

No. 713,754.

Patented Nov. 18, 1902.

A. H. DURSTON.
GUN CLEANING TOOL.
(Application filed Dec. 23, 1901.)

(No Model.)

Fig. 1.

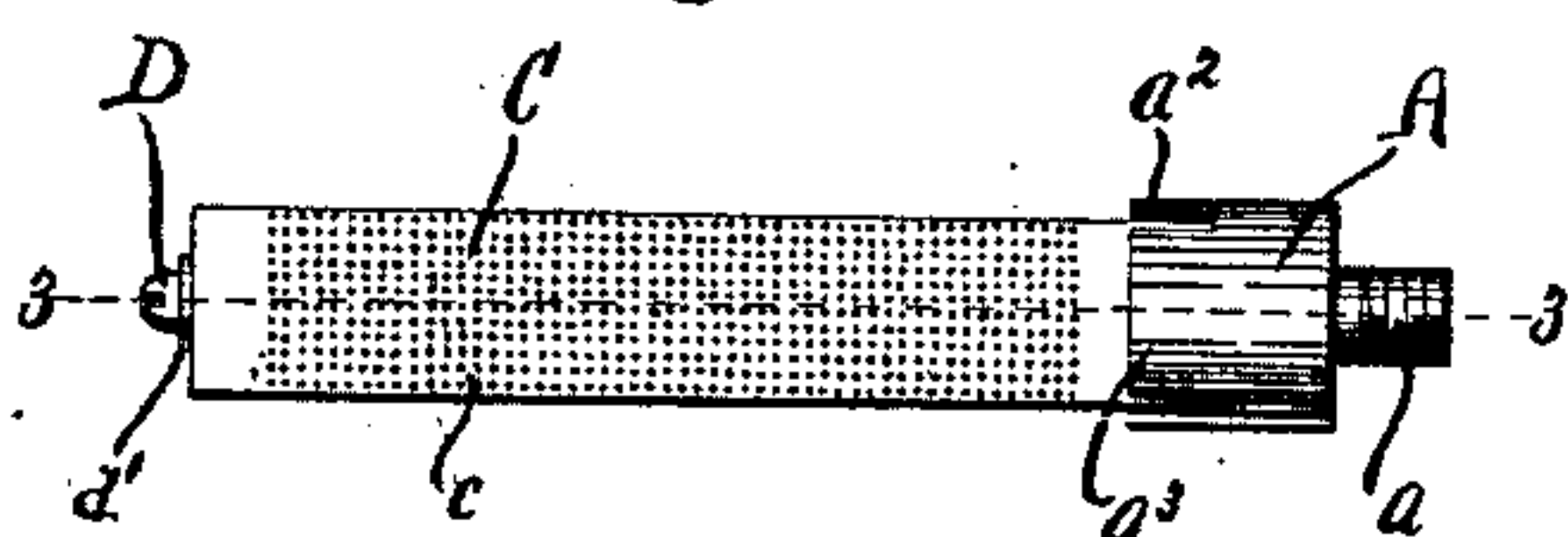


Fig. 2.

