

(No Model.)

J. M. HOYT.

BRUSH HOLDER FOR BOTTLE WASHING MACHINES.

No. 337,332.

Patented Mar. 2, 1886.

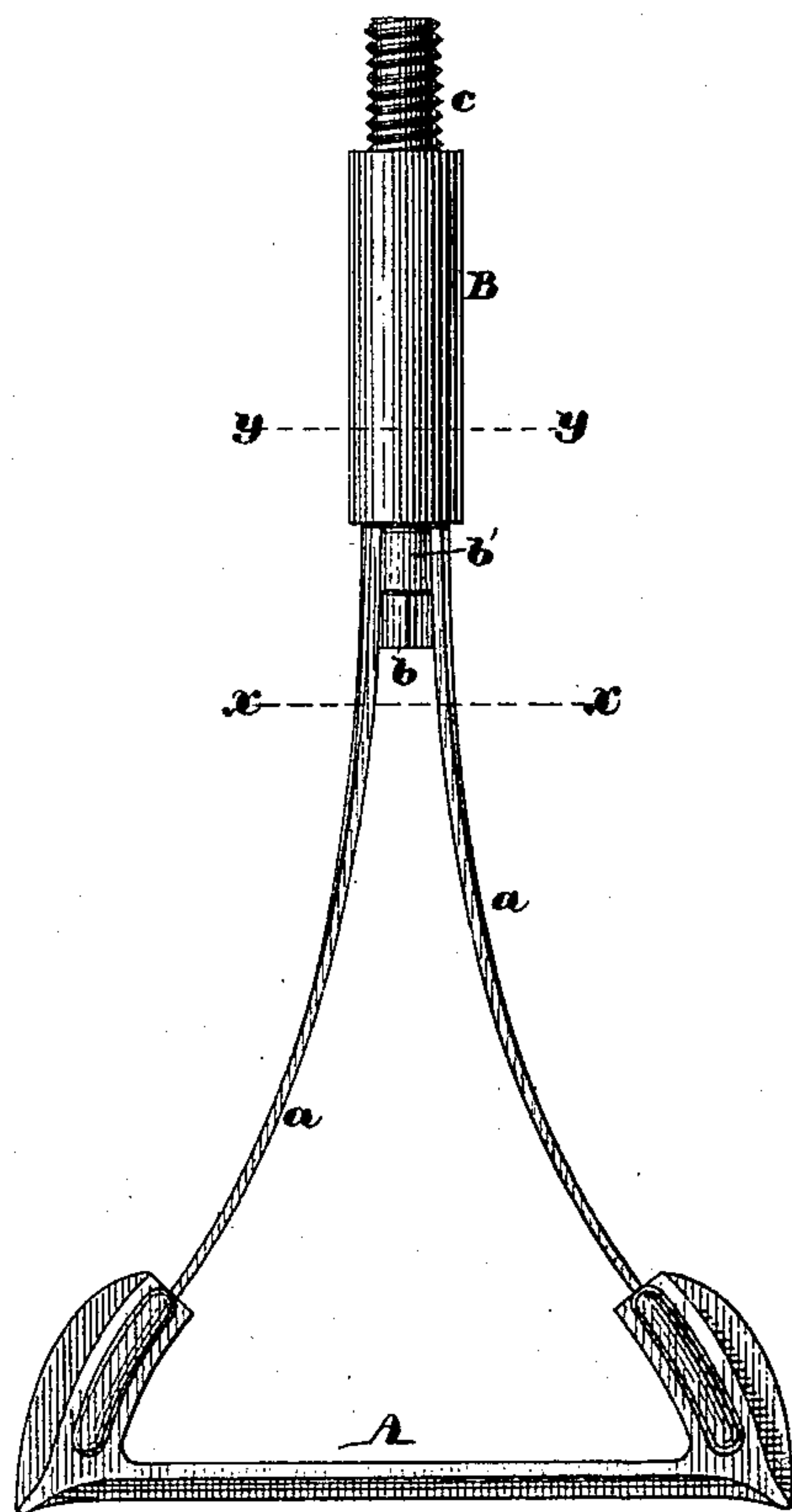


Fig. 1.

