

No. 801,738.

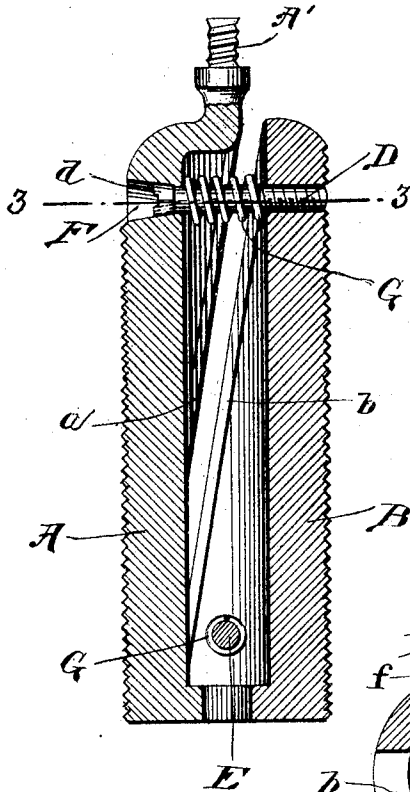
PATENTED OCT. 10, 1905.

E. M. MOOS, W. HARDIN & F. A. BERNARD.

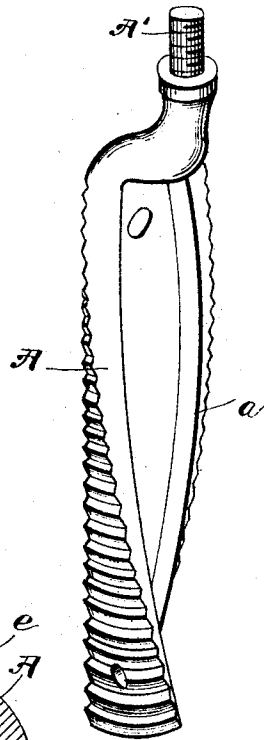
GUN CLEANER.

APPLICATION FILED FEB. 24, 1905.

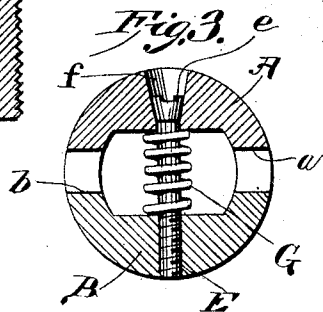
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## GUN-CLEANER.

No. 801,738.

Specification of Letters Patent.

Patented Oct. 10, 1905.

Application filed February 24, 1905. Serial No. 247,125.

*To all whom it may concern:*

Be it known that we, ERNEST M. MOOS, WILLIAM HARDIN, and FREDERICK A. BERNARD, citizens of the United States, and residents of Lincoln, in the county of Logan and State of Illinois, have made certain new and useful Improvements in Gun-Cleaners, of which the following is a specification.

This invention is an improvement in gun-cleaners, having for an object to provide a novel construction by which to clean the accumulations from within the barrels of guns; and the invention consists in certain novel constructions and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a longitudinal section of a cleaner embodying our invention. Fig. 2 is a detail perspective view of one of the sections of the cleaner, and Fig. 3 is a cross-section on about line 3 3 of Fig. 1.

As shown, the gun-cleaner comprises the opposite sections A and B, extending longitudinally side by side and provided on their outer sides with the transverse ribs *a* and *b*, to facilitate the cleaning operation. These sections A and B are connected together, and means are provided for pressing them yieldingly apart so the sections may be compressed to fit within a gun-barrel and then expand in order to bind to a slight degree within the gun-barrel to secure the pressure to render the cleaner effective in operation.

As shown, the sections A and B are connected by the bolts D and E, which are threaded at one end in one of the sections, extend across the space between said sections, and have their heads *d* and *e* operating within the countersunk openings F and *f* in the outer sides of the opposing section. Springs G bear between the sections A and B and preferably fit on the connecting-bolts, as shown.

As shown, the bolts D and E are arranged approximately at a right angle to each other, and the sections A and B are twisted spirally from end to end, so that their edges overlap in the direction of length of the cleaner. By this means we avoid any breaks between the sections in the direction of length, so that a cleaning-rib *a* or *b* is always in the line of any accumulation in the barrel, the cleaner thus cleaning the entire circle of the barrel and

yet being compressible and spring-actuated, so it will properly operate in the barrel in use.

A suitable handle-rod may be connected with the cleaner, and to this end we prefer to provide one of the sections A and B (shown the section A) with an upwardly-projecting threaded shank A', on which a socket at the lower end of the handle may screw, as will be understood from Fig. 1 of the drawings.

The construction is simple, easily operated, and will be found to operate efficiently for the desired purpose.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The gun-cleaner herein described comprising the opposite sections extending longitudinally side by side and twisted spirally from end to end so that their edges overlap in the direction of length of the cleaner, one of the sections being extended at its upper end and provided with a threaded shank for the connection of a handle device, bolts extending between and connecting the opposite sections and threaded in one of the sections and having heads countersunk in the other section, and springs on said bolts and bearing between the opposite sections whereby to force the same apart, substantially as set forth.

2. A gun-cleaner comprising the opposite sections extending longitudinally side by side and twisted spirally from end to end whereby their edges overlap in the direction of length of the cleaner, connections between the opposite sections and springs for forcing the sections apart, substantially as set forth.

3. A gun-cleaner comprising the sections extending longitudinally side by side, bolts connecting the sections and arranged approximately at a right angle to each other and slidably connected with one of the sections and springs on the bolts and bearing between the said sections, substantially as set forth.

4. A gun-cleaner comprising a plurality of sections extending side by side one of said sections being provided at its upper end with an extension adapted for the connection of the handle device, connections between the said sections and springs for forcing the sections apart substantially as set forth.

5. A gun-cleaner comprising a pair of spi-

5 rally-arranged sections extending longitudinally side by side and bolts connecting said sections and arranged approximately at a right angle to each other and springs between the sections for forcing the same apart, substantially as set forth.

6. A gun-cleaner comprising a pair of sections extending longitudinally side by side, bolts extending between said sections and slid-

ably connected with one of the sections and 10 springs between the sections for forcing the same apart, substantially as set forth.

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