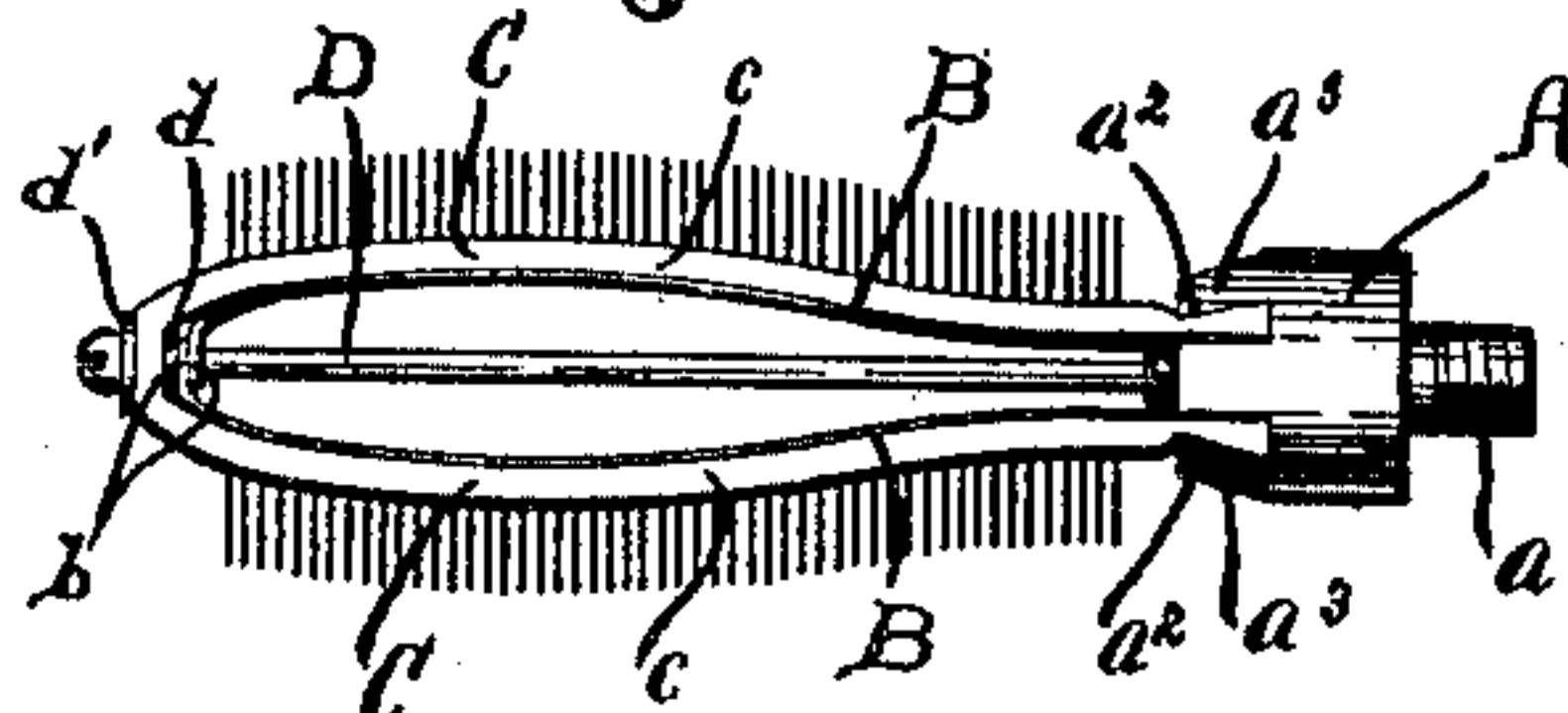


Fig. 3.

