R. P. HILL.

FAUCET.

APPLICATION FILED SEPT. 9, 1913.

1,097,433. Patented May 19, 1914.

Fig. 1.

