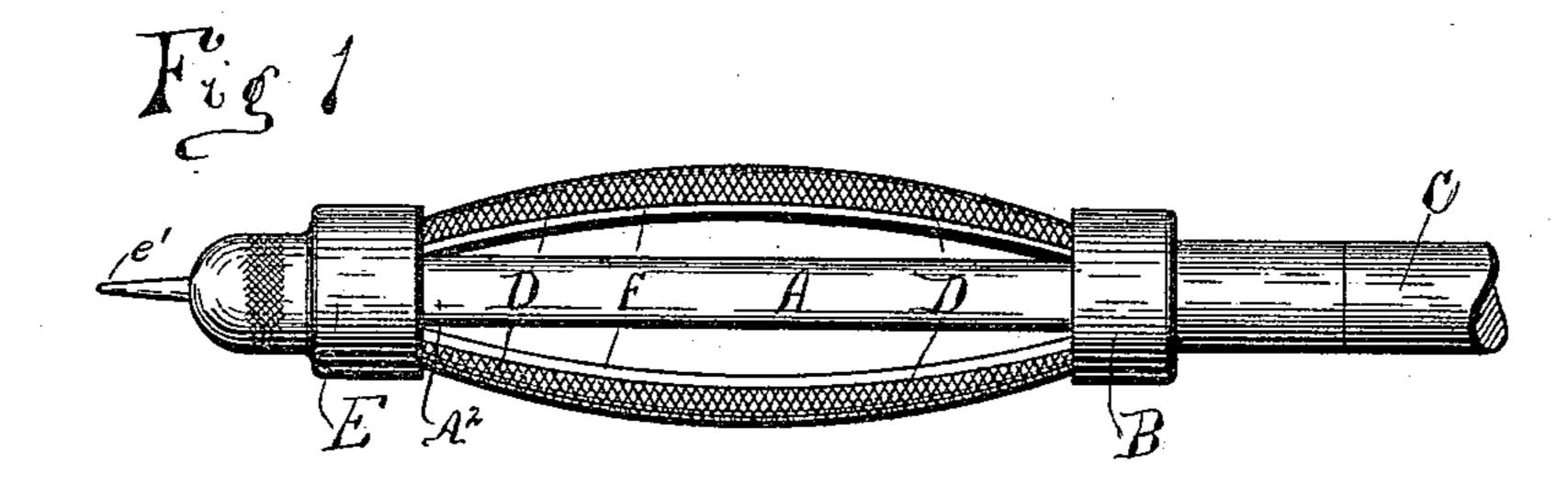
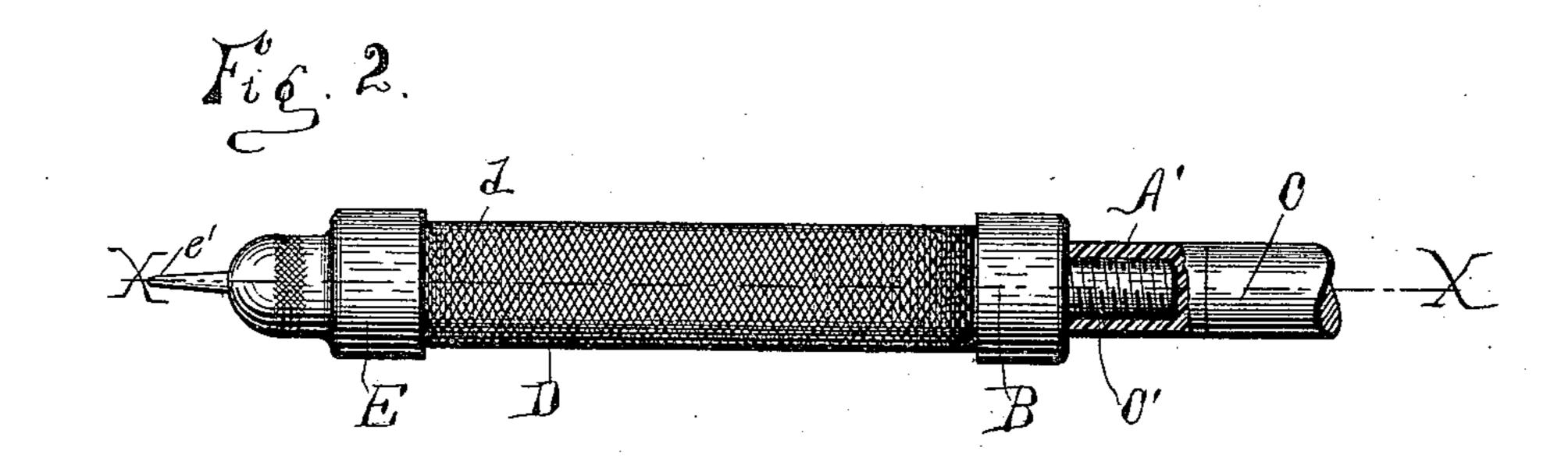
(No Model.)

