No. 696,422. Patented Apr. 1, 1902.

E. S. DUFFY.

CLAMP FOR WASHBOWLS, &c.

(Application filed Dec. 26, 1899.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

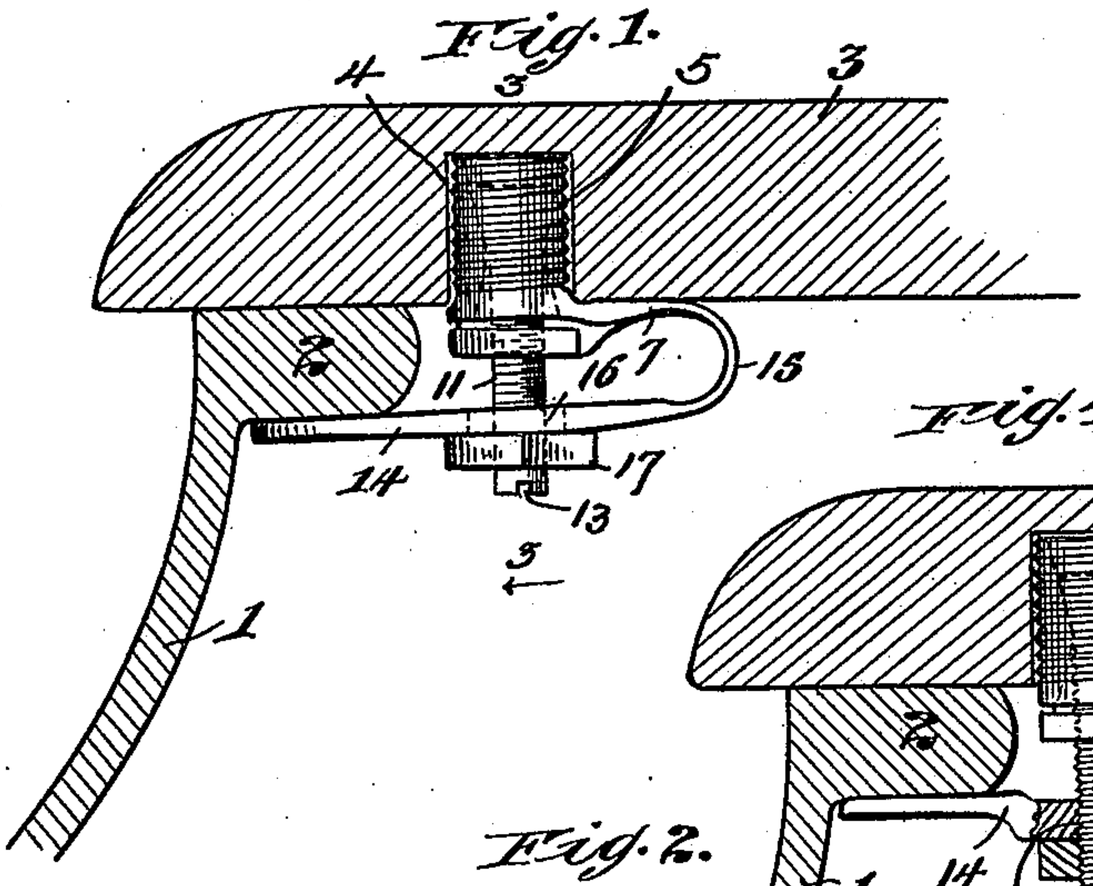


Fig. 4.

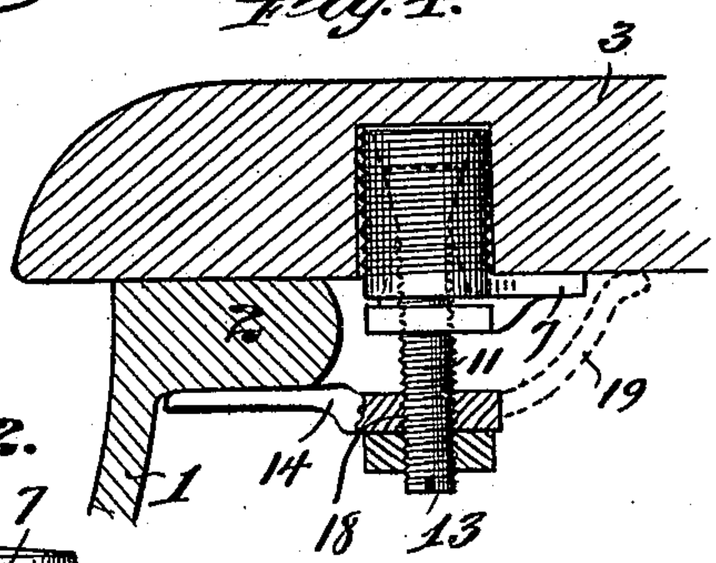


Fig. 2.

