

F. WALKER.
SOIL PIPE DRAINAGE AND VENT FITTING.

APPLICATION FILED JAN. 3, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

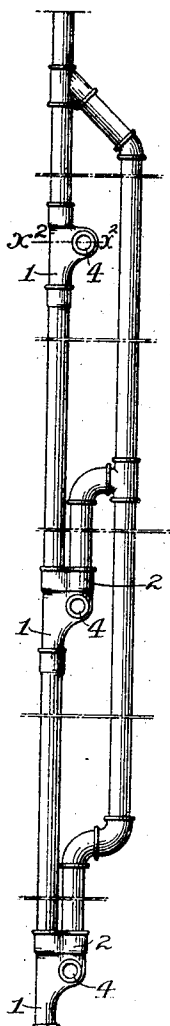


Fig. 4.

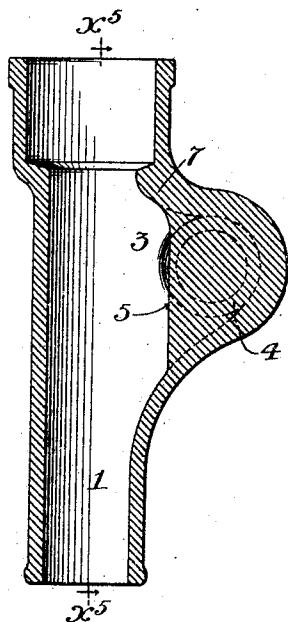


Fig. 5.

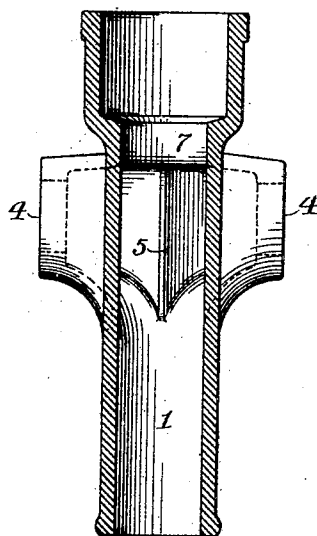


Fig. 2.

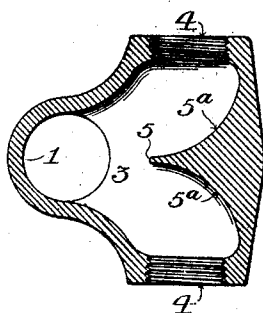
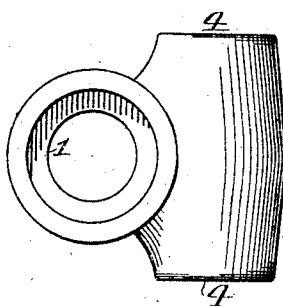


Fig. 3.



Witnesses:
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A. P. Knight

Inventor:
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2 SHEETS—SHEET 2.

Fig. 6.

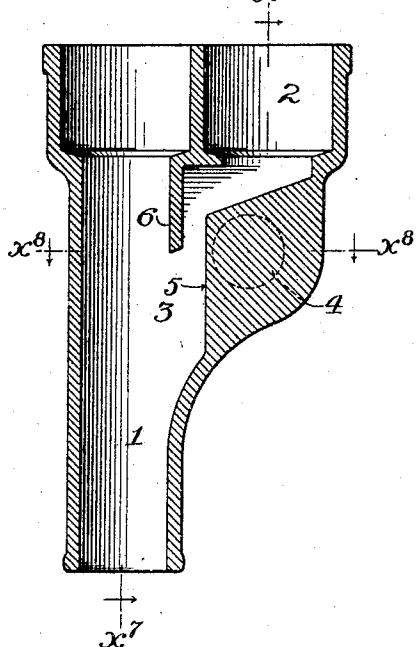


Fig. 7.

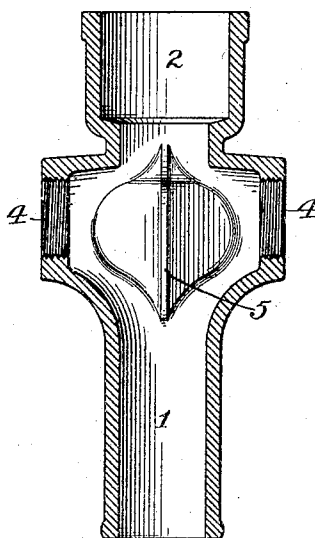


Fig. 8.

