J. E. White,

Casting Stench Traps.

No. 109,786. Patented Nov. 29. 1870.

Fig. 1.

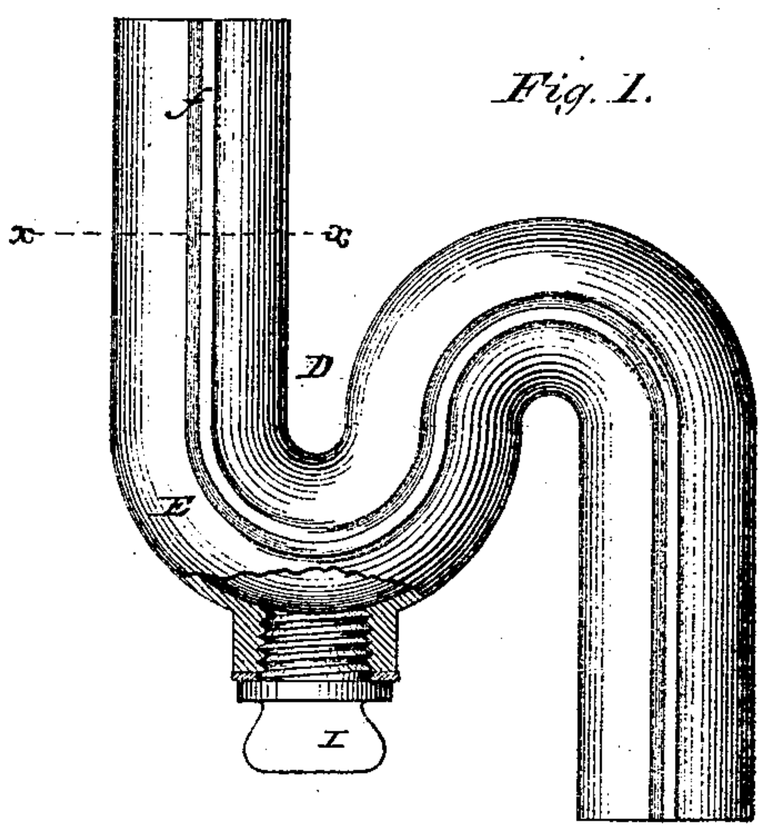


Fig. 2.

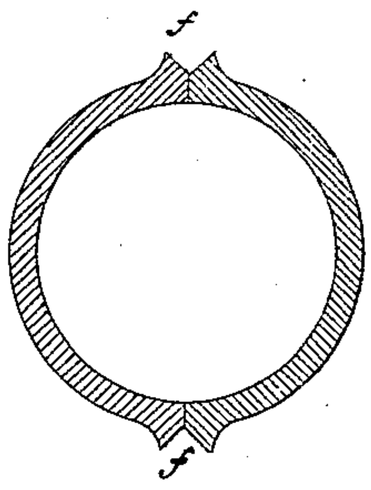


Fig. 3.

