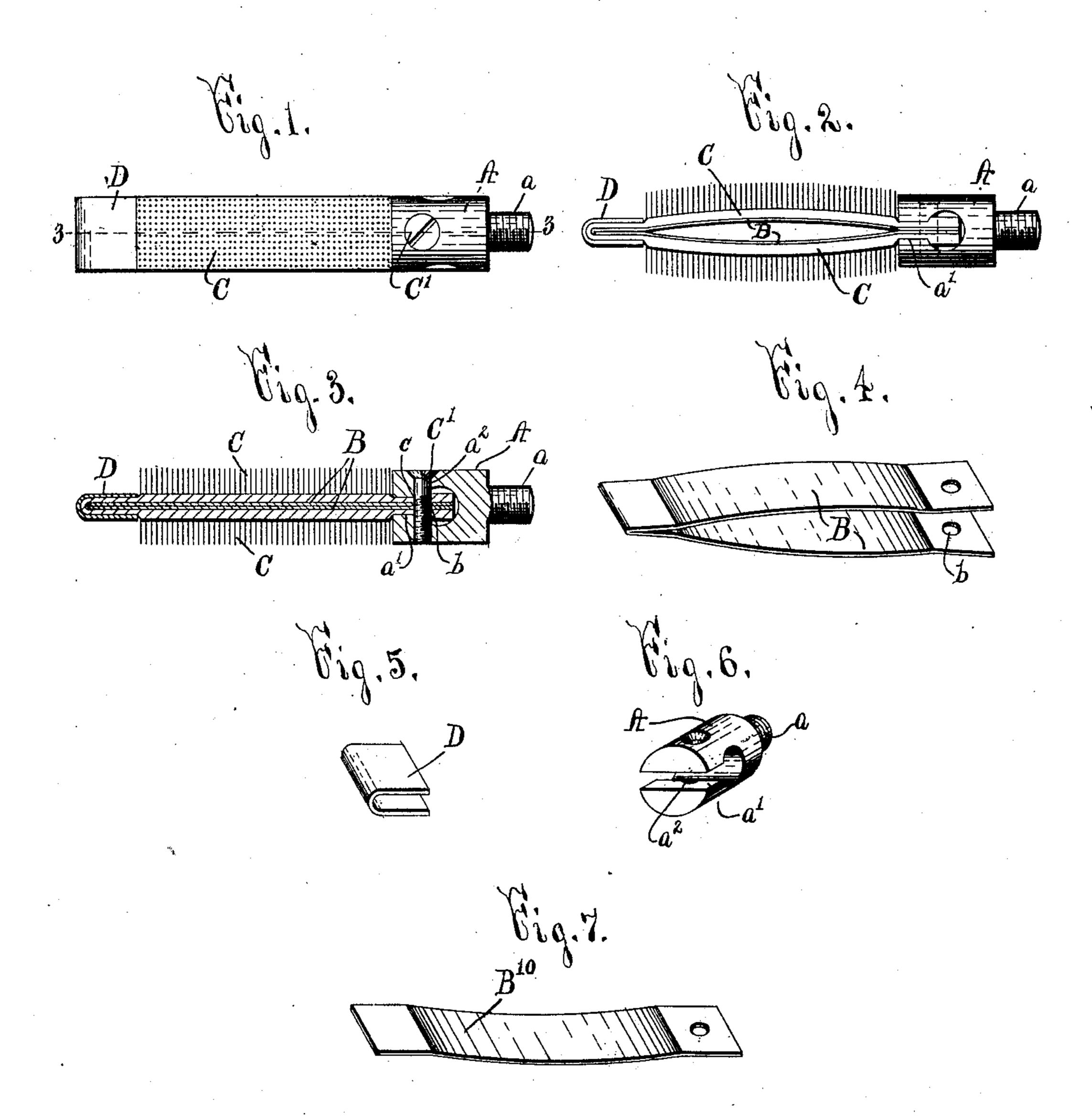
J. A. ROSENBERG. GUN CLEANING TOOL.

(Application filed Dec. 14, 1900.)

(No Model.)



WITNESSES:

St. 30 amouren fr. M.D. Lewis. Joseph a. Rosenberg

BY

ATTORNEYS.

United States Patent Office.

JOSEPH A. ROSENBERG, OF SYRACUSE, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS, TO LEFEVER ARMS COMPANY, OF SAME PLACE.

GUN-CLEANING TOOL.

SPECIFICATION forming part of Letters Patent No. 671,839, dated April 9, 1901.