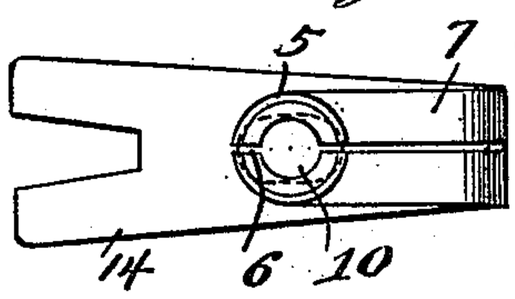
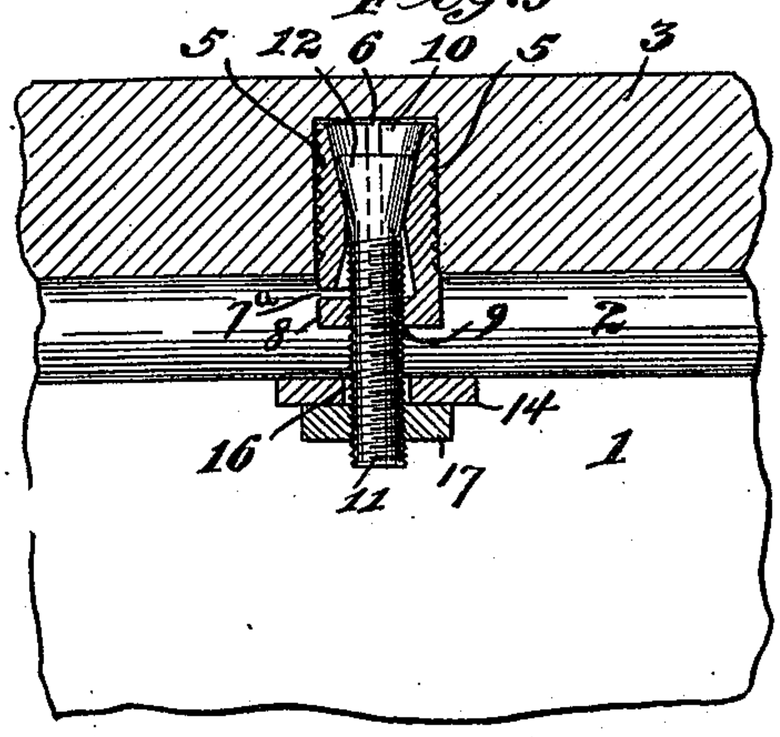


Fig. 3



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(No Model.) 2 Sheets—Sheet 2.

Fig. 5.