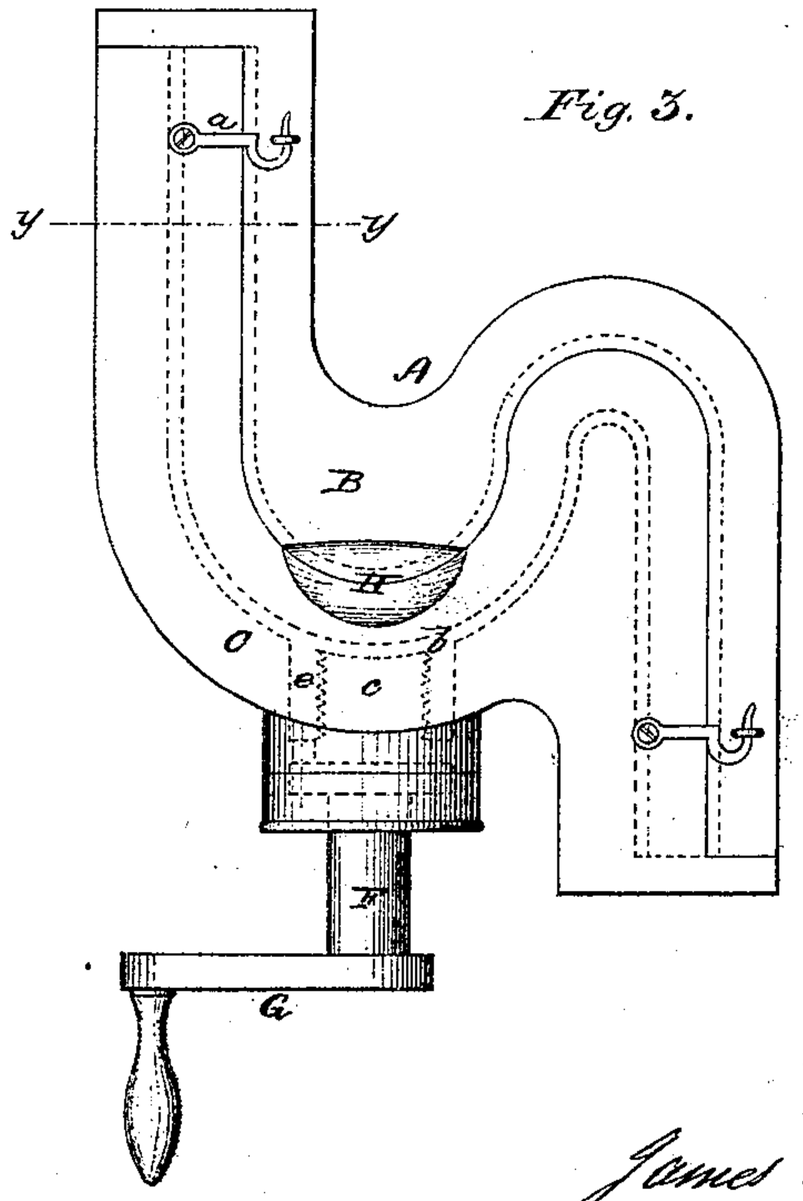
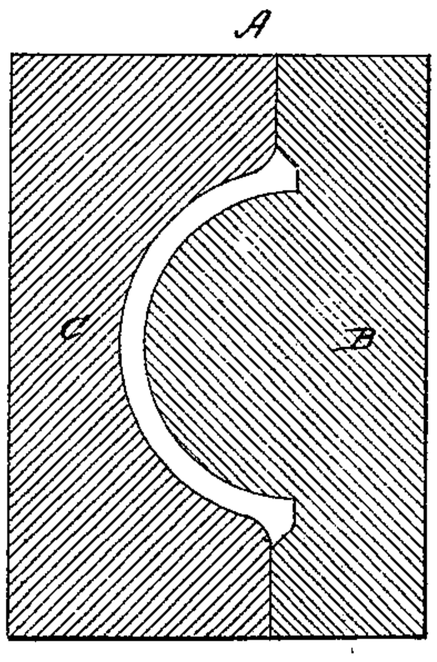


Fig. 4.



Witnesses:

Phil. T. Dodge

Wm. T. Hutchinson

Inventor

James E. White

by Dodge & Munn

his attys

UNITED STATES PATENT OFFICE.

JAMES E. WHITE, OF NEW YORK, N. Y., ASSIGNOR TO LOUIS A. CAUVET, OF SAME PLACE.

IMPROVEMENT IN CASTING STENCH-TRAPS.

Specification forming part of Letters Patent No. **109,786,** dated November 29, 1870.

To all whom it may concern:

Be it known that I, JAMES E. WHITE, of the city of New York, in the county of New York and State of New York, have invented certain Improvements in Stench-Traps for Water-Closets and similar purposes, of which the following is a specification, reference being had to the accompanying drawing.

