Sept. 19, 1961 S. A. YOUNG 3,000,392

COMBINATION FAUCET

Filed Oct. 19, 1955

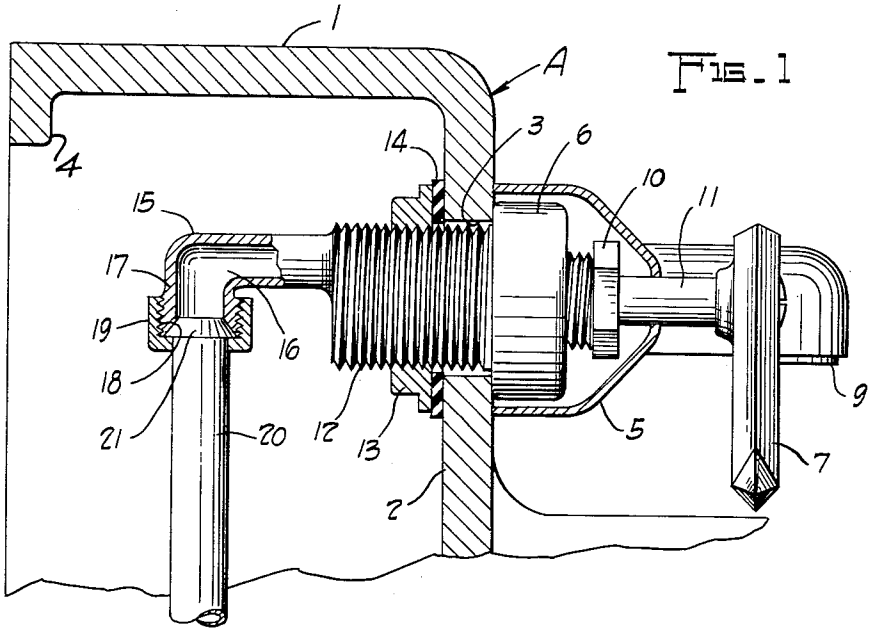


FIG. 1

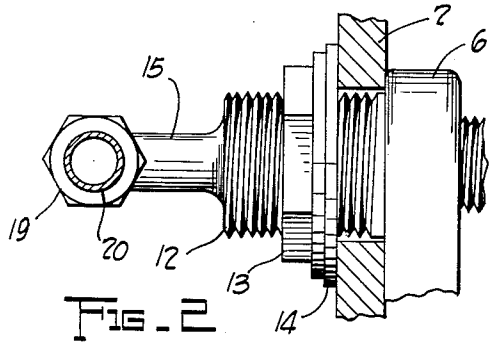


FIG. 2

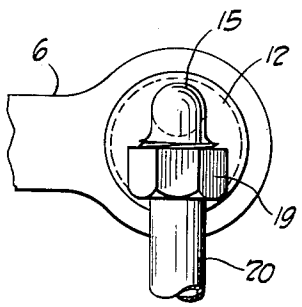


FIG. 3

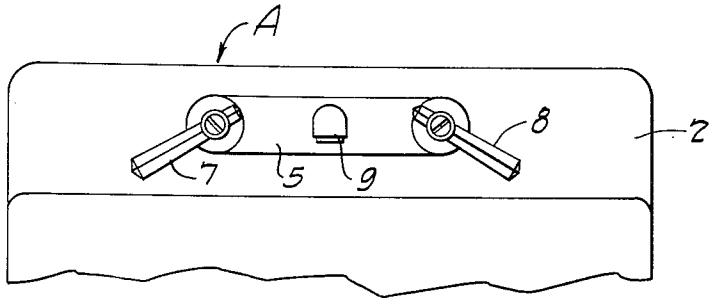


FIG. 4

INVENTOR.
S. A. YOUNG
BY
Robb & Robb
attorneys

United States Patent Office 3,000,392 Patented Sept. 19, 1961

3,000,392

COMBINATION FAUCET

Stephen A. Young, 1005 E. Monroe St., Delphi, Ind.

Filed Oct. 19, 1955, Ser. No. 541,474
3 Claims. (Cl. 137—357)

This invention relates to plumbing fittings and more particularly to faucets, being primarily concerned with the means for mounting the same and making connection thereof on the sink, lavatory or other place of use.

