

UNITED STATES PATENT OFFICE.

FRED B. MORTON, OF PASADENA, CALIFORNIA.

PLUMBING-FITTING.

1,064,241.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRED B. MORTON, a citizen of the United States, residing in the city of Pasadena, county of Los Angeles, State of California, have invented new and useful Improvements in Plumbing-Fittings, of which the following is a specification.

One of the objects of my invention is to provide a plumbing fitting a portion of which is adapted to form a portion of the soil pipe or stack and is provided with a two-limbed branch, one limb of which opens into the main body at such point that when the fixture is flushed it will siphon the other limb and the other limb being closed at its outer end to form with the fixture connections a trap and a vent on the limb opening into the main body at such point that it will not prevent the siphon action on the other limb, all being cast integral and forming a unitary body and when positioned for use is so situated that the drainage from the floors above the trap cannot siphon the trap.

Another object is to provide a plumbing fitting a portion of which is adapted to form a portion of the stack, which fitting is provided with a two-limbed branch, one limb extending outwardly and upwardly to its connection with the other limb, which last limb extends downwardly and is closed at its outer end and has a fixture opening therein and with the fixture connections forms a trap that is siphoned by the other limb when the fixture is flushed, all being cast integral.

Another object of my invention is to provide a fitting which may be used for two fixtures situate on opposite sides of a partition inclosing the fitting, and in which fitting shall be contained two adjacent traps lying side by side either of which is operable through the fixture connected thereto without affecting the trap of the other fixture.

A further object is to simplify and facilitate the setting and repair of sinks, wash-bowls, closet basins and other structures requiring a trap.

I accomplish these objects by the fitting described herein and illustrated in the accompanying drawings, in which:

Figure 1 is a diagrammatical illustration of my improved fitting and the manner of its connection to the soil stack and vent stack at the upper story and the next lower

floor of the building, the connecting fixtures being omitted for clearness of illustration, with certain of the parts shown in section. Fig. 2 is an enlarged view showing a section of the fitting on the line 2-2 of Fig. 1 and also showing a section of a partition and a fragment of two rooms with fixtures therein connected up to the fitting.

In the drawings 5 is a partition wall which separates room 6 from room 7.

8 is the soil stack and 9 is the vent stack.

10 and 11 designate my improved fittings, each of which forms a part of the soil pipe or stack when the fitting is positioned for use.

My improved fitting consists of a straight tubular body 13, made of the same diameter throughout except at the limb opening and provided with like ends as any other section of soil pipe. Opening out of this body and cast integral therewith is a two-limbed branch 14. The inner limb 15 opens out of the soil pipe and when the fitting is positioned for use extends upwardly and outwardly to its connection with the outer limb

16. The outer limb extends downwardly from its connection with the inner limb and the lower end thereof, when positioned for use, is closed so as to form with the fixture connections a pocket or trap. The inner limb opens into the tubular body at a point below the point of junction of the two limbs and preferably below the lower end of the outer limb, as shown in Fig. 1. When the fitting is to be used in a building containing a plurality of floors I provide the inner branch with a vent channel 17, which opens into a branch 18 connected to the vent stack.

The vent channel opens into the branch below the point of connection of the limbs and preferably below the lower end of the outer limb as shown in the lower portion of Fig. 1. Near the closed end of the outer limb are openings 19 into which are secured in any suitable manner the fixture pipes 20, which carry the waste from fixture 21. When it is desired to position fixtures on each side of the partition and not have the waste therefrom commingled, I provide the outer limb with a vertical partition 22, centrally located between the openings in which the fixture pipes are connected and which preferably extends a little higher than the connection at the bottom between the limbs. By this construction the work of installing the fixtures such as closets, wash-bowls, and

sinks is greatly simplified and the number of joints diminished, thereby reducing the chances of leakage from defective joints. It will also be observed that the outer limb together with the pipes connecting the fixtures thereto form a perfect water seal to the fixture thereby dispensing with the use of the usual form of water seal or trap. It will be observed that in this form of fitting the limb of the fitting, which contains the water seal has an exterior, which is surrounded by the air surrounding the fitting, and should there be any imperfections in this limb, such as blow holes, such imperfections would be discovered as soon as the fitting was tested or used. Should a hole be subsequently developed in this limb the leakage would soon disclose it when the fitting could be repaired or replaced, thereby always preserving a seal for the fixture. This would not be the case if a part of the wall of the seal were inclosed in the fitting, so that leakage through such wall would be carried off by the waste. This feature is a very important matter, as it is very desirable that a perfect water seal should be provided between the fixture and the waste. It will be observed that the opening between the lower end of the inner limb and the soil pipe is below the opening between the limbs whereby a siphoning action is produced when the fixture is flushed which is very desirable when the fixture is a closet. Another important advantage of my fitting lies in the fact that the fitting is roughed in with projecting nipples extending outwardly through the partition into the room

so that the interior finish of the room need not be delayed, and ready means for connecting the fixtures are provided. When only one fixture is used with the fitting the outer branch is provided with only one fixture opening.

Having described my invention what I claim is:—

A soil pipe fitting comprising a section of pipe adapted to form a part of a line of soil pipe; a two-limbed branch formed integral with and opening out of said section of pipe, the inner limb of said branch extending upwardly and outwardly and the outer limb extending downwardly and having the outer end thereof closed, said outer limb having an inlet opening below the junction of the limbs when positioned for use, the point of junction between the limbs being above the opening of the inner limb into the body and a vent channel opening into the inner limb below the point of connection of the limbs when positioned for use, said vent channel being adapted for connection with the vent stack, and the point of connection between the vent channel and limb being at such point that the outer limb will be siphoned when a fixture is flushed.

In witness that I claim the foregoing I have hereunto subscribed my name this 1st day of November 1910.

FRED B. MORTON.

Witnesses:

G. E. HARPHAM
C. M. AUSTIN.