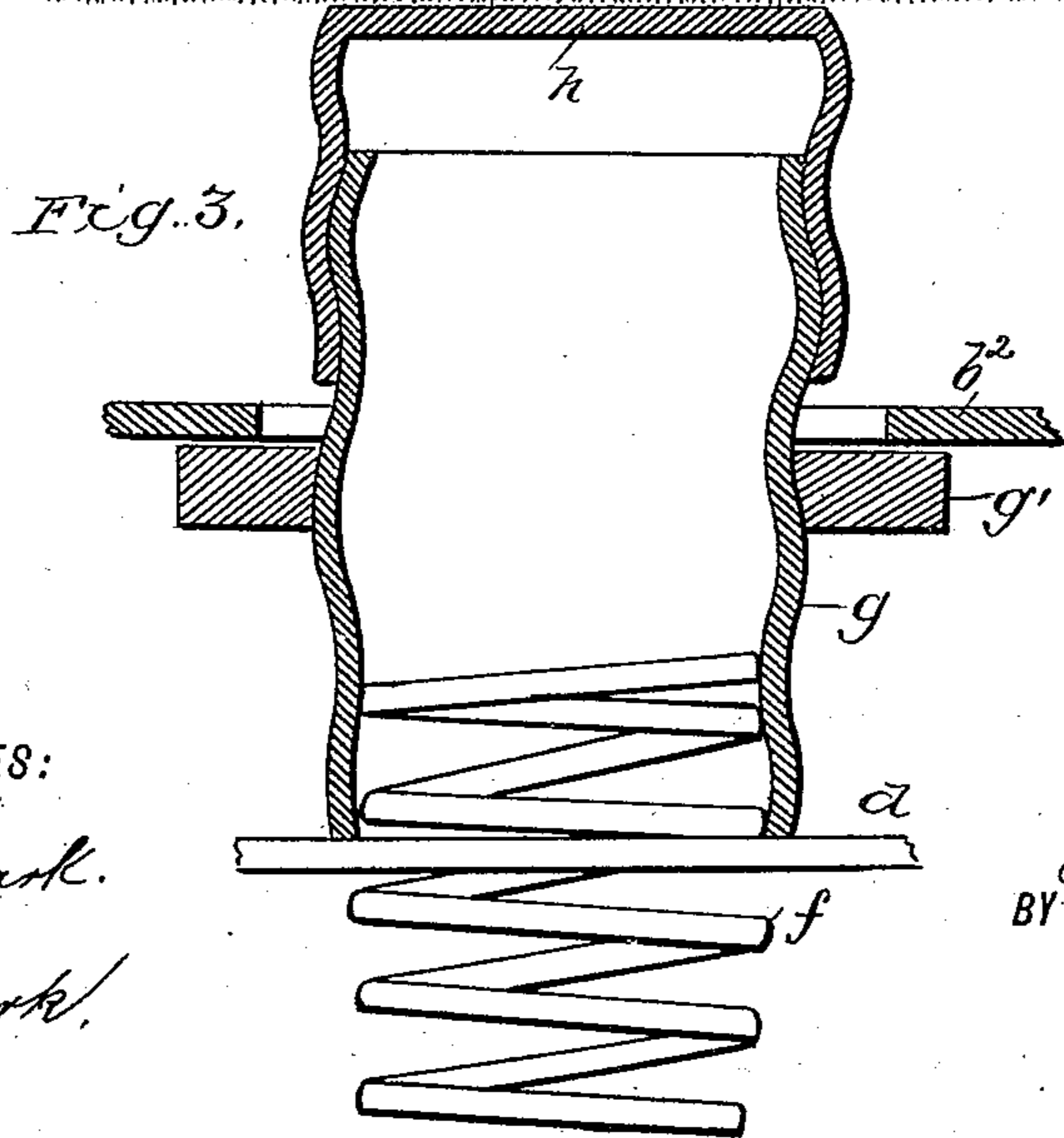