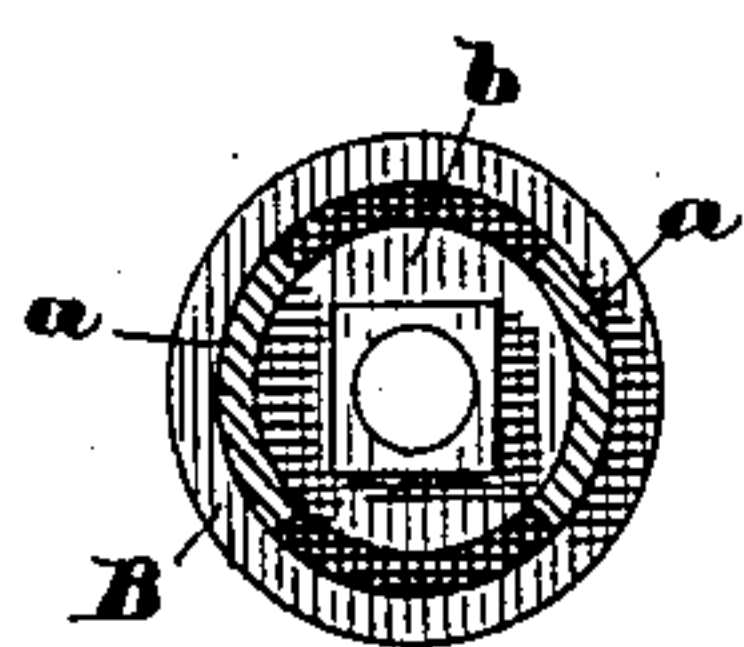


Fig. 3.

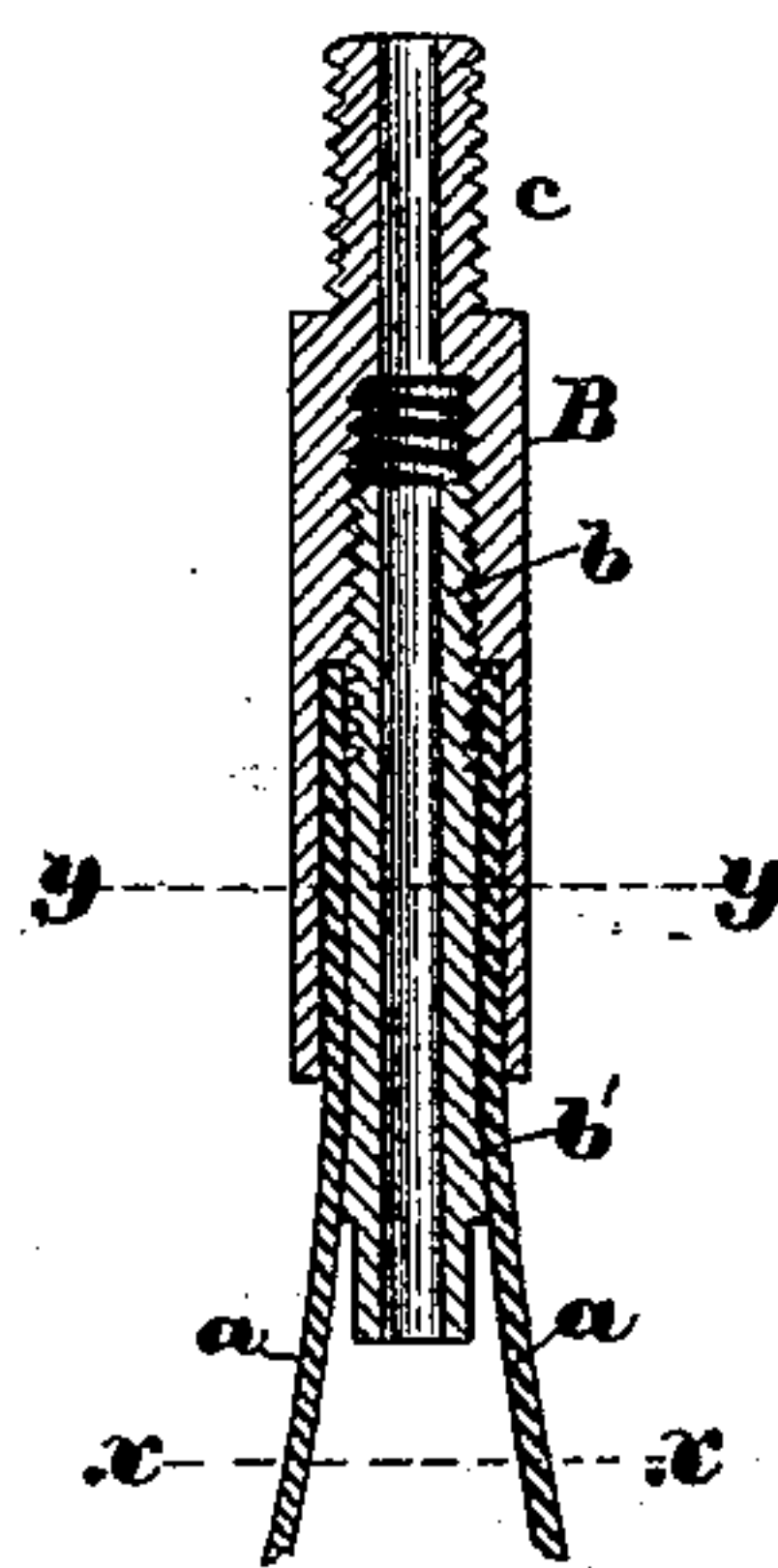


Fig. 2.

