

(No Model.)

H. L. JACOBS.
SINK OR ANALOGOUS ARTICLE.

No. 297,404.

Patented Apr. 22, 1884.

Fig 1.

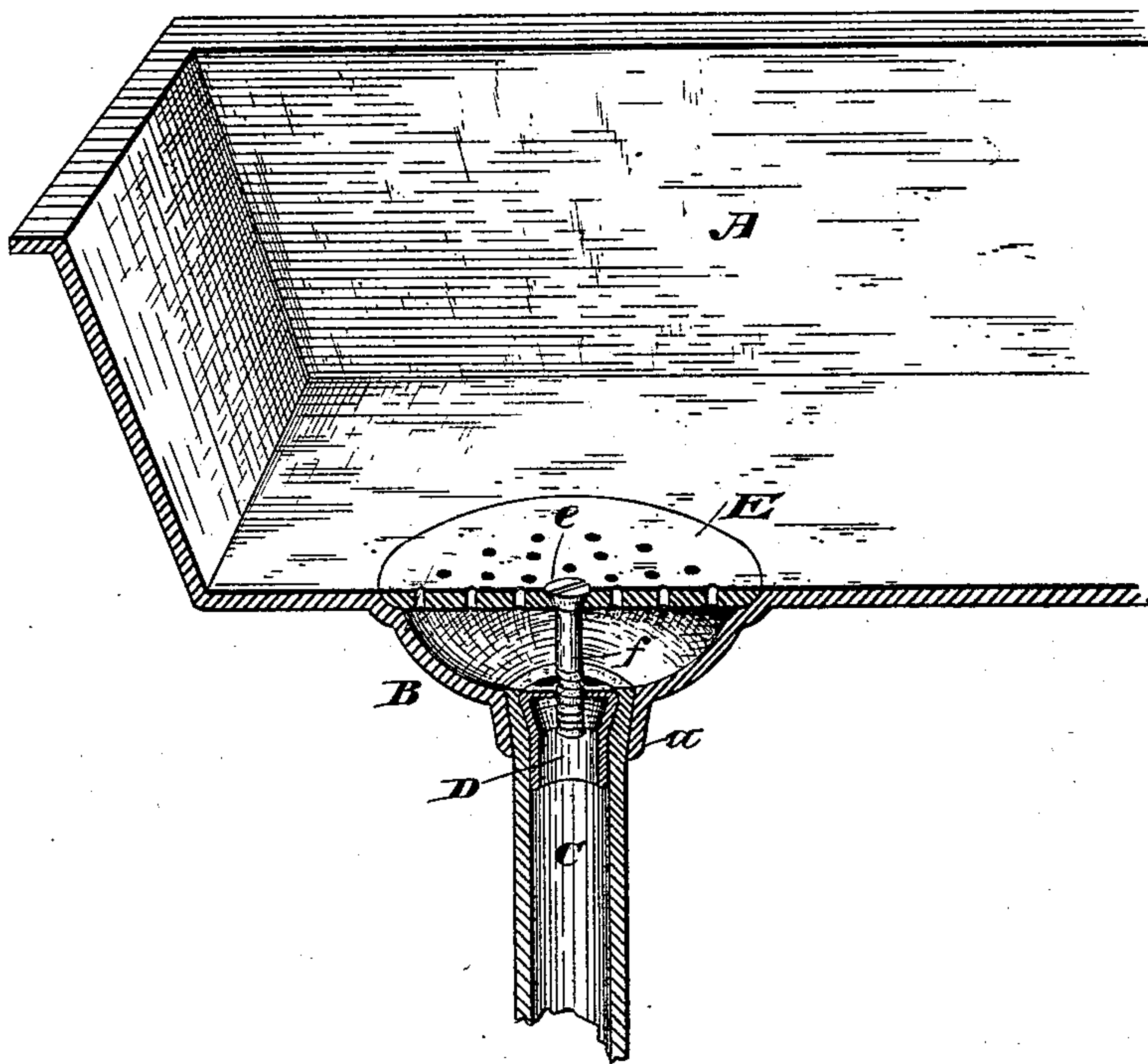


Fig. 3.