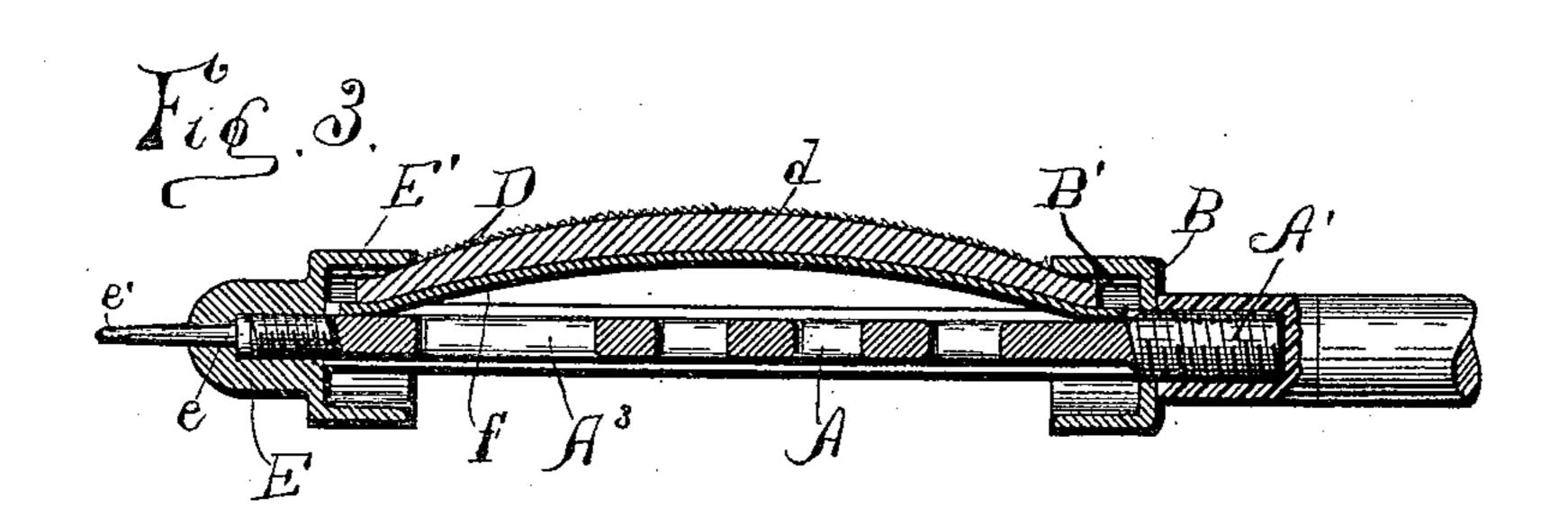
C. & C. E. TOMLINSON. GUN TOOL.

