

No. 733,475.

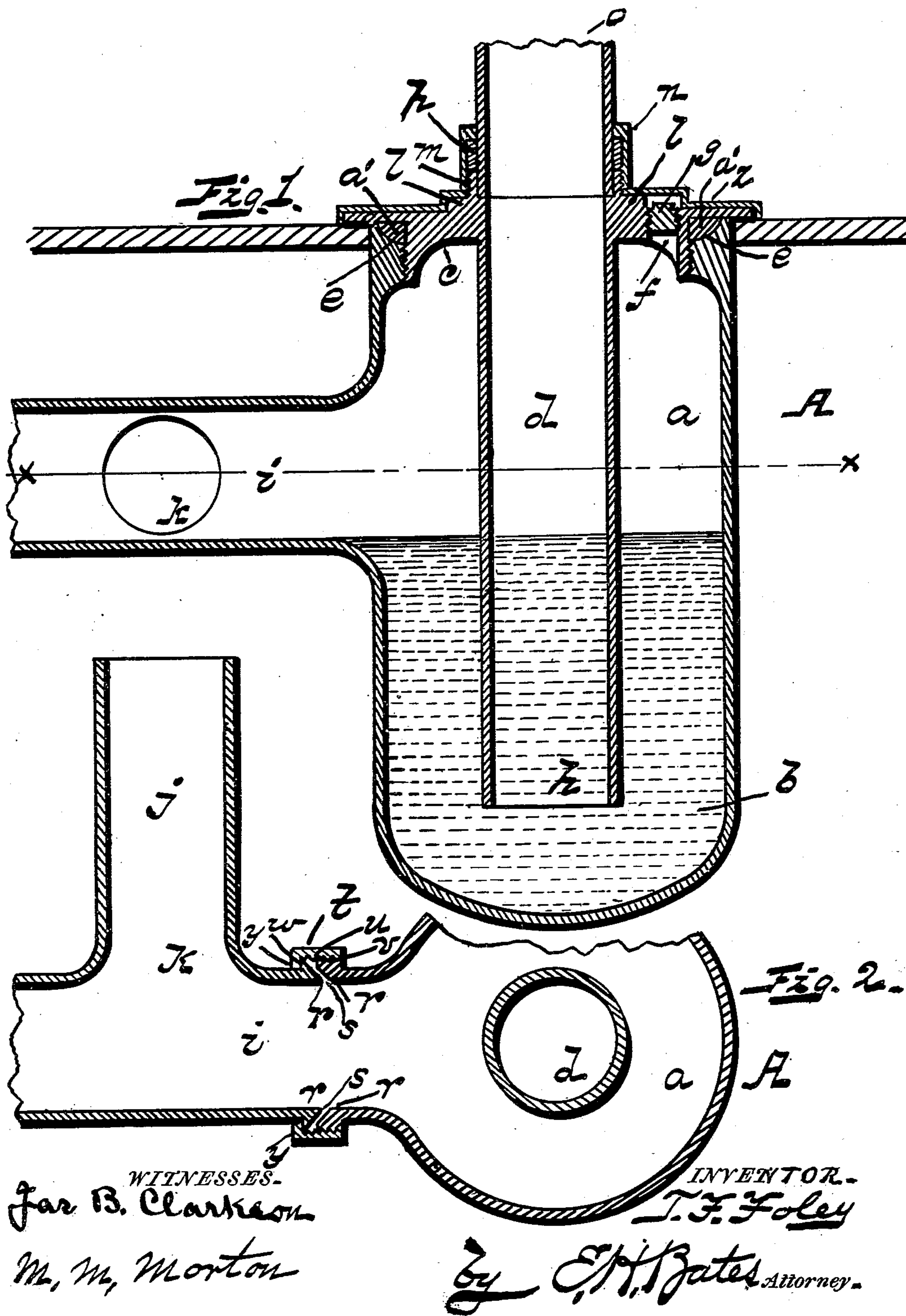
PATENTED JULY 14, 1903.

T. F. FOLEY.

TRAP.

APPLICATION FILED MAR. 11, 1903.

NO MODEL.



UNITED STATES PATENT OFFICE.

THOMAS F. FOLEY, OF WASHINGTON, DISTRICT OF COLUMBIA.

TRAP.

SPECIFICATION forming part of Letters Patent No. 733,475, dated July 14, 1903.

Application filed March 11, 1903. Serial No. 147,239. (No model.)

