June 17, 1930. D. H. BOWLZER 1,763,877

COMBINATION SPOUT AND DIVERTER

Filed Aug. 12, 1926

Fig. 1

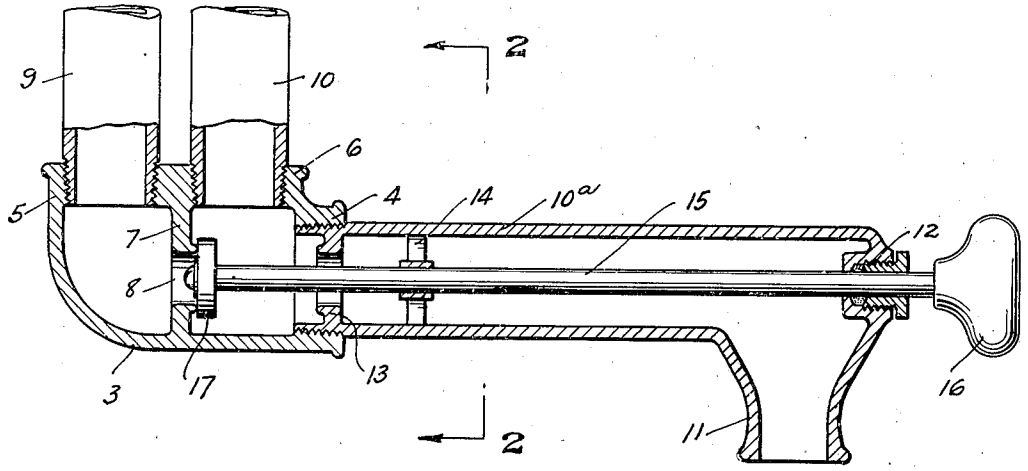
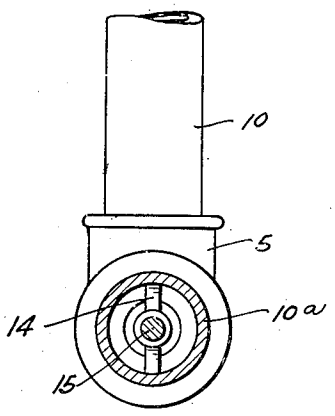


Fig. 2



INVENTOR.
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UNITED STATES PATENT OFFICE

DANIEL H. BOWLZER, OF LOS ANGELES, CALIFORNIA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO BUCKNELL SUPPLY COMPANY, OF LOS ANGELES, CALIFORNIA, A CORPORATION OF CALIFORNIA, DOING BUSINESS AS SPHINX MANUFACTURING COMPANY

COMBINATION SPOUT AND DIVERTER

Application filed August 12, 1926. Serial No. 128,746.

This invention relates to a spout fitting having a valve adapted for diversion of water as between two outlets. For convenience of illustration of the invention, a combination diversion valve and spout adapted for use with a bath tub and a shower will be illustrated and described herein.

Diversion valves to direct water either to a shower or tub are well known in the art. Such valves have been structures forming elements of the system independent of the spout. The present invention has for its primary object the provision of a spout combining therein a diversion valve. In addition to the broader objects of this invention there are certain details of construction whereby a structure economical to manufacture, simple, durable, and easy to manipulate is obtained. These objects together with other objects and corresponding accomplishments are obtained by means of the embodiment of my invention illustrated in the accompanying drawing, in which:

Fig. 1 is an axial sectional view of a spout constructed in accordance with my invention, the section being in a vertical plane; Fig. 2 is a section as seen on the line 2—2 of Fig. 1.

Referring with more particularity to the drawing, 3 indicates a valve casing structure in the nature of an elbow having a spout outlet 4. At the opposite end is a shower outlet 5. Adjacent to and intermediate the outlets is an inlet 6. The inlet and outlets are provided with internal threads to receive their respective spout and pipes. Within the valve casing intermediate the shower outlet and the inlet and extending across the chamber is a partition 7 dividing the valve casing into an inlet chamber and an outlet chamber. The partition has a valve port and seat. The pipe leading to the shower is indicated by 9, and 10 indicates a pipe for conducting the water to the valve casing. It will be apparent that the water supply to the inlet pipe may be mixed hot and cold water, or may be either hot or cold.

Mounted in the outlet 4 is the tubular neck 10^a of the spout. A downwardly directed mouth 11 provides for the exit of the water from the spout. Adjacent the mouth and in line with the neck is a stuffing box structure indicated generally by 12 for the purpose of slidably receiving the stem of a valve. At the inner end of the neck is a valve seat 13, and within the neck is a guide for the valve stem indicated by 14. Slidably mounted in the guide 14 and the stuffing box is a valve stem 15. Mounted upon the outer end of the stem is a knob 16 for convenience in manually moving the stem. Secured on the opposite end of the valve stem is a rubber washer 17 constituting a valve adapted to seat either on seat 7 or seat 13.

When the valve is upon seat 7, water may enter through the inlet pipe 10 to the inlet chamber of the valve casing and pass through the port in seat 13 to the spout from which it is discharged. To divert the water to the shower, the valve stem is pulled outwardly so that the washer 17 seats upon seat 13 thereby closing the port leading to the spout and opening the port 8 leading to the outlet chamber and therefrom to the pipe 9 directing water to the shower. The water pressure within the inlet chamber tends to hold the washer seated in either position.

What I claim is:

1. A spout structure comprising a valve casing of elbow form having a ported partition with a valve seat dividing the casing into an outlet chamber and an inlet chamber, there being a first outlet in one branch of the elbow communicating with said inlet chamber, there being an inlet communicating with said inlet chamber at the other branch of the elbow and a second outlet by the side of said inlet communicating with said outlet chamber, a spout connected to said first outlet extending in alignment therewith and having a port and valve seat therefor, valve means between said seats to alternately open and close the ports whereby to divert water to either outlet and operating means for said valve means extending axially through said spout to a place adjacent the mouth convenient for manipulation.

2. A spout structure comprising a valve casing having a single partition dividing the casing into an inlet chamber and an outlet chamber provided respectively with an inlet

and outlet side by side, said partition having a port and valve seat, there being a spout outlet in said inlet chamber opposite to said port and opening laterally to the first-mentioned outlet and inlet, a spout connected to said outlet having a seat, a valve stem extending through the bore of said spout from a point adjacent its mouth into said casing and having a valve washer on the inner end thereof disposed between said seats, said valve stem being adapted to be actuated to move said valve washer to alternately open and close said ports.

In witness that I claim the foregoing I have hereunto subscribed my name this 31st day of July, 1926.

DANIEL H. BOWLZER.