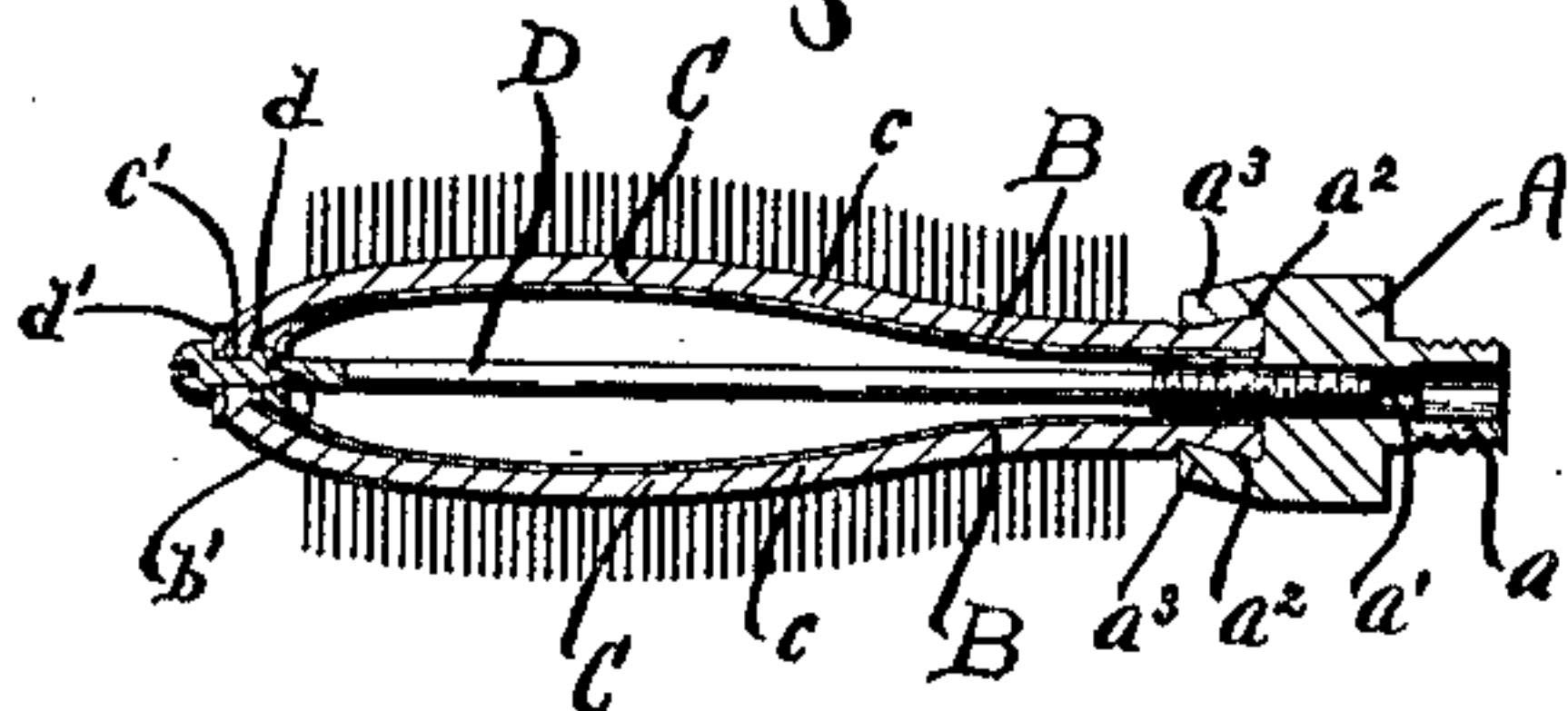


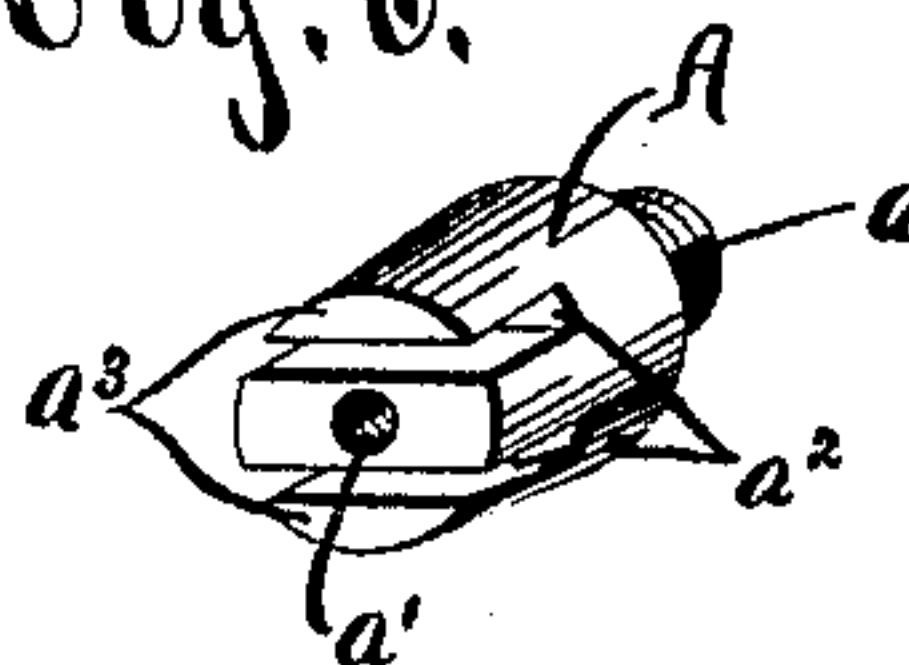
Fig. 4.



