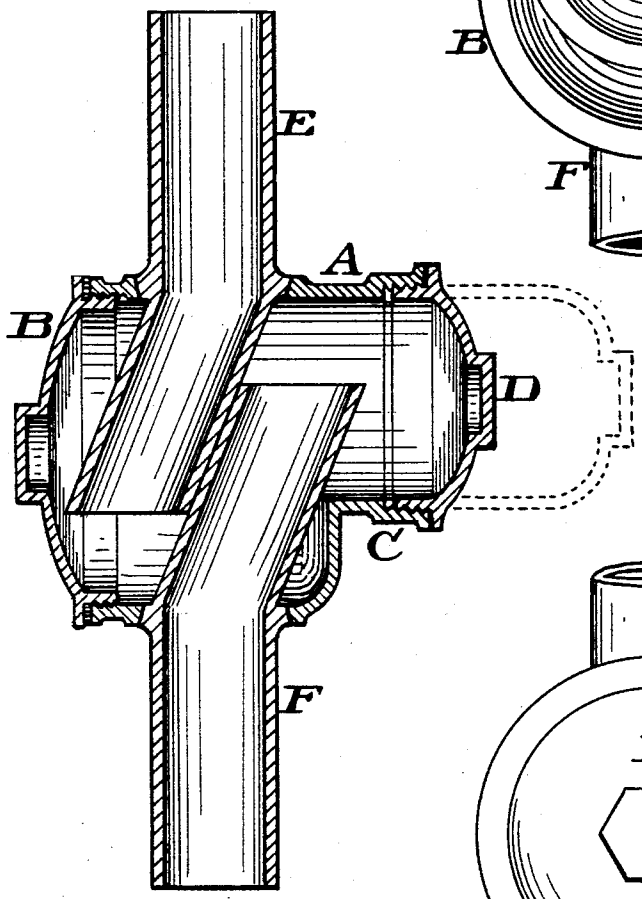
(No Model.)

# F. E. CUDELL.

## SEWER GAS TRAP.

No. 579,963. Patented Apr. 6, 1897.

Fig. 1.



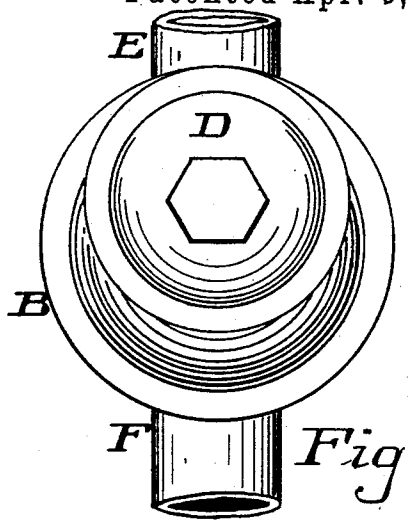




Fig. 3.

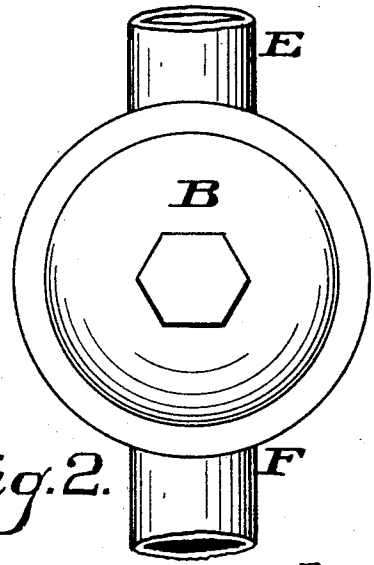



Fig. 2.

Witnesses.
Jos. Goldberger
J. J. Callan

Inventor,
Frank E. Cudell.
by Geo. W. Tibbitts Attorney.

# UNITED STATES PATENT OFFICE.

FRANK E. CUDELL, OF CLEVELAND, OHIO.

## SEWER-GAS TRAP.

SPECIFICATION forming part of Letters Patent No. 579,963, dated April 6, 1897.

Application filed December 1, 1896. Serial No. 614,143. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK E. CUDELL, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Sewer-Gas Traps, of which the following is a specification.

This invention relates to traps in waste-pipes for the prevention of the escape of sewer-gases, and has for its object to provide a non-siphoning trap, and one which can be easily opened for access to the interior.

The invention consists in the combination of a trap-chamber, and an inlet and an outlet pipe leading into and out of said chamber in a straight perpendicular line, said pipes within the chamber being bent in a diagonal line and lapping by each other in such a manner that the open end of the inlet-pipe is below the open end of the outlet-pipe, whereby a water seal is made in said chamber. The chamber is provided with removable caps on the front and rear sides, enabling it to be opened for free access to said pipes.

In the accompanying drawings, Figure 1 is a vertical section of the trap. Fig. 2 is a front elevation, and Fig. 3 is a rear elevation, of the trap.

A is an open cylinder comprising the chamber of the trap. B is a cap closing one end of said cylinder.

C is a reduced portion of the cylinder opposite the cap B, and is closed with a smaller cap D.

E is the inlet-pipe, attached to the upper side of the cylinder, and F is the outlet-pipe, attached to the under side, in such a manner that they have the outward appearance of a pipe passing straight through. Within the chamber said pipes are bent in a diagonal line, so that their open ends lap by each other. This constitutes the trap in coöperation with the chamber.

Instead of the cap D a cup-shaped inclosure G (shown in dotted lines) may be substituted for the purpose of extending the reduced portion of the chamber. This is intended to increase the capacity of the chamber to resist siphoning. In ordinary cases this would not be needed, but where there is a strong suction the extension is applied to insure non-siphoning. The special advantage of this construction is that by removal of the caps B and D the interior of the chamber and the pipes are accessible for easy cleansing.

In appearance the waste-pipe has a straight perpendicular line down from a bowl or basin.

The rear end of the cylinder may be made same diameter as the front and have a cap the same size if desired.

Having described my invention, I claim—

In combination the chamber A having caps B and D, vertical angular inlet-pipe E attached to the upper side and angular outlet-pipe F attached to the under side of said chamber, said pipes lapping inside of the chamber, substantially as described and for the purpose specified.

FRANK E. CUDELL.

Witnesses:

GEO. W. TIBBITTS,

LEWIS W. FORD.