Application filed December 14, 1900. Serial No. 39,861. (No model.)

To all whom it may concern:

Be it known that I, Joseph A. Rosenberg, 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, 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 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, the supporting members being shown as bent substantially flat. Figs. 4, 5, and 6 are isometric views, respectively, of the supporting members, the end piece, and the main body of said gun-cleaning tool. Fig. 7 is an isometric view of a modified construction of supporting member.

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

The main body A is here illustrated as formed substantially cylindrical and as having one end provided with an engaging portion or shank a and its opposite end formed with a slot a', extending inwardly and longitudinally from its corresponding end face, and with a perforation a^2 , arranged at substantially right angles with the slot a' and communicating therewith.

The supporting members B are arranged opposite to each other and are suitably connected together at their advance or free ends, being here shown as united together or formed 40 integral with each other at said advance or free ends. It is obvious, however, that said supporting members may consist of separable members, as B¹⁰, Fig. 7. The members B are generally formed substantially bowshaped and composed of spring material, as steel, of sufficient thinness, so that said members are more or less flexible. The rear ends of the members B are inserted into the slot a of the main body A and provided with apertures b, alined with the perforation a. Said

supporting members B project in front of the main body A, and their front ends being disconnected from the body A are free to move laterally independently thereof.

The abrasive members C are flexible, are 55 mounted on the outer surfaces of the supporting members B, and are suitably connected together at their advance or free ends, being here shown as united or formed integral with each other at said advance or free 60 ends and in advance of the corresponding ends of the supporting members. Said abrasive members may, however, be formed separable from each other. The rear ends of the members C are arranged in the slot a' be- 65 tween contiguous surfaces of the main body A and the members B and are formed with apertures c, alined with the perforation a^2 and the apertures b. Said abrasive members C are preferably composed of a flexible back- 70 ing formed of cloth or other suitable material and a plurality of bristles formed of wire or other desirable material. The abrasive members C are generally secured in position by a fastener or screw C', which is passed 75 through the perforation a^2 and the apertures b c and also secures the supporting members B in position.

In the preferable construction of my invention a substantially **U**-shaped end piece D is 80 clamped over the advance or free ends of the members B C for firmly securing said ends together and adding to the appearance of the gun-cleaning tool.

In the use of my invention the supporting 85 members B normally spring outwardly and tension the abrasive members C, but yield freely as the tool passes through the gun-barrel. Moreover, said parts B and C being flexible move or bend simultaneously and closely 90 fit a maximum surface of the gun-barrel.

The construction and operation of my guncleaning tool will now be readily understood upon reference to the foregoing description and the accompanying drawings, and it will 95 be particularly noted that more or less change may be made in the construction and arrangement of the component parts of said tool without departing from the spirit of my invention.

Having thus fully described my invention, 100

what I claim as new, and desire to secure by

Letters Patent, is-

1. A gun-cleaning tool comprising a main body, opposite substantially bow-shaped supporting members projecting in front of the main body and having their rear ends fixed to the main body and their front ends connected together and free to move laterally independently of said body, and abrasive members mounted on the supporting members, substantially as and for the purpose described.

2. A gun-cleaning tool comprising a main body, opposite substantially bow-shaped supporting members projecting in front of the main body and having their rear ends fixed to the main body and their front ends connected together and free to move laterally independently of said body, and abrasive members having their rear ends fixed between contiguous surfaces of the main body and the rear ends of the supporting members and their front ends fixed to said supporting members, substantially as and for the purpose specified.

3. A gun-cleaning tool comprising a main body, opposite substantially bow-shaped supporting members projecting in front of the

main body and having their rear ends fixed to the main body and their front ends free to 30 move laterally independently of said body, abrasive members mounted on the supporting members, and a substantially **U**-shaped end piece clamped over the front ends of the supporting members, substantially as and for 35 the purposes set forth.

4. A gun-cleaning tool comprising a main body, opposite substantially bow-shaped supporting members projecting in front of the main body and having their rear ends fixed 40 to the main body, abrasive members mounted on the supporting members and having their rear ends fixed to said main body, and a substantially **U**-shaped end piece clamped over the front ends of the supporting and 45 abrasive members, substantially as and for the purposes set forth.

In testimony whereof I have hereunto signed my name, in the presence of two attesting witnesses, at Syracuse, in the county of 50 Onondaga, in the State of New York, this 11th

day of December, 1900.

JOSEPH A. ROSENBERG.

Witnesses:

ARTHUR E. PARSONS, S. DAVIS.