W. S. WALLING.

COMBINED BACKWATER TRAP AND FLOOR DRAIN.

APPLICATION FILED FEB. 28, 1914.

1,119,909. Patented Dec. 8, 1914.

Fig. 1.

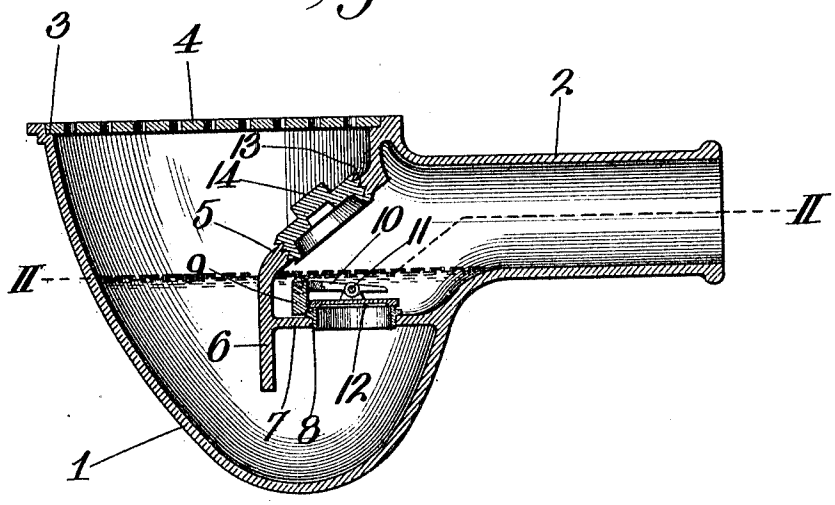
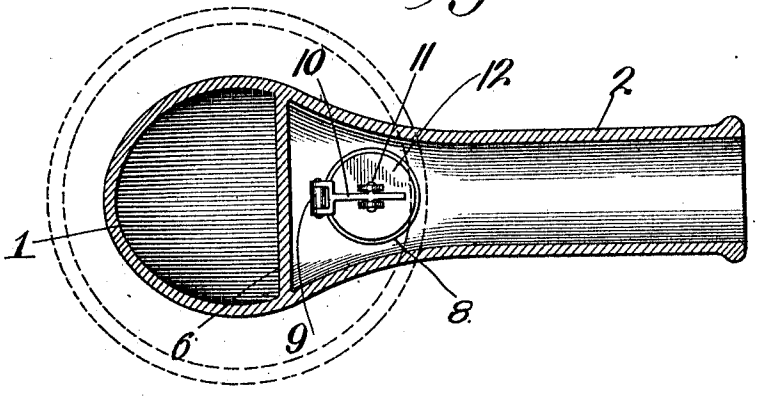


Fig. 2.



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COMBINED BACKWATER-TRAP AND FLOOR-DRAIN.

1,119,909. Specification of Letters Patent. Patented Dec. 8, 1914.

Application filed February 28, 1914. Serial No. 821,829.

To all whom it may concern:

Be it known that I, WILLIAM S. WALLING, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Combined Backwater-Traps and Floor-Drains, of which the following is a specification.

This invention relates to combined floor drains and back water traps, and has for its object to produce a device of this character which is accessible at all points to facilitate and make easy the cleaning thereof; which has no joints in the drain to necessitate packing, and which is of simple, strong, durable and cheap construction.

To this end the invention consists in certain novel and peculiar features of construction and organization as hereinafter described and claimed; and in order that it may be fully understood reference is to be had to the accompanying drawing, in which—

Figure 1 is a central vertical section of a combined floor drain and back-water trap, embodying the invention. Fig. 2 is a section on the line II—II of Fig. 1.

In the said drawing, 1 is the receptacle or bowl portion and 2 the discharge stem of the trap, said stem being formed integral therewith, and said receptacle in its upper edge is provided with an annular upwardly-facing shoulder or seat 3 for the usual perforated plate 4.

Depending obliquely from the receptacle near its junction with the stem 2, is an obtuse angle partition, comprising the downwardly and inwardly extending portion 5 and the downwardly extending portion 6, the latter depending to a plane below the lower side of the stem 2, and dividing said receptacle into two chambers communicating below the said partition.

Extending from said partition 6 to the rear side of the receptacle below the level of stem 2, is a horizontal partition, 7, having a circular opening within which is secured a brass or analogous bushing ring 8, forming a valve seat, projecting upward from the ring 8, is an arm 9, to which is hinged a lever 10, and said lever is pivoted to a gate valve 12, normally seated on the valve seat 8, through a pair of perforated ears 11, formed integral with and centrally of said valve 12, and the free end of the lever projects some distance beyond its connection with the valve, to insure the positioning of the valve for proper seating at all times, by guarding against tilting thereof to such an extent that it may fail to seat and properly close communication between the discharge stem and the room in which the drain is located.

The downwardly and inwardly extending partition portion 5 has formed therein a threaded opening 13, in which is screwed a removable clean-out plug 14, and said opening 13 is of large diameter in order to permit suitable tools to be inserted therethrough for grinding the opening in the partition 7, and forcing the bushing ring into said opening.

It is obvious that water poured into the drain in excess of the capacity of the trap as indicated by the water line on the drawing, (Fig. 1), escapes through the stem 2, to the soil pipe (not shown) and that the gate valve opens automatically to accommodate this action, and closes the instant the excess water passes through the stem 2. It is also apparent that the water standing in the receptacle 1 to the level of the discharge stem 2, prevents the entrance of any gases from the stem 2 and further that the gate valve is closed and prevents any water backing up in said trap from the discharge stem. The trap can be readily cleaned because of the accessibility of all parts.

From the above description it will be apparent that I have produced a combined floor drain and backwater trap embodying the features of advantage enumerated as desirable, and I wish it to be understood that while I have illustrated and described the preferred embodiment of the invention, I reserve the right to make all changes falling within the spirit and scope of the appended claims.

I claim:—

1. A floor drain and back water trap, comprising a receptacle having at a suitable height above the bottom a discharge stem, a partition depending into the receptacle to a plane below the lower side of said discharge stem, a second perforated partition connecting the first-named partition with the wall of the receptacle below the lower side of said stem, and a valve closing said perforation in the second partition and controlling communication between said receptacle and the discharge stem.

2. A floor drain and back water trap, com-

prising a receptacle having at a suitable height above the bottom a discharge stem, a partition depending into the receptacle to a plane below the lower side of said discharge stem, a clean-out plug secured in the upper part of said partition, a second perforated partition connecting the first-named partition with the wall of the receptacle below the lower side of said stem, and a valve closing said perforation in the second partition and controlling communication between said receptacle and the discharge stem.

In testimony whereof, I affix my signature in the presence of two witnesses.

WILLIAM S. WALLING.

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