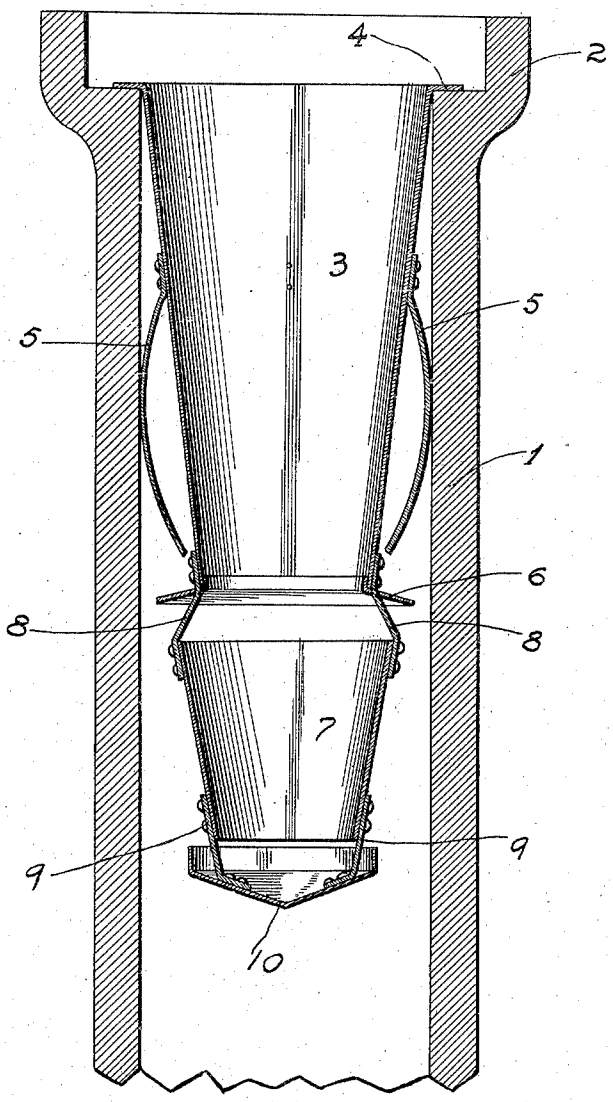
L. BERWANGER.

TRAP FOR SEWER VENT PIPES.

APPLICATION FILED APR. 30, 1909.

965,861. Patented Aug. 2, 1910.



WITNESSES

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LOUIS BERWANGER, OF ST. LOUIS, MISSOURI.

TRAP FOR SEWER VENT-PIPES.

965,861. Specification of Letters Patent. Patented Aug. 2, 1910.

Original application filed January 2, 1909, Serial No. 470,507. Divided and this application filed April 30, 1909. Serial No. 493,088.

To all whom it may concern:

Be it known that I, LOUIS BERWANGER, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Traps for Sewer Vent-Pipes, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a new and useful trap for sewer vent pipes, and the like, my object being to construct a simple trap which is positioned in the upper end of a sewer vent pipe for the purpose of arresting leaves, sticks, stones and like formed bodies, which very often enter sewer vent pipes, and accumulate at the lower end of said vent pipes, thereby obstructing the flow of water therethrough.

My present application is a division of an application filed by me January 2, 1909, Serial No. 470,507.

To the above purposes, my invention consists in certain novel features of construction and arrangement of parts hereinafter more fully described, claimed and shown in the accompanying drawing, in which the figure is a vertical section of a part of a vertically disposed vent pipe constructed of tile and in which one of my improved traps is positioned.

Referring by numerals to the accompanying drawing, 1 designates a section of tile or the like, forming the upper end of the sewer vent pipe and the upper end of which tile is provided with a flange 2 which supports my improved trap. The main body of the trap comprises a shell 3, preferably formed of sheet metal and which tapers slightly toward its lower end. A flange 4 is formed on the upper end of this shell, which flange rests upon the flange 2 of the tile 1.

Fixed at their upper ends on the exterior of the shell 3 is a series of flat springs 5 which bear against the inner face of the pipe 1, thus maintaining the device in a central position within the pipe.

Formed on the lower end of the shell 3 is an outwardly projecting flange 6, the external diameter of which is slightly less than the internal diameter of the pipe 1.

7 designates a short shell which tapers slightly toward its lower end, and said shell 7 is suspended by hangers 8 fixed to the lower end of the shell 3.

Positioned immediately below the shell 7 and suspended therefrom by hangers 9 is a shallow cup or pan 10.

When my improved trap is positioned for use in the upper end of the sewer vent pipe, it will be seen that water can pass readily downward through the trap, and that air or fumes can readily pass upward therethrough, but any foreign matter, such as sticks, stones, leaves and the like, too large to pass through the space between the lower end of the shell 7 and the cup 10, will be caught in said cup and thus be prevented from passing downward into the bend at the lower end of the vent-pipe, where by accumulation it would form a dam and prevent the unobstructed flow of air or water through said pipe.

The flange 6 is provided at the lower end of the shell 3 in order to prevent sticks from being floated out through the space between the lower end of the shell 3 and the upper end of the shell 7. Should the entire trap fill up so as to prevent the passage of water or air, said trap can be easily and quickly removed from the pipe and cleaned out, which operation can be accomplished quicker and with much less expense than would be required in cleaning out an ordinary trap or bend at the lower end of the sewer vent-pipe.

I claim:—

1. A trap for sewer vent-pipes comprising a hollow open-ended body formed in two parts, both of which parts taper toward their lower ends, there being an opening between the two parts, a flange on the upper end of the upper part, a flange on the lower end of the upper part, a cup suspended beneath the lower end of the low part, and a series of springs carried by the trap for maintaining the same in a central position in a sewer vent-pipe.

2. A trap for sewer vent-pipes, comprising a pair of shells, which taper toward their lower ends, one shell being arranged immediately below the other, there being a space between said shells, a flange on the upper end of the upper shell, a flange on the lower end of the upper shell, hangers depending

from the lower end of the lower shell, a cup carried by the lower ends of the hangers, which cup is larger in diameter than is the lower end of said lower shell, and a series of springs carried by the upper shell for maintaining the trap in a central position in a sewer vent-pipe.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this 26th day of March, 1909.

LOUIS BERWANGER.

Witnesses:

F. R. CORNWALL,

LENORE CLARK.