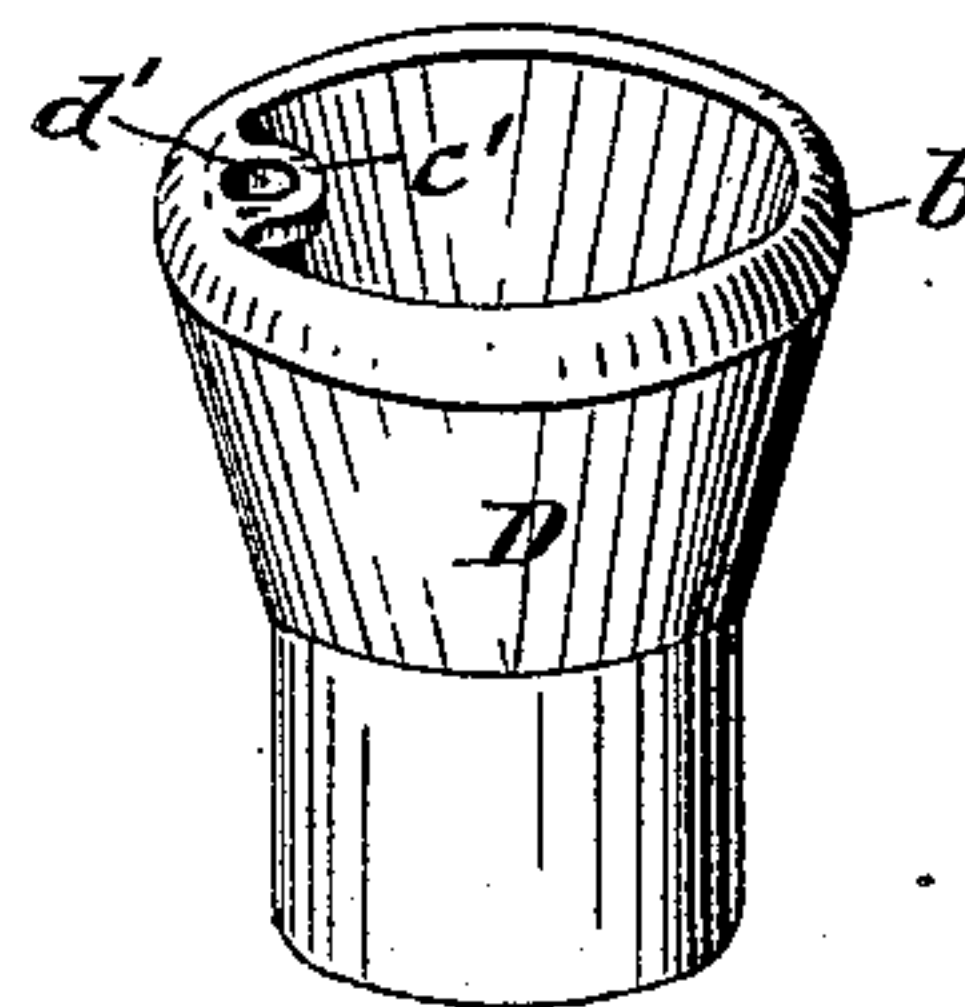
