

(No Model.)

C. S. LEET.
GUN CLEANER.

No. 302,007.

Patented July 15, 1884.

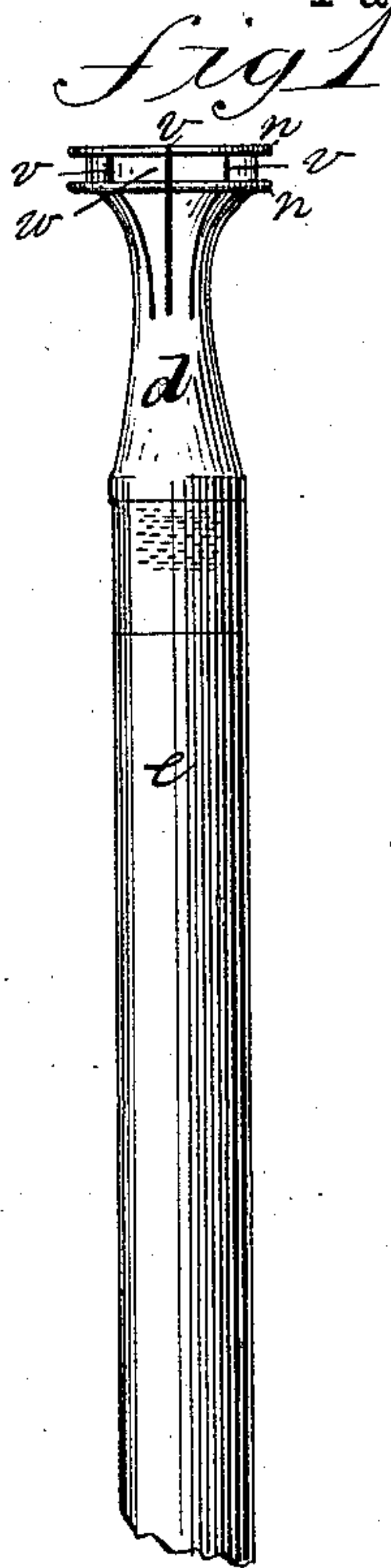


fig 2

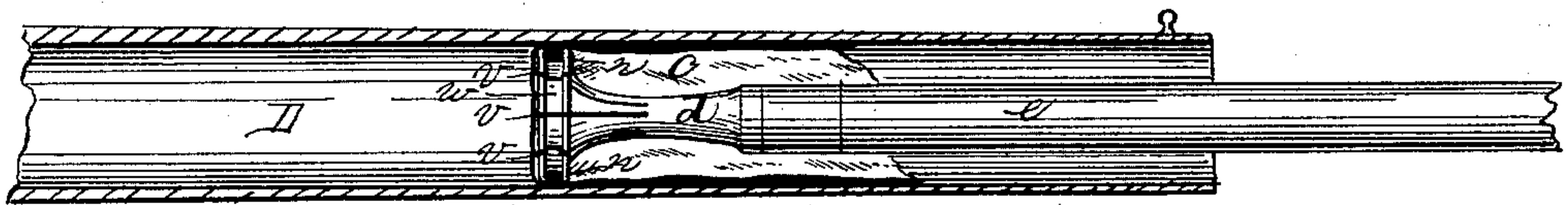
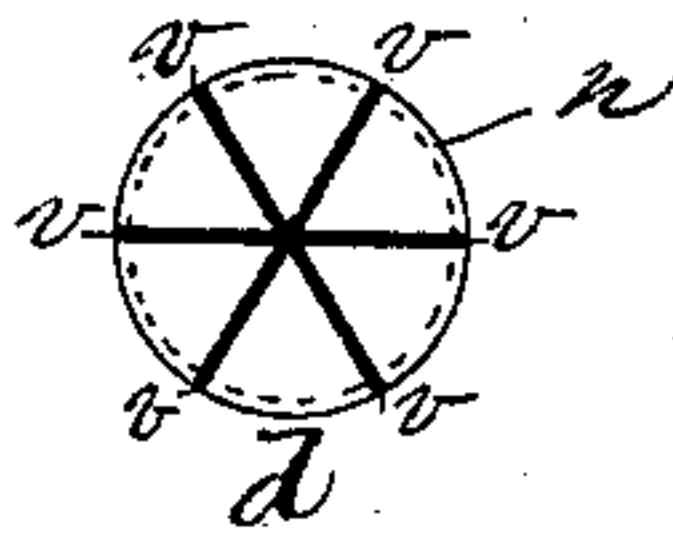


fig 3



WITNESSES:

J. D. Garfield
M. C. Buck

INVENTOR

Charles S. Leet

BY *Henry A. Chapin*

ATTORNEY

UNITED STATES PATENT OFFICE.

CHARLES S. LEET, OF BRIDGEPORT, CONNECTICUT.

GUN-CLEANER.

SPECIFICATION forming part of Letters Patent No. 302,007, dated July 15, 1884.

Application filed November 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. LEET, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented new and useful Improvements in Gun-Cleaners, of which the following is a specification.

This invention relates to improvements in gun-cleaners, the object being to provide an improved form of cleaner for cleaning gun-barrels—one capable of economical construction, and adapted to act with improved efficiency in removing lead, rust, and dirt from the interior surface of a gun-barrel.

In the drawings forming part of this specification, Figure 1 is an elevation of a gun-cleaner embodying my improvements, and shown attached to the end of a wiping-rod. Fig. 2 illustrates a section of a gun-barrel and the manner of employing the cleaner in it. Fig. 3 is a top view of the cleaner.

In the drawings, *d* is the cleaner, *e* the cleaner-rod, and *D* the section, of a gun-barrel. A wiping rag or patch is indicated by *c*. The gun-cleaner *d* is made from brass or other suitable metal, or it may be made from hard wood or hard rubber. The lower end of the cleaner is screwed or otherwise arranged to be conveniently attached to the end of the rod *e*, and is made with a circular head having a groove, *w*, around it, whereby are formed the narrow collars *n n* above and below said groove; and a series of slots, *v*, are formed in the upper end of the cleaner, extending about half-way (more or less) the length of the latter, dividing

the head of the cleaner into a number of spring-segments capable of being deflected toward the center and of so springing outwardly as to force the collars *n* against the bore of the barrel. If desired, the head may be made with only one of said collars.

The cleaner is employed with a wiping-rag, *c*, or other suitable material, which is placed over the head, and the cleaner is then drawn back and forth through the barrel *D* until the latter is thoroughly cleaned. The diameter of the cleaner is slightly greater than the barrel in which it is used, so that the collars *n n* will bear against the surface of the bore with considerable force.

It will be observed that the head of the cleaner is practically solid, save as it is divided by the slits, and the end is a disk divided only by narrow radial slits. This form of cleaner, besides being stronger, has less tendency to cut or tear the patch than the tubular form of wiper with spring-arms which has been heretofore known and used.

What I claim as my invention is—

A gun-cleaner adapted for attachment to the end of a cleaning-rod, having a head which presents a disk-like face, the same being solid, except as divided by radial slots, which extend lengthwise of the body of the cleaner, and having one or more projecting collars, substantially as described.

C. S. LEET.

Witnesses:

WM. F. BARNES,

MORRIS B. BEARDSLEY.