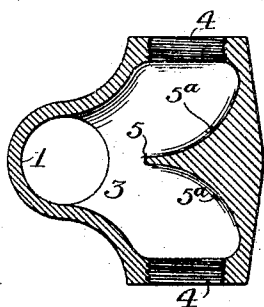
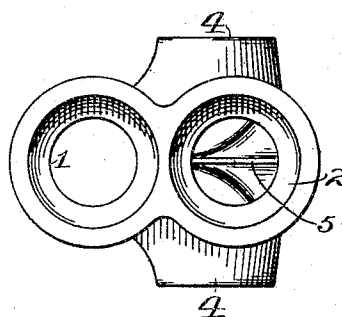


Fig. 9.



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UNITED STATES PATENT OFFICE.

FRANK WALKER, OF LOS ANGELES, CALIFORNIA.

SOIL-PIPE DRAINAGE AND VENT FITTING.

No. 796,377.

Specification of Letters Patent.

Patented Aug. 1, 1905.

Application filed January 3, 1905. Serial No. 239,321.

To all whom it may concern:

Be it known that I, FRANK WALKER, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Soil-Pipe Drainage and Vent Fitting, of which the following is a specification.

This invention relates to a sanitary fitting which is constructed to receive drainage matter from two laterals and to deliver the drainage matter to the soil-pipe, the fitting also including suitable venting means; and a prominent feature of the invention is a novel means for producing a unique flowing of the drainage matter within the fitting while being transferred from the laterals to the soil-pipe, the object being to attain the double function of preventing the inflow drainage from one lateral from interfering with the inflow drainage from the other lateral and to turn the drainage to one side while it is passing downwardly to prevent it from spattering, thereby obviating accumulation of grease, soap, or other matter.

This invention embraces a fitting comprising two parallel hubs, a soil-pipe opening from one of the hubs, a chamber at the side of the soil-pipe leading directly from the other hub and opening at its bottom into the soil-pipe, and a single partition below the hubs forming portions of the walls of both the soil-pipe and the chamber and a drainage lateral opening into the chamber. Preferably the two hubs are amalgamated together, being separated by only a single partition, one of which forms a portion of the wall of the soil-pipe hub and the other a portion of the wall of the vent-hub. By the construction stated the fitting is brought into the simplest and most compact and economical form.

The accompanying drawings illustrate the invention, and, referring thereto, Figure 1 is a side elevation showing fittings and piping arranged to take drainage from three floors of the building. Fig. 2 is a section on line $x^2 x^2$, Fig. 1. Fig. 3 is a plan view of the upper fitting in Fig. 1 detached from the piping. Fig. 4 is an enlarged longitudinal section through the upper fitting shown in Fig. 1. Fig. 5 is a section on line $x^5 x^5$, Fig. 4. Fig. 6 is a longitudinal section through one of the lower fittings of Fig. 1. Fig. 7 is a section on line $x^7 x^7$, Fig. 6. Fig. 8 is a section on line $x^8 x^8$, Fig. 6. Fig. 9 is a plan view of

the lower fitting shown in Fig. 1 detached from the pipe.

Either of the lower fittings shown in Fig. 1 comprises a soil-pipe member 1 which has an unobstructed passage and which at its upper end is enlarged to form the soil-pipe hub h to receive the lower end of the piping which connects the fitting with the next pipe.

2 is a vent-pipe hub arranged close to the upper end of the soil-pipe 1 and which communicates with an interior chamber 3, which communicates with the soil-pipe 1. The side walls of the chamber 3 are provided with lateral drainage-ducts 4, oppositely arranged and communicating with the chamber 3.

Projecting into the chamber 3 is a deflector 5, having oblique concave diverging faces 5^a , each concave face facing one of the lateral ducts 4, and the deflector 5 serves to prevent the passage of liquid from one duct into the other. The curved faces of the deflector 5 deflect the liquid as it enters from the laterals, and by reason of the curve and gravity the liquid is easily turned from its straight inward flow and spattering is avoided, which prevents the accumulation of grease, soap, or other matter in the chamber. A guard 6 in the form of a single partition extends down in front of the edge of the deflector 5 and separates the vent-pipe from the soil-pipe.

