

Aug. 26, 1952

G. HINDERER
FAUCET CONSTRUCTION
Filed Nov. 24, 1945

2,608,378

Fig. 2

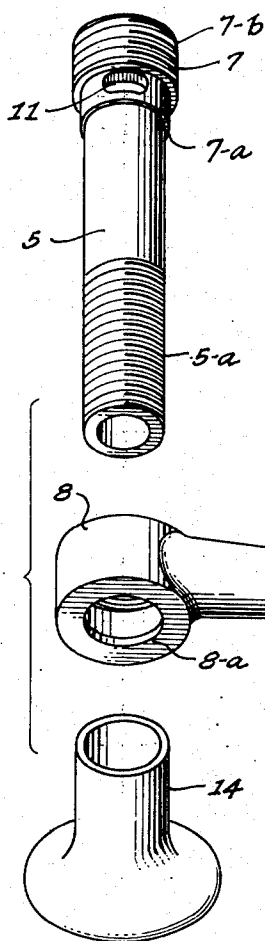
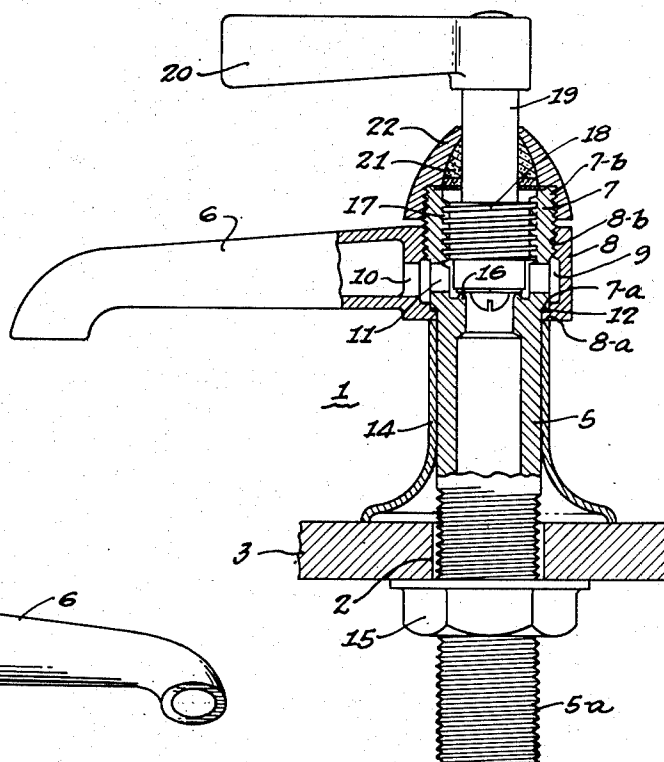


Fig. 1



INVENTOR.
Gottlob Hinderer
BY *John Flann*
ATTORNEY

UNITED STATES PATENT OFFICE

2,608,378

FAUCET CONSTRUCTION

Gottlob Hinderer, Los Angeles, Calif., assignor to
Price-Pfister Mfg. Co., Los Angeles, Calif., a
copartnership

Application November 24, 1945, Serial No. 630,648

7 Claims. (Cl. 251-156)

1

This invention relates to faucets and particularly to such faucets as are commonly employed in connection with wash stands or the like for controlling the flow of water thereto.

Such faucets commonly comprise a body 5 formed of a single casting, the exterior surface of which is polished to provide a smooth and pleasing appearance. A body formed in this way is subject to the usual hazards of castings such as porous spots, blow holes and the like so that at least some of the castings must be rejected. 10 While some defects may be such as to render a casting entirely useless by causing it to leak, other defects may be only surface flaws, but nevertheless, the casting must be rejected since it cannot be finished in an acceptable manner. Defects are not always apparent in a rough casting, but are often uncovered in a machining or polishing operation, sometimes after considerable work has been performed, in which case not only is the casting lost, but the rest of such work as well.

It is an object of this invention to provide a faucet so constructed that the number of castings required to be rejected in accordance with the foregoing is substantially reduced.

It is another object of this invention to provide for this purpose a faucet having a built-up body fabricated from parts, some of which may be castings and others of sheet or bar stock.

It is another object of this invention to provide a faucet having a built-up body, including a pair of fluid conducting parts, only one of which is subjected to fluid pressure. In this way the number of parts which must be rejected as defective is substantially reduced.