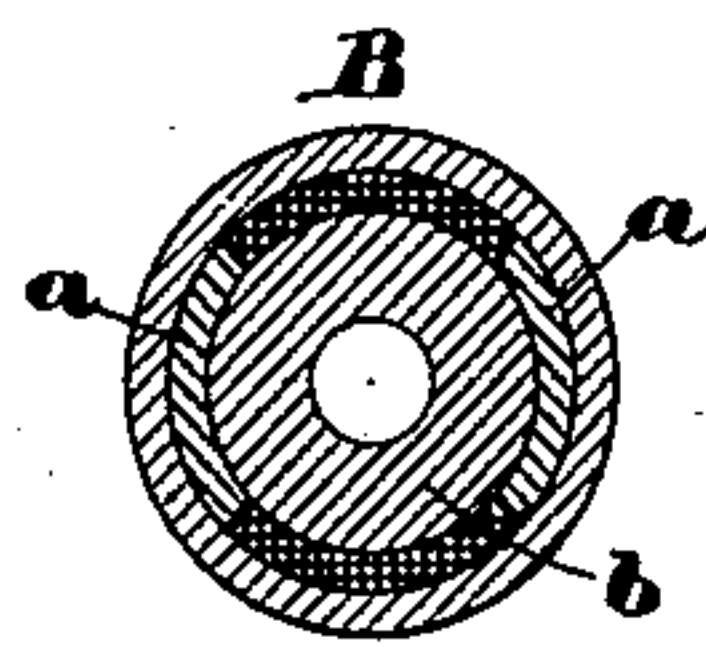


Fig. 4.

Witnesses:

Walter E. Lombard.
Frank C. Gray.

Inventor:

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UNITED STATES PATENT OFFICE.

JOSEPH M. HOYT, OF LYNN, MASSACHUSETTS, ASSIGNOR TO HOYT BROTHERS & CO., OF SAME PLACE.

BRUSH-HOLDER FOR BOTTLE-WASHING MACHINES.

SPECIFICATION forming part of Letters Patent No. 337,332, dated March 2, 1886.

Application filed August 29, 1885. Serial No. 175,625. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH M. HOYT, of Lynn, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Brush-Holders for Bottle-Washing-Machines, 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 an improvement upon the invention shown and described in the Letters Patent No. 238,306, granted to Charles Pease, March 1, 1881; and it consists in an improved 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 of so much of the same as is necessary to illustrate my invention. Fig. 3 is a transverse section on line *x x* on Figs. 1 and 2, drawn to an enlarged scale; and Fig. 4 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 spring-arms *a a*, substantially as shown and described in Letters Patent No. 213,583, granted to Miles and Lovett, March 25, 1879. These spring-arms *a a* are constructed substantially as described in the before-cited patent to Pease.

B is the main body or shell of the chuck, made in the form of a tube, the bore of which has three different diameters, the largest of which extends through about one-half of the length of the chuck. The middle section is threaded to receive the threaded end of the tubular clamping-core *b*, and the other section has a small smooth hole drilled through it to permit the passage of water through the chuck to the interior of the bottle. The shell B upon that end thereof which has the smallest bore is provided with the threaded stem *c*, by which said shell is connected to the end of the tubular shaft of the machine.

The ends of the arms *a a*, which are curved transversely, are inserted in the larger bore

of the shell B, with their ends touching the bottom or inner end of said larger bore, and the core *b* is screwed into the threaded portion of the bore till its frusto-conical portion *b'* forces the two arms *a a* hard against the inner surface of the shell B and clamps them firmly thereto. By this construction the cost of the brush-holders is very materially reduced, as is also the cost of repairs in case of breakage, as it has been often found quite difficult to remove a broken spring from the sockets or chucks constructed as described in the Pease patent, owing to their becoming corroded to such an extent as to render it almost or quite impossible to drive them out by means of any tool sufficiently small to pass through the small holes provided for that purpose, which difficulty is entirely overcome by my improvement, as when the core *b* is removed the springs *a a* are unsupported upon their inner sides and can be easily pushed inward away from the shell B.

Another advantage of my improved construction is that by dispensing with the inner tube of Pease's patent I am enabled to make the shell thicker, and therefore more durable, than when the inner split tube was used.

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

In a bottle-washer, the combination, with the spring-arms *a a*, for holding the rubber brush A, of the shell B, having a chamber to receive said arms and extending inward about one-half the length of said shell, and a female threaded chamber extending beyond said first-mentioned chamber, and the tubular core *b*, provided with the frusto conical section *b'*, and with a male screw-thread, all arranged and adapted to operate substantially as and for the purposes described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 27th day of August, A. D. 1885.

JOSEPH M. HOYT.

Witnesses:

WALTER E. LOMBARD,
FRANK E. BRAY.