARRISON.

Witnesses:

E. H. SANFORD,
I. BLUMAUER.