

W. W. BYTHINER & F. MONTAGUE.
VENT BOX.

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1,286,935.

Patented Dec. 10, 1918.

FIG. 1.

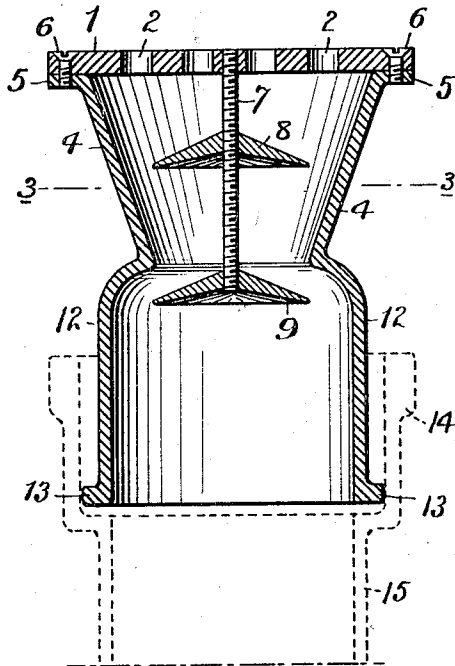


FIG. 2.

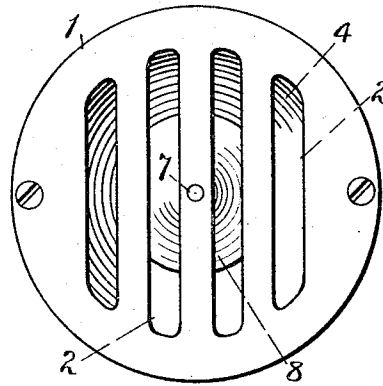


FIG. 3.

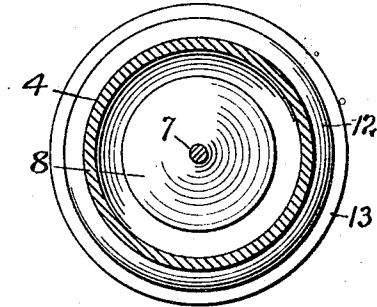
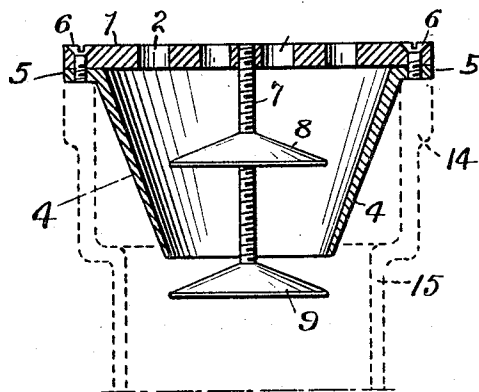


FIG.



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VENT-BOX.

1,286,935.

Specification of Letters Patent.

Patented Dec. 10, 1918.

Application filed June 5, 1918. Serial No. 238,378.

To all whom it may concern:

Be it known that we, WILLIAM W. BYTHINER and FRANK MONTAGUE, citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Vent-Boxes, of which the following is a specification.

Our invention relates to improvements in vent-boxes adapted to be used upon pipes for ventilating drainage systems.

The object of our invention is to provide a vent box which will prevent the insertion of sticks and pieces of wire which would clog the drainage system; a further object of our invention is to so construct the vent box that small particles of dirt and dust cannot accumulate in the vent box, but will fall or be washed into the drainage system; and a further object of our invention is to construct the vent box in such a manner that it cannot be readily displaced from the pipe upon which it is used.

Referring to the drawing; Figure 1, is a vertical section illustrating our improved vent box; Fig. 2, is a plan view of the cover of the vent box; Fig. 3, is a horizontal section on line 3—3 Fig. 1; and Fig. 4, is a vertical section of a modified form of the vent box.

In the accompanying drawing in which like reference characters refer to like parts, 1 represents the cover provided with elongated orifices 2, as shown in Fig. 2. A conical or funnel shaped member 4, is located immediately below the cover 1. Said conical member 4 is open at the bottom for the free passage of dirt which may enter through the orifices 2 in the cover 1.

The conical member 4, is provided with a flange 5, at the top edge thereof, upon which rests the cover 1 which may be fastened thereto by screws 6, or any other suitable fastening devices.

Suspended from the cover 1 is a rod 7 on which are secured shields 8 and 9, preferably made conical or dome shape so that any foreign bodies cannot lodge upon them. The rod 7 is provided with a screw thread and its upper end is screwed into a threaded aperture in the cover 1 and the shields 8 and 9 are each provided with a threaded aperture which permits them to be screwed upon the rod 7.

The shields 8 and 9 are so located upon the rod 7 that they will be held a sufficient

distance above and below the reduced portion of the conical member 4, to form free ventilating spaces through the vent box.

The shields 8 and 9 are of as great a diameter as will permit them to pass through the throat or central opening of the conical member 4, when it is desired to remove the cover from the conical member 4. The reduced portion of the conical member 4 forms a collar which will cause a stick or wire to rest upon the shield 9, located immediately below the collar and the upper shield will prevent the upper end of the stick or wire from being brought to a central position, which would be necessary before the same could pass between the shield 9 and the collar forming the throat of the conical member 4.

The conical or funnel shaped member 4 may be provided with a depending flange 12 having an enlarged collar 13 thereon for the purpose of forming a coupling member by which a permanent connection may be readily made with the drain pipe 15, shown in dotted lines Fig. 1.

Where it is not desired to make a permanent connection with the drain pipe the vent box may be made without the flange or coupling member 12, in which form the flange 5 of the conical member 4 will rest upon the upper end 14 of the drain pipe 15, as shown in dotted lines Fig. 4.

Our improved vent box may be manufactured at a very low cost; the cover being provided with elongated orifices will permit of greater ventilation than could be obtained with circular orifices; the funnel member 4 and the shields 8 and 9 are so arranged that it is impossible to force a stick or piece of wire through the vent box, and the coupling member 12 forms a means for readily making a permanent connection with the drain pipe.

Our improved vent box is self cleaning and therefore particularly adapted for use on sidewalks where the cover of the vent box is flush with the surface of the sidewalk.

Having thus described our invention we claim and desire to secure by Letters Patent:

1. A vent box for drains comprising a cover having orifices formed therein, shields suspended from said cover, a funnel shaped member having a central opening forming a free air space through the vent box, said funnel member having its contracted portion located between said shields and the

lower one of said shields being smaller in diameter than the contracted portion of the funnel member.

2. A vent box for drains comprising a
5 cover having orifices formed therein, a rod rigidly secured in the cover, a shield upon the rod adjacent to the cover, an inverted conical member having a central opening formed therein and forming a free passage-
10 way through the vent box, and a second shield upon said rod located below the said conical member.

3. A vent box for drains comprising a
15 cover having orifices formed therein, a funnel shaped member upon which the cover is secured, a rod rigidly secured to said cover,

shields secured to said rod, said shields having their upper surfaces beveled, said shields located above and below the contracted portion of the funnel member with a free air
20 space formed between the shields and the funnel member, and the lower one of said shields being smaller in diameter than the contracted portion of the funnel member to permit the said shield to pass through the
25 funnel member when the cover is removed.

In testimony whereof we affix our signatures in the presence of a witness.

WILLIAM W. BYTHINER.
FRANK MONTAGUE.

Witness:

MEYER KRAUS.

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