

(No Model.)

P. CONNOLLY.

CLAMP FOR WASH BASINS, &c.

No. 347,921.

Patented Aug. 24, 1886.

Fig. 1.

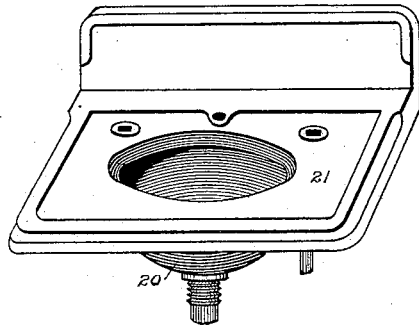


Fig. 2.

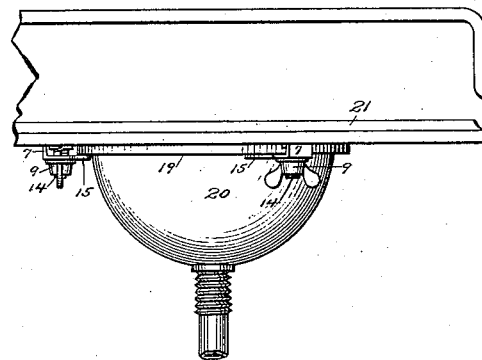


Fig. 3.

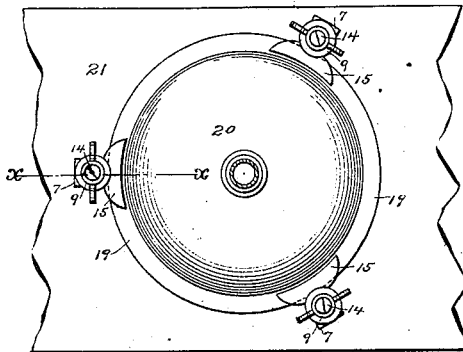


Fig. 4.

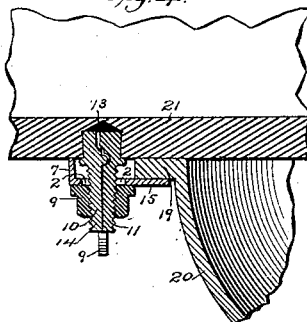


Fig. 5.



Fig. 6.



Fig. 7.



Fig. 8.

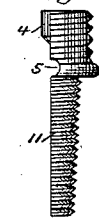


Fig. 10.

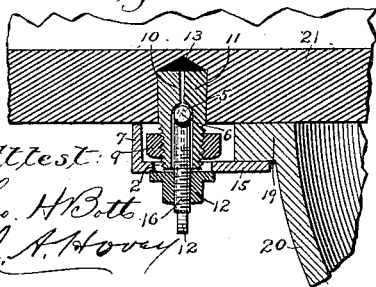


Fig. 11.



Fig. 12.

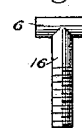
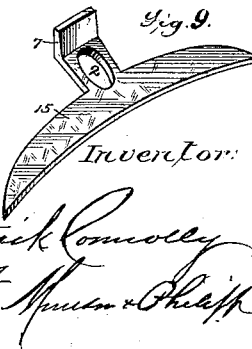


Fig. 9.



Attest:

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Inventor:

Patrick Connolly  
By *[Signature]*

Attest:

# UNITED STATES PATENT OFFICE.

PATRICK CONNOLLY, OF BROOKLYN, NEW YORK.

## CLAMP FOR WASH-BASINS, &c.

SPECIFICATION forming part of Letters Patent No. 347,921, dated August 24, 1886.

Application filed January 18, 1886. Serial No. 188,848. (No model.)

### *To all whom it may concern:*

Be it known that I, PATRICK CONNOLLY, a citizen of the United States, residing at Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Clamps for Wash-Basins, &c., fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

This invention relates to a clamping device, which is especially adapted for use in securing wash-basins and other articles to marble or slate slabs or other surfaces into which screws cannot be driven.

