

J. F. KELLY.
 BASIN COCK.
 APPLICATION FILED NOV. 23, 1909.

958,927.

Patented May 24, 1910.

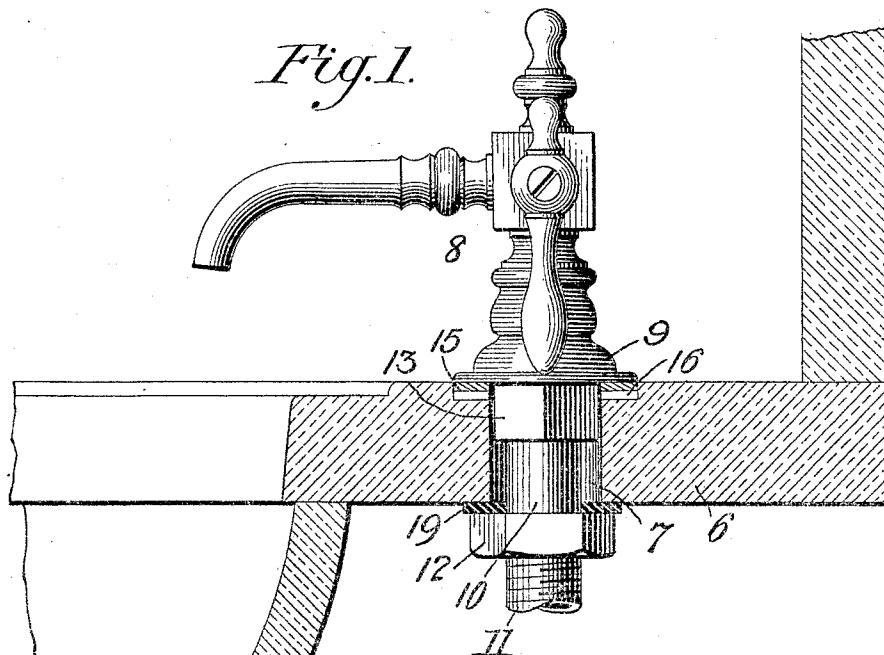


Fig. 2.

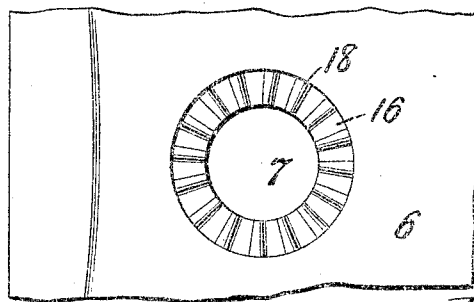


Fig. 4.

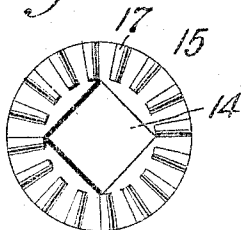
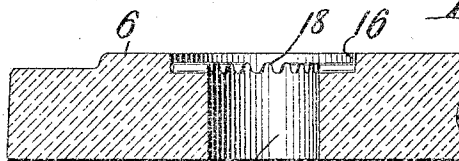


Fig. 5.



Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN F. KELLY, OF TRENTON, NEW JERSEY.

BASIN-COCK.

958,927.

Specification of Letters Patent. Patented May 24, 1910.

Application filed November 23, 1909. Serial No. 529,515.

To all whom it may concern:

Be it known that I, JOHN F. KELLY, a citizen of the United States, and resident of Trenton, county of Mercer, and State of New Jersey, have invented certain new and useful Improvements in Basin-Cocks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

In the ordinary lavatory constructions in which the cocks or faucets are applied to the slab by insertion in round holes drilled in the latter, it is impossible to secure firmly the basin cock in position so that it will always be rigidly held with its spout or nozzle pointed in the proper direction. On the other hand, the disadvantages arising from the application of a basin cock to a slab by means of a square or polygonal hole in the latter, are well recognized, inasmuch as such holes are more difficult to form than round holes and the slab is apt to crack or split away from the corners that are created; also, it is impossible to adjust the cock in a horizontal plane so that its nozzle or spout will extend in exactly the direction it should have with respect to the basin or bowl. Under these circumstances it has been attempted to construct basin cock fixtures in which the cock can be adjustably and rigidly locked in a round hole in the slab, but in effecting this end, inventors have had to modify the construction of the cocks so that cocks of the usual standard type cannot be employed, and the devices have been complicated and expensive.

The object of the present invention is to obviate all of the disadvantages enumerated above and furnish a fixture in which a cock of standard type may be rigidly locked in a round hole in the slab and at the desired angle to the bowl. In evolving the new fixture I have also endeavored to make it of very simple form and of such construction that the cock may be applied to and removed from the slab with maximum ease and rapidity.

In carrying out the invention, I use an ordinary standard cock having the customary squared off portion at its lower extension, which extension passes through a round hole drilled in the slab. Around the upper part of said hole there is provided a

countersink or depression in the slab provided with means to firmly interlock with a washer that is interposed between the same and the base of the cock and so locked to the squared portion of the latter as to prevent the turning or shifting of the cock relatively to the washer, which is rigidly held in the desired position by a nut screwed on the extension of the cock beneath the slab, as will appear more clearly from the following description.

In the accompanying drawing: Figure 1 is a sectional elevation of a fixture embodying the invention; Fig. 2 is a detail plan view of the slab, showing the form of the hole in which the cock is secured; Fig. 3 is a vertical section through that portion of the slab shown in Fig. 2; and Figs. 4 and 5 are detail views of the washer that positively locks the cock to the slab.

