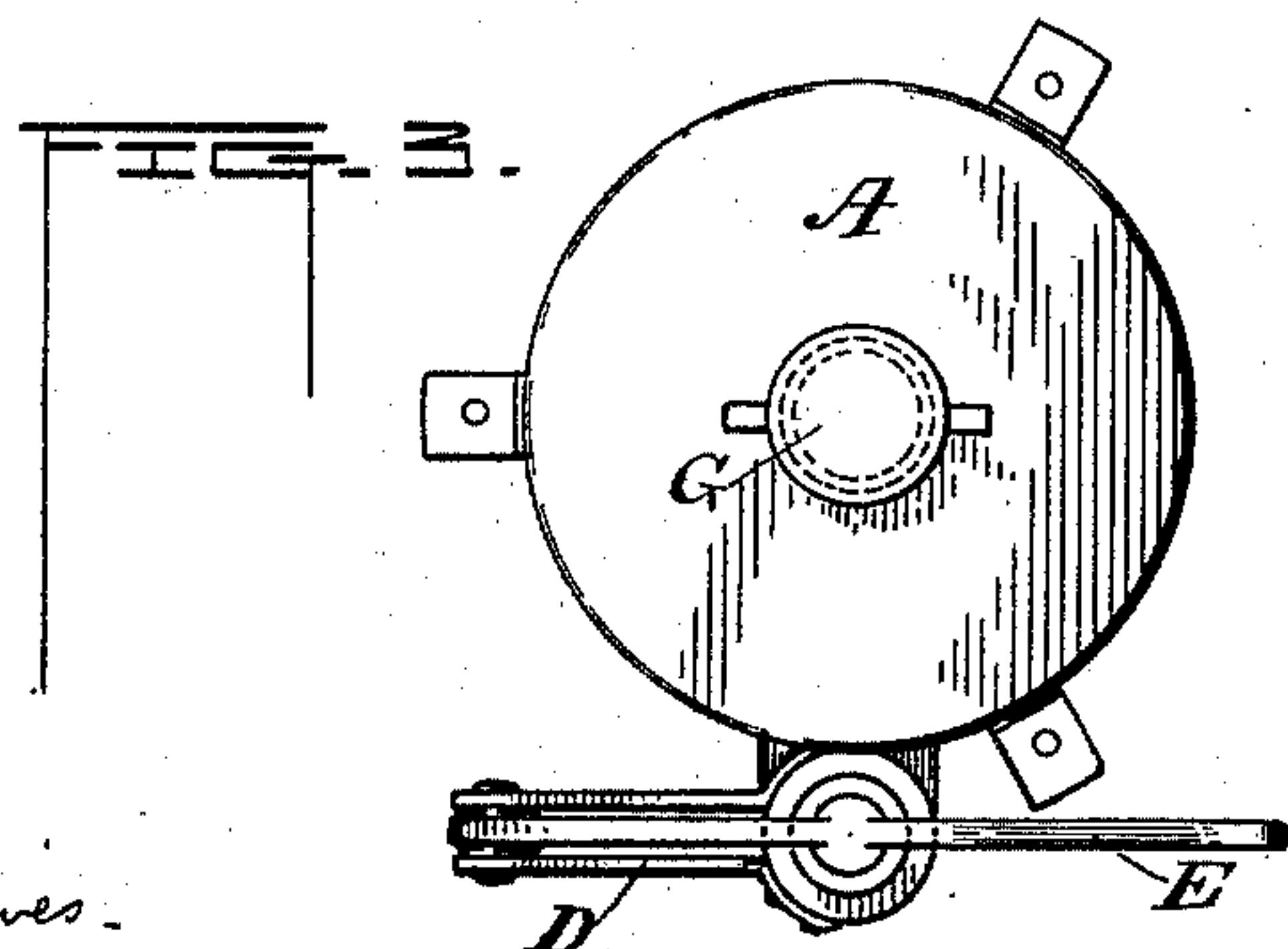
