C. PEASE. Bottle Washer.

No. 238,306.

Patented March 1, 1881.

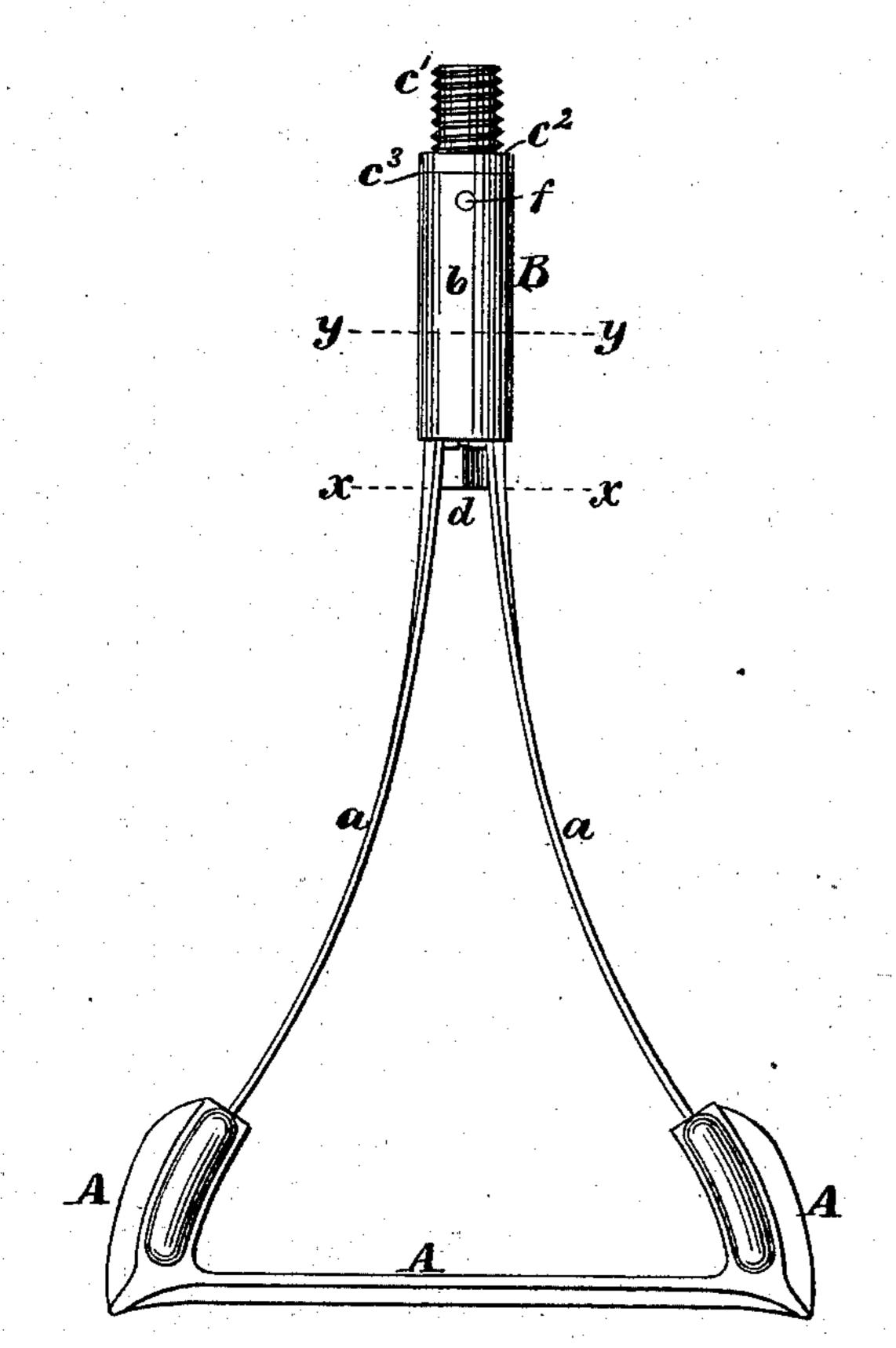


Fig.1.