Referring to the drawing, the slab 6 is drilled with a round or circular hole or bore 7 in which the basin cock 8 is to be secured. The cock 8 is of the usual standard type and comprises a base 9 and a tubular extension 10 directed downward from the base through the hole 7, said extension being threaded at a point below the slab, as indicated at 11, in order to receive a nut 12 that is screwed up on the extension in the customary way to hold the base of the cock down on the slab.

Immediately beneath the base 9 there is formed on the extension 10 a square or polygonal part 13, as is usual in standard cocks, and said part 13 passes through a correspondingly formed opening in a washer 15 that is interposed between the base of the cock and the slab, the washer thus being locked to the cock so as to be incapable of independent angular movement. The washer 15 is also locked to the slab, preferably by having a non-rotative relation with a countersink or depression 16 cut in the slab around the upper end of the hole 7. In order to lock the washer to the slab, the contacting surfaces of the former and of the depression 16 are roughened as by interfitting projections and recesses such as afforded by corrugations 17, 18 formed respectively on the washer and in the countersink or depression. In the embodiment illustrated the corrugations 17 of the washer are disposed radially and are created by bending the washer at certain points so as to give its outer part or

periphery an undulating form, as shown in Figs. 4 and 5. Of course the corrugations 18 of the countersink 16 are correspondingly arranged, so that the washer may be fitted and held in the countersink in any of a number of positions, thus locking the cock at the desired angle to the bowl. The nut 12 clamps the base 9 of the cock down on the washer after the latter and the cock are placed in the desired position.

In order to mount the cock on the slab, the washer 15 is slipped over the extension 10, the nut 12 being removed, whereupon said extension is inserted through the opening 7. The washer, with the cock locked to it, is then turned so that the latter will be directed at the desired angle with respect to the bowl, the washer being seated in this position by means of its corrugations that interlock with the corrugations 18 of the countersink. The nut 12 is then screwed on the threaded part 11 of the extension, a suitable rubber gasket being preferably interposed between said nut and the under surface of the slab, as shown; the tightening of the nut will force the base of the cock into tight engagement with the washer 15, with which it is preferably coextensive, and said washer will in turn be forced and held tightly in the position previously indicated. In order to dismount the fixture, it is merely necessary to remove the nut 12, whereupon the cock may be lifted off its seat and removed, together with the locking washer.

It is apparent that the square portion 13 is of such size as to be movable angularly in the hole 7 when the parts are loosened and the washer is raised from its seat.

The manner of interlocking the washer with the slab may be varied in a number of different ways without departing from the invention, it being merely necessary to provide for the positive locking of the washer against angular movement when the cock is clamped in place. It is also manifest that the invention may be carried out with cocks or faucets of various types, and that I have not attempted to describe the many modifications of the structure that may be made without digressing from my inventive idea.

What I claim is:—

1. The combination with a slab having an opening, of a cock or faucet provided with an extension passing through said opening, and a locking member interposed between the upper surface of the slab and the base of the cock and positively locked against angular movement with respect to the cock and slab.
2. The combination with a slab having a round opening, of a cock having an extension located in said opening, and a locking member having non-rotative engagement with said extension and positively locked to the upper surface of the slab.

3. The combination with a slab, of a cock or faucet having an extension passing through the slab, a locking member having non-rotative engagement with the extension and interposed between the base of the cock and the upper surface of the slab, and means for locking said member positively in a number of positions in the same horizontal plane.

4. The combination with a slab, of a cock having an extension passing therethrough, a washer having non-rotative engagement with the extension and movable angularly into a number of positions on the upper surface of the slab, and means for positively locking said washer in any of such positions.

5. The combination with a slab having a round opening, of a cock provided with an extension passing through the opening and furnished at a point therein with a polygonal portion, a washer having a polygonal opening whereby it embraces said polygonal portion, said washer being interposed between the base of the cock and the upper surface of the slab, and angularly movable with respect to the latter, and means to lock said washer positively in any of its angularly adjusted positions.

6. The combination with a slab having a round opening and a depression surrounding the opening at the upper surface of the slab, said depression being provided with locking projections, of a cock having an extension passing through said opening, a locking member in non-rotative engagement with the extension and furnished with projections to coact with those of said depression, and a tightening nut threaded on the extension beneath the slab.

7. The combination with a cock or faucet having an extension and a polygonal portion on the extension, of a flat locking washer having a polygonal opening to conform to said polygonal portion, and furnished with locking projections, and a nut threaded on the extension.

8. The combination with a slab having an opening with a corrugated countersink or depression, of a cock or faucet provided with an extension located in said opening, a corrugated washer locked to the extension and seated in said depression beneath the base of the cock, and a tightening nut threaded on the extension beneath the slab.

9. The combination with a slab, of a cock having an extension passing therethrough, and a washer interposed between the base of the cock and the upper surface of the slab, and positively and directly locked to both the cock and slab.

10. The combination with a slab having an opening therethrough and a depression or countersink around the opening at the upper surface of the slab, of a cock having an extension passing through said opening,

and a washer seated in said depression or countersink beneath the base of the cock, and positively locked to both the cock and slab.

- 5 11. A basin fixture comprising a cock or faucet having a threaded extension with a polygonal portion thereon, a flat washer having a polygonal opening to conform to said polygonal portion, and corrugated

radially, and a nut adapted to be screwed on 10 said extension.

In testimony whereof I affix my signature, in presence of two witnesses.

JOHN F. KELLY.

Witnesses:

JOS. J. GALLAVAN,
ALBERT EVANS.