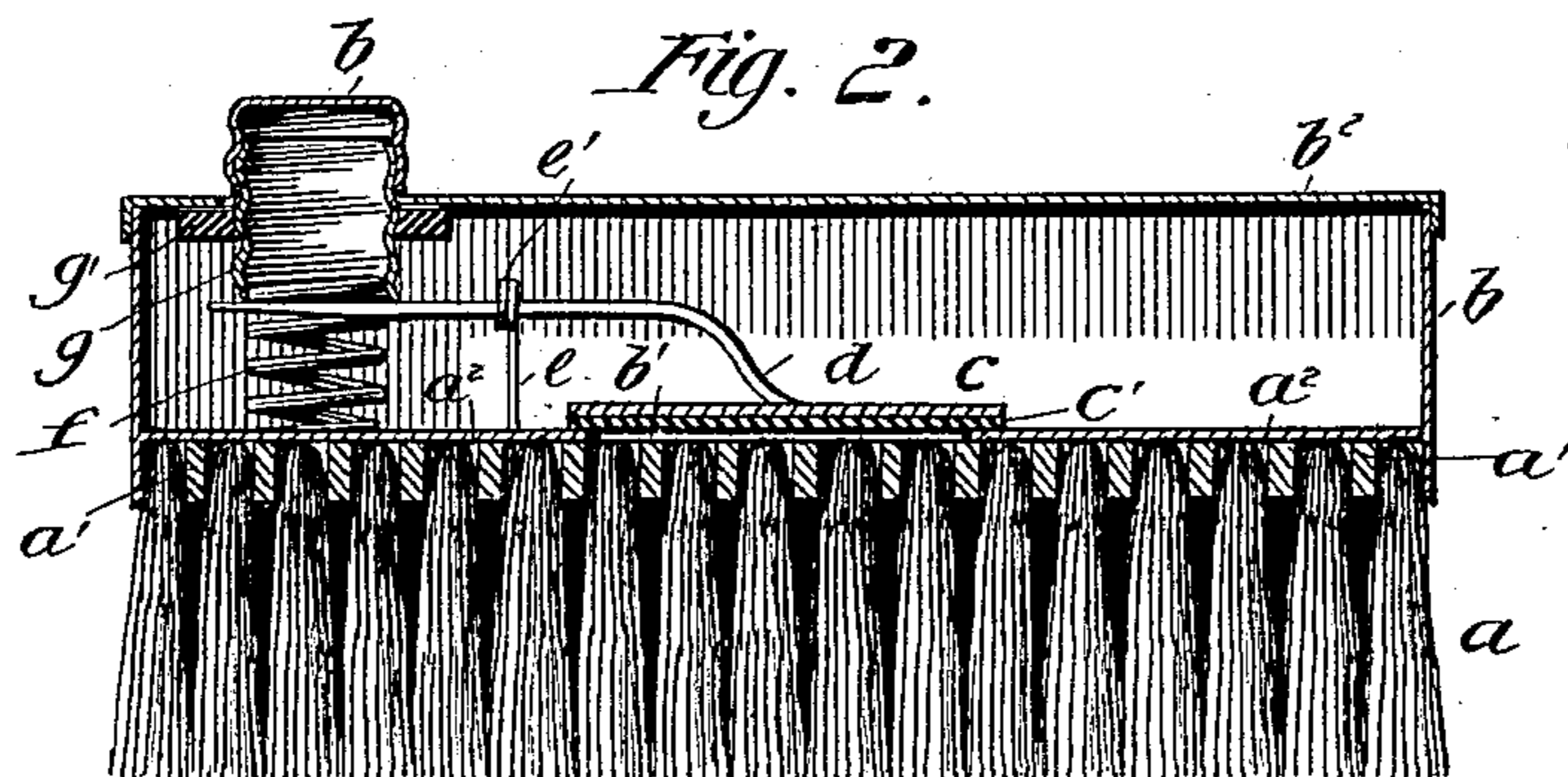