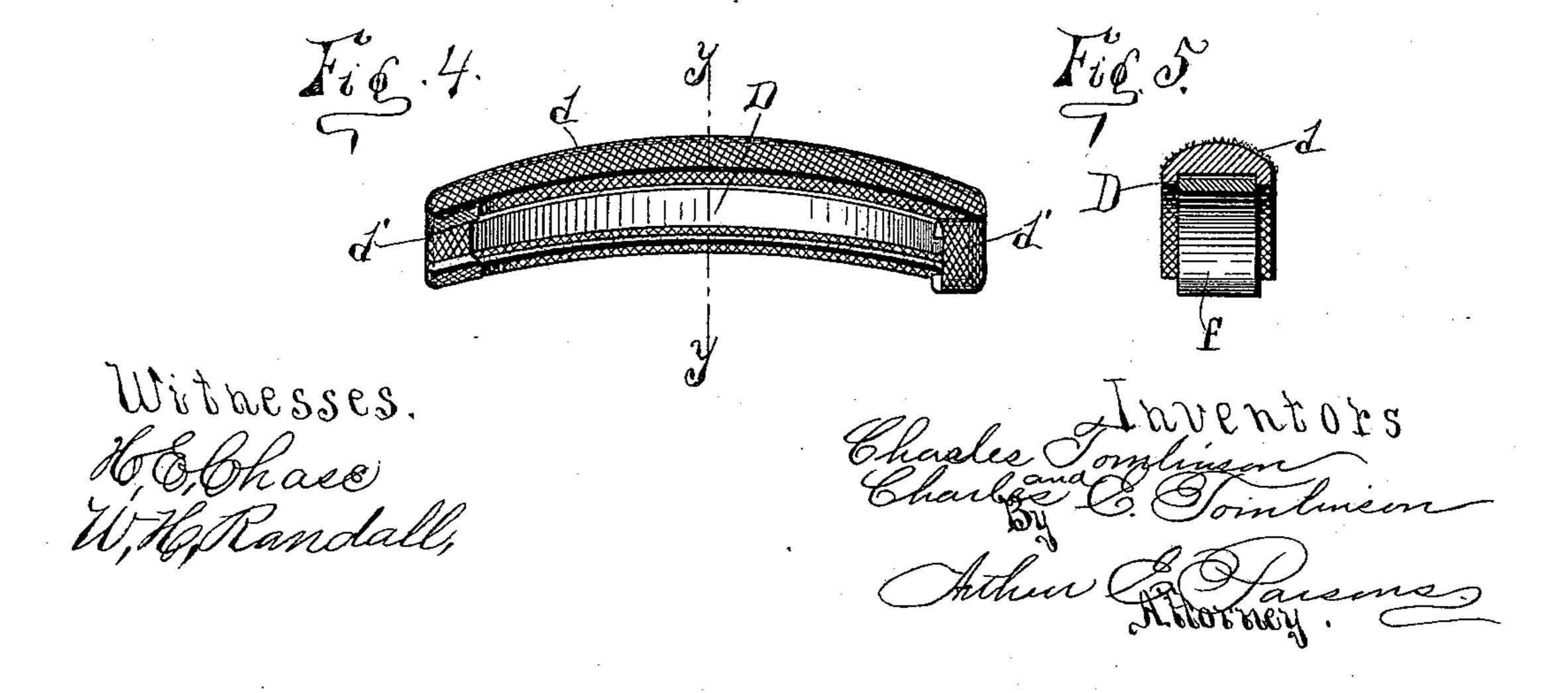
No. 450,323.

Patented Apr. 14, 1891.









United States Patent Office.

CHARLES TOMLINSON AND CHARLES E. TOMLINSON, OF SYRACUSE, NEW YORK.

GUN-TOOL.

SPECIFICATION forming part of Letters Patent No. 450,323, dated April 14, 1891.

Application filed August 15, 1889. Serial No. 320,809. (No model.)

To all whom it may concern:

Be it known that we, CHARLES TOMLINSON and CHARLES E. TOMLINSON, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Gun-Tools, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

Our invention relates to an improved guncleaning tool, and has for its object the production of a simple and effective device which is extremely simple in operation and very effective in use; and to this end it consists, essentially, in a frame, a spring-support mounted upon said frame, and a strip of wire-gauze or other like cleaning material mounted upon said spring.

The invention also consists in the detail construction and arrangement of the parts, all as hereinafter more fully described, and pointed out in the claims.

In describing our invention reference is had to the accompanying drawings, forming a part of this specification, in which like letters indicate corresponding parts in all the views.

Figures 1 and 2 represent views of our tool, taken in planes at right angles with each other and showing the operating-rod as broken off. Fig. 3 is a longitudinal sectional view taken on line x x, Fig. 2. Fig. 4 is a perspective view illustrating the manner of securing the wire-gauze to the support therefor. Fig. 5 is a detail sectional view taken on line y y, Fig. 4.

The frame A, which may be of suitable size, form, and construction, is here illustrated as a thin bar. Secured in any desirable manner at one extremity of the bar A is the recessed disk B. Projecting from said disk B is the extremity A' of the frame A, to which is secured the cleaning or operating rod C, preferably formed with a socket C', having screw-threads or other suitable fastening means for engaging the extremity A'.

Supported upon the frame A are the supports D upon which we secure strips of wiregauze d. These supports D are preferably secured to the frame A by having one extremity thereof inserted into the recess B' of the

collar or disk B and having their other extremity inserted into a recess E' of a disk or collar E, secured at the opposite extremity A² of the frame A. This collar E is preferably 55 formed with a longitudinal socket having screw-threads engaging the screw-threads formed upon said extremity A². When first placing the supports D in their desired position the collar or cap E is unscrewed, so that 60 said supports may be readily inserted, and by then screwing said cap toward the extremity A' of the frame A the supports D will be securely held in operative position.