In securing wash-basins and other articles to such surfaces it has heretofore been customary either to drill holes for a distance into the marble or other surface and then anchor the clamping-bolts therein by means of lead or cement or to drill the holes entirely through the marble or other slab, so that the heads of the clamping-bolts were upon the side of the slab opposite that to which the basin or other article was secured. Both of these ways have been found objectionable in practice, the first because of the great trouble and labor involved, and because a bolt once anchored in that manner could only be removed with great difficulty; and, second, because of the extra labor involved in drilling the holes entirely through the slab, and because the heads of the clamping-bolts upon the top of the slab destroyed its even and smooth surface, and made it more difficult to keep the slab properly cleaned.

It is the object of the present invention to overcome these difficulties; and to that end the invention consists in a clamping-bolt which is so constructed that it can be readily and securely anchored in a comparatively shallow hole without the use of lead or cement, thereby permitting the bolts to be inserted and removed as often as may be desired and without extra labor or trouble.

As a full understanding of the invention can be best given by a detailed description of the construction and manner of using the device, such description will now be given, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of an ordi-

nary stationary wash-basin provided with the invention. Figs. 2 and 3 are respectively a side elevation and a bottom plan view of the same upon an enlarged scale. Fig. 4 is a section upon a still larger scale through one of the clamps, the same being taken upon the line *xx* of Fig. 3. Figs. 5, 6, 7, and 8 are enlarged views of the parts of the clamping-bolt. Fig. 9 is an enlarged perspective view of the clamp. Fig. 10 is a view similar to Fig. 4, showing a modified form of the clamping-bolt; and Figs. 11 and 12 are views of the parts of the bolt detached.

Referring to said figures it is to be understood that 20 represents an ordinary marble or earthen wash-basin, and 21 the usual marble, slate, or other slab which forms the top of the wash-stand, and to the under side of which the basin is secured. The basin 20 is provided with the usual rim or flange, which fits against the under side of the slab 21 and serves as a bearing for the clamps 15, which are pressed against the flange to hold the basin in position. The slab 21 is provided upon its under side, just outside the flange, with a number of holes, 13, which extend partly through the slab and form seats or anchorages for the bolts 14, which hold the clamps 15 in position. The clamping-bolts 14, which are threaded at their outer ends and are made slightly tapering, as shown, are split longitudinally into two parts, 10 11. One of these parts, 10, as shown, is provided near its head with a transverse rib or projection, 6, which fits into a corresponding groove or depression, 5, formed in the other part. The rib 6 and groove 5 are so proportioned, however, that when the outer or smaller ends of the parts 10 11 are brought together, as shown in Fig. 4, the rib will act as a fulcrum, upon which the parts will turn, so that the upper or larger ends will be forced apart, as also shown in Fig. 4, and thus spread or enlarge the head of the bolt, and vice versa. The rib or fulcrum 6 and groove 5 also serve to register the screw-threads of the two parts 10 11, so as to permit the clamping-nut 9 to be readily run onto the bolt.

It is to be remarked in passing that the rib or fulcrum 6, instead of being made integral

with one of the parts 10 11, may be a round pin, which will lie in corresponding grooves formed in the two parts. The upper or larger end of one of the parts of the bolt—the part 11, as shown—is also provided with a short longitudinal rib, 4, (see Figs. 7 and 8,) which fits into a corresponding groove, 3, (see Figs. 5 and 6,) formed in the other part. This rib and groove are of minor importance; but they serve to prevent the parts 10 11 from moving laterally with relation to each other, particularly while the screw-thread is being cut on the bolt. The opening 2 of the clamp 15, through which the bolt 14 passes, is elongated, as shown, so that the clamp can be adjusted within certain limits to conform to slight variations in the size of the basin 20, and the clamp is provided with an upward projection or flange, 7, of a width equal or about equal to the thickness of the flange 19, which rests against the under side of the slab 21, and serves to hold the clamp up to the flange, as best shown in Fig. 4.

