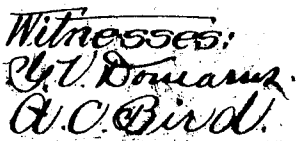


978,913.

2 SHEETS--SHEET 1.



T. Patrick J. Madden

Inventor:

By: J. Hopkins Attor.

P. J. MADDEN.
 DRINKING FOUNTAIN AND OTHER PLUMBING FIXTURE.
 APPLICATION FILED MAY 24, 1906.

978,913.

Patented Dec. 20, 1910.

2 SHEETS—SHEET 2.

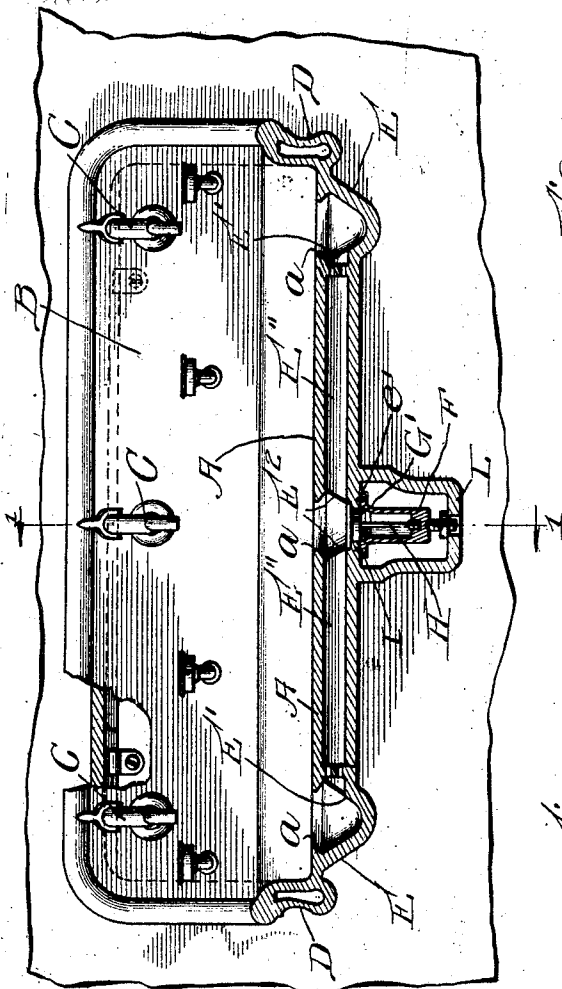
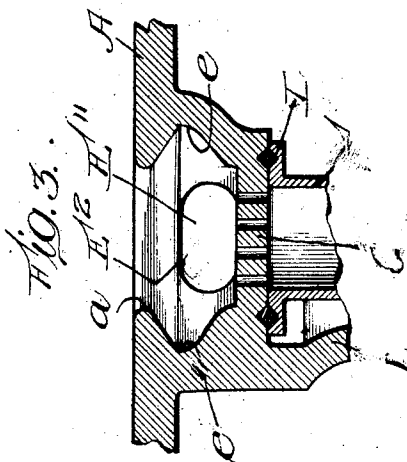
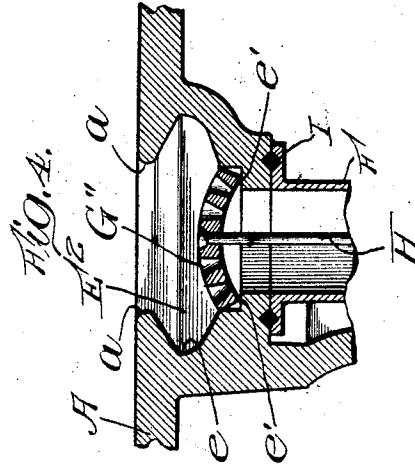


Fig. 2.

Witnesses:
 G. V. Domarus.
 A. C. Bud.



Patrick J. Madden
 Inventor.
 by: *[Signature]*
 Atty.

UNITED STATES PATENT OFFICE

PATRICK J. MADDEN, OF CHICAGO, ILLINOIS.

DRINKING-FOUNTAIN AND OTHER PLUMBING-FIXTURE.

978,913.

Specification of Letters Patent. Patented Dec. 20, 1910.

Application filed May 24, 1906. Serial No. 318,515.

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 Drinking-Fountains and other Plumbing-Fixtures, of which the following is a specification.

The principal object of the present invention is to provide an improved drinking fountain, but it will be seen from the following description that the novel features in which the invention resides are also adapted to other plumbing fixtures, among which may be mentioned sinks and lavatories, and, as to some of said novel features, water-closets, urinals, and many other fixtures which it is not necessary to here specifically enumerate.

The invention being primarily intended and especially well adapted for drinking fountains, this embodiment of it is selected for the purpose of description and illustration.

The invention consists in the features of novelty that are hereinafter described.

