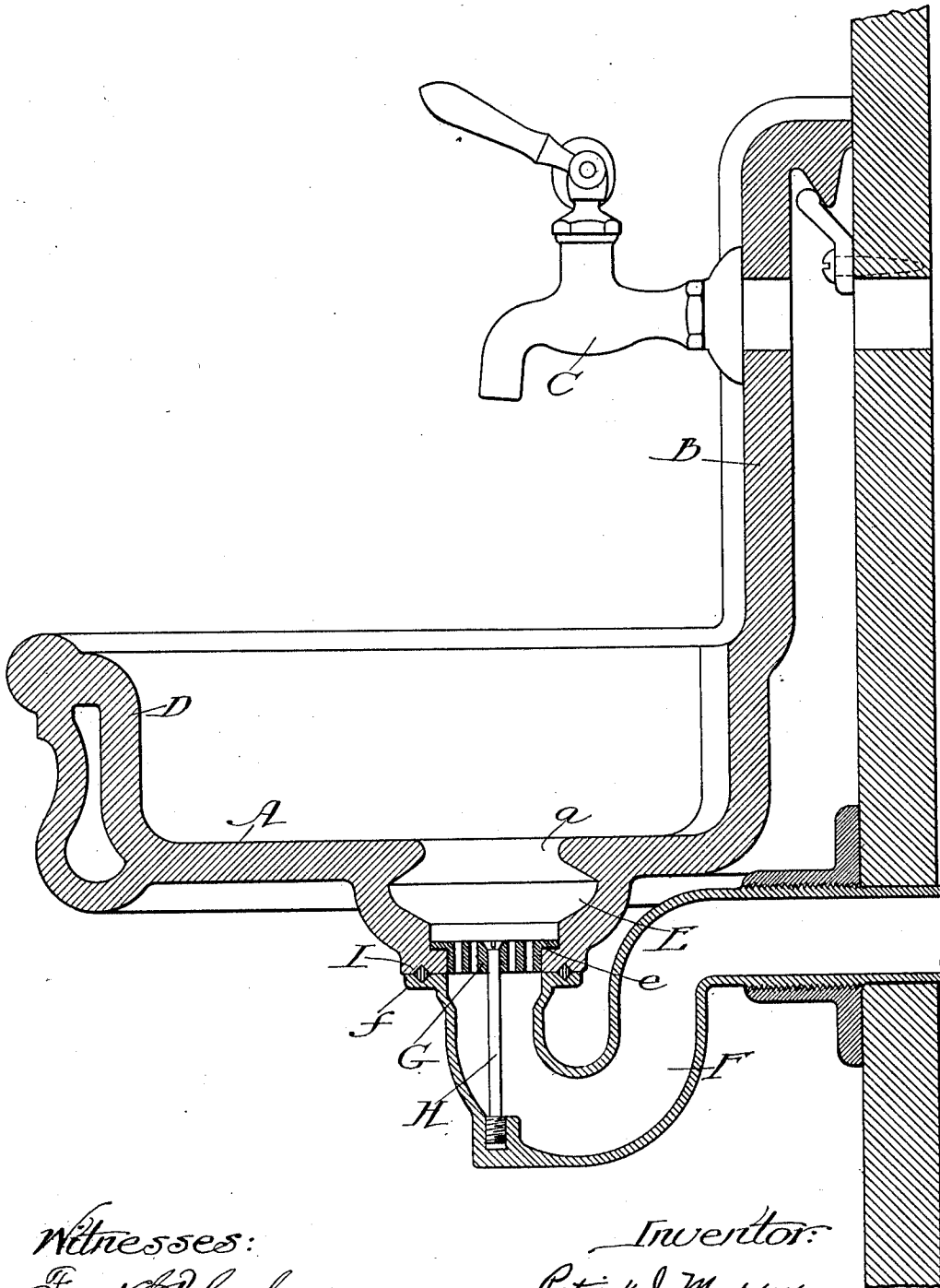


P. J. MADDEN.
PLUMBING FIXTURE.
APPLICATION FILED NOV. 23, 1908.

1,022,146.

Patented Apr. 2, 1912.



Witnesses:
Frank Blanchard
Nelson DeLong

Inventor:
Patrick J. Madden
By J. M. Hopkins
Attorney.

UNITED STATES PATENT OFFICE.

PATRICK J. MADDEN, OF CHICAGO, ILLINOIS.

PLUMBING-FIXTURE.

1,022,146.

Specification of Letters Patent.

Patented Apr. 2, 1912.

Original application filed May 24, 1906, Serial No. 318,515. Divided and this application filed November 23, 1908. Serial No. 464,073.

To all whom it may concern:

Be it known that I, PATRICK J. MADDEN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Plumbing-Fixtures, of which the following is a specification.

The present application is a division of my application for patent for "improvements in drinking fountains and other plumbing fixtures" on which Letters Patent No. 978,913 were issued December 20, 1910.