Generally speaking the problem solved hereby has not been present until relatively recently in the plumbing art, because of the fact that the type of lavatory for which the arrangement is most suitable had not been designed or manufactured in any quantity if at all.

The lavatory referred to is the ledge-back type wherein an upwardly extending integral portion of shelf-like form is provided in which water supply connections must be made, the same comprising a section raised above the rim of the fixture on which toilet articles may be placed.

The arrangement generally above referred to is the basis for a somewhat different kind of fitting, which fitting evolved so that it has usually been similar to concealed or built-in fittings.

The difficulty with this arrangement is that the fitting is mounted from within the ledge and requires the plumber to resort to a substantial amount of disassembly and subsequent re-assembly of the trim with consequent tendency or possibility of leakage being the result.

A further disadvantage of prior types of ledge-back faucets is the close relationship of plated parts and separate mounting thereof which not only results in causing the same to be more difficult to keep clean but actually is more expensive than the arrangement of the instant invention.

It is therefore a principal object of the present invention to provide a ledge-back faucet which is installed with great simplicity and may be made up with ease equal to or greater than prior types.

It is a furthehr object of the invention to provide in a faucet of the ledge-back type a one piece unit which obviates much of the handling of separate parts and is easier to keep clean.

A more specific object of the invention is to provide a faucet in which the supply of water is directed to the body through angular supply means, but said means are formed so as to enable installation and mounting with greater ease than formerly was the case.

Further to the last mentioned object, although the faucet is constructed of more than one piece, no disassembly is required to install the same and the water supply is connected at right angles to the body the locknuts for fastening the same to the ledge being manipulated over the inlet end of the body.

Another object of the invention is to provide a novel form of mounting shank for faucets or the like which includes an inlet end directed at approximately right angles, arranged to receive a slip nut thereon, said inlet end lying within the outline of a projection of the shank, to facilitate manipulation of a locknut onto the shank whereby the faucet is fixed in position with respect to a lavatory or the like.

Other and further objects of the invention will be understood from a consideration of the specification appended hereto and shown in the drawing wherein:

FIGURE 1 is an enlarged sectional view showing a faucet constructed in accordance with this arrangement as being mounted upon a lavatory of the ledge-back type, the latter being fragmentary in the illustration.

FIGURE 2 is a fragmentary view of the faucet, taken

from below illustrating further the form of shank herein.

FIGURE 3 is a rear view of the faucet as though the same had been removed from the lavatory, the faucet being only fragmentarily illustrated.

FIGURE 4 is a front view, showing a faucet constructed according to this invention mounted on a lavatory the latter being only partly shown.

Referring now to the drawing, FIGURE 1 illustrates a faucet constructed in accordance with this invention as being mounted upon a lavatory generally denoted A, which lavatory includes a shelf section 1, and the same is generally denoted a ledge, the ledge-back so called being indicated at 2. The ledge-back 2 is provided with the desired number of openings such as 3 it being obvious that the illustration hereof is a side view, and the openings 3 are preferably round in accordance with the usual practice in the manufacture of lavatories of the type herein under consideration.

The lavatory as a whole may be mounted as by means of the flange denoted 4, and hung from a wall or other place of use, the manner of hanging the same or fastening the same to the wall not being illustrated since it forms no part of the invention hereof.

As shown in FIGURE 4, which is merely illustrative and is not intended to be detailed disclosure of the particular faucet, the faucet of this invention may comprise the housing shown in enlarged detail in section at 5 in FIGURE 1 and in some smaller portion in FIGURE 4, said housing covering a body therewithin which body 6 is a mixing chamber in which water is mixed under the control of the handles 7 and 8 to be directed outwardly through the spout 9 into the lavatory bowl. The usual valve mechanism is operated by each of the handles 7 and 8, the same not being illustrated herein since it is generally conventional and only forms a secondary part of this invention, the usual stuffing box nut such as 10 being provided to prevent leakage of water around the stem 11 to which the handle 7 for example is affixed.

In order to provide for mounting of the faucet hereof on the back 2, each end of the body is provided with a shank such as 12, referring now to FIGURE 1, which shank 12 is in this particular instance provided with a thread and the same being a cylindrical shank is adapted to receive thereon suitable locknut 13 and washer 14.