It is another object of this invention to provide a faucet wherein that portion of the body subject to pressure comprises a separate piece, hidden from view, and thus does not require polishing. Hence, the possibility of such parts requiring to be rejected for defects uncovered by a polishing operation is limited. Further, the only portion of the body requiring a polished casting is not subjected to pressure and, hence, the number of rejects of this part due to flaws uncovered by a polishing operation is greatly reduced.

It is another object of this invention to provide a faucet wherein the flange height can be readily altered.

It is still another object of this invention to provide a faucet so arranged that the amount of grinding and polishing on cast surfaces is substantially reduced. This is attained by providing a polished member of sheet or tubular material for covering at least a part of the body.

2

It is still another object of this invention to provide a built-up faucet body which may be easily assembled.

This invention possesses many other advantages, and has other objects which may be made more clearly apparent from a consideration of one embodiment of the invention. For this purpose there is shown a form in the drawings accompanying and forming part of the present specification. The form will now be described in detail, illustrating the general principles of the invention; but it is to be understood that this detailed description is not to be taken in a limiting sense, since the scope of this invention is best 15 defined by the appended claims.

In the drawing:

Figure 1 is a vertical section, partly in elevation, of a faucet incorporating the features of the invention; and

Fig. 2 is a pictorial exploded view of the body of the faucet.

Referring to Fig. 1 of the drawing, a faucet 1 is shown having a generally conventional appearance and mounted in an opening 2 in a wall 3, which may be part of a conventional wash stand. The faucet is to be connected in the usual way to a supply pipe (not shown).

The body of the faucet 1 comprises a tubular member 5 and a spout 6 secured thereto. The member 5 is preferably of circular cross section, having a running thread along its lower end, as indicated by 5-a, and having an enlarged portion or head 7 at its upper end which provides a downwardly directed shoulder 7-a facing the wall 3.

The spout 6 projects from an integral cylindrical chamber 8 which is telescoped over the head 7 and is provided with an inwardly directed flange 8-a adapted to engage the shoulder 7-a. The upper portion of the head 7 is enlarged and exteriorly threaded as indicated by 7-b. The upper end of the chamber 8 is of reduced diameter and is correspondingly threaded at 8-b, to engage the lower end of the threaded portion 7-b. The chamber 8 and head 7 thus cooperate when the spout 6 is assembled on the member 5 to define an annular space 9 communicating with the spout 6 through an aperture 10, and with the interior of the member 5 through one or more apertures 11.

The spout 6 is assembled on the member 5 by threading it on from below until the flange 8-a and shoulder 7-a are in engagement, a suitable washer 12 being interposed between the flange and the shoulder to prevent leakage. A flanged sleeve or spacer 14 is telescoped over the body member 5 and is clamped between the flange 8-a

3

4

and the wall 3 by a nut 15 threaded on the member 5. In this way the faucet is secured to the wash stand wall 3.

The axial bore through the member 5 is reduced to provide a valve seat 16 within the head 7 and is enlarged in diameter and provided with a coarse thread 17 for accommodating a correspondingly threaded valve closure 18. This closure 18 has a stem 19 projecting from the member 5 and carrying an operating handle 20. Packing means 21 is provided about the stem 19 and is confined in a packing nut or gland 22 which is threaded on the upper part of the threaded portion 7-b of the head 7. Rotation of the closure 18 by means of the handle 20 serves to open and close the faucet in an obvious manner.

The member 5 is the only portion of the body subjected to fluid pressure. This member may be conveniently made from a casting, bar stock, or a die casting; and, since it is substantially entirely hidden from view by the sleeve 14 and chamber 8, it does not require polishing. Hence, no castings are rendered defective by such an operation. On the other hand, spout 6 which does require polishing is not subjected to fluid pressure, and hence, less perfect castings can be tolerated. An additional advantage of the separate sleeve or flange 14 is that it can be formed of sheet or tube stock, as by a spinning or stamping operation; such material is much more easily polished than a casting.

In assembling the faucet, the spout 6 is secured to member 5 by screwing the portion 8 onto the head 7 until the flange 8-a engages the shoulder 7-a, the gasket 12 being interposed. The sleeve 14 is then telescoped over the member 5, and the member 5 inserted in the opening 2. The nut 15 is then screwed into the threaded portion 5-a, securing the faucet 1 to the wall 3 by clamping the sleeve 14 between the wall and the flange 8-a. The valve closure 18 and the packing means 21, 22, may be assembled in the member 5 either before or after mounting the spout 6 on the member, and may be subsequently removed at any time for inspection and repair.