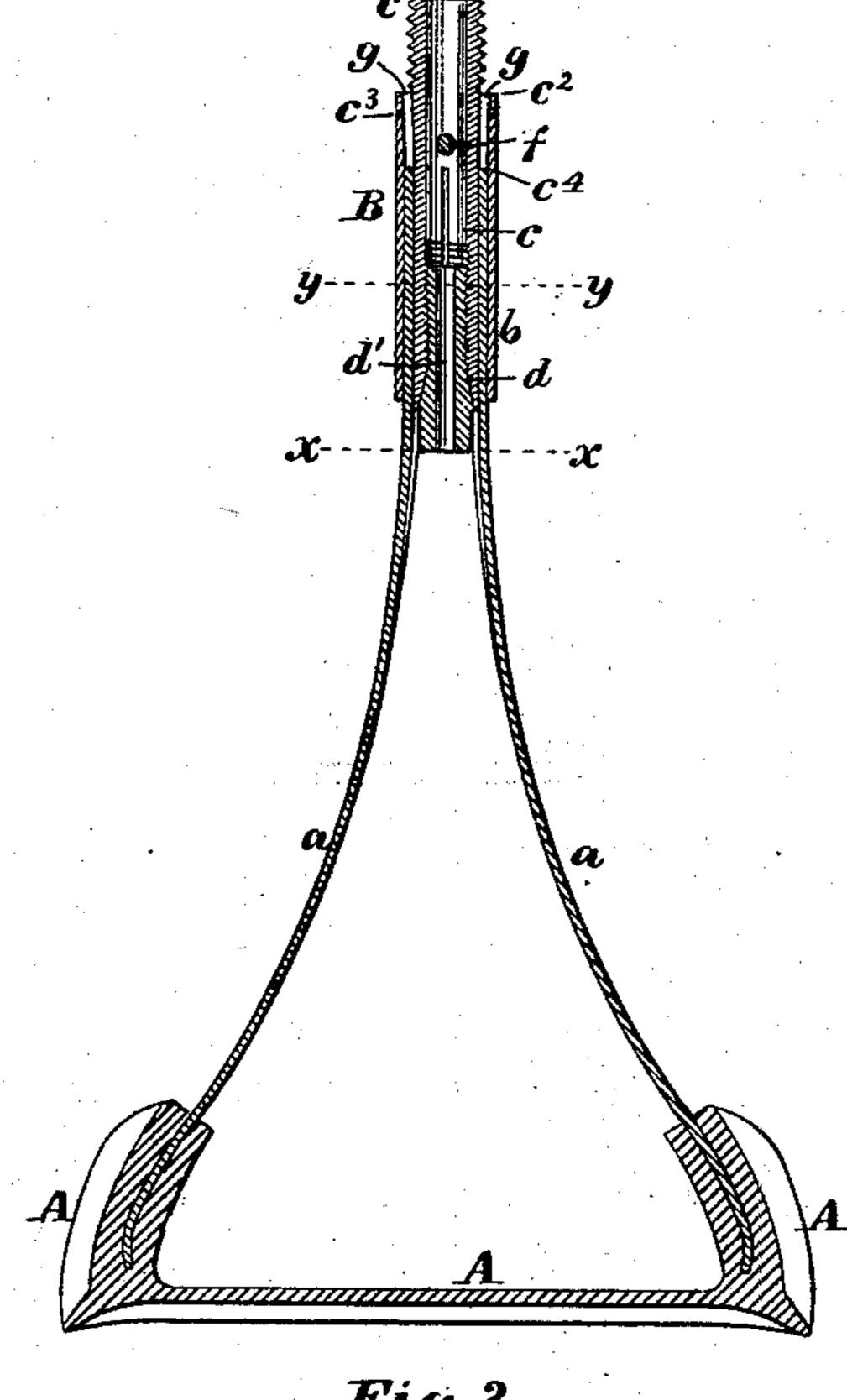


Fig.2.

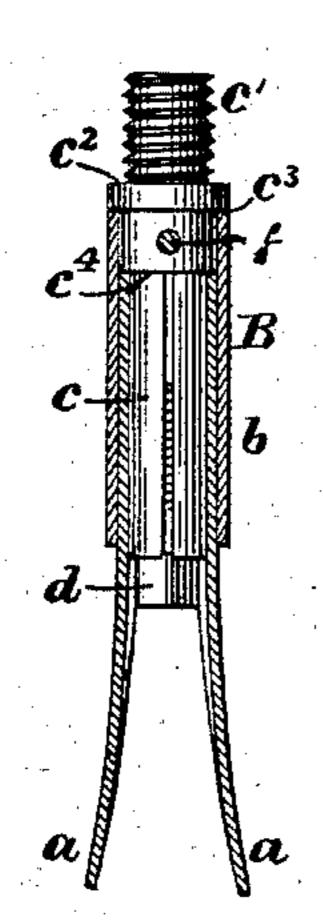


Fig. 3.

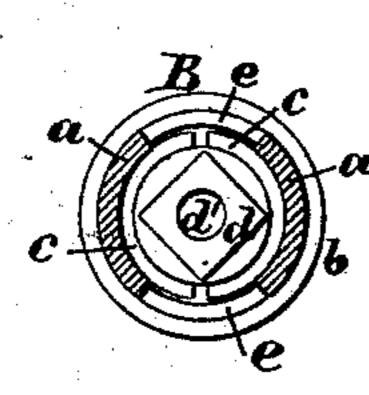


Fig.4.

