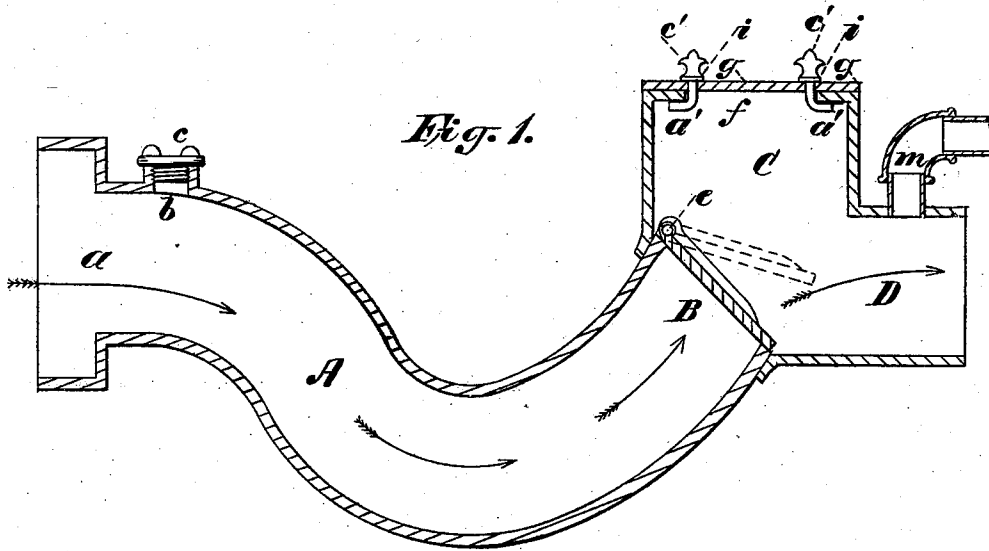
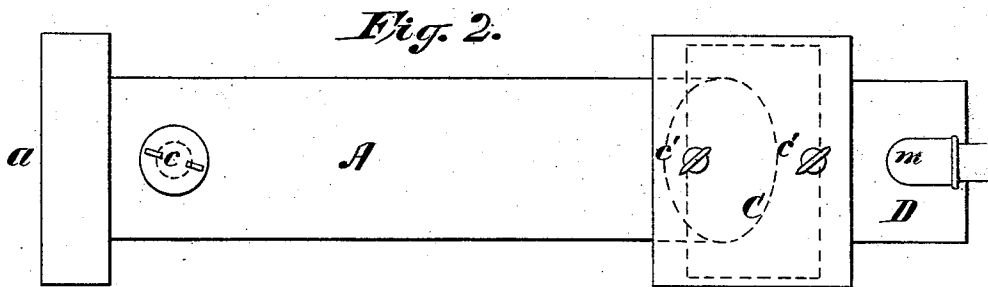


(No Model.)

W. BEDELL.
SEWER TRAP.

No. 244,425.

Patented July 19, 1881.



WITNESSES.

H. F. Parker

Chas. H. Doxat

INVENTOR.

William Bedell

Per James A. Whitney
Att'y.

UNITED STATES PATENT OFFICE.

WILLIAM BEDELL, OF NEW YORK, N. Y.

SEWER-TRAP.

SPECIFICATION forming part of Letters Patent No. 244,425, dated July 19, 1881.

Application filed March 26, 1880. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BEDELL, of the city, county, and State of New York, have invented certain Improvements in Sewer-
5 Traps, of which the following is a specification.

This invention belongs to that variety of sewer-traps which may with propriety be called "backwater-traps"—that is to say, traps de-
10 signed to prevent the reflux or regurgitation of water backward through the trap in a direction the reverse to that in which the material flows in the normal use or operation of the apparatus. As hitherto constructed such
15 traps have been liable to foul, and have been, as a rule, difficult of access for purposes of internal cleaning.

My invention is designed to obviate such drawbacks; and it consists in a novel combination of parts whereby the accumulation of
20 filth or refuse on the valve is effectually prevented; also, whereby a convenient means of access to the interior of the apparatus is afforded; also, whereby the force or pressure of the regurgitating liquid upon the valve and
25 adjacent parts may be relieved under circumstances where such pressure is liable to be excessive.

Figure 1 is a vertical longitudinal sectional
30 view, and Fig. 2 is a plan view, of a sewer-trap embracing my said invention.

A is the body of the trap, made of cast-iron or other suitable material, and of a form substantially such as is represented in Fig. 1.
35 One end, *a*, of this body A is constructed for attachment to the ordinary conducting-pipe, and near the said end *a* is a hand-hole, *b*, which, when required, is closed by a screw-cap, *c*, or other suitable means. At the opposite end of
40 the body A is a valve, B, the position of this valve, as hereinafter more fully indicated, being an important element in providing for the practical and advantageous operation of my invention. The said valve B belongs to the
45 class very commonly termed a "flat" valve, and is placed in the inclined position represented in Fig. 1, and pivoted at its uppermost edge by a suitable hinge or pivot, *e*.

Above the valve is a valve-chamber, C, in
50 the top of which is an opening, *f*, which, un-

der ordinary circumstances, is closed by a cap-plate, *g*, which is attached or held in position by clamping-bolts *i*, the lower hooked ends, *a'*, of which pass under the edges of the opening *f*, and which are provided with screw-nuts
55 *e'*, by which the hooked lower ends, *a'*, are tightened to snugly confine the plate *g* in place.

D is the outlet of the trap, and is provided at its upper part with a vent or passage, *m*.

The operation of the invention is as follows: 60
The passage of the sewage-water, &c., in the direction of the arrows in Fig. 1, throws the valve B outward and upward into a position more or less approximating that represented in dotted lines in Fig. 1—that is to say, up-
65 ward, toward, or into the valve-chamber C—and thereby permits the sewage-water, &c., to pass to the outlet when said sewage-water, &c., is in movement, as just hereinbefore indicated. When, however, no such passage of
70 the sewage is in progress the valve B is caused, by its own gravity, to descend to the closed position represented in the drawings—that is to say, into the inclined position hereinbefore explained—whereupon the outer surface of the
75 said valve is brought into so steep a plane or angle with reference to the horizontal that all the foul matter and refuse materials which would settle upon a valve horizontally placed
80 slide outward and downward from said outer surface of the valve into the outlet-passage D, so that the valve is never loaded or ob-
85 structed by the extraneous deposits regurgitating from the passage D; and, furthermore, this inclined position of the valve B causes it to close against its seat, and more effectually
90 to serve the body than would be possible if it was placed in a perpendicular position, in which its own weight would be practically inoperative to secure its retention in position.

When, for any reason, it is desired to have access to the interior of the apparatus, such access is readily afforded by removing the cap
95 *c* and the cap-plate *g*. In case there is any reflux or regurgitation of sewage backward through the outlet D against the valve B, the latter is, of course, pressed against its seat, and prevents the continuance of the influx into
100 or through the body A, while a greater or less portion of the reflowing or regurgitating ma-

terial passes off through the branch pipe or passage *m* to the sewer, or to a cesspool, or, when preferred, to any other suitable receptacle therefor, thereby relieving the apparatus
5 from excessive internal pressure and strain and liability to leak at the joints.

What I claim as my invention is—

The combination of the branch pipe or pas-

sage *m*, the outlet-pipe *D*, the body *A*, having the inclined valve *B*, and the valve-chest *C*, constructed with the opening *f*, all substantially as and for the purpose herein set forth.

WILLIAM BEDELL.

Witnesses:

CHAS. HY. DOXAT,

H. F. PARKER.