In the accompanying drawings, which are made a part of this specification, Figure 1 is a vertical section, on the line 1—1, Fig. 2, of a drinking fountain embodying the invention in its preferred form. Fig. 2 is a vertical section thereof on the line 2—2, Fig. 1. Figs. 3, 4 and 5 are fragmentary views showing slight modifications in vertical section.

A represents the slab, and B the back of a drinking fountain, which may be of any desired shape or configuration, and which may have one or more faucets C, preferably of the self-closing type. The so called "slab" of a drinking fountain is usually bounded at its front and ends by a bead or low wall and the slab and wall taken together form in fact and in effect a shallow bowl or sink which receives the waste water. The slab shown in the drawings has such a wall, (shown at D) and the slab, its back, and the wall are preferably integral and of earthenware. For the sake of brevity the term "slab" will hereinafter be used for designating this part A, with the understanding that the term is intended to comprehend the slab or bottom of a drinking fountain, or the bottom of an ordinary kitchen sink, or any other sink or sink-like bowl or like receptacle.

The slab A is provided with an outlet opening *a* directly beneath the bib of each of the faucets, where more than one is used, or directly beneath the hub of the only faucet, where but one is used. In the preferred form of the invention this outlet, or each of them, opens directly into a splash-cup E, the bottom of which is below the slab, and the sides of which are undercut as shown at *e*. Preferably each of these cups is integral with the slab and is provided with an opening for the outlet of waste water. Where the fountain has only a single faucet, the outlet of the single splash-cup is at the bottom thereof, and a drain pipe F for carrying off the waste water communicates with it. The outlet of the splash-cup is protected by a strainer which may be integral with the cup, as shown at G, in Fig. 3, or which may be made separately as shown at G' in Figs. 1, 2 and 5, and at G'' in Fig. 4. When it is separate, the strainer is supported by a shoulder *e'* on the cup and is held down by a tie-bolt H, the lower end of which has threaded engagement with the drain pipe F. This tie-bolt serves not only to hold the strainer in place but in addition it serves to draw the waste pipe and the receptacle toward each other for the purpose of forming a tight joint between them. To this end the pipe is provided with a flange *f* having an annular groove into which projects one side of an elastic packing ring I, the other side of which projects into a similar annular groove formed in the receptacle and surrounding its outlet opening. By tightening the tie-bolt the receptacle and pipe are drawn toward each other and the elastic packing ring compressed, thereby forming a water tight joint. In addition to this tie-bolt for drawing the receptacle and pipe toward each other, the drawing shows a screw J engaging the pipe and having threaded engagement with a nut K, supported by a housing L which housing is integral with the receptacle and completely incloses and conceals the end of the pipe. This last described means for forcing the pipe and receptacle toward each other is not claimed in this application, but is claimed broadly, in combination with any suitable support, and specifically, in combination with a housing integral with the receptacle in my co-pending application of even date herewith bearing Serial No.

318,512. This last described means for forcing the pipe and receptacle toward each other may be dispensed with when the tie-bolt is used. Nor do I claim in this application the means for forming a tight joint
 5 between a receptacle and a pipe having a vertically presented open end, which consists in interposing an elastic packing ring between them and drawing or forcing them
 10 together to compress the packing ring, this also being claimed in my application aforesaid. Nor do I claim in this application the tie-bolt engaging the strainer and pipe for drawing the strainer and pipe toward
 15 each other and clamping the receptacle toward each other, this being the subject matter of a divisional application filed November 23, 1908 Serial No. 464,073.

The novel features thus far described, and
 20 which may be used in a drinking fountain having either one or more than one outlet opening, are the tie bolt engaging the strainer and drain pipe for drawing them toward each other, and the splash-cup.
 25 The essential peculiarity of the splash-cup is its undercut sides, which afford an enlarged chamber within which the splash is received and dissipated, the over-hanging
 30 lips at the top or upper part of the cup preventing the splash from leaving the cup in a direction that would carry it directly over the walls of the sink.

Where two or more faucets are used a splash-cup is provided for each of them but
 35 as to all excepting one of said splash-cups, (i. e., the one with which the drain pipe communicates, hereinafter called the main cup,) the outlet is at the side, as shown at
 40 E' in Figs. 1 and 2. The outlet of each of these additional splash-cups opens into one end of a pipe or duct E'' the other end of which opens into the main splash-cup, as
 45 shown at E², which are located below the general plane of the slab and are integral herewith, so that the slab forms the top side
 50 of the pipe while its remaining sides are built out upon the underside of the slab, so that the pipe, or so much of it as is built upon the under side of the slab, forms a
 55 longitudinal rib or bead which strengthens the slab, thereby enabling the slab to be made thinner than would be necessary if the duct were formed wholly within the slab and between the planes of its top and bottom
 60 surfaces. Furthermore this pipe is in and of itself the duct or passage through which the water flows and not merely a cavity in the ware in which a separate pipe is contained and confined either by embedding it
 65 during the process of molding the slab or otherwise. Furthermore the housing L is disposed transversely to the pipe and is integral therewith as well as with the slab so that it takes the form of an enlarged
 65 centrally located transverse rib which addi-

tionally strengthens the slab at its mid-length thereby greatly strengthening the slab at the point where it joins the integral back B. These pipes or ducts E'' slope downward toward the main splash-cup and are integral with the sink. In fact the slab or bottom of the sink forms the top of the pipes or ducts, thus dispensing with the use of separate pipe connections. A peculiarity of each of the additional splash-cups is that its bottom is closed and extends downward below its lateral outlet opening, E', thereby forming a well which contains and at all times retains a small quantity of water. This also has a tendency to prevent splash-
 70 ing.

