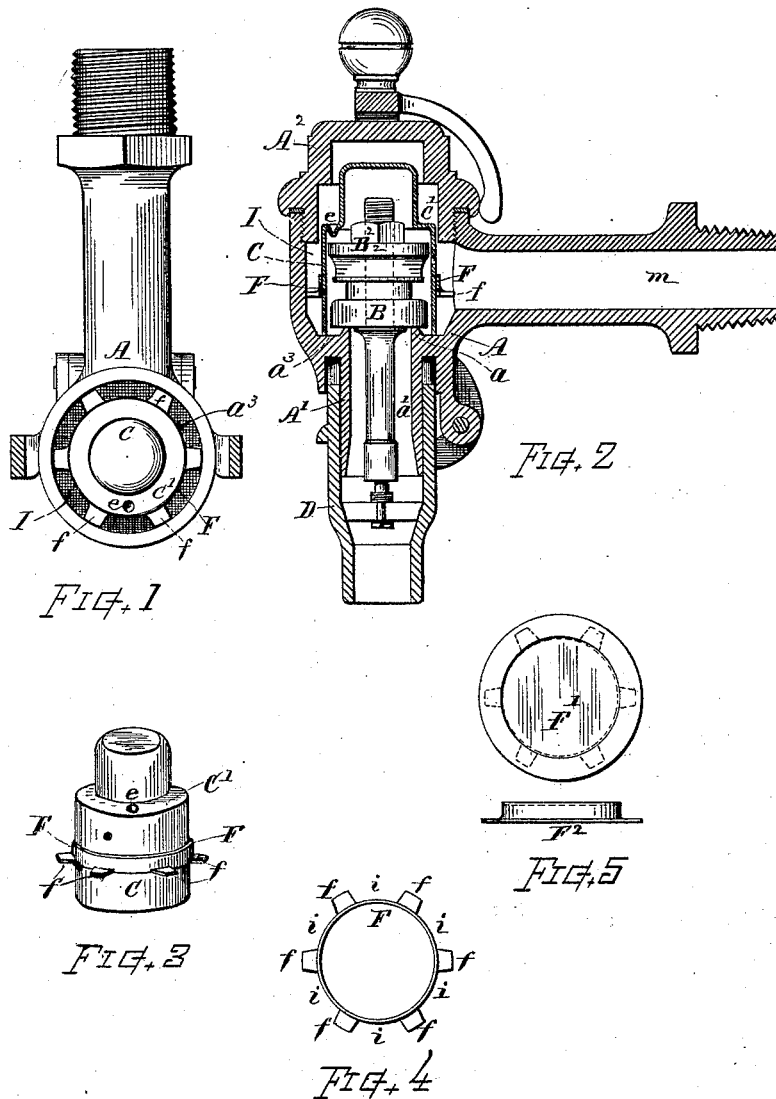


(No Model.)

A. P. HOWES.
FAUCET.

No. 417,917.

Patented Dec. 24, 1889.



Witnesses.

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UNITED STATES PATENT OFFICE.

ALBERT P. HOWES, OF WORCESTER, MASSACHUSETTS, ASSIGNOR OF TWO-THIRDS TO EDMUND CONVERSE AND AMBROSE T. MATTHEWS, BOTH OF SAME PLACE.

FAUCET.

SPECIFICATION forming part of Letters Patent No. 417,917, dated December 24, 1889.

Application filed June 24, 1889. Serial No. 315,315. (No model.)

To all whom it may concern:

Be it known that I, ALBERT P. HOWES, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Faucets, of which the following, together with the accompanying drawings, is a specification sufficiently full, clear, and exact to enable persons skilled in the art to which this invention ap-
10 pertains to make and use the same.

This invention relates to an improvement in that class of faucets described in my previous Letters Patent, No. 388,362.

15 The object of my present invention is to simplify the manufacture and to provide, in connection with the valve-cup, a dentilated ring or collar having a series of radially-disposed projections thereon surrounding the cup
20 and extending across the annular space about the periphery thereof, whereby said cup is maintained central within the chamber of the faucet-body and in proper relation to its seat, as more fully hereinafter explained.

25 In the drawings, Figure 1 is a top view of the faucet with the screw-cap removed. Fig. 2 is a vertical central section through the body and cup. Fig. 3 is a perspective side view of the valve cover or cup separate. Fig.
30 4 is a plan view of the dentilated collar, and Fig. 5 shows the details of the collar when partially formed.

The body or shell A of the faucet is made in substantially the same form as heretofore
35 employed, it being provided with the inlet-passage *m* and means for attaching it to the supply-pipe. It has the removable cap A², the projecting portion A', through which the discharge-passage *a'* is formed. The body is fit-
40 ted with the valve-seat *a* for the puppet B, which controls the discharge, and with the surrounding seat *a*³, whereon the loose valve-cover or inverted cup C rests when the valve is closed.

45 The valve-puppet B and the means for effecting operation thereof by the movable nozzle D may be substantially the same as heretofore employed. The interior of the shell is

formed with a circular chamber I, within which the cup C is free to move up and down. 50 The action thereof, in connection with the puppet for controlling the flow of liquid, is similar to that fully described in the Letters Patent above named, and need not be herein more fully specified.

55 Surrounding the exterior of the cup or valve cover C in accordance with my present invention I employ a dentilated ring or collar F, fixed at about one-third to one-half the height of the cup, more or less, and presenting a se-
60 ries of radially-disposed teeth or projections *f*, that extend across the space or chamber between the cup and body shell with intervening recesses *i*, as shown. The dentilations or
65 projections *f* are of sufficient length and of sufficient numbers to form all sides and retain it central within the chamber I while allowing it free action, so that the cup will take
70 proper position on its seat *a*³, regardless of any side pressure or rotative movement of the cup and valve. This dentilated collar is best produced by forming from a disk or blank
75 F' of thin sheet metal, by the aid of suitable dies, a flanged cap, as F², and then stamping therefrom the dentilated ring or collar, as
Fig. 4. This ring is then by suitable machinery and dies forced or pressed onto the exterior of the cup C to the position indicated,
(see Figs. 2 and 3,) where it remains fixed per-
80 manently and rigidly, as though formed integral therewith; or it can in some instances be soldered or otherwise fixed in place, if preferred.

The shoulder C' of the cup C has an indentation *e*, that makes contact with the top
85 B² of the puppet B, where the latter is lifted, and by means of which the cup is raised in a slightly-tilted condition, and the external projections *f* serve to prevent the cup being
90 thrown too much to one side in the action of the faucet.

I claim as my invention to be secured here-
in by Letters Patent—

1. The cup C, provided with the dentilated ring or collar F, formed and pressed from
95 sheet metal rigidly fixed thereon and present-

ing a series of thin projecting dentils with intervening recesses about the periphery thereof, as set forth.

2. The valve-cover or inverted cup C, having compressed upon or secured about the central periphery thereof a narrow re-enforcing ring or band that is dentilated on its exterior with radiating projections, in combination with the valve-puppet B, and the shell A, having the circular internal chamber, the valve-seat a , and seating-surface a^3 , substantially as and for the purpose set forth.

3. The combination, with the chambered body and the cup C in a faucet, of a series of projections with intervening recesses periph-

erally surrounding said cup and radially disposed across the annular space in the several directions for maintaining the cup in proper relation to the shell, said series of projections being formed on and supported by a narrow annular band or ring stamped in flanged form and pressed into place, substantially as set forth.

Witness my hand this 22d day of June, A. D. 1889.

ALBERT P. HOWES.

Witnesses:

CHAS. H. BURLEIGH,
ELLA P. BLENUS.