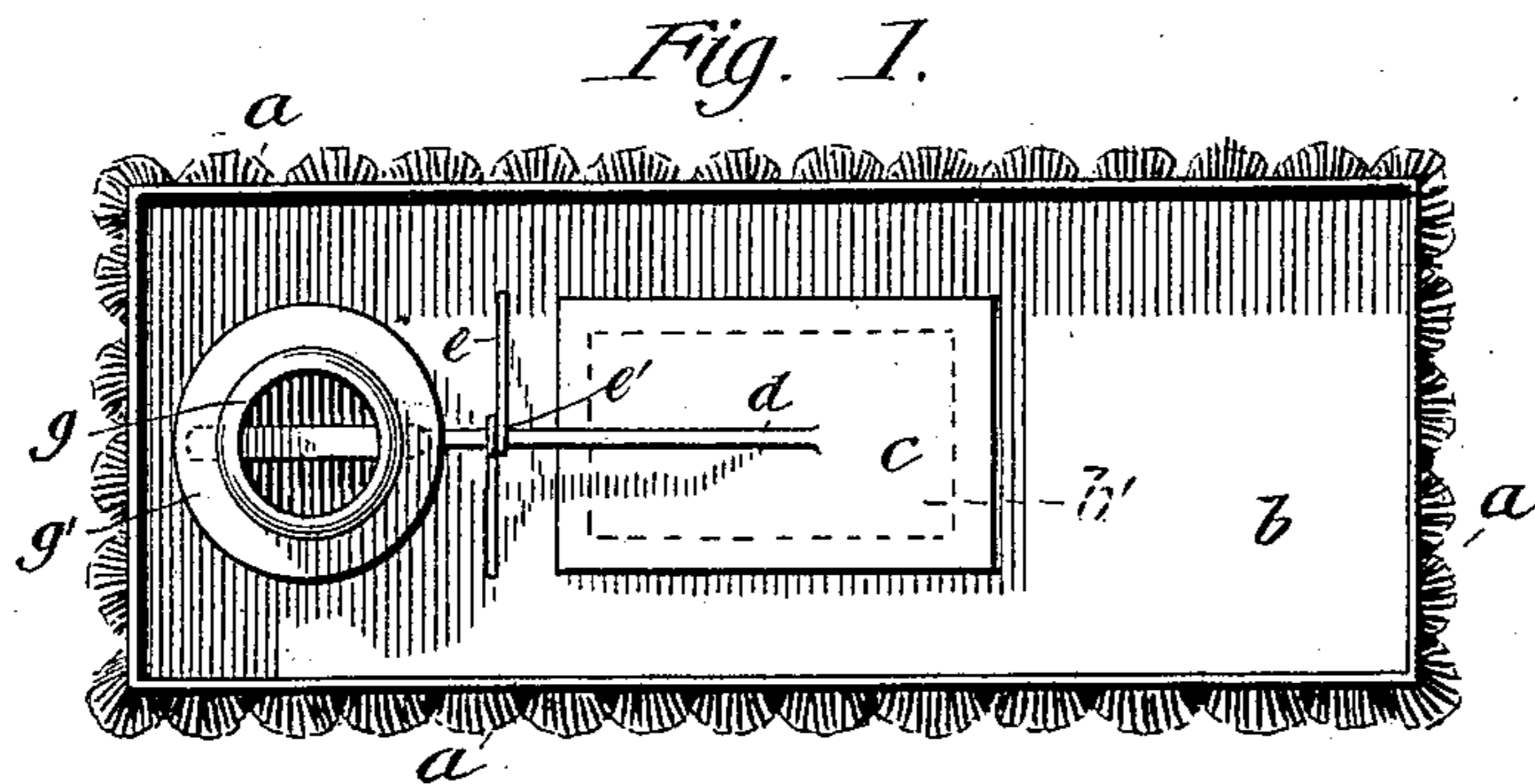


