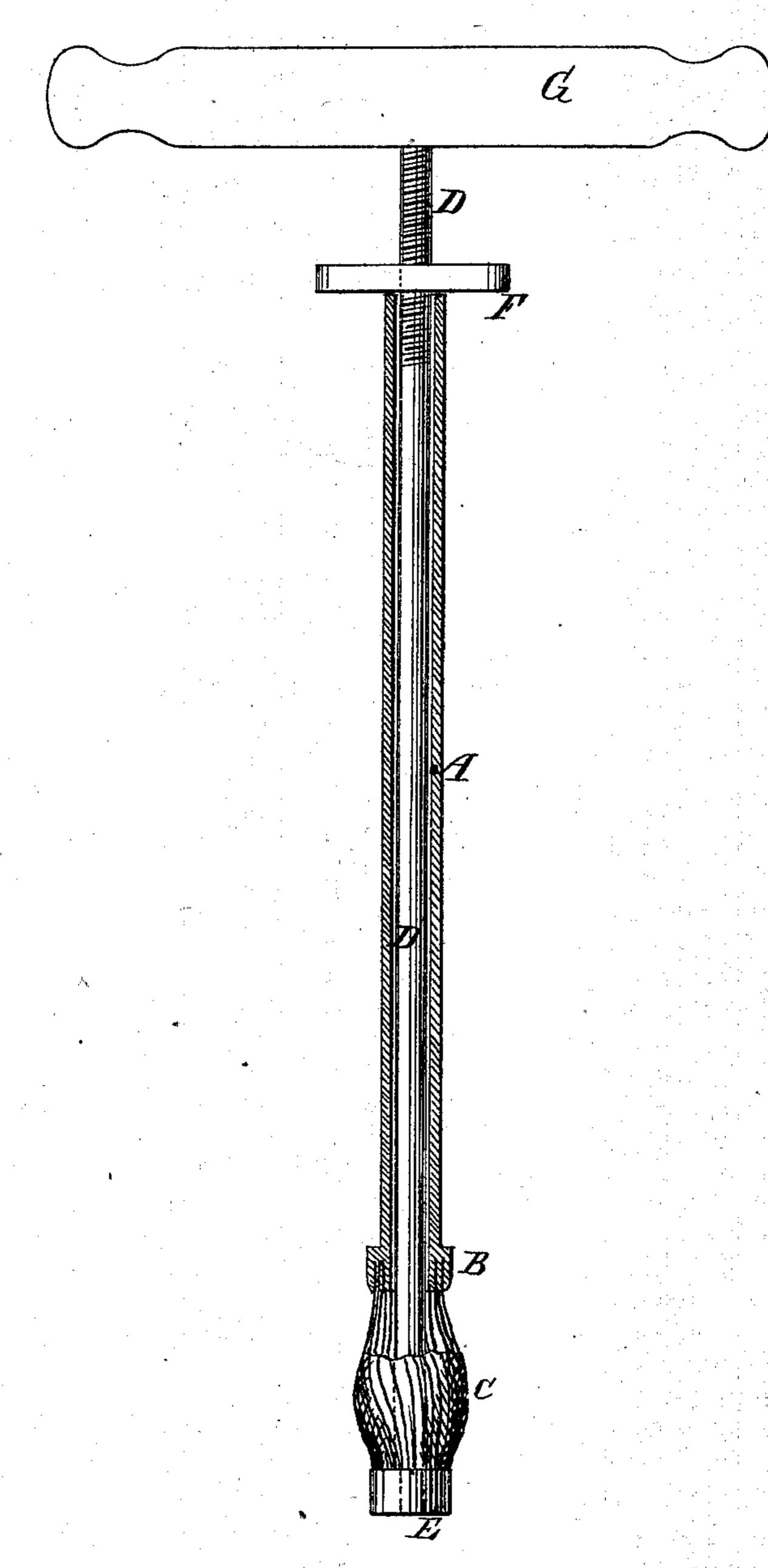
## W. E. TURNER.

## Instruments for Cleaning Gun-Barrels.

No. 139,633.

Patented June 3, 1873.



Witnesses:

Millo. Turner

## UNITED STATES PATENT OFFICE.

WILL E. TURNER, OF FORT SNELLING, MINNESOTA.

## IMPROVEMENT IN INSTRUMENTS FOR CLEANING GUN-BARRELS.

Specification forming part of Letters Patent No. 139,633, dated June 3, 1873; application filed March 15, 1873.

To all whom it may concern:

Be it known that I, Dr. WILL. E. TURNER, of Fort Snelling, in the county of Hennepin and State of Minnesota, have invented a new and useful Improvement in Instrument for Cleaning and Burnishing Gun-Barrels, of which the following is a specification:

The object of this invention is to provide ready and efficient means for cleaning and burnishing the inside of gun-barrels; and it consists in an instrument formed of a tube and movable central rod, and an expansible cluster of wire or similar material, the latter being expanded and adjusted to fit barrels of different caliber, or to give more or less friction to barrels of the same caliber by means of a screw-thread and nut on the rod, as hereinafter more fully described.

The drawing represents a longitudinal section of the instrument.

Similar letters of reference indicate corresponding parts.

A is a tube of any desired length, but designed to be equal to the length of the barrel to be cleaned, and of less diameter so that it will readily enter the bore of the barrel. B is a collar on the end of this tube. C represents a cluster of wire or similar material, (steel preferred,) which is made fast at one end to the collar B. D is the rod which extends through the tube, upon the end of which there is a head-piece, E, to which the other ends of the cluster are rigidly attached. The wires composing the cluster are bent outward and obliquely, so that the cluster presents a spiral form, and is designed to entirely surround the rod.

When the head E and the collar B are approximated, or, in other words, when the rod is drawn upward, the cluster is expanded and the expansion is made more or less, and the cluster is held in any desired position by means of the screw-nut F, at the upper end of the tube through which the rod passes, as represented in the drawing.

G is the handle rigidly attached to the top of the rod.

When this instrument is given a reciprocating motion in a gun-barrel, the rust is readily removed, and the barrel is soon cleaned and burnished. The residuum of burned powder or similar foulness in the barrel is as readily removed by the same operation, and tow or rags may be twined within the wires of the cluster to form an effective wiper for the barrel when desired. The wire-cluster C may by a slight modification be used on the end of the ordinary ramrod. I do not therefore confine myself strictly to the construction shown and described, the main feature of the invention being the wire-cluster C and the mode of expanding it.

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

An instrument for cleaning and burnishing gun-barrels, consisting of the tube A, wire-cluster C, rod D, head E, screw-nut F, and handle G, when arranged to operate as shown and described.

WILL. E. TURNER.

Witnesses:
T. W. Lord,
A. HEGER.