(No Model.)

P. A. BENNETT.

BOTTLE WASHER.

No. 355,054. Patented Dec. 28, 1886.

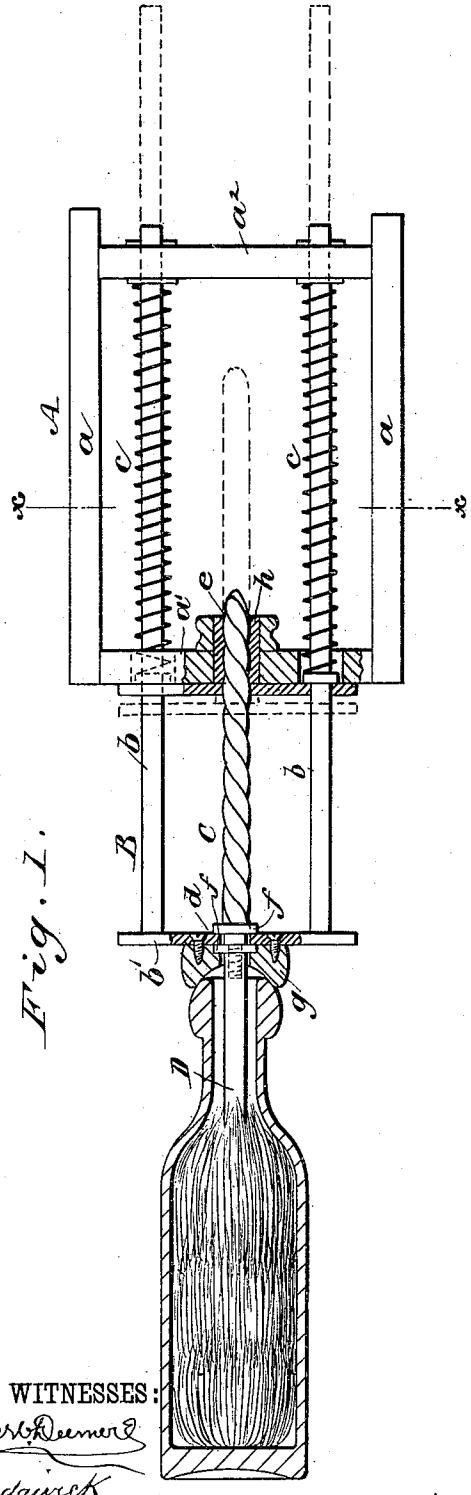


Fig. 1.

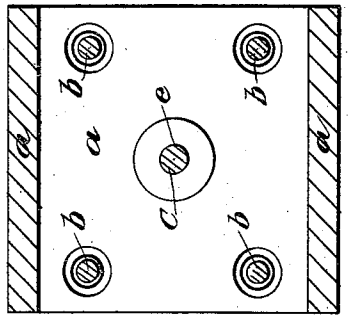


Fig. 2.

WITNESSES:

John W. Dennett

C. Sedgwick

INVENTOR:

P. A. Bennett

BY Munn & Co

ATTORNEYS.

N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

PETER A. BENNETT, OF NEW YORK, N. Y.

BOTTLE-WASHER.

SPECIFICATION forming part of Letters Patent No. 355,054, dated December 28, 1886.

Application filed February 25, 1886. Serial No. 193,232. (No model.)

To all whom it may concern:

Be it known that I, PETER A. BENNETT, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Bottle-Washer, of which the following is a full, clear, and exact description.

My invention relates to an apparatus for washing the interior of bottles with a brush; and the invention consists, principally, of the combination, with a suitable frame, of a spiral spindle to which the brush is attached, the spindle being adapted to be moved longitudinally in a suitable apertured plate or sleeve for causing it and the brush attached to it to revolve axially.

The invention also consists of the special construction of the apparatus, the same including a fixed and a spring-actuated sliding frame carrying the spiral spindle, all as hereinafter described and claimed.

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 both the figures.

Figure 1 is a partly-sectional plan view of my new and improved bottle-washing apparatus, showing a bottle applied to the brush, and Fig. 2 is a sectional view taken on the line *x x* of Fig. 1.

A represents the main frame of the apparatus, composed of the top and bottom pieces, *a a*, and the end pieces, *a' a²*. In the main frame A is held the sliding frame B. This is composed of the rods *b b* and outer plate, *b'*, attached to the rods. The rods *b* pass loosely through openings made in the end pieces, *a' a²*, of the main frame A, and upon each rod is placed a coiled spring, *c*, which normally holds the frame B forced outward, as shown in full lines in Fig. 1, but which permit said frame to be forced inward to the position shown in dotted lines.

In an opening, *d*, in the plate *b'* of the sliding frame, and an opening, *e*, in the plate *a'* of the main frame, is held loosely the spiral spindle C, which is held to the plate *b'* by the two collars *f*, placed on the spindle, one each side of the plate, so the spindle will move longitudinally when the sliding frame is reciprocated or moved to and from the main frame A. The opening *d*, for the outer end of the spiral spindle, is a plain circular opening and forms a journal for the spindle, while the opening *e* is a threaded opening shaped to fit the spiral portion of the spindle, so that as the spindle is reciprocated it will cause it to revolve in one direction when the frame B and spindle are forced inward, and in the opposite direction when forced outward by the action of the springs *c*. The brush D is attached to the outer end of the spindle C, so that the rotary motion of the latter is communicated to the brush. Secured to the outer surface of the plate *b'*, around the aperture *d*, is the annular and concaved block or cushion *g*, against which the neck of the bottle to be washed is to be placed, so the bottle will not come in contact with the plate *b'*, nor with the outer collar, *f*, on the spindle C. The opening *e*, through which the spindle C passes, is by preference lined with a sleeve or bushing, *h*, which may be easily replaced in case of wear; and the outer end of the spindle is screw-threaded, as shown at *c'*, to enter a screw-threaded socket formed in the end of the spindle of the brush D, so the brush may be easily attached to and removed from the spiral spindle.

In use the bottle to be washed will be slipped upon the brush D, and the nose of the bottle placed squarely against the block *g*, and then the bottle will be pressed forward, which will shove the frame B to the position shown in dotted lines, and force the spiral spindle C through the opening *e*, which will cause the spindle to revolve the brush within the bottle. The longitudinal movement of the frame B compresses the springs *c*, so that as soon as the bottle is relieved of forward pressure the spring will force the frame B and the spiral spindle C outward, which will cause the spiral spindle to revolve the brush D in the opposite direction within the bottle. The reciprocating movement of the frame B and bottle thus not only reciprocates but revolves the brush D, and this movement may be repeated as often and as rapidly as required for cleaning the bottle.

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

1. An apparatus for washing bottles, comprising a stationary frame having a fixed bush-

ing, *h*, a sliding frame, and a longitudinally-moving spiral spindle journaled in the sliding frame to move longitudinally therewith, the spiral portion of the spindle passing through the fixed bushing, substantially as described.

2. In a bottle-washing apparatus, the sliding frame B, composed of the rods *b* and plate *b'*, frame A, holding the rods *b*, and the coiled springs *c*, placed thereon, in combination with the spiral spindle C, held by the plate *b'* at its outer end and passed through the opening *e* in the main frame, the opening *e* being made to fit the spiral spindle, substantially as and for the purposes set forth.

PETER A. BENNETT.

Witnesses:
MICHL. BENNETT,
J. J. BENNETT.