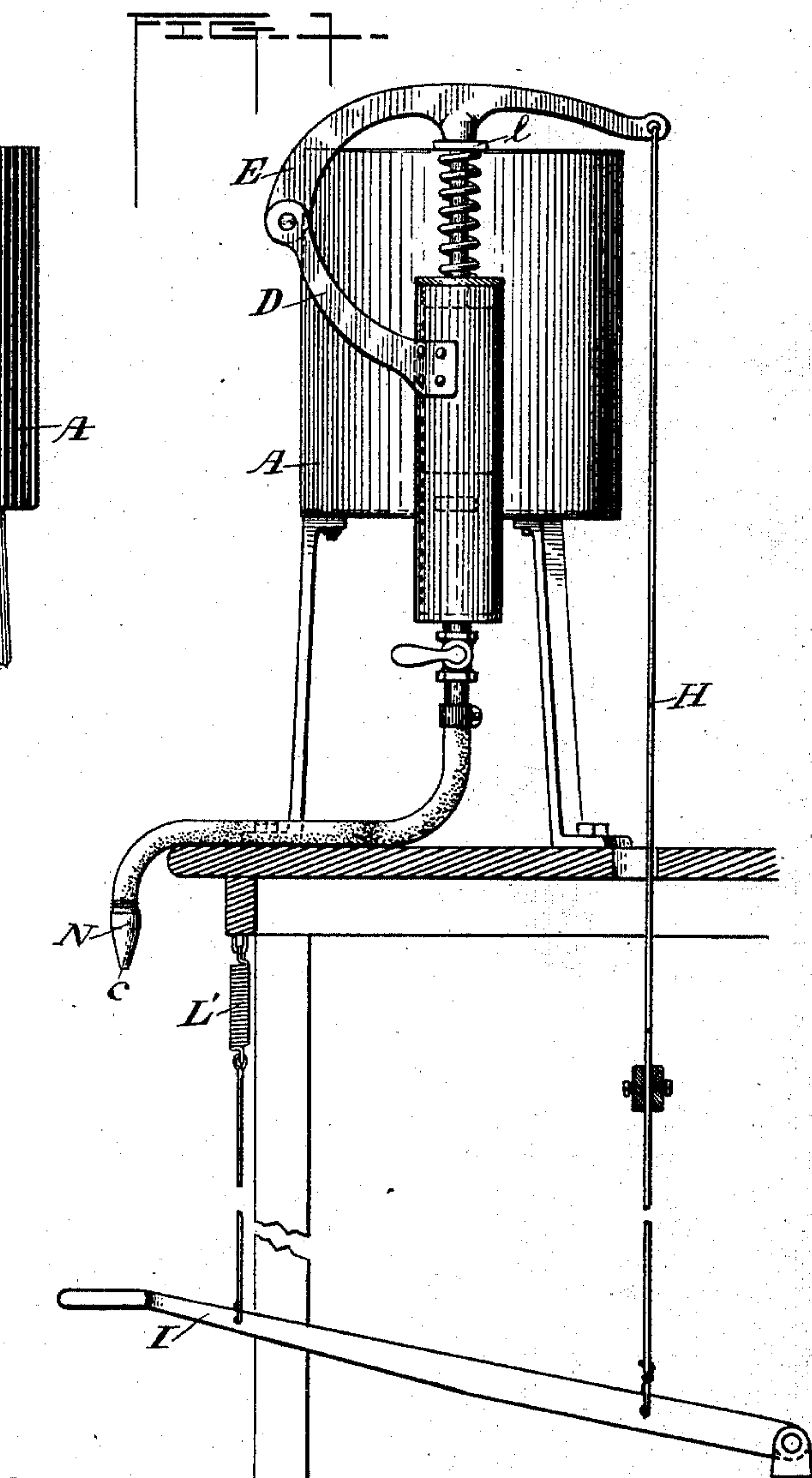