The supports D are preferably yieldingly 65 mounted upon springs f, which, while they may be of any desirable form and construction, are here shown as a curved piece of spring metal. The supports D may also be of suitable size or material, but preferably consist 70 of wood or other hard substance which will not bed into the spaces in the wire-gauze d. This wire-gauze is formed of brass or other material harder than lead and softer than the gun-barrel, so as to thoroughly remove the 75 lead from the gun-barrel, and to polish it at the same time without any liability of scratching.

The preferable manner of securing the wire-gauze to the support D is best shown in Figs. 80 4 and 5. The gauze is cut off in thin strips slightly longer than said support, and the extremities d' of the gauze are folded toward each other. When the support is in its operative position, it will be seen that the ends 85 thereof contact with the frame A, and that as the extremities d' of the wire-gauze are turned toward each other the same will be tightly contacted with the frame A and will be held in their desired position without lia-90 bility of their displacement when cleaning the gun-barrel.

By reference to Fig. 4 it will be observed that the wire-gauze is preferably wider than the face of the support D and that the sides 95 thereof are bent around the sides of said support and folded on the inner face thereof. The spring f by contacting with these sides still further prevents the displacement of the wire-gauze and causes the same, by fitting tightly 100 around the outer or wiring face of the support D, to be more effectual in operation.

As preferably constructed, the support D is formed with a recess on its under face, with which the spring f registers, thus presenting an additional feature for operatively 5 retaining the wire-gauze. This wire-gauze when used in strips can be procured very cheaply, and when worn can be replaced with but slight cost and without the exercise of skill. It will also be understood that the manre ner of holding the same prevents displacement and at the same time very effectually cleans the gun.

Formed in the frame A is the opening A³. When the cleaning device or wire-covered 15 supports D have been operated through the gun-barrel, the same can be readily removed from the frame A by unscrewing the cap E, and thereupon a rag may be secured in the opening A³, and the gun-barrel be cleanly

20 wiped.

The desirability and advantage of our improved cleaning device is further increased by providing the disk or cap E with an opening e, leading from and of less diameter than 25 the socket in said disk or cap, for receiving the screw-threaded end A² of the frame A. This opening allows the cleaner to be used as a decapper, since the said disk or cap can be removed from operative position, whereupon 30 a headed pin e' is inserted into said socket and opening, and when the said disk is forced to its normal position the point of said pin e'projects beyond the outer end of said disk, thus allowing our cleaner to be used as a de-35 capper when desired.

It will be understood that considerable: change may be made in the construction and arrangement of the parts of our invention, and hence we do not limit ourselves to its

40 precise form and construction.

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

1. In a gun-cleaning tool, the combination 45 of a supporting-frame, collars upon said frame, and yielding wire-gauze held in position by said collars, and a yielding support for said gauze, substantially as and for the purpose set forth.

2. In a gun-cleaning tool, the combination

of a supporting-frame, collars upon said frame, yielding supports held in position by said collars, strips of wire-gauze on said supports, inwardly-extending extremities upon said strips interposed between said yielding sup- 55 ports, and a supporting-frame for retaining the gauze strips in position, substantially as and for the purpose set forth.

3. In a gun-cleaning tool, the combination of a supporting-frame, collars upon said frame, 60 a spring f, held in position by said collars, a hard-surfaced support D, mounted on said

spring, and strips of wire-gauze mounted on the outer face of said hard-surfaced support, substantially as and for the purpose described. 65

4. In a gun-cleaning tool, the combination of a supporting-frame, collars upon said frame, a spring held in position by said collars, a support mounted on said spring, a recess formed in the inner face of said support for 70 receiving the spring, and wire-gauze mounted on the outer face of said support with its edge interposed between said spring and support, substantially as and for the purpose set forth.

5. The combination of a supporting-frame, collars upon said frame, yielding supports held in position by said collars, strips of wiregauze having their extremities turned inwardly and held in position by said collars, a 80 recess in one of the collars E, and a pin e, projecting beyond the extremity of said collar, substantially as and for the purpose specified.

6. The combination, with the frame A, of 85 strips of wire-gauze yieldingly mounted upon said frame, and a decapper removably secured to said frame, substantially as and for the purpose specified.

In testimony whereof we have hereunto 90 signed our names, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 25th day of June, 1889.

> CHARLES TOMLINSON. CHARLES E. TOMLINSON.

Witnesses:

GEORGE B. WARNER, H. E. CHASE.