Fig. 5.



Fig. 6.



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ALFRED H. DURSTON, OF SYRACUSE, NEW YORK.

GUN-CLEANING TOOL.

SPECIFICATION forming part of Letters Patent No. 713,754, dated November 18, 1902.

Application filed December 23, 1901. Serial No. 86,966. (No model.)

To all whom it may concern:

Be it known that I, ALFRED H. DURSTON, of Syracuse, in the county of Onondaga and State of New York, have invented a certain new and useful Gun-Cleaning Tool, of which the following is a specification.

My invention relates to gun-cleaning tools, and has for its object the production of a device for the desired purpose which is particularly simple in construction and highly durable and effective in use; and it consists in certain novel devices and combinations hereinafter set forth and claimed.

Figures 1 and 2 are respectively top plan and side elevation of my gun-cleaning tool. Fig. 3 is a vertical sectional view taken on line 3-3, Fig. 1. Figs. 4, 5, and 6 are isometric views of detached parts of said gun-cleaning tool.

My gun-cleaning tool consists, essentially, of a main body A, supporting members B, abrasive members C, and a part D.

The main body A is here shown as substantially cylindrical and as having one end provided with an engaging portion or shank a and its opposite end formed with a threaded longitudinal socket a' , and slots a^2 arranged on opposite sides of the socket a' and provided with yielding walls a^3 , which are normally bent toward each other, as seen in Figs. 2, 3, and 6, for clamping the rear ends of the members B and C in position.

The supporting members B are arranged opposite to each other and are generally formed substantially bow-shaped and composed of spring metal of sufficient thinness, so that said members are more or less flexible. The rear ends of the members B are inserted into the slots a^2 of the main body A, and their front ends are illustrated as provided with laterally-extending portions b , lapped upon each other and formed with notches b' , aligned with each other. Said front ends are separable from each other, are movable lengthwise of the corresponding end of the part D, and being disconnected from the body A are free to move independently thereof.

The abrasive members C are here illustrated as flexible, as mounted on the outer surfaces of the supporting members B, and as united at their advance or free ends in front

of the corresponding ends of the supporting members. Said abrasive members may, however, be formed separable from each other or integral with the supporting members B. The rear ends of the members C are fixed in the slots a^2 between contiguous surfaces of the main body A and the members B. Said abrasive members C when formed separable from the supporting members B are preferably composed of a strip c , of cloth or other suitable material, folded upon the outer surfaces of the supporting members and having its ends normally fixed relatively to the main body and its central portion arranged in front of the corresponding ends of the supporting members and of wire bristles projecting from opposite outer faces of said folded strip and forming abrasive surfaces.

The part D is here shown as consisting of a rod extending longitudinally between the supporting members and having its rear end threaded and movable lengthwise and normally fixed in the socket a' of the main body A and its front end passed through the notches b' and extended beyond the supporting members through an aperture c' in the point of union of the abrasive members C. Said part D is provided with means, as a shoulder d , arranged in advance of the supporting members B and engaged with the inner surface of the point of union of the abrasive members C—that is, the inner surface of the central portion of the strip c —in order to prevent rearward movement of the advance ends of the abrasive members and move said advance ends forwardly, and is usually provided with a washer or shoulder d' , engaged with the outer face of said point of union of said abrasive members.

In the use of my invention the supporting members B normally force the abrasive members C outwardly, but yield freely as the tool passes through the gun-barrel. Moreover, said members being flexible move or bend more or less and closely fit a maximum surface of the gun-barrel.

The construction and operation of my gun-cleaning tool will now be readily understood upon reference to the foregoing description and the accompanying drawings, and it will be particularly noted that more or less change may be made in the construction and arrange-

ment of the component parts of said tool without departing from the spirit of my invention.

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

1. A gun-cleaning tool comprising a main body, abrasive members, a part having its rear end normally fixed to the main body, and its front end provided with means for preventing rearward movement of the advance ends of the abrasive members, and supporting members for the abrasive members arranged on opposite sides of said part and formed of spring material, said supporting members having their rear ends fixed relatively to the main body and their front ends movable lengthwise of said part, substantially as and for the purpose described.