My invention relates to stench-traps; and consists in constructing them in halves, with their edges so shaped that when united they will form an outer groove between the edges, in which any suitable metallic cement may be run for uniting them solidly together; also, in forming in the under or lower half, in the process of its construction, an opening with a screw-thread on its interior wall for the insertion of a screw-plug.

In the drawing, Figure 1 is a side view of the trap with a portion broken away. Fig. 2 is a cross-section on the line *x x* of Fig. 1. Fig. 3 is a top-plan view of the mold with its hollow space and screw dotted in, and Fig. 4 is a cross-section on the line *y y* of Fig. 3.

In the construction of the trap D two molds are used. In the drawing only one of the molds is shown, as the other is an obvious modification of it.

The mold A, Fig. 3, for casting or constructing the lower half, E, of the trap, consists of two parts, B and C, fastened together by hooks *a*, or other suitable devices. The part C has a semicircular concave depression or groove on its inner face, and the part B a semicircular convex corresponding projection, with their edges so shaped that when united there will be a space between them in its cross-section of the form clearly shown in Fig. 4. In that part of the mold designed to form the lower curve of the under half of the trap is a circular opening, *b*, and in this opening is placed the end *c* of a short shaft, F, arranged to turn freely, by means of a crank-handle, G, in bearings on the side of the mold, as clearly shown in Fig. 3. The end *c* of this shaft is of the requisite length to have its face on a line with and to rest against the inner face of the convex side of the mold, and also of the requisite diameter to leave an annular space, *e*, about it, and has cut upon it a screw-thread, all as clearly shown in said Fig. 3. In this mold, just over, or nearly so, the end *c* of the shaft F, is an opening H, for pouring in the metal to form the lower half of the trap.

The parts of the mold for forming the upper half are made in the same manner, except that there is no provision made for casting it with an opening for the insertion of a screw-plug. The molds for casting the parts of the trap are placed securely on work bench or table. The casting of the upper half and the removal of it from the mold are done in the usual manner; but in casting the lower half it will be seen that the metal fills the annular space about the end of the shaft F and the screw-thread thereon. To remove it, however, it is only necessary to turn the crank-handle G, when the screw on the shaft, turning in the thread formed about it on the interior of the opening in the casting, will at once force it from the mold, and in doing so will also perfect the screw-thread in its opening. The parts A and B of the trap, being thus cast, are now put together, when their edges will form a groove, *f*, between them of the shape clearly shown in Figs. 1 and 2, and are fastened solidly by running a metallic cement in this groove, of solder, or by using the process of burning together. In the opening in the lower bend of the trap a screw-plug, I, is then inserted, as clearly shown in Fig. 1.

As the trap is arranged for use, as shown in said Fig. 1, it will be seen that the plug affords a convenient recess to the lower curve of the trap for cleaning it out in case of fouling.

The material used in casting this trap is lead or some suitable composite metal.

Heretofore traps have been cast in one piece; but this has been found impracticable, for the reason that the curves did not admit of the uniform distribution of the metal; and they have also been cast in sections; but as the sections have not been so constructed as to form a groove along their line of union for convenience in soldering or burning the part solidly together, this method has been found expensive and inconvenient.

Traps have also been made of brass or similar metal, and have then been provided with an opening in their lower curve by boring and cutting through it, and then cutting on the inner wall of the opening a screw-thread for

the insertion of a screw-plug. These, however, I do not claim; but,

Having thus described my invention, what I do claim is—

1. The groove *f*, formed on the line of union of the two sections or halves of the trap by the projections along their edges, substantially as herein described, and for the purpose set forth.

2. The method of forming an opening with a screw-thread on its interior surface, in the lower curve of a cast-metal stench-trap, by the employment of a threaded core, adapted to be turned out, substantially as herein described.

JAMES E. WHITE.

Witnesses:
EDWARD DE ROSE,
LOUIS A. CAUVET.