(No Model.)

J. C. ISRAEL.
PRINTER'S BRUSH.

No. 398,049.

Patented Feb. 19, 1889.



WITNESSES:

J. H. Clark.
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UNITED STATES PATENT OFFICE.

JOSEPH C. ISRAEL, OF NEW YORK, N. Y.

PRINTER'S BRUSH.

SPECIFICATION forming part of Letters Patent No. 398,049, dated February 19, 1889.

Application filed July 9, 1888. Serial No. 279,406. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH C. ISRAEL, of the city, county, and State of New York, have invented a new and Improved Printer's Brush, of which the following is a full, clear, and exact description.

The invention relates to that form of brushes in which a liquid-containing vessel or compartment is arranged on the top or back of the brush, and provided with a valve devised to allow small quantities of the liquid to be delivered to the bristles through the bristle-holding apertures.

The object of the invention is to provide a brush of this character especially adapted for printers' use in cleaning the forms with benzine.

The invention consists in the novel construction and combination of parts, hereinafter particularly described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view with the cover of the benzine-chamber removed. Fig. 2 is a longitudinal vertical sectional elevation, the cover of the benzine-chamber being in place; and Fig. 3 is a detail view, partly in section and on an enlarged scale, of the tube, cap, washer, spring, and valve-operating lever.

The brush may be of the usual or any approved form of printer's brush, including the bristles *a* and back *a'*, in the apertures *a²* of which the bristles are secured in the ordinary manner. Secured to the back *a'* of the brush is a benzine chamber or receptacle, *b*, formed, preferably, of tin, the bottom of said receptacle having an opening, *b'*, for the escape of the benzine to the brush-bristles through those apertures *a²* of the brush coincident with the said opening *b'*. The opening *b'* is normally closed by a flat plate or valve, *c*, on the bottom of which is a cork or other soft substance, *c'*, that will effect a complete closure of the opening *b'*. The plate or valve *c* is secured to one end of an operating rod or lever, *d*, that is fulcrumed at about its center in the loop *e'* of the elevated support *e*, the ends of which are soldered or otherwise fastened to the bottom of the receptacle *b*. The operating rod or lever *d* passes through the upper end of a spiral spring, *f*, or its equivalent,

and on the said rod, around the upper end of the spring *f*, is fixedly secured a neck or short section of tube, *g*, through which the receptacle is supplied with benzine. The top of the tube or neck *g* extends above the cover *b²* of the receptacle, and it is closed by a screw-cap, *h*, and below the cover *b²* the tube or neck *g* is provided with a collar or washer, *g'*, of cork or other suitable material for preventing leakage of the benzine when the brush is inverted or overturned.

In operation, the receptacle having been supplied with benzine, the desired quantity is supplied to the bristles by depressing the cap *b*, which causes the rod *d* to raise the plate or valve *c* and allow the escape of the benzine. Upon relieving the pressure on cap *b* the spring *f* returns the plate *c* to its seat over the opening *b'*, and also forces the collar or washer *g'* to a bearing against the under side of the cover *b²*, thereby effectually preventing the escape of the benzine, no matter in what position the brush may be placed.

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

1. The combination, with a brush, of a liquid-receptacle secured to the back thereof and formed with an opening in its bottom, a valve-plate secured to one end of a fulcrumed operating-rod and arranged to close said opening, a spring at the opposite end of said rod, and a capped tube held to the said spring and to the valve-rod and projecting above the cover of the receptacle, substantially as shown and described.

2. The combination, with a brush, of a liquid-receptacle secured to the back of said brush and formed with an opening in its bottom, a valve-plate located at said opening and provided with a softer material, as cork, on its under side, a fulcrumed operating-rod secured at one end to said plate, a spring at the opposite end of said rod, a tube held to the upper end of said spring and to the valve-rod, and provided with a washer or collar of soft material, as cork, below the cover of the receptacle, and a screw-cap on the said tube above the said cover, substantially as described.

JOSEPH C. ISRAEL.

Witnesses:

WILLIAM STERN,
HENRY SCHULTZ.