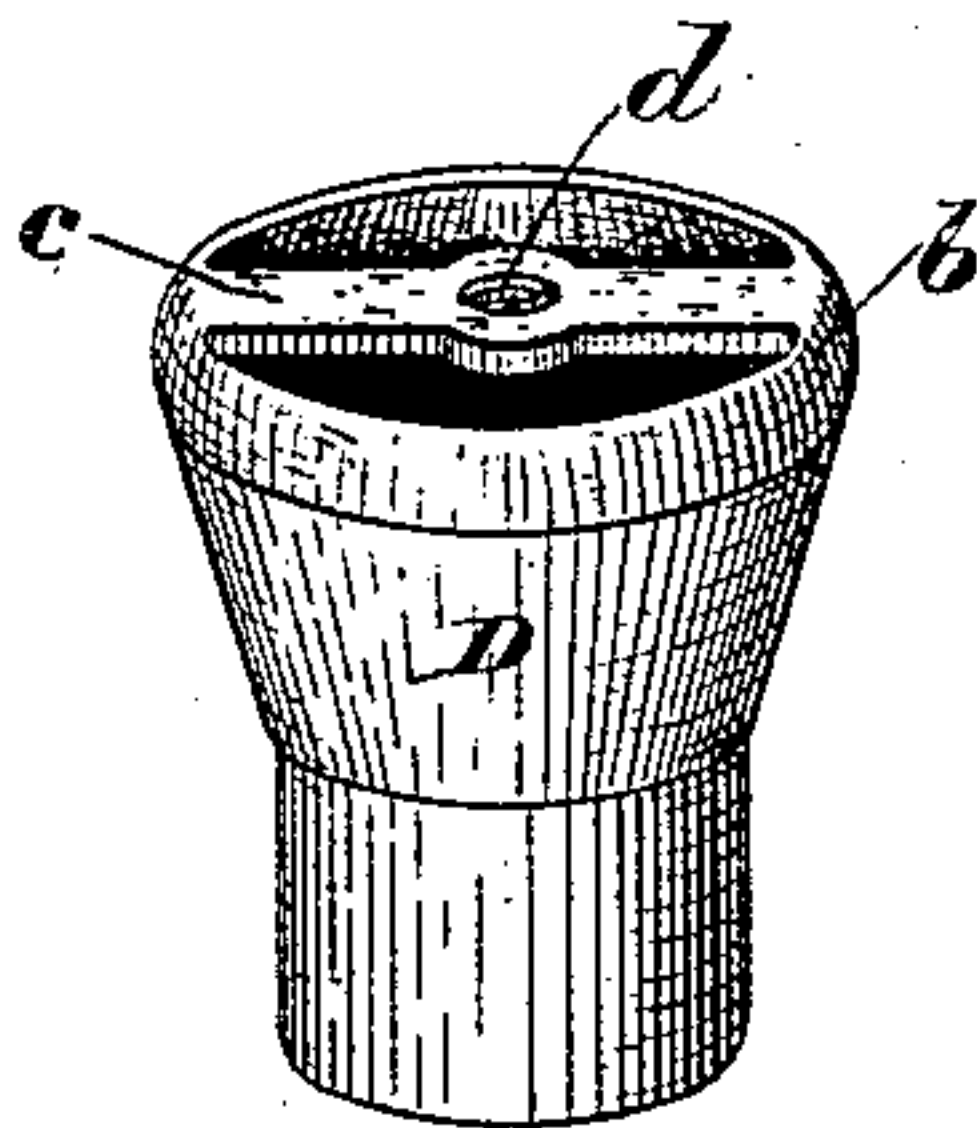