The inventor claims:

1. In a faucet: a tubular member having an exteriorly threaded head at the upper extremity of the member, and providing a downwardly directed shoulder extending about the member below the threaded portion of said head; a spout member having a chamber forming portion adapted to encircle said head, interiorly threaded at its upper portion to engage the thread on the head, and provided with a lower flange to engage beneath said shoulder, said spout when assembled on the head communicating with the interior of said member; and means controlling fluid flow through said members.

2. In a faucet: a tubular member having an exteriorly and interiorly threaded head providing a downwardly directed shoulder extending about the member below the exteriorly threaded portion of said head; means forming a valve seat within said member; a closure member threaded within said head for movement toward and away from said seat to control fluid flow through said member; a spout member having a chamber forming portion adapted to encircle said head, interiorly threaded at its upper portion to engage the thread on the head and provided with a lower flange to engage beneath the shoulder; said spout when assembled on the head communicating with the member.

3. In a faucet: a tubular member having an exteriorly threaded head providing a shoulder extending about the member; a spout member having a chamber forming portion adapted to encircle said head, interiorly threaded to engage the thread on the head, and provided with a flange to engage said shoulder, said spout when assembled on the head communicating with the interior of said member; means controlling fluid flow through said members, a sleeve telescoped over said tubular member, on the opposite side of the flange from the head; and means cooperating with said member to clamp the sleeve against said flange.

4. In a faucet: a tubular member having an exteriorly threaded head at the upper extremity of the member, and providing a downwardly directed shoulder extending about the member below the threaded portion of said head; a spout having a portion adapted to encircle said head, interiorly threaded at its upper portion to engage the threads on the head, and provided with a lower flange to engage beneath said shoulder, said head and said spout portion cooperating when assembled to provide a sealed annular space extending about the head; there being ports for establishing communication between said space and the interior of said member, as well as between said space and said spout; and valve means controlling fluid flow from the interior of said member to the spout.

5. In a faucet: a tubular member adapted for insertion in an apertured wall, said member having an exteriorly threaded head providing a downwardly directed shoulder extending about the member below the threaded portion of said head; a spout member having a chamber forming portion adapted to encircle said head, said spout member being interiorly threaded at its upper portion to engage the thread on the head and provided with a lower flange to engage beneath said shoulder, said spout when assembled on the head communicating with the interior of said member; means for controlling fluid flow through said members; a flanged sleeve slidable on said member and engaging said spout and wall; and means on said member cooperating with the wall for clamping the sleeve against said spout and wall.

6. In a faucet: a tubular member insertable in an apertured wall and having a head providing a downwardly directed shoulder extending about the member, said head being exteriorly threaded above said shoulder and said head also being interiorly threaded; means forming a valve seat within said member; a closure member threadedly engaging the interiorly threaded portion of said head for movement toward and away from said seat to control fluid flow through said member; a spout member having a chamber forming a portion adapted to encircle said head, said spout member having an internal thread at its upper portion threadedly engaging the exterior thread on the head and provided with a lower flange engaging beneath the shoulder; said spout when assembled on the head communicating with the member; a flanged sleeve on said member having its opposite ends engaging said spout and wall; and means on said member cooperating with the wall to clamp the sleeve against said spout and wall.

7. In a faucet: a tubular member insertable through an apertured wall and having a head providing a downwardly directed shoulder extending about the member, said head having an

5

upper externally threaded portion above said shoulder; a movable closure within said head for controlling fluid flow through said member and having an extension projecting upwardly from the head; packing means between said member and said extension including a gland member threaded on said upwardly threaded head portion; a spout member having a chamber forming portion encircling said head and communicating with said member, said spout member being interiorly threaded at its upper portion for engaging the exterior threads on said head and having a lower flange engaging beneath said shoulder; a flanged sleeve on said member having its opposed ends engaging said wall and spout; and means on said member cooperating with the wall to clamp the sleeve against said spout and wall.

GOTTLOB HINDERER.

Number
201,769
234,206

6

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
302,022	Peck	July 15, 1884
926,190	Hunsberger	June 29, 1909
974,878	Gruschow	Nov. 8, 1910
1,057,757	Martin	Apr. 1, 1913
1,212,806	Newton	Jan. 16, 1917
1,743,413	Weatherhead	Jan. 14, 1930
1,854,051	McAndrew	Apr. 12, 1932
2,008,657	Deiller	July 16, 1935
2,172,073	Smith	Sept. 5, 1939

FOREIGN PATENTS

Number	Country	Date
201,769	Great Britain	Aug. 9, 1923
234,206	Great Britain	of 1925