The manner of using the clamping device just described is as follows: The holes 13, having been bored into the slab 21 at the proper points, the parts 10 11 of the bolts 14 will be placed together, with their larger ends or heads in contact and their smaller or threaded ends separated, and while in this condition the heads of the bolts will be inserted into the holes 13. The clamps 15 will then be placed in position and the nuts 9 run onto the threaded outer ends of the bolts. As the nuts 9 are run onto the bolts, the gradual increase in the thickness of the parts 10 11 will cause them to be drawn together at their outer ends, thereby rocking the two parts on the rib or fulcrum 6, and causing the inner ends or heads of the parts to be separated or spread apart and forced against the sides of the holes 13, so as to be held firmly in the slab 21, and this will continue and the pressure of the heads of the parts 10 11 against the sides of the holes 13 will increase until the nuts 9 come into contact with the clamps 15 and force them firmly against the flange 19.

To remove the bolts 14, it is only necessary to back off the nuts 9, after which the outer ends of the parts 10 11 can readily be separated and the parts withdrawn from the holes 13.

In some cases it may be desirable to have the clamping-bolts so constructed that the clamps 15 and the basin can be removed without removing the clamping-bolts from the slab 21. This can readily be done by means of the construction shown in Figs. 10, 11, and 12. In this case the threaded portions of the parts 10 11 are made shorter than in the construction first described, and the nuts 9, instead of serving the double purpose of separating the head portions of the parts 10 11, so as to hold the bolts in the holes 13, and also of holding the clamps against the flange 19, serve only the former purpose, and are located between the clamps and the slab 21.

The rib or fulcrum 6, upon which the parts 10 11 rock, instead of being integral with one of the parts, is formed by the head 6 of a T-shaped bolt, which head lies in corresponding grooves, 5, formed in the parts 10 11, while the body of the bolt 16, which is threaded and extends beyond the end of the bolt 14, lies in longitudinal grooves, 1, which are formed in the threaded ends of the parts 10 11, and intersect the grooves 5. The head 6 of the bolt 16 serves the same purpose as and is the equivalent of the rib or fulcrum 6 in separating the head portions of the parts 10 11 when the nut 9 is run onto the threaded portions of the parts, and the outer threaded end portion of the bolt 16 is provided with a nut, 12, which is run onto the bolt after the nut 9 is in place, and serves to hold the clamp 15 against the flange 19. By means of this construction the nuts 12 and clamps 15 can be removed so as to release the basin without disturbing the bolts 14, after which, if desired, the bolts 14 can be removed from the slab by backing off the nuts 9. The head portions of the parts 10 11 will preferably be roughened or provided with coarse threads, as shown in Figs. 5 to 8, which will engage with the sides of the holes 13 as the head portions are spread, and thus prevent the bolts from turning as the nuts are run on and tightened.

The invention is herein shown as applied to a wash-basin, because this is one of its most important and useful applications; but it will be readily seen that it may be successfully applied in any or almost any case where it is desired to anchor a bolt in a stone or other body, and it will also be seen that it is immaterial in what direction the bolt extends, as it may be made to extend either upward or downward, or in any intermediate position.

What I claim is—

1. The combination, with the bolt 14, composed of the two parts 10 11, which are tapered at their threaded ends and are arranged to rock upon the rib or fulcrum 6, of the nut 9, adapted to be run onto the threaded ends of said parts, substantially as described.

2. The combination, with the bolt 14, composed of the two parts 10 11, which are tapered at their threaded ends and are arranged to rock upon the rib or fulcrum 6, of the clamp 15 and the nut 9, adapted to be run onto the threaded ends of the said parts, substantially as described.

3. The combination, with the bolt 14, composed of the two parts 10 11, which are tapered at their threaded ends, of the bolt 16, having the head 6, forming a rib or fulcrum upon which the parts 10 11 rock, and the nut 9, adapted to be run onto the threaded ends of said parts 10 11, substantially as described.

4. The combination, with the bolt 14, composed of the two parts 10 11, which are ta-

pered at their threaded ends, of the bolt 16,  
having the head 6, forming a rib or fulcrum  
upon which the parts 10 11 rock, the nut 9,  
adapted to be run onto the threaded ends of  
5 said parts 10 11, the clamp 15, and the nut 12,  
adapted to be run onto the end of the bolt 16,  
substantially as described.

In testimony whereof I have hereunto set my  
hand in the presence of two subscribing wit-  
nesses.

PATRICK CONNOLLY.

Witnesses:

J. A. HOVEY,

JAS. J. KENNEDY.