P. MUELLER AND A. C. SCHUERMANN.

INDEX FOR COCKS.

APPLICATION FILED NOV. 12, 1917.

1,319,893.

Patented Oct. 28, 1919.

2 SHEETS—SHEET 1.

Fig 1

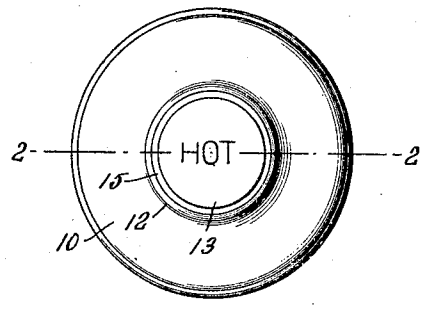


Fig 2

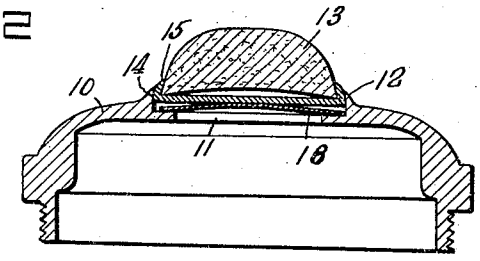
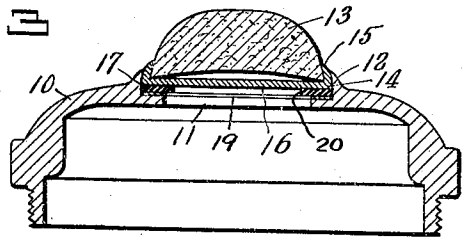


Fig 3



Witnesses

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2 SHEETS—SHEET 2.

Fig. 4.

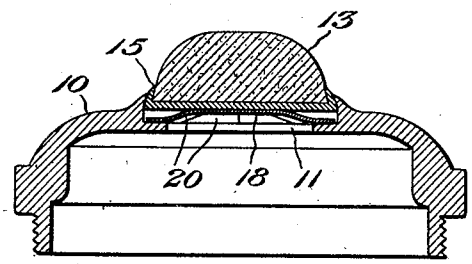


Fig. 5.

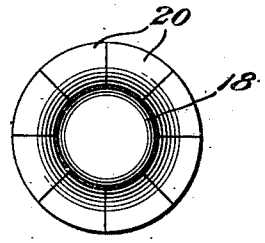


Fig 6

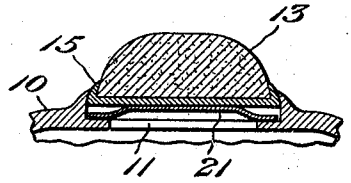
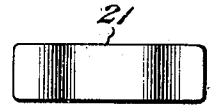


Fig. 7.



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UNITED STATES PATENT OFFICE.

PHILIP MUELLER AND ANTON C. SCHUERMANN, OF DECATUR, ILLINOIS, ASSIGNORS TO ADOLPH MUELLER, TRUSTEE, OF DECATUR, ILLINOIS.

INDEX FOR COCKS.

1,319,893. Specification of Letters Patent. **Patented Oct. 28, 1919.**

Application filed November 12, 1917. Serial No. 201,487.

To all whom it may concern:

Be it known that we, PHILIP MUELLER and ANTON C. SCHUERMANN, citizens of the United States, residing at Decatur, in the county of Macon and State of Illinois, have invented new and useful Improvements in Indexes for Cocks, of which the following is a specification.

This invention relates to index buttons for cocks, faucets and the like where an index button may be used; the principal object of the invention being to secure the button to the handle or such other convenient part of a faucet that after being fastened in place, the button may be turned until the word or words, letters, or characters thereon are brought into an upright or convenient position for reading.

The use of index buttons on the handles of cocks and faucets are well known, but as a rule these buttons are attached either directly to the handle or to some part that has to be screwed into place. It has been found that however much care is exercised to machine and thread the parts, and place the button in position thereon, when said parts are screwed into place, the characters on the buttons are, more often than not, out of register, that is to say, out of position to read properly, or out of symmetrical relation to the faucet. To overcome this unsatisfactory condition the index buttons in the present invention are fixed in carriers or holders and each carrier or holder is secured in place by a suitable fastening which permits the carrier being turned, after all the parts are assembled to properly position the index button.

The index buttons are usually and preferably made of porcelain, circular in shape with a convex top and a concave bottom. These buttons may, if desired, be made of other material and in different shapes, the one described, however, is a common form. At the present time, each button is usually fastened in its supporting part by burnishing or spinning an annular fin, formed for the purpose on said part, over the edge of the button, and because of the fact that the buttons are usually irregular in shape on their peripheries, not perfectly circular, and in many instances have small rough projections thereon, numbers of the buttons are broken, cracked and chipped while being secured to the faucet handle or in attempting to turn them to position after the faucet has been screwed in place.

In the present invention, the buttons are each mounted in a cup-shaved carrier or holder which latter is frictionally connected to the faucet handle or other part in such manner that it may be rotated by the fingers or a suitable tool until the index is in a proper position to be read.

With this object in view the invention consists of the novel combination and arrangement of parts hereinafter described, claimed and illustrated in the accompanying drawings in which—

Figure 1 is a top view of one form of faucet handle with an index button secured thereto in the improved manner.

Fig. 2 is an enlarged sectional view on the line 2—2 of Fig. 1 showing one form of attaching the index button carrier or holder to the faucet handle.

Fig. 3 is a similar view of a modified form of the attaching means.

Fig. 4 is a sectional view showing a slightly different form of attaching means,

Fig. 5 is a plan view of the resilient holding means shown in Fig. 4.