In case of the top fitting of the stack the vent-pipe 2 may be omitted, as shown in Figs. 1 and 4, and, referring to Fig. 4, it will be seen that the only difference in the construction is that the interior of the chamber 3 is walled over at the top at 7 just above the deflector 5, the deflector 5 joining the wall 7, as shown. The two laterals 4 communicate with the chamber 3 at opposite sides of the deflector 5, as shown. This fitting being a top fitting, the main stack above the laterals forms the vent, so that the side vent 2, which is necessary in a lower fitting, may be in this upper fitting dispensed with.

The shape of the deflector is such that its two deflecting-surfaces lie as closely together as possible. This compactness affords a large space between the deflector and lateral openings.

What I claim is—

1. A soil-pipe drainage and a vent fitting comprising a soil-pipe member having an unobstructed passage and provided with an interior chamber, the opposite walls of which

chamber have drainage lateral inlets, and a deflector projecting into the chamber and lying between the laterals, the deflector having oblique faces which lie in front of the inner mouth of the laterals.

2. A soil-pipe drainage and a vent fitting comprising a soil-pipe member having an unobstructed passage and provided with an interior chamber, the opposite walls of which chamber have drainage lateral inlets, and a deflector projecting into the chamber and lying between the laterals, the deflector having oblique faces which lie in front of the inner mouth of the laterals, and a vent-pipe opening above the deflector.

3. A soil-pipe drainage and a vent fitting comprising a soil-pipe member having an unobstructed passage and provided with an interior chamber which is offset from the center line of the soil-pipe, the opposite walls of which chamber have drainage lateral inlets, and a deflector projecting laterally toward the soil-pipe into the chamber and lying between the laterals, the deflector having concave faces, which lie in front of the inner mouth of the laterals.

4. A fitting comprising a soil-pipe with an interior chamber, the opposite walls of which chamber have drainage lateral inlets, and a deflector projecting into the chamber and lying between the laterals, the deflector having concave faces which lie in front of the inner mouth of the laterals, a vent-pipe opening above the deflector and a guard extending down between the vent-pipe and soil-pipe.

5. A fitting comprising a soil-pipe with an interior chamber, the opposite walls of which chamber have drainage-laterals, and a deflector projecting into the chamber and lying between the laterals, the deflector having concave faces which lie in front of the inner mouth of the laterals, a vent-pipe opening above the deflector and a guard extending down between the vent-pipe and soil-pipe, the lower end of the guard extending to a point below the line of the upper edge of the deflector.

6. A soil-pipe drainage and vent fitting provided with oppositely-disposed drainage

inlet-openings, and a deflector between the openings and having opposite diverging faces fronting the openings, the free edge of the deflector being vertically disposed whereby matter passing down through the soil-pipe cannot collect on the edge.

7. A fitting provided with oppositely-disposed drainage inlet-openings and a deflector disposed midway between the openings and having a broad base and concave walls converging from the base to a relatively thin edge, an unobstructed soil-pipe member formed vertically in the fitting and adapted to receive the drainage as it is delivered from the deflector.

8. A fitting provided with oppositely-disposed drainage inlet-openings and a deflector disposed midway between the openings and having a broad base and concave walls converging from the base to a relatively thin edge, an unobstructed soil-pipe member formed vertically in the fitting and adapted to receive the drainage as it is delivered from the deflector, and a vent-pipe formed in the fitting and arranged above the deflector and laterals.

9. A soil-pipe fitting comprising an unobstructed vertical member and a branch opening into one side thereof, said branch having a drainage-outlet at the lower end and a vent-outlet at the upper end and having lateral openings entering between the vent and drainage, and a deflector extending laterally from the outer wall of the branch between the lateral openings and toward the drainage-outlet.

10. A fitting comprising two parallel hubs, a soil-pipe opening from one of the hubs, a chamber at the side of the soil-pipe leading directly from the other hub and opening at its bottom into the soil-pipe, a single partition below the hubs forming portions of the walls of both the soil-pipe and the chamber, and a drainage lateral opening into the chamber.

In testimony whereof I have hereunto set my hand, at Los Angeles, California, this 24th day of December, 1904.

FRANK WALKER.

In presence of—

A. P. KNIGHT,
JULIA TOWNSEND.