Fig 2.



Attest:

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UNITED STATES PATENT OFFICE.

HENRY L. JACOBS, OF COLUMBUS, OHIO.

SINK OR ANALOGOUS ARTICLE.

SPECIFICATION forming part of Letters Patent No. 297,404, dated April 22, 1884.

Application filed October 20, 1883. (No model.)

To all whom it may concern:

Be it known that I, HENRY L. JACOBS, of Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Sinks and Analogous Articles, of which the following is a specification.

This improvement, while designed more particularly for use in sinks, is also applicable to stationary wash-bowls, tanks, and the like provided with lead waste-pipes and strainers, and I desire to be understood as including this application in my claims.

The improvement is directed to means for more conveniently and securely attaching the pipe to the neck of the sink, and also to means for holding in place the strainer, which usually is placed in or on the bottom of the sink, over the pipe or opening leading thereto. Under my improvement I insert the pipe into the neck, and then drive into the upper end of the pipe a tubular ferrule of externally conical or tapering form, which acts as a wedge or expanding device to spread the upper end of the pipe and to clamp or bind it with the utmost security and tightness in place in the neck, the joint at the top being calked, in the manner well known to plumbers, by hammering down the projecting upper end of the pipe upon and around the upper end of the plug, which for this purpose has an external bevel. In this way the neck, the pipe, and the plug are held securely together. The ferrule or plug thus placed serves as a convenient means by which the strainer-plate can be held in place. For this purpose it is provided with a screw-threaded hole for reception of a binding-screw, which, after the strainer-plate is put in position over the opening in the sink, is inserted through a suitable hole in the plate, and is screwed down into the plug or ferrule. The parts are thus attached with simplicity and ease, there can be no leakage, and the strainer can be easily removed to clean the pipe.

The nature of my invention and the manner in which the same is or may be carried into effect will be readily understood by reference to the accompanying drawings, in which—

Figure 1 is a sectional perspective view of a sink embodying my improvement, the line

of section passing vertically and axially through the neck. Fig. 2 is a perspective view of the ferrule or plug detached. Fig. 3 is a like view of a modification hereinafter referred to.

A is the sink, and B is the neck thereof. The lower tubular portion of the neck B is by preference slightly tapering or conical, as seen at *a*.

C represents the lead pipe, which is to be connected to the neck B.

D is the tubular ferrule or plug by which the pipe is fastened in place.

The upper end of the pipe is first inserted in the part *a* of the neck. While the pipe is in this position the plug D, which has a somewhat tapering form, preferably as shown, is inserted into it from above, and is then driven down into the neck, thus expanding and spreading the pipe against the flaring walls of the neck, and making a thoroughly tight and secure joint between the two. In practice the pipe is inserted to such an extent in the neck that when the plug or ferrule is driven home the pipe will extend about a quarter of an inch above it. This protruding portion of the pipe is calked down so as to lap over upon the beveled upper portion, *b*, of the plug. This completes the operation.

The pipe is held tightly, firmly, and immovably in place, and the joint is entirely secure against leakage. As hereinbefore stated, the plug D thus placed can be conveniently used as a means to hold the strainer in place. For this purpose the plug, which preferably is made of malleable iron, is formed or provided on top with a screw-threaded hole or socket to receive the binding-screw of the strainer-plate. This socket can occupy any suitable position in the plug. It may, for instance, be made by providing the plug with a cross-bar, *c*, and by tapping therein a screw-threaded hole, *d*.

The strainer E is provided with a suitable hole, *e*, which, when the strainer is in place, stands vertically above hole *d*, and a screw, *f*, passing freely through hole *e* and screwed down into hole *d* in the cross-bar until its head brings up against the strainer, holds the latter securely in place, being at the same time readily removable, so that the strainer can conveniently be taken off whenever it is de-

sired to get at the plug or pipe below for any purpose.

In lieu of making use of a cross-bar, *c*, the hole can be tapped in a lug or ear, *c'*, of the plug, as indicated at *d'*, Fig. 3. The latter is the arrangement which, on the whole, I prefer.

At whatever point the hole is formed, the binding-screw *e* will of course pass through the strainer at a point over the said hole.

10 Having now described my improvement and the best way known to me of carrying the same into effect, what I claim as new and of my own invention is as follows:

1. The combination of the sink-neck, the 15 expanding plug or ferrule, and the pipe expanded and clamped against the interior walls of the neck by the ferrule, and calked down around and upon the upper portion of the

latter, as and for the purposes hereinbefore set forth.

2. The combination, with the body and neck 20 of the sink, of the pipe inserted in the neck, the tubular plug or ferrule inserted in the pipe so as to clamp the latter in place in the neck, the strainer, and the binding-screw passing 25 down through the said strainer into a screw-threaded hole or socket provided for it in the ferrule or plug, substantially as and for the purposes hereinbefore set forth.

In testimony whereof I have hereunto set 30 my hand this 20th day of April, A. D. 1883.

HENRY L. JACOBS.

Witnesses:

J. D. SULLIVAN,
J. C. RICHARDS.