As an extension of the shank 12 and integral therewith, an inlet opening and supplying connection portion 15 is provided for each of the shanks such as 12, the same being further illustrated in the other views 2 and 3 as forming a water passageway 16 which terminates in a water inlet connection 17 which water inlet connection 17 is threaded as at 18 to receive thereon a slip nut 19. The slip nut 19 is intended to position and maintain in connection with the inlet connection a supply line such as 20 having the beveled integral end portion 21 thereon which is fixed in place at the water passage by the slip nut 19 in accordance with known practice.

It will be observed that the inlet opening and supply connection portion 15 is of somewhat smaller cross section area than the shank 12 and the water inlet connection is turned at right angles to the axis of the shank 12, all the said portions thus far described being integral with the shank and that the slip nut 19 is emplaced on the inlet connection 17. As viewed in FIGURE 3 it will be seen that the diameter of the shank 12 is such that the extension of a cylindrical plane so to speak would completely enclose the water inlet opening and supply connection portion and the water inlet connection, including the slip nut thereon. Thus it might be said in other and further explanation that the inlet portion which is at right angles as described, lies within the confines of a projection of a shank 12, the purpose of this arrangement being that it

enables the emplacement on the shank of the lock nut **13** without removing any of the parts, and obviously facilitates the mounting of the faucet, with much greater ease that is heretofore possible because usually an elbow is provided in place of the inlet opening and supply connection portion.

With the foregoing in mind it should be understood that all a plumber need do in order to make up the fitting hereof is to insert the shanks such as **12** in the openings provided therefor, and thereafter manipulate the lock nuts **13** over the portions **17** and **15** so that they thereafter come into engagement with the threads on the shanks **12** and draw the lock nuts **13** up into position shown in FIGURE 1. Thereafter the slipnut **19** may be removed, supply line **20** inserted therethrough and the slip nut replaced readily so that same will be in leak proof engagement, there being no possibility of the inlet opening and supply connection portion **15** leaking and thus providing a much more satisfactory mounting of the fixed fitting as a whole.

It should be noted that the opening **3** provides for the insertion of the shank **12** not removing any of the parts preliminarily and thus it is obvious that additional time is saved over prior construction which requires the mounting of the faucet body from the rear or left as viewed in FIGURE 1 and subsequent attachment of the various trim parts over the exposed portions.

I claim:

1. In a faucet of the class described adapted to be mounted in the front face of a plumbing fixture, in combination, a faucet body, a mounting shank connected with and extending from said body, said shank being of smaller cross sectional area than the portion of the body with which the shank is connected, valve mechanism in the body extending therefrom on the opposite side from the shank, said shank adapted to be axially entered in an opening in a mounting member, such opening being of less cross sectional area than the portion of the body with which the shank is connected, a hollow supply connection

portion integrally extending from the other end of said shank, said portion being positioned eccentric to the axis of said shank, and a tubular inlet spaced longitudinally from said shank integrally extending from said portion in a direction substantially diametrically across said axis, supply connecting means on the end portion of said inlet, and said connecting portion and inlet lying wholly within the confines of a projection of the shank aforesaid whereby said shank may be entered into such opening from the body side thereof without tilting said body with respect to said axis, and lock means on said shank to clamp said faucet body on such mounting member.

2. The combination as claimed in claim 1, wherein the supply connection portion is substantially tubular, and the axis thereof is generally parallel to and spaced from the axis of the shank.

3. The combination as claimed in claim 1, wherein the supply connection portion is substantially tubular, the axis thereof is generally parallel to and spaced from the axis of the shank, and the inlet is provided with slip nut means likewise lying within the projection described.

References Cited in the file of this patent

UNITED STATES PATENTS

259,698	Magin	June 20, 1882
985,853	Stewart	Mar. 7, 1911
1,117,251	Safberg	Nov. 17, 1914
1,346,403	Grierson	July 13, 1920
1,414,792	Seither	May 2, 1922
1,796,064	Swanson	Mar. 10, 1931
1,885,042	Baldwin	Oct. 25, 1932
2,456,165	Yuza	Dec. 14, 1948
2,747,604	Fraser	May 29, 1956

FOREIGN PATENTS

1,868	Great Britain	Aug. 16, 1858
328,845	Germany	Nov. 8, 1920
607,611	Germany	Jan. 3, 1935