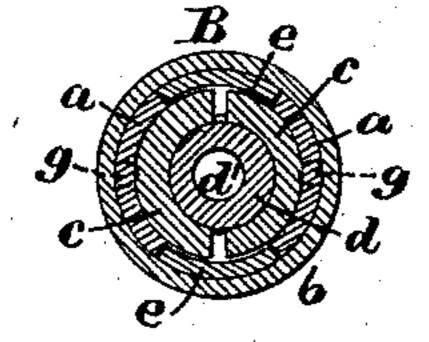


Fig. 5.

Witnesses:

6 A. Hemmenway. Halter & Lombard.

Inventor: Charles Pease by No Lombard. Attorney.

United States Patent Office.

CHARLES PEASE, OF LYNN, MASSACHUSETTS, ASSIGNOR TO JOSEPH M. HOYT, OF SAME PLACE.

BOTTLE-WASHER.

SPECIFICATION forming part of Letters Patent No. 238,306, dated March 1, 1881.

Application filed January 6, 1881. (No model.)

To all whom it may concern:

Be it known that I, CHARLES PEASE, of Lynn, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Brush-Holders for Bottle-Washers, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to the construction of brush-holders for bottle-washers, and is especially adapted for use in connection with the rubber brush described in Letters Patent No. 213,583, granted to Miles and Lovett March 25, 1879, and is an improvement upon the

15 brush-holder therein described.

My invention consists in novel means for securing the spring-arms which carry the rubber brush to the tubular hub or shaft, which will be readily understood by reference to the description of the drawings, in which—

Figure 1 is a side elevation of a brush and holder embodying my invention. Fig. 2 is a central longitudinal section. Fig. 3 is a partial longitudinal section, showing the inner split tube in elevation. Fig. 4 is a transverse section on line x on Figs. 1 and 2, drawn to an enlarged scale; and Fig. 5 is a transverse section on line y y on Figs. 1 and 2, also enlarged.

A is the rubber brush applied to the outer expanded ends of the springs a a, substantially as shown and described in the patent of Miles and Lovett, before cited. These spring-arms a a are made from sheet-steel, and a portion of the length of each, at the end opposite the rubber brush A, is swaged, so as to curve it transversely, and give it the shape in cross-section of a segment of a tube, as shown in Figs. 4 and 5. These curved ends of the spring-arms a a are inserted in correspondingly-shaped sockets in the chuck B, composed of the outer tube, b, the inner split tube, c, and the conical-shouldered screw d. The tube c is provided at one end with the

45 male screw-thread c', by which it coupled to the tubular shaft of the machine, and with the shoulders c^2 , c^3 , and c^4 , (shown in Fig. 3,) and has formed in its interior, at the opposite

end, a female screw-thread to receive the screw d, the mouth of said end of the tube being 50 beveled to fit the conical shoulder of the screw d, as shown. The tube c is bifurcated or divided from its conical mouth to the shoulder c^4 , so that the inward movement of the screw d, after its conical shoulder comes in contact 55 with the conical mouth of said tube, will cause the two parts of the tube to be forced outward against the inclosed portions of the springarms a a, and gripe them between them and the outer tube, b. The tube b has brazed or 60 otherwise secured to its inner surface two segmental guide-pieces, e e, upon opposite sides thereof, as a means of locating the arms a aopposite each other. These pieces ee, instead of being attached to the outer tube, may be 65 secured to or from a part of the inner tube, c, in which case the slit which divides said tube would extend through each of said guidepieces. The screw d has drilled longitudinally through it the hole d', through which the wa- 70 ter for washing passes from the rotating tubular shaft (not shown) to the brush and the interior of the bottle. The outer tube, b, extends over the inner tube to the shoulder c^3 , and is secured thereto by the pin f.

g g are holes through which a tool may be inserted to drive out the arms a a, in case of breakage, close up to the end of the chuck B.

What I claim as new, and desire to secure by Letters Patent of the United States, is— 80

1. A chuck composed of the outer tube, b, the inner bifurcated tube, c, and the conically-shouldered screw d, all combined, arranged, and adapted to operate substantially as and for the purposes described.

2. The combination of the outer tube, b, the inner bifurcated tube, c, the spring-arms a a, the rubber brush A, and the conically-shouldered screw d, all arranged and adapted to operate substantially as described.

Executed at Lynn, Massachusetts, this 3d day of January, A. D. 1881.

CHARLES PEASE.

Witnesses:

S. R. ROGERS, CHARLES HEALEY.