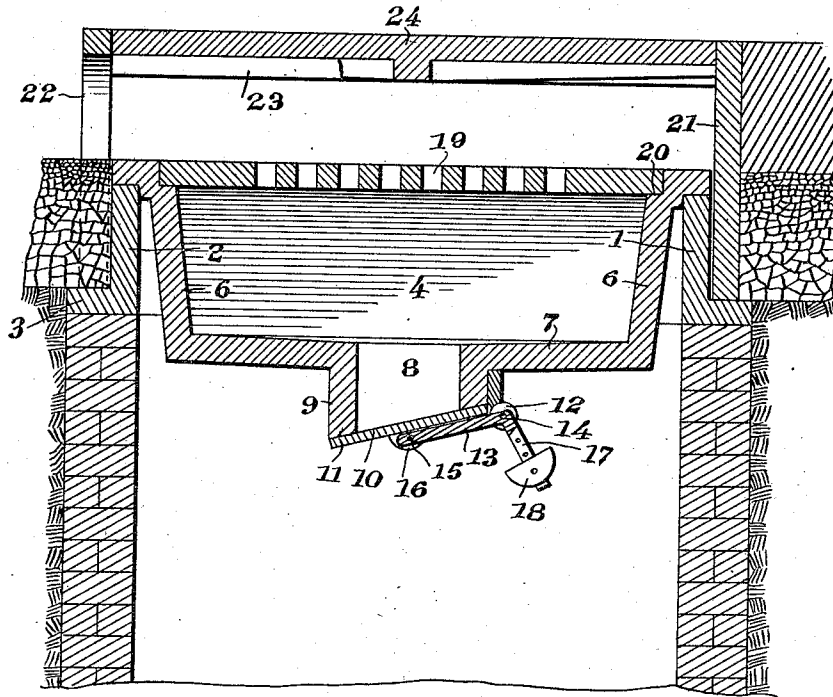


D. H. PIPER.
CATCH BASIN.
APPLICATION FILED MAY 26, 1912.

1,066,316.

Patented July 1, 1913.



Witnesses
M. F. Gannett
J. Warner

Inventor
David H. Piper
By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

DAVID H. PIPER, OF CELINA, OHIO.

CATCH-BASIN.

1,066,316.

Specification of Letters Patent.

Patented July 1, 1913.

Application filed May 25, 1912. Serial No. 699,683.

To all whom it may concern:

Be it known that I, DAVID H. PIPER, a citizen of the United States, residing at Celina, in the county of Mercer and State of Ohio, have invented new and useful Improvements in Catch-Basins, of which the following is a specification.

This invention is an improved catch basin or sewer trap which, while permitting water to flow freely to a sewer or the like, serves to effectually prevent the escape of noxious gases from the sewer, the invention consisting in the construction, combination and arrangement of devices hereinafter described and claimed.

The accompanying drawing is a longitudinal sectional view of my invention, showing my improved catch basin or sewer trap used in connection with an inclosing box or casing.

In accordance with my invention, I provide a frame 1, which is rectangular in form and comprises a vertical wall 2 and a base 3 which projects from the outer side of the wall. The pavement of the walk, gutter or street in which the trap or catch basin is used is formed around the said frame and bears on the base thereof, leaving the upper edge of the wall 2 exposed. The basin 4 fits in the wall of the frame 1 and is provided at its upper side with an outwardly extending surrounding flange 5 which bears on the upper edge of the wall of the frame. The sides of the basin are here shown as converging downwardly as at 6 and the bottom 7 of the basin is shown as nearly flat and provided with a central discharge opening 8 which also extends through an enlargement 9 on the under side of the bottom of the basin, the said enlargement presenting an inclined lower face 10 which forms the seat for a valve 11 which is adapted to open therefrom and close against the same. At one side of the enlargement 9 are a pair of downwardly extending spaced ears 12 between which is pivoted a lever 13, the pivot of the lever being indicated at 14. One end of the lever is pivoted as at 15 between a pair of ears 16 which are arranged medially of and project downwardly from the valve. The outer end of the lever forms an arm 17 on which is arranged an adjustable weight 18. The function of this weight is to keep the valve normally closed and by adjusting the weight the valve may be so arranged as to open

downwardly at any desired pressure. Owing to the fact that the valve is kept normally closed by the weight, noxious gases are prevented from escaping from the sewer in connection with which the trap is used. When water accumulates in the basin to the extent required to overcome the resistance of the valve, under the influence of the weight, the valve opens so as to permit the passage of water from the basin to the sewer and the valve will stay open as long as there is a sufficient pressure of water in the basin and above the valve but when the pressure of the water diminishes the valve is immediately reclosed by the action of the weight and, hence, no gas can escape. A grating 19 is provided which covers the basin and is seated in a recess 20 which runs around the inner side of the walls thereof. The grating can be readily removed to permit access to the basin and the latter can be readily removed from the frame 1 to afford access to the sewer. I also provide a box or casing 21 which is open on its lower and upper sides and the side walls of which are adapted to fit around the walls of the frame 1 and to bear on the flange 3 thereof. One of the walls of this box or casing is provided with an opening 22 to permit the flow of water to the trap.

Opposite walls of the box or casing are provided on their opposing sides, near their upper edges with supporting flanges 23 on which a detachable cover or lid 24 is placed, this cover or lid fitting within the walls of the box or casing, as shown. This lid may be readily removed when desired and the box or casing may be also removed from the frame 1.

While I have herein shown and described the preferred form of my invention, I would have it understood that other modifications may be made in the form, proportion and construction of the several parts, without departing from the spirit of my invention, and within the scope of the appended claim.

I claim:—

The herein described sewer trap comprising a frame having side walls, and a base flange projecting outwardly from the said walls, a basin detachably fitted in the frame having supporting flanges at the upper sides of its side walls bearing on the upper edges of and having shoulders abutting against the inner sides of the walls of the frame, the bottom of the said basin having a

discharge opening and also having a
downwardly extending enlargement through
which said opening extends, a valve nor-
mally closed against the lower side of the
5 enlargement and adapted to be opened by
water pressure from above, a grating seated
in the upper side of the basin and remov-
able therefrom, in combination with a box
or casing open at its upper and lower sides
10 having walls bearing around those of the
frame and resting on the base flange there-

of, one of the said walls having an opening
above and to admit water to the basin, and
a top or cover detachably secured to the
upper side of the said box or casing. 15

In testimony whereof I affix my signa-
ture in presence of two witnesses.

DAVID H. PIPER.

Witnesses:

THEODORE KISER,
G. I. THOMAS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
