

K. O. PFEIFFER.
INDEXED HANDLE OR HANDWHEEL.
APPLICATION FILED JULY 31, 1920.

1,402,013.

Patented Jan. 3, 1922.

Fig. 1.

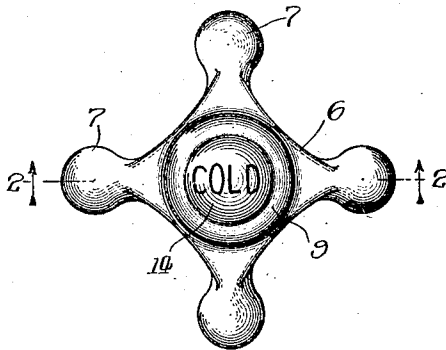


Fig. 3.

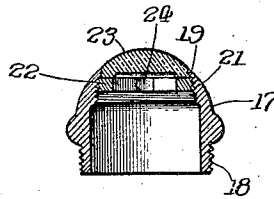


Fig. 4.

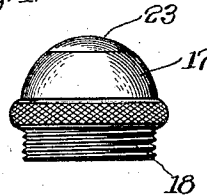


Fig. 2.

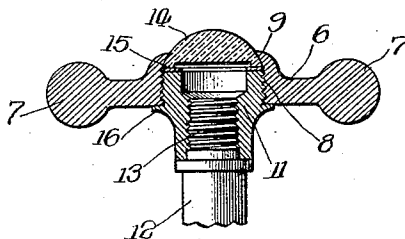
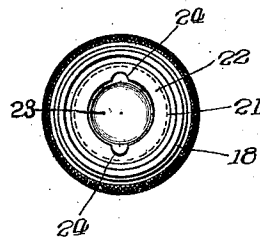


Fig. 5.



Witness:
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UNITED STATES PATENT OFFICE.

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INDEXED HANDLE OR HANDWHEEL.

1,402,013.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, KARL O. PFEIFFER, 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 Indexed Handles or Handwheels, of which the following is a specification.

This invention relates in general to faucets, cocks, valves or the like, and has more particular reference to a handle or handwheel therefor.

In lavatories and many other places, it is customary to use faucets either of the "turn" or "push" type provided with index buttons, from which it may be determined by inspection which is the hot water, and which the cold water faucet.

In the manufacture of these handles or handwheels, it has heretofore been customary to provide the upper face of the top with a socket, into which the index button, usually made of porcelain or china, is set, whereupon the upper edge of the socket was spun inwardly over the circumferential margin of the button to secure and retain the same in place. The spinning operation, however, was one which involved a high degree of delicacy and accuracy in order to compress the metal around the button without rupturing the metal or fracturing the frangible porcelain button. Too great rapidity of the spinning operation, or the application of too much pressure to the tool inevitably resulted in injury either to the button or to the edge of the metal being spun, with the result that the spoilage of these handles during their manufacture was unprofitably high.

One of the primary objects of my present invention is the provision of a handle which can be manufactured economically without danger of spoilage, and with this end in view, I have devised a handle in which the porcelain index button, instead of being fastened and retained by a spinning operation, is inserted into the handle from the bottom thereof and clamped in position between two elements of the handle without involving any spinning operation whatsoever.

Another object of my invention is the provision of a handle which will be simple in construction, cheap to manufacture, and durable in operation, one which will be attractive in appearance and which can be re-

paired if desired by replacing a button which may become accidentally broken without replacing the whole handle.

In order to facilitate an understanding of my invention, I have illustrated on the accompanying drawings, preferred embodiments thereof, from an inspection of which, when considered in connection with the following description, my invention and many of its inherent advantages should be readily appreciated.

Fig. 1 is a top plan view of a handle embodying my invention;

Fig. 2 is a vertical sectional view on the line 2—2 of Fig. 1;

Fig. 3 is a similar view of another type of handle or indexed button cap embodying my invention;

Fig. 4 is a side elevation of the cap shown in Fig. 3; and

Fig. 5 is a bottom view of the cap shown in Figs. 3 and 4.

Referring to the drawings, and particularly Figs. 1 and 2 thereof, reference character 6 indicates generally the body of a handle, which may be of any preferred shape and size, the one selected for purposes of illustration in this instance being equipped with the usual radially projecting members 7 affording provision for gripping the same to facilitate its turning. This is the usual type of handle employed on turn faucets for use in lavatories and the like.