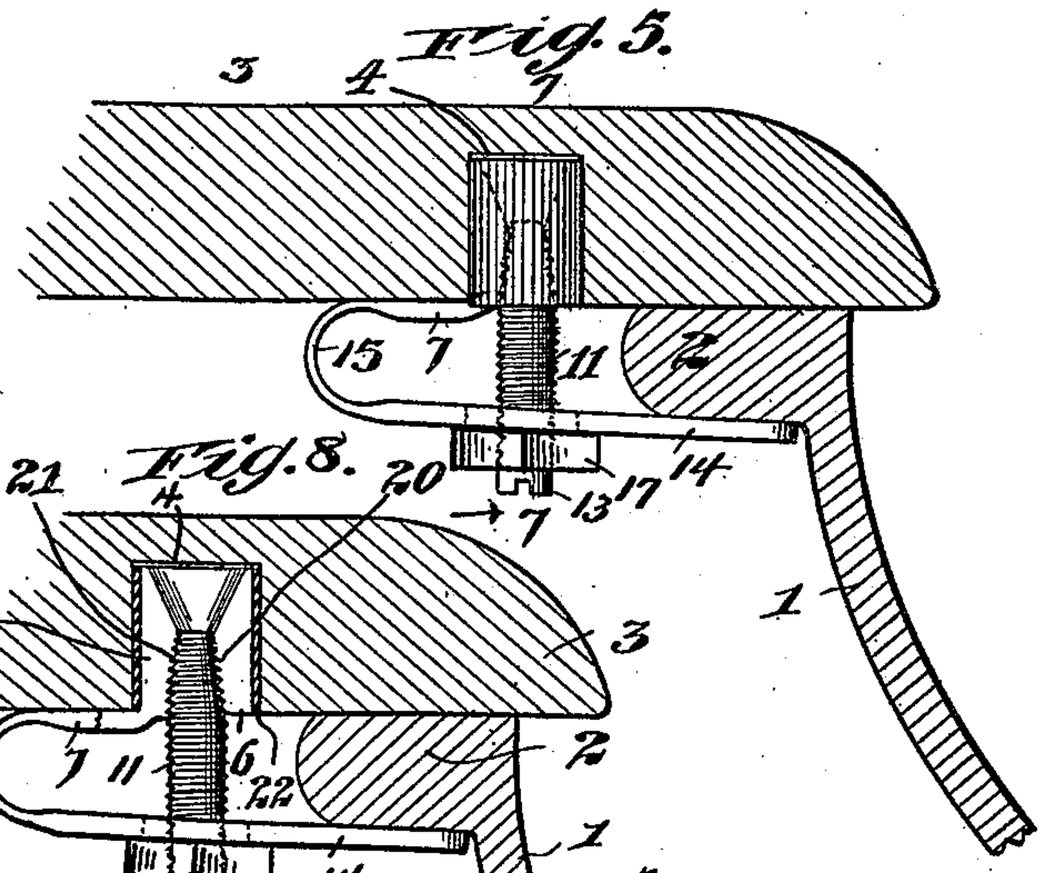
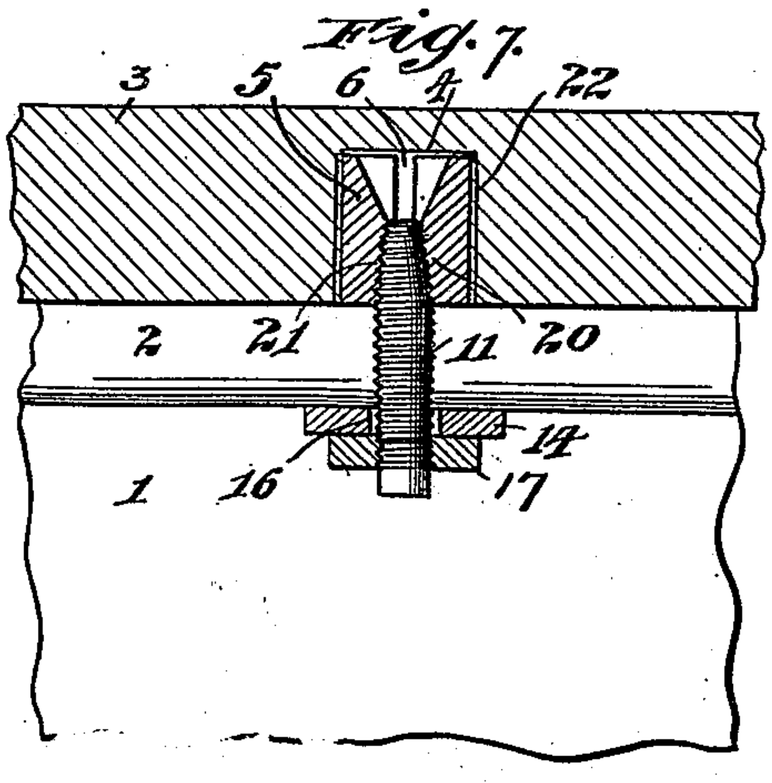


Fig. 8.

Fig. 6.

Fig. 7.



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UNITED STATES PATENT OFFICE.

EDWARD S. DUFFY, OF CHICAGO, ILLINOIS.

CLAMP FOR WASHBOWLS, &c.

SPECIFICATION forming part of Letters Patent No. 696,422, dated April 1, 1902.

Application filed December 26, 1899. Serial No. 741,584. (No model.)

To all whom it may concern:

Be it known that I, EDWARD S. DUFFY, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Clamps for Washbowls, &c., of which the following is a specification.

This invention relates to clamps for washbowls, and has for its object to provide a construction whereby a washbowl may be readily and firmly secured to the stone slab which forms the top of the washstand.

To this end my invention consists in certain novel features, which I will now proceed to describe and will then particularly point out in the claims.

In the accompanying drawings, Figure 1 represents a sectional view through a portion of a washbowl and its supporting-slab, the connecting device being shown in elevation. Fig. 2 is a plan view of the connecting device detached. Fig. 3 is a sectional view taken on the line 3 3 of Fig. 1 and looking in the direction of the arrow. Fig. 4 is a view similar to Fig. 1, illustrating a slightly-modified form of the construction therein shown. Fig. 5 is a view similar to Fig. 1, illustrating a further modification of the device. Fig. 6 is a plan view of the connecting device shown in Fig. 5. Fig. 7 is a transverse sectional view taken on the line 7 7 of Fig. 5 and looking in the direction of the arrow; and Fig. 8 is a view similar to Fig. 5, illustrating the mode of forming the split thimble in the last-mentioned modification.

