

F. SCHLICH & J. KOSTER.
 Bottle-Washing Apparatus.

No. 162,771

Patented May 4, 1875.

Fig. 2.

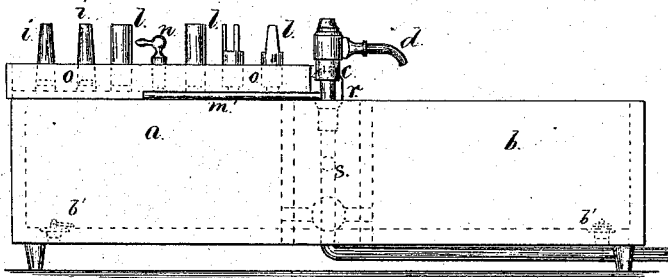


Fig. 3.

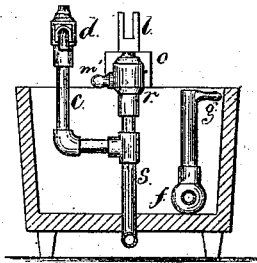
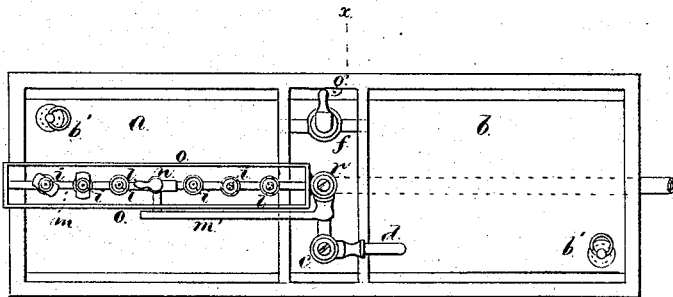


Fig. 1.



Witnesses

Charles Smith
Geo. D. Pinchney

Inventors

Frederick Schlich
John Koster
 per *Lemuel W. Serrell*

att'y

UNITED STATES PATENT OFFICE.

FREDRICH SCHLICH AND JOHN KOSTER, OF NEW YORK, N. Y.

IMPROVEMENT IN BOTTLE-WASHING APPARATUS.

Specification forming part of Letters Patent No. **162,771**, dated May 4, 1875; application filed October 17, 1874.

To all whom it may concern:

Be it known that we, FREDRICH SCHLICH and JOHN KOSTER, of the city and State of New York, have invented an Improvement in Apparatus for Washing Bottles, of which the following is a specification:

In Letters Patent No. 138,046, granted to said F. Schlich, an apparatus is described for washing bottles, and jets, in ranges, are used with a cock to direct the water through one set of jet-tubes while bottles are being placed over the other set of jet-tubes.

The present invention relates to a series of jet-tubes for washing out the insides of the bottles, in combination with tubs, in which the bottles are soaked and washed off, and with couplings that allow the jet-tubes to be moved from one tub to the other, so that the bottles can be soaked in one tub, and washed off upon the outside, and then the bottles are placed upon the nipples for washing out the insides. Other bottles are placed in the tub to be soaked, and the water used to wash out the bottles runs into the tub. The bottles are removed from the nipples, and then the apparatus is swung around over the next tub to receive the bottles that have been soaked therein. Thereby a saving is effected by employing the water that is used to wash out the insides of the bottles to wash off the outsides of the next lot of bottles, and time is saved by allowing the bottles to soak in one tub while bottles are being washed in another tub, removed and washed on the insides, and one set of washing-jets is available for two or more tubs, in which the bottles are washed on the outside.

In the drawing, Figure 1 is a plan of the apparatus. Fig. 2 is an elevation of the same, and Fig. 3 is a cross-section at the line *x x*.

The tubs *a* and *b* are provided with the ordinary waste or sewer pipes and plugs at *b'*, and with a supply water-pipe at *c*, which, pref-

erably, is made as a swinging bib or nozzle, *d*, that can be turned to deliver the water into either one tub or the other, or turned aside and stopped.

We also provide a pipe, *f*, running from one tub to the other, with a cock, *g*, so that water can be allowed to pass out of one tub into the other when at a higher level, and in this manner a saving of water will sometimes be effected.

The bottle-washing jets *i i* are each surrounded with the fingers, rings, cylinders, or other supports *l*, that hold the bottle in an inverted position, while the water is passing into the inside in a jet or spray for washing out the interior, and the water passes, by a pipe, *m*, and cock *n*, to either or both sides of the ranges of jet for washing, as in the aforesaid patent, and these jets may be more or less numerous, so as to receive any desired number of bottles, and the frame *o*, in which these bottle-washing nipples are sustained, can be swung around upon the coupling *r*, that unites the horizontal pipe *m'* with the vertical pipe *s*, so as to bring the bottle-washing apparatus over either one tub or the other, according to the convenience of the operator while washing the bottles, as aforesaid.

We claim as our invention—

The bottle-washing apparatus consisting of the tubs *a* and *b*, and ranges of nipples or jets and supply-pipes, arranged substantially as set forth, so that the washing jets can be placed over either one tub or the other, for the purposes specified.

Signed by us this 9th day of October, A. D. 1874.

FREDRICH SCHLICH.
JOHN KOSTER.

Witnesses:

GEO. T. PINCKNEY,
CHAS. H. SMITH.