The invention of the present application relates to plumbing fixtures, generally, which have receptacles which have provided through their walls openings for the passage of water, pipes having open ends which register or communicate with the openings of the receptacles and means for connecting the pipes and receptacles so as to form water-tight joints between them. It will be observed that this general statement includes a great variety of plumbing fixtures, but the invention is particularly adapted to a more limited variety among which may be mentioned drinking fountains, sinks for various purposes, and other fixtures having receptacles for waste water provided with outlet openings and strainers for protecting such openings and preventing solid substances from entering and clogging or stopping up the waste or drain pipes.

The object of the invention is to improve the construction of such a fixture with a view to cheapening and simplifying its construction in order that its several parts may be assembled or disassembled with ease and facility and an absolutely water-tight joint made between the receptacle and the pipe.

Since the invention is peculiarly adapted to fixtures of this particular class and since it was originally designed and intended for application to a drinking fountain having through the bottom of its receptacle an opening for the outlet of water and a strainer for protecting said opening, this embodiment of the invention has been selected for illustration and specific description, but, at the same time, it is to be understood that the invention in its broadest aspect is applicable to other plumbing fixtures and I therefore reserve to myself the exclusive right to so use it.

The invention consists in the features of novelty that are hereinafter described with reference to the accompanying drawing,

which is made a part of this specification and which is a vertical section of a drinking fountain embodying it.

The drinking fountain shown in the drawing has a bottom slab, A, a back, B, extending upwardly from the rear side of the slab and a low wall D, also extending upwardly from the remaining three sides of the slab, all of which parts taken together form a receptacle for waste water and this receptacle may be of any desired size, dimensions, configuration or design, without departing from the spirit of the invention. The back, B, may support any desired number of faucets, C, of any desired construction.

The receptacle has through its bottom an opening *a* for the outlet of water, and this opening communicates with or enters into the construction of a splash cup, E, which is so located as to receive the water falling directly from the faucet and dissipate the splash, as shown and described in my aforesaid Patent No. 978,913. The open end of a drain pipe, F, communicates or registers with the outlet opening and in order to form a tight joint between the pipe and the receptacle, the end of the pipe is provided with a flange *f* having a bearing surface adapted to a corresponding bearing surface formed on the receptacle around the outlet opening *a*, the latter bearing surface being presented outwardly, relatively to the receptacle, and these opposed bearing surfaces being provided with corresponding annular grooves occupied by an elastic packing ring, I, suitable means being provided for drawing or forcing the receptacle and the pipe toward each other and thereby compressing the packing ring. (The terms inwardly and outwardly are used in this specification relatively to the interior of the receptacle and without any relation whatever to the horizon.) It is in the construction of the means for thus drawing or forcing the receptacle and pipe toward each other that the present invention resides.

In the specific embodiment of the invention shown in the drawing, G represents a strainer covering and protecting the outlet opening and seating upon a bearing surface, *e*, formed on the bottom of the receptacle adjacent to said opening and presented inwardly.

H is a tie-rod which passes through a centrally located opening of the strainer, whence it extends therefrom, outwardly and

into the drain pipe, the outer end of said tie-rod being provided with a screw thread which engages a corresponding screw thread on the interior of the pipe. For supporting
5 or resisting endwise movement of the tie-rod outwardly, it is provided with an enlarged head having a bearing surface, presented outwardly, and seating upon a corresponding bearing surface formed on the
10 strainer around the opening through which the tie-rod passes and presented inwardly, and for rotating the tie-rod its head is notched for the reception of a screw-driver or other suitable tool. By thus rotating the
15 tie-rod its threaded lower end is caused to rotatively engage the corresponding threads of the pipe, and by this means the strainer is held firmly seated upon the receptacle and the receptacle and the pipe are drawn
20 toward each other and the packing ring compressed, thereby connecting all of the parts and forming a water-tight joint between the receptacle and pipe by a single operation. The aforesaid threads of the
25 pipe are wholly within the pipe, being formed on the interior of a socket which does not extend through the wall of the pipe, and thus all possibility of leakage at this point is absolutely avoided.
30 The terms above applied to the several parts in the specific embodiment of the invention shown in the drawing are correct and appropriate, but several of these parts have functions which warrant the use of
35 less specific terms, in considering the

broader aspects of the invention. For instance the so called strainer performs not only the function of a strainer, but in addition thereto it acts as a support for the so called tie-rod and prevents the endwise
40 movement of the latter, whereby the tensile strains put upon the tie-rod are transmitted to the receptacle. Likewise the part H has been called a "tie-rod" and while it performs the function of a tie-rod it is in fact
45 a screw so that any suitable device connecting the receptacle and pipe is within the scope of the invention.

What I claim as new and desire to secure by Letters Patent is: 50

In a plumbing fixture, the combination of a receptacle having an opening for the passage of water, a pipe registering with said opening, said pipe and receptacle having
55 oppositely presented bearing surfaces, a strainer bearing upon the receptacle around said opening, a tie rod passing through the strainer and having an enlarged head which bears upon the top of the strainer and is provided with features, accessible from above
60 the strainer, for receiving a tool for turning it, said tie rod being externally screw threaded and said pipe having an internally screw threaded socket into which the tie rod
65 screws, said socket being wholly closed by an integral part of the pipe.

PATRICK J. MADDEN.

Witnesses:

L. M. HOPKINS,

FRANK E. BALLARD.