Referring first to the construction shown in Figs. 1, 2, and 3 of the drawings, 1 indicates the washbowl, which is provided with the usual outwardly-extending flange 2, and 3 indicates the stone slab which forms the top of the washstand. Within this slab there is formed from underneath a cylindrical recess 4, within which fits a thimble 5, which is preferably corrugated externally in order to cause its outer surface to more firmly grip the wall of the recess 4. This thimble is split or divided vertically, as indicated at 6, the two parts of the thimble being, however, integrally connected by means of a shank 7, extending at right angles to the thimble, from the lower portion thereof, so as to bear against the under side of the slab, the slit 6 extending some distance along this shank. The slit 6 does not extend entirely to the base of the thimble 5, but extends laterally to the periphery of the thimble some little distance above the base, as indicated at 7^a, and the unsplit or integral base thus formed is provided with a threaded aperture 9. The body of the thimble above this base is provided with a tapering aperture 10. 11 indicates a screw which fits the threaded aperture 9 in the base of the thimble and is provided with a tapering or conical head 12, which operates as a wedge to spread the split body of the thimble. The lower end of the screw 11 is provided with the usual notch 13, by means of which it may be turned. 14 indicates the clamping-arm, which in this construction is made integral with the shank 7 of the thimble, being connected therewith by a bowed or spring portion 15. This clamping-arm is provided with a slot 16, through which the screw 11 passes, and there is mounted on said screw below the clamping-arm a nut 17. The device thus constructed is utilized by placing the thimble 5 within the cylindrical aperture 4 and at the same time engaging the end of the clamping-arm 14 underneath the flange 2 of the bowl 1 after this latter has been brought into position under the slab 3. The screw 11 may then be rotated in such a manner as to draw its conical head 12 downward, so as to spread the two sections of the vertically-split upper portion of the thimble laterally outward and cause them to firmly clamp the device in position in the recess 4 of the slab 3. The nut 17 may then be screwed up upon the screw 11 in such a manner as to press the free end of the clamping-arm 14 firmly against the flange of the bowl, and thereby hold the bowl in position against the under side of the slab. It will be observed that I obviate the necessity of undercutting the recess 4 in the slab and do away with the calking of the thimble in place by melted lead or other similar means. The device may be readily and quickly applied at a minimum of expense and may when necessary be as readily removed.

In Fig. 4 of the drawings I have shown a modification of the construction just de-

scribed in which the integral connection between the clamping-arm 14 and the shank 7 of the thimble is dispensed with. In this construction I prefer to substitute for the slot 16 in the clamping-arm a threaded aperture 18, in which the screw 13 fits. I may, if desired, extend that end of the clamping-arm which is not in engagement with the bowl-flange so that it will rest upon the under side of the slab 3, as indicated in dotted lines at 19.

In Figs. 5, 6, 7, and 8 I have shown a further modification of the device in which the thimble 5 is split vertically throughout its entire height, the slit 6 extending from top to bottom thereof, as shown in Fig. 8. The two halves are, however, still integrally connected by means of the shank 7. The lower portion of the thimble is provided with a tapering or threaded aperture 20, and the upper end of the screw 11 is correspondingly tapered and threaded, as indicated at 21. I have also shown the thimble as provided with a smooth exterior and surrounded by a split jacket 22, of lead or other soft metal. It will be obvious that rotation of the screw 11 will force its tapered extremity into the correspondingly-tapered aperture in the thimble and will spread this latter, so as to force the lead jacket firmly against the walls of the recess 4, and thereby firmly connect the device to the slab 3. The structure is in other respects similar to that already described in connection with Figs. 1, 2, and 3 of the drawings.

Various other modifications will readily suggest themselves, and I do not wish to be understood as limiting myself to the precise details hereinbefore described, and shown in the drawings.

I claim—

1. The combination, with a slab having a cylindrical recess, and a bowl, of a clamping device comprising a longitudinally-split thimble and a clamping-arm integrally connected therewith, a screw threaded to engage the thimble and having a conical or tapering portion to spread the same, and a nut mounted on said screw and bearing against the clamping-arm, substantially as described.

2. The combination, with a slab having a cylindrical recess, and a bowl, of a clamping device comprising a thimble of uniform external diameter adapted to fit the recess and split both longitudinally and transversely, the lower portion being threaded, a screw adapted to fit said threaded portion and having a conical or tapering portion to spread the upper or vertically-split portion of the thimble, a clamping-arm to engage the bowl, and a nut mounted on the screw and bearing against the clamping-arm, substantially as described.

3. The combination, with a slab having a cylindrical recess, and a bowl, of a clamping device comprising a thimble adapted to fit the recess and split both vertically and horizontally, the lower portion being threaded, a clamping-arm adapted to engage the bowl and integrally connected with the thimble, a screw engaging the threaded portion of the thimble and having a tapering or conical portion to spread the thimble, and a nut mounted on said screw and bearing against the clamping-arm, said arm being apertured or slotted for the free passage of the screw, substantially as described.

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