The body 6 is provided with a centrally disposed bore 8 extending therethrough from bottom to top, the bore however, being of reduced diameter at its upper end so as to provide an inwardly projecting flange 9, preferably extending upwardly above the plane of the radially extending webs of the body. This bore is tapped from its lower end to receive the exteriorly threaded upper end of a member 11 forming the base of the handle. This base is adapted for connection to the stem 12 of a valve, faucet, or the like, this connection being preferably effected by tapping the base to receive the screw-threaded upper end 13 of the stem 12.

The index button 14, with which the handle is equipped, is customarily made of white porcelain, and is provided on its upper convex face with suitable indicia, such as the words "Cold" or "Hot," and is of such diameter that it may be inserted into the bore

8 of the body from the lower end thereof, but will be prevented from passing entirely through the bore by the inwardly projecting flange 9.

5 In assembling this structure, the button is inserted into the bore from the lower end, followed by a washer 15 of felt or other yieldable material, whereupon the base 11 is screwed into the bore so as to clamp the
10 button between the base and the flange 9. The washer 15, interposed between the base and the button, softens the pressure exerted upon the button by the base. To insure against undue compression of the button
15 such as would be liable to fracture it, the base is equipped with a circumferential stop flange 16 adapted to abut against the lower face of the body 6 to thereby limit the extent of insertion of the base into the body. It
20 will be observed that the button is firmly clamped in position between the flange 9 and the base, the clamping action being modified by the yieldable washer 15. In order to prevent accidental unscrewing of the body
25 from the base 10 in operation, a suitable cement, such as litharge, is applied to the threads of the base before the connection is established.

The form of the invention illustrated in
30 Figs. 3 to 5 inclusive, is applicable to faucets having an index cap fastened to the handle top, of the "push" type, or in other words, to those faucets which are adapted to be opened by downward pressure upon the top,
35 and also to self-closing basin faucets in which the top is given a partial rotation for opening purposes and automatically returns to closed position.

In the indexed cap, the body 17 is substantially cylindrical in shape and exteriorly threaded at its lower end, as indicated at
40 18, for connection with the handle or hand-wheel of a valve or faucet. In this instance also, the central bore is of reduced diameter at its upper end by reason of the inwardly
45 projecting flange 19, and immediately beneath this flange, it is interiorly screw-threaded at 21 to receive a member 22 which, in this instance, is in the form of a ring exteriorly threaded for engagement with the
50 threads 21 of the cap.

The index button 23, similar in all respects to the button 14, previously described, is insertable into the top from the bottom
55 end of the bore, and is prevented from upward displacement at the top of the bore by the flange 19. After the button has been inserted in position, it is locked in place by the ring 22, which is preferably provided

with oppositely disposed recesses 24 to accommodate a spanner wrench, by means of
60 which the ring can be quickly and easily threaded in place. The button in this instance is clamped between the flange 19 and the ring 22, and in this type also, a washer
65 may be interposed between the button and ring, if desired, but I have found that quite satisfactory results are secured with this type of top without using a washer.

It will be apparent from the foregoing
70 that I have provided a handle in which the index button is retained in position by a circumferential flange, but in the manufacture of which, no spinning operation such as would be liable to result in injury to the
75 button or to the metal of the top, is necessary. The top can be more economically manufactured than those heretofore in use, the spoilage in manufacture is practically eliminated, the handle can be assembled
80 more quickly than the ordinary type, thus further reducing its cost of manufacture.

While I have shown and described preferred embodiments of my invention, it should be understood that it is capable of
85 embodiment in structures differing materially in their details from those illustrated and described, without departing from the spirit of the invention as defined in the following claims.

I claim:

1. An article of manufacture, comprising a hollow index button holding member threaded at its lower end for attachment to a cock or faucet and provided at its upper
95 end with an inwardly extending flange, an index button disposed within said member and retained against upward displacement by said flange, and a retaining member structurally independent of the cock or faucet
100 threaded into said holding member beneath said button to clamp the button against said flange.

2. An article of manufacture comprising a hollow member threaded at its lower end
105 for attachment to a faucet or the like, the bore of said member being of reduced diameter near its upper end and interiorly threaded, the upper extremity of the bore being provided with an inwardly extending
110 circumferential flange, an index button positioned within the reduced portion of the bore immediately beneath said flange, and a ring member structurally independent of the cock or faucet threaded into said reduced portion
115 of the bore beneath said button to clamp said button in position against said flange.

KARL O. PFEIFFER.