2. A gun-cleaning tool comprising a main body, abrasive members, a part having its rear end adjustable lengthwise of the main body and normally fixed thereto, and its front end provided with means for moving the advance ends of the abrasive members forwardly, and supporting members for the abrasive members arranged on opposite sides of said part and formed of spring material, said supporting members having their rear ends fixed relatively to the main body and their front ends movable lengthwise of said part, substantially as and for the purpose specified.

3. A gun-cleaning tool comprising a main body, opposite supporting members formed of spring material and having their rear ends fixed to the main body, abrasive members mounted on the supporting members, and a part extending longitudinally between the supporting members and having its rear end fixed to the main body and its front end provided with means for preventing rearward movement of the advance ends of the abrasive members, substantially as and for the purpose set forth.

4. A gun-cleaning tool comprising a main body, opposite substantially bow-shaped supporting members formed of spring material and having their rear ends fixed to the main body, abrasive members mounted on the supporting members, and a part extending longitudinally between the supporting members and having its rear end normally fixed to the main body and its front end extended beyond the supporting members and provided with means in advance of said supporting members for preventing rearward movement of the advance ends of the abrasive members, substantially as and for the purpose described.

5. A gun-cleaning tool comprising a main body, opposite substantially bow-shaped supporting members formed of spring material and having their rear ends fixed to the main body and their front ends separable, abrasive members mounted on the supporting members, and a part extending longitudinally be-

tween the supporting members and having its rear end normally fixed to the main body and its front end interposed between contiguous surfaces of the corresponding ends of the supporting members and provided with means for preventing rearward movement of the advance ends of the abrasive members, substantially as and for the purpose specified.

6. A gun-cleaning tool comprising a main body, opposite supporting members formed of spring material and having their rear ends fixed to the main body, abrasive members mounted on the supporting members and consisting of a strip folded upon the outer surfaces of the supporting members and having its opposite ends normally fixed relatively to the main body and its central portion arranged in front of the corresponding ends of the supporting members, and abrasive surfaces on the opposite outer faces of said strip, and a part extending longitudinally between the supporting members and having its rear end normally fixed relatively to the main body and its front end provided with means for preventing rearward movement of the central portion of said strip, substantially as and for the purpose set forth.

7. A gun-cleaning tool comprising a main body, opposite substantially bow-shaped supporting members formed of spring material and having their rear ends fixed to the main body, abrasive members mounted on the supporting members and consisting of a strip folded upon the outer surfaces of the supporting members and having its opposite ends normally fixed relatively to the main body and its central portion arranged in front of the corresponding ends of the supporting members and abrasive surfaces on the opposite outer faces of said strip, and a part extending longitudinally between the supporting members and having its rear end normally fixed relatively to the main body and its front end extending beyond the supporting members and engaged with the inner surface of the central portion of said strip in advance of the supporting members for preventing rearward movement of said central portion, substantially as and for the purpose described.

8. A gun-cleaning tool comprising a main body, opposite substantially bow-shaped supporting members formed of spring material and having their rear ends fixed to the main body and their front ends separable, abrasive members mounted on the supporting members and consisting of a strip folded upon the outer surfaces of the supporting members and having its opposite ends normally fixed relatively to the main body and its central portion arranged in front of the corresponding ends of the supporting members and abrasive surfaces on the opposite outer faces of said strip, and a part extending longitudinally between the supporting members and having its rear end adjustable lengthwise of the main body and normally fixed thereto, and

its front end interposed between contiguous
surfaces of the corresponding ends of the sup-
porting members and engaged with the in-
ner surface of the central portion of said strip
5 for moving said central portion forwardly,
substantially as and for the purpose speci-
fied.

In testimony whereof I have hereunto

signed my name, in the presence of two attest-
ing witnesses, at Syracuse, in the county of 10
Onondago, in the State of New York, this 13th
day of December, 1901.

ALFRED H. DURSTON.

Witnesses:

S. DAVIS,
D. LAVINE.