Fig. 6 is a sectional view showing still another form of attaching means,

Fig. 7 is a plan view of the resilient holding means shown in Fig. 6.

In the drawings, 10 indicates the upper part or member of a faucet handle of that type shown in Letters Patent No. 963,166, granted June 5, 1910. The invention is shown in connection with this form of handle merely by way of illustration, as it is equally applicable to handles of many other kinds and to objects other than cock or faucet handles.

The member 10 in the present instance is dome shaped, hollow and formed with an axial opening 11 therethrough surrounded exteriorly by an annular, concentric fin 12 of greater diameter than the opening 11.

The index button 13 is preferably made of porcelain, circular in shape with a concave bottom and a convex top on which the index characters are displayed, as in Fig. 1. The button 13 is seated in a shallow cup-shaped carrier or holder 14, the upstanding rim 15 of which is quite thin and sharp, like a fin, and having flat bottoms 16 both within and without. If found desirable, the bottoms 16 may be made with curved or other shaped

faces as is apparent. The index button 13 is placed in the cup-shaped holder 14 and the short rim or fin 15 burnished or spun over the peripheral edge or side of the button at the bottom thereof. To more securely fasten the index button, the side is preferbly made with a slight flare as shown.

After the index button 13 has been secured in its carrier or holder 14, the latter is ready to be placed within the fin 12 or in a recess 17 formed in the handle and surrounded by said fin. The latter construction is preferred as a better support for the index button carrier is obtained. Before inserting the button carrier or holder 14 in the recess 17 a thin resilient concavo-convex washer or disk 18 of smaller diameter than said recess 17 is first placed therein with its convex side uppermost on the center or highest part of which the button holder 14 bears. The index button and its holder or carrier are then pressed downward to place the washer or disk under tension while the fin 12 on the handle is burnished over the sides of button holder to retain it in place, as shown. The spring washer or disk 18 tends to force the button carrier or holder upward, but is prevented from doing so by the inturned fin 12. The pressure of the washer is sufficient to hold the index button carrier firmly in place against accidental rotation, but permitting rotation thereof to adjust the characters on the index button when sufficient force is applied to the button or its holder.

In Fig. 3, which shows a modification, a very thin flat annular washer 19 having an opening of approximately the same diameter as the opening 11 in the handle, is first inserted in the recess 17, then a soft resilient centrally perforated washer 20, say of rubber, is placed on the washer 19 after which the index button carrier is seated on the soft washer 20 and subjected to pressure, while the fin 12 is burnished, spun or stamped over the button holder for the purpose described.

In Figs. 4 and 5 a disk similar to the disk shown in Fig. 2 is found, except that in order to be a highly resilient disk and one which will hold the index button and its carrier firmly in place, but readily movable, the disk 18 will be slitted radially to give a number of elastic spring fingers 20, thereby providing a highly elastic but firm holding means for the index button.

In that form shown in Figs. 6 and 7, the resilient or spring holding means takes the form of a rigid bar of resilient material which extends diametrically across the axial opening and the crown of which bears against the button carrier or holder, this furnishing a very economical yet efficient holding means to maintain the index button in its adjusted position against ordinary displacement, but yielding adjustment of this button when the button is forced downwardly against the spring so as to collapse it and permit the button and its carrier to be turned.

It will be understood that, as shown in the drawings, there would be a slight clearance between the edges of the resilient members and the walls of the pocket in which they are seated so as to permit them to yield and flap under pressure upon the button for the purposes of adjusting.

Such changes as are within the range and mechanical skill may be made from the construction herein shown without departing from the spirit of our invention, and we do not, therefore, limit ourselves to the exact details shown and described.

Having thus described the invention what we claim as new is:

1. In an adjustable index for faucets, an index button, a faucet part having a seat in which said button is mounted for rotation and limited longitudinal movement, and means for holding said button frictionally locked against rotation at one extreme position of longitudinal movement, but movable longitudinally to release friction and permit said button to be rotatably adjusted.

2. In an adjustable index for faucets, an index button, a faucet part having a seat in which said button is mounted for rotation and limited longitudinal movement, and resilient means for holding said button frictionally locked against rotation at one extreme position of longitudinal movement, but movable longitudinally to release friction and permit said button to be rotatably adjusted.

3. In an adjustable index for faucets, an index button, a faucet part having a seat in which said button is mounted for rotation and limited longitudinal movement, and a spring plate for holding said button frictionally locked against rotation at one extreme position of longitudinal movement, but movable longitudinally to release friction and permit said button to be rotatably adjusted.

4. In an adjustable index for faucets, an index button, a faucet part having a seat in which said button is mounted for rotation and limited longitudinal movement, and an arched spring plate for holding said button frictionally locked against rotation at one extreme position of longitudinal movement, but movable longitudinally to release friction and permit said button to be rotatably adjusted.

5. In an adjustable index for faucets, an index button, a faucet part having a seat in which said button is mounted for rotation and limited longitudinal movement, and an arched disk having marginal spring fingers for holding said button frictionally locked against rotation at one extreme posi-

tion of longitudinal movement, but movable longitudinally to release friction and permit said button to be rotatably adjusted.

6. In an adjustable index for faucets, an index button, a flanged disk in which said button is seated, a faucet handle having a flanged seat in which said button holder is seated so as to be rotatable and have limited longitudinal movement, and an arched disk of less diameter than said seat and having its margin slitted to form spring fingers between said holder and seat to maintain said holder frictionally locked against rotation but free to be forced longitudinally toward said seat to release friction and permit said holder and button to be rotatably adjusted.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

PHILIP MUELLER.
ANTON C. SCHUERMANN.

Witnesses:
ROY HUGHES,
W. J. KELLY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."