

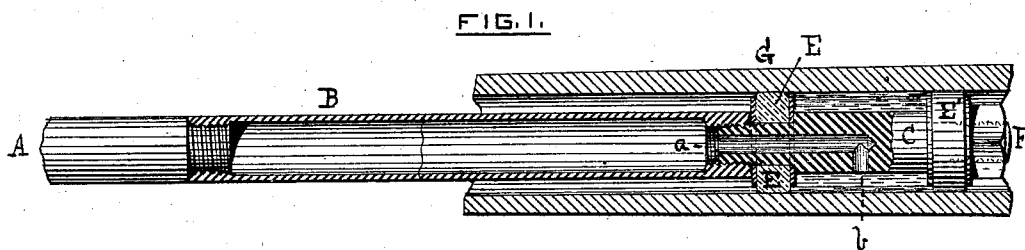
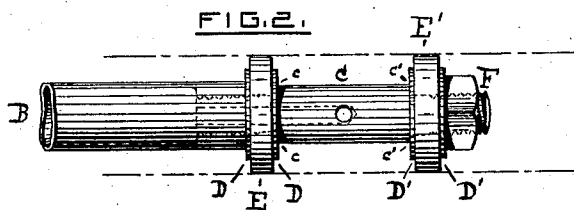
(No Model.)

J. F. DAVIS.

GUN CLEANER.

No. 247,541.

Patented Sept. 27, 1881.



WITNESSES.

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JAMES F. DAVIS, OF FALL RIVER, MASSACHUSETTS.

GUN-CLEANER.

SPECIFICATION forming part of Letters Patent No. 247,541, dated September 27, 1881.

Application filed July 20, 1881. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. DAVIS, of Fall River, in the county of Bristol, in the State of Massachusetts, have invented a new and useful Improvement in Gun-Cleaners; and I declare the following to be a specification thereof, reference being had to the accompanying drawings.

Like letters indicate like parts.

Figure 1 is a longitudinal section of my improved gun-cleaner shown in position within a gun-barrel. Fig. 2 is a side elevation of my invention.

My invention consists in providing a gun-cleaner, at its entering end, with a tubular reservoir to contain a cleansing-fluid, which fluid is discharged from said reservoir through a suitable vent between two swabs, which fit snugly the bore of the gun-barrel, and also in the use of elastic swabs which can be adjusted and spread diametrically between metallic washers by the pressure of a screw.

The gun-cleaner A is made, as usual, with one or more joints screwed together to form a continuous rod. The joint B is made tubular and forms a chamber or reservoir, in which I pour any suitable cleansing-fluid. I prefer to use benzine for this purpose because by its solvent properties it is admirably adapted to effect and remove from the gun-barrel the residuum of the burned powder. The last joint, C, is a solid cylindrical piece, screwed into the outer end of the chamber B, and provided with a small central bore, *a*, which opens into the chamber B at its outer end and terminates, midway the length of the rod C, in a vent, *b*. The cylindrical rod C is shouldered at *c c'*, as shown, and has metallic washers or collars D D' D', between which are the swabs E E', respectively. The swabs are made of any suitable material, preferably india-rubber, because of its elasticity. They should be of a diameter nearly equal to that of the gun-bore. A nut, F, at the end of the piece C confines the swab E' and the collars D' D' in position.

The gun-barrel is shown in longitudinal section at G in Fig. 1.

The swabs, being elastic, are capable of diametrical expansion by compressing them between the metallic collars, and so can be adjusted, as desired, to fit snugly the bore of the

gun. For this purpose I tighten the nut F, which presses the outer collar, D', against the swab E'. As the inner collar, D', has a rigid bearing against the shoulder *c'* of the joint C, the swab E' must spread or expand outwardly. I then enter the implement into the gun-barrel, and when it is inserted I can still further adjust it by turning the handle, which has the same effect to spread diametrically the swab E as the turning of the nut has upon the swab E', as before described. When the swabs have been thus adjusted to snugly fit the bore, it will be perceived that I have formed within the gun-barrel a temporary chamber, of which the two swabs form the ends, and the inner surface of the gun-barrel the sides, and into the temporary chamber so formed the cleansing-fluid enters, flowing from the reservoir B through the duct *a b*, and comes into direct contact with the surface of the bore all of the inner surface of the bore is consecutively exposed to the fluid, and the edges of the swabs scour said surface, while at the same time the fluid cannot flow away, being confined between the swabs, as described.

It would obviously be within my invention if the reservoir should be formed in the handle of the implement instead of forming a part of the rod itself, and should discharge the fluid by a suitable duct running throughout the entire length of the rod.

I am aware that the use of the rubber swabs laterally expansible by the pressure of a screw is not new, and also that gun-cleaners have been constructed containing a reservoir and duct for holding and conveying a cleansing-fluid; but

I claim as a novel and useful invention and desire to secure by Letters Patent—

The improved gun-cleaner herein described, consisting of the joints A, the tubular reservoir B, the perforated joint C, the collars D D' D', the swabs E E', and the nut F, combined and operating substantially as and for the purpose specified.

JAMES F. DAVIS.

Witness:

GEORGE E. BAMFORD,
HENRY H. EARL.