To all whom it may concern:

Be it known that I, THOMAS F. FOLEY, a citizen of the United States, residing at Washington, District of Columbia, have invented certain new and useful Improvements in Traps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to improvements in traps, and the device is designed to be used in connection with a bath-tub more particularly; and it consists in the novel construction, combination, and arrangement of parts, all as will be hereinafter more fully described, and particularly pointed out in the appended claim.

The annexed drawings, to which reference is made, fully illustrate my invention, in which—

Figure 1 represents a vertical sectional view of my improved trap; and Fig. 2 is a horizontal section view of the same, taken on line *x x*, Fig. 1.

Referring by letter to the accompanying drawings, A designates the trap, composed of the cylinder *a*, which is provided with the water *b* for forming an obstruction or seal against sewer-gases, a cover or top cap *c*, and an inner projecting pipe *d*, that forms a part of said cover. The upper end of the vessel or cylinder is provided with female screw-threads to receive the male threads of the cover, whereby said cover is screwed to its place in the top of the vessel. At the upper end of this vessel the same is provided with a circular groove *e*, in which a packing *a'* is placed, which packing is composed of rubber or other suitable material. This cover is further provided with an opening *f*, having female screw-threads to receive male threads on a plug *g*, said plug having a shouldered head for a wrench, as will be further explained. The projecting pipe *d* extends from the under side of the cover downwardly and into the water, the open end *h* thereof extending to within a short distance of the bottom of the vessel. This vessel is further provided with an outlet or waste pipe *i*, which is also provided with a lateral pipe *j*, that forms a vent for the trap. This pipe com-

municates with the outlet-pipe at *k* and is designed to be attached to the usual vertical pipe for carrying off any sewer-gases. On the top of the cover is provided a shouldered projection *l*, to which an ordinary wrench may be applied in screwing said cover to the vessel or removing it from the same.

m represents an annular flange which is arranged at the top of the cover and is provided with male screw-threads, to which is screwed a coupling *n*, by which the lower end of the waste-pipe *o*, leading from a bath-tub, is secured to the trap. Interposed between the upper portion of the coupling and the top of the annular flange is a packing *p*, which is forced in position as the coupling is screwed down and causes a tight joint at this point.

In connecting the top or cover to the bowl or vessel the packing is placed within the curved annular groove, and the cover is then screwed home, which causes the packing to expand and completely seal the joint thereof. At the same time the downwardly-projecting pipe enters the water sufficiently below the water-line and provides means whereby the sewer-gas is prevented from entering the vertical pipe *d* and passing through the bath-tub pipe and into the room or dwelling. At the same time the foul air or gases are carried off through the lateral pipe or vent and out of the building. This vent *j* is preferably constructed in one piece with the outlet or waste pipe *i* and bowl or vessel; but, if desirable, the waste-pipe, with its vent, may be constructed separately from the vessel, as shown in Fig. 2 of the drawings. The meeting ends *r r* of the waste-pipe have beveled faces *s s*, which when brought together by means of the coupling *t*, which is provided with female screw-threads *u*, that engage male threads *v* on the extension of the vessel. The opposite beveled end thereof is provided with an annular shoulder *w*, which engages the coupling by its annular flange *y*. Thus when the coupling is screwed home the two beveled ends form a tight joint or connection at this point.

In the cover is provided an opening *f*, which is female screw-threaded to receive a plug *g*, having male threads, whereby said opening is kept in a closed position except when it is desired to empty the vessel to prevent freez-

ing of said water. This is accomplished by removing the plug and inserting a suction-tube for drawing off the water without disarranging any of the other connections.

5 It will be observed from the above description when taken in connection with the annexed drawings that in screwing the cover of my trap down the packing is caused to wedge between said cover and the vessel, forming a
10 tight joint, and it will be seen that the cover can be readily removed for cleaning out or removing any obstruction in the waste-pipe and vessel or the vent-pipe. On the top of the cover is removably attached a plate or
15 shield *z*, which is designed to protect the top of the trap or cover from damage or injury temporarily.

It will be readily seen that my device is simple in construction and operation, not
20 liable to get out of order, and at the same time it is inexpensive to manufacture.

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

The combination with the vessel, having 25 the thickened upper portion, female screw-threaded and the groove, of the cover, provided with male screw-threads and annular flange *m* having the inner shoulder at the base thereof adapted to receive the lower 30 end of the pipe, the sleeve *n*, engaging the threaded annular flange, and the pipe *d*, said pipe, cover and annular flange formed of a single piece, the whole constructed and arranged, substantially as described. 35

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS F. FOLEY.

Witnesses:

JOHN L. FLETCHER,
E. H. BATES.