As above described, and as shown in Figs. 1 to 4, inclusive, the splash-cup is located below the slab or bottom of the sink and integral therewith, and while this is preferable, still, generically considered, the invention is not limited thereto and in Fig. 5 I have shown a splash-cup M located above the slab and made separate therefrom and preferably of metal. The bottom of the cup has a tubular portion *m* which projects into the outlet opening of the slab and is made of two diameters and with an offset
 90 *m'*. The offset provides an external shoulder which rests upon a corresponding internal shoulder *a'* in the outlet opening and an internal shoulder which provides a support for the strainer G'. The tie bolt H which passes through the strainer G' and engages the pipe F serves to hold the splash-
 95 cup in place, in addition to holding the strainer in place, when the latter is removable, and drawing the slab and pipe toward each other for forming a tight joint between them as already described. Above the slab, and at the level of the top surface thereof the cup is provided with a series of perforations, *m''*, for permitting water to run from the slab into the bottom of the cup.

What I claim as new is:

1. As a new article of manufacture, a plumbing fixture having a slab having an opening through it, and a splash-cup communicating with said opening, said splash-cup having undercut sides, substantially as
 110 described.

2. As a new article of manufacture, a plumbing fixture having a slab, having an opening through it, and a splash-cup communicating with said opening, said splash-
 120 cup having at top an over-hanging lip, substantially as described.

3. As a new article of manufacture, a plumbing fixture having a slab having an opening through it, and a splash-cup communicating with said opening, said splash-
 125 cup being integral with the slab and having undercut sides, substantially as described.

4. As a new article of manufacture, a plumbing fixture having a slab, having an
 130

opening through it, a splash-cup communicating with said opening, said splash-cup having undercut sides, and having also an outlet opening, and a strainer in said outlet opening, substantially as described.

5 5. As a new article of manufacture a plumbing fixture having a slab provided with a plurality of openings through its bottom, for the escape of waste water, a pipe 10 with which said openings communicate, said pipe being integral with the slab and located on the under side thereof, so that the slab forms the top side of the pipe while its remaining sides are built up on the under 15 side of the slab, thereby forming ribs for strengthening the slab and a drain pipe with which the pipe first aforesaid communicates.

6. As a new article of manufacture, a plumbing fixture having a slab provided 20 with a plurality of openings through its bottom, for the escape of waste water, a splash cup with which each of said openings communicates, a pipe with which each of 25 said splash cups communicates, said slab, splash cups and pipe being integral and the splash cups and pipe being located below the slab, so that the slab forms the top side of the pipe while the remaining sides of the pipe and splash cups are built up upon the 30 under side of the slab so as to form ribs for strengthening the slab and a drain pipe with which the pipe first aforesaid communicates.

7. As a new article of manufacture, a plumbing fixture having a slab having an 35 opening through it, a splash-cup below the slab communicating with said opening, said splash-cup having undercut sides and having a closed bottom, and a drain-duct or passage communicating with the splash-cup 40 above its closed bottom, substantially as described.

8. As a new article of manufacture, a plumbing fixture having a slab having an

opening through it, a faucet, the spout of which is located directly over said opening, 45 a splash-cup below the slab, communicating with said opening, said splash-cup having undercut sides and having also an outlet opening, and a drain pipe communicating with said outlet opening, substantially as 50 described.

9. As a new article of manufacture, a plumbing fixture having a slab provided with a plurality of openings through it, a pipe, integral with the slab, with which all 55 of said openings communicate, said slab and pipe being integral so that the slab forms the top side of the pipe while its remaining sides are built up upon the under side of the slab, thereby forming a strengthening rib, 60 and a housing, integral with the slab and pipe, with the interior of which said pipe communicates, said housing being disposed transversely to the pipe and forming an additional strengthening rib.

10. As a new article of manufacture, a plumbing fixture having a slab provided with a plurality of openings through it, a pipe, integral with the slab, with which said 70 openings communicate to the said pipe being located below the slab so that the slab forms the top side of the pipe while its remaining sides are built up on the under side of the slab, thereby forming a strengthening rib, 75 a housing, integral with the slab and pipe, said housing being located at a point intermediate of and transversely to the pipe, thereby forming an additional strengthening rib, the portions of the pipe located on 80 opposite sides of the housing being in internal communication therewith.

PATRICK J. MADDEN.

Witnesses:

L. M. HOPKINS,
GEO. A. HARTKE.