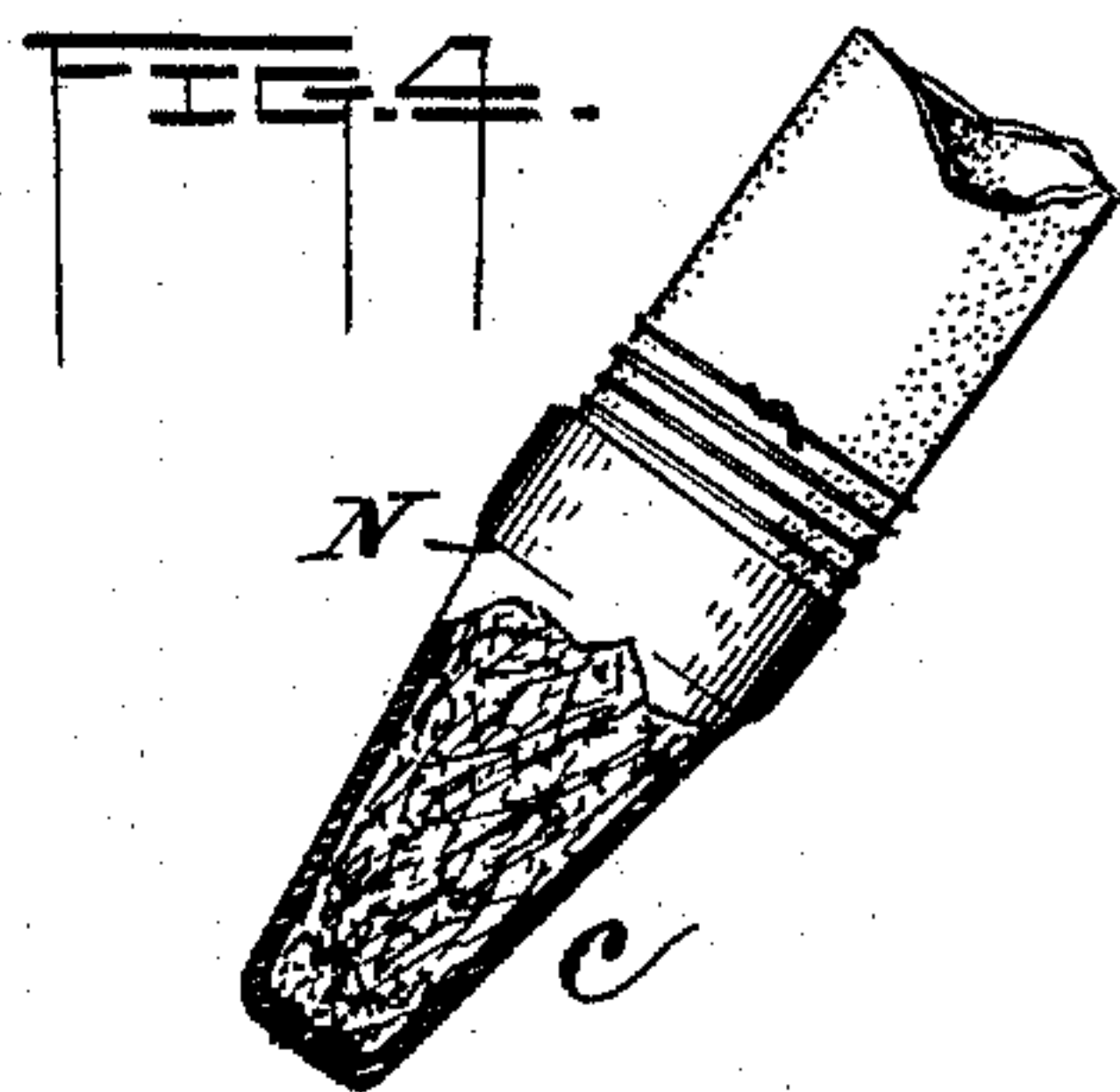
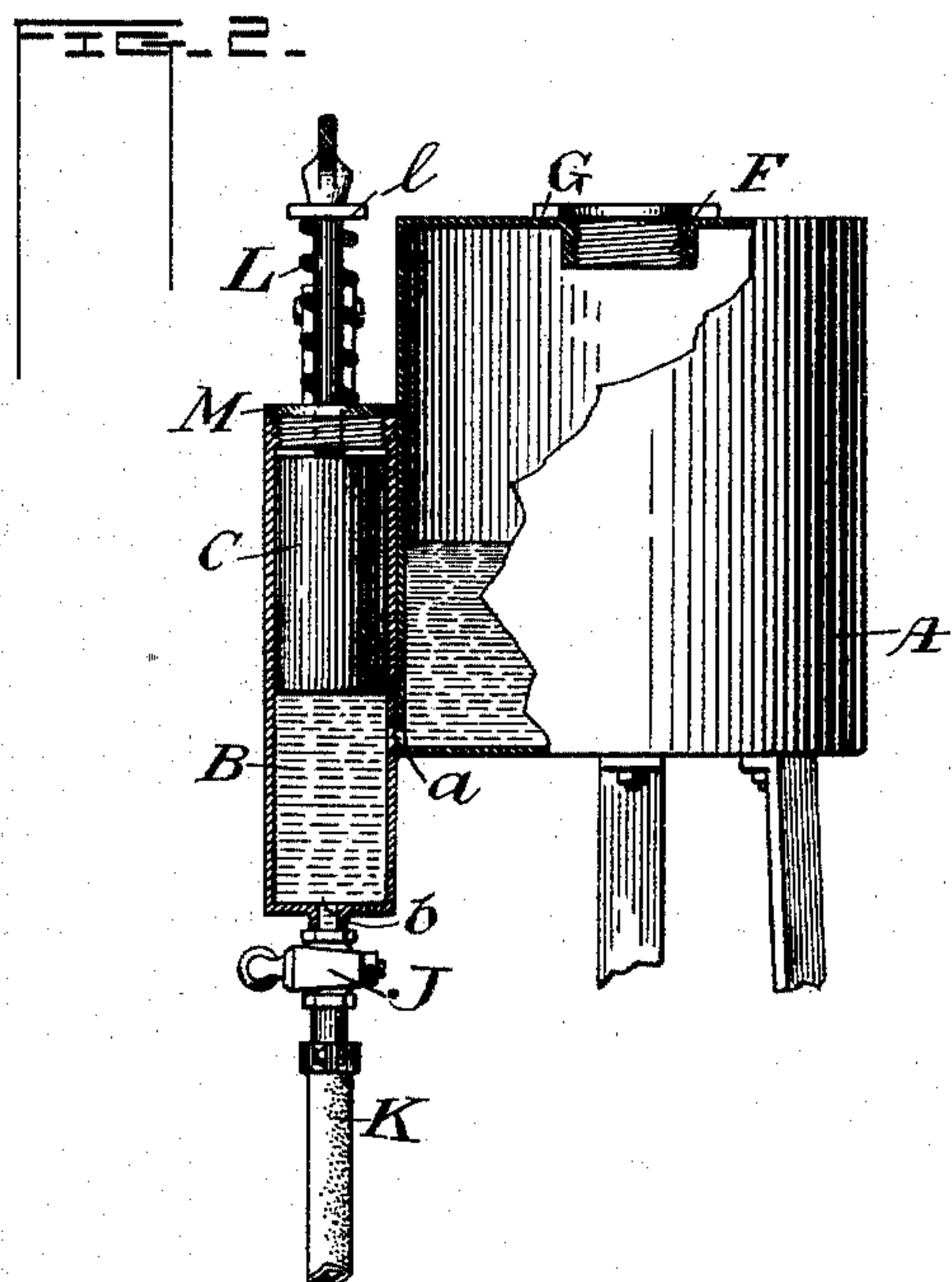


(No Model.)

W. ROBERTSON.  
CEMENTING MACHINE.

No. 483,367.

Patented Sept. 27, 1892.



Witnesses  
Frank Blair Rives.  
Gales P. Moore.

Inventor  
William Robertson  
By Chas. S. Sturtevant  
his Attorney



# UNITED STATES PATENT OFFICE.

WILLIAM ROBERTSON, OF HAMILTON, CANADA, ASSIGNOR TO JAMES A. McPHERSON, OF SAME PLACE, AND ELBERT D. WEYBURN, OF CHICAGO, ILLINOIS.

## CEMENTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 483,367, dated September 27, 1892.

Application filed April 20, 1892. Serial No. 429,850. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM ROBERTSON, a subject of the Queen of Great Britain, residing at Hamilton, in the county of Wentworth and Province of Ontario, Canada, have invented certain new and useful Improvements in Cementing-Machines, of which the following is a description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention is an improved receptacle for holding fluids, such as bookbinders' or shoemakers' cement, and is designed to serve not only as a place of storage of the same, but is also adapted to deliver the material in necessary quantities when desired by the operator. Most cements—such as are used in bookbinding or in the manufacture of leather goods, as boots and shoes—are made from chemicals or from rubber and naphtha, and these are liable to explosion or ignition when near fire, and, furthermore, when exposed to the air the cement evaporates and loses its strength, and a large waste follows when put into an open vessel.

The object of my invention, therefore, is to provide a strong and substantial vessel which shall be hermetically closed to prevent the air from coming in contact with the contents of the vessel, thereby preventing explosion and evaporation.

My invention consists in the matters hereinafter described, and referred to in the appended claims.

In the accompanying drawings, which illustrate my invention, Figure 1 is an elevation of my improved apparatus. Fig. 2 is a view at right angles to Fig. 1, part being in section. Fig. 3 is a plan view; and Fig. 4 is an enlarged view of the outlet, showing the porous spraying substance therein incased.

In the drawings, A represents the receptacle for holding the material. It is in the form of a hollow cylinder and made of iron or any other suitable material. A supplemental hollow cylinder B, preferably of smaller diameter and having a cover M, is attached to the

cylinder A, and within it fits closely a piston C. A bracket D is attached to the cylinder in such manner that a lever E may be pivoted thereto, this lever having a downwardly-extending lug or post *l*, which presses upon the upper end of the piston C. The cylinder A has a suitable head or cap F screwed into its upper end, this cap having a central opening large enough to receive the cement. This opening is closed with a cover or screw-cap G.

To the free end of the lever E is attached a jointed treadle-rod H, secured at its lower end to the treadle or presser-foot I, pivoted to the floor, whereby the rod H and the lever E can be operated and the piston C pressed down into the cylinder B. A spiral spring L is secured to the end of the piston C for returning the same after it has been pressed down, and in addition to this a second spring L' may be provided between the forward end of the treadle and the table to return the same to normal position.

The cylinder B is provided with a suitable outlet closed by a stop-cock J, and a flexible tube K is attached to the bottom of the cylinder B, through which the contents of the cylinders flow, and fastened to the end of this tube K is a tube N, and I place in the end of this tube a porous mass of material, such as sponge or hair, which acts as a spreader or distributor of the cement.

In my construction I make the cylinder A with an opening at the bottom opposite and leading into the cylinder B at *a*. It is obvious that when the cylinder A contains any cement or other liquid it will flow into the opening *a* and also into the cylinder B. In order to force the cement out of the cylinder B, I use the piston C, which when forced down pushes the cement into the tube K at *b*, and it thus flows out at the end of the tube N at *c*. The piston C is made so as to fill the cylinder B above the opening *a* and is made so that when the piston is pressed down it closes the opening *a* and prevents any of the cement getting above the upper end of the piston C. The piston forms a force and suc-



tion pump. When raised, it sucks the contents of the cylinder A into the cylinder B, and when pressed down it forces the contents of the cylinder B out of the opening into the tubes K and N out through the nozzle.

I claim as my invention—

1. An apparatus for storing and delivering fluids, comprising a storage-receptacle, a cylinder extending below the same, a passage on a line with the bottom of the storage-receptacle, leading directly into said cylinder, and a piston reciprocating in said cylinder and adapted to close communication between the said receptacle and said cylinder, substantially as described.

2. An apparatus for storing and delivering fluids, comprising a storage-receptacle, a cylinder communicating therewith, said cylinder

being provided with an outlet, and a porous mass of material adapted to spray the fluid, incased in said outlet, substantially as described.

3. In combination with the cylinder A, the cylinder B, the solid piston C, the spiral spring L, the bracket D, the lever E, the screw-cap G on the cylinder-head F, the treadle-rod H, the presser-foot I, the stop-cock J in the cylinder B, the flexible tube K, and porous mass of material incased in the outlet N, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM ROBERTSON.

Witnesses:

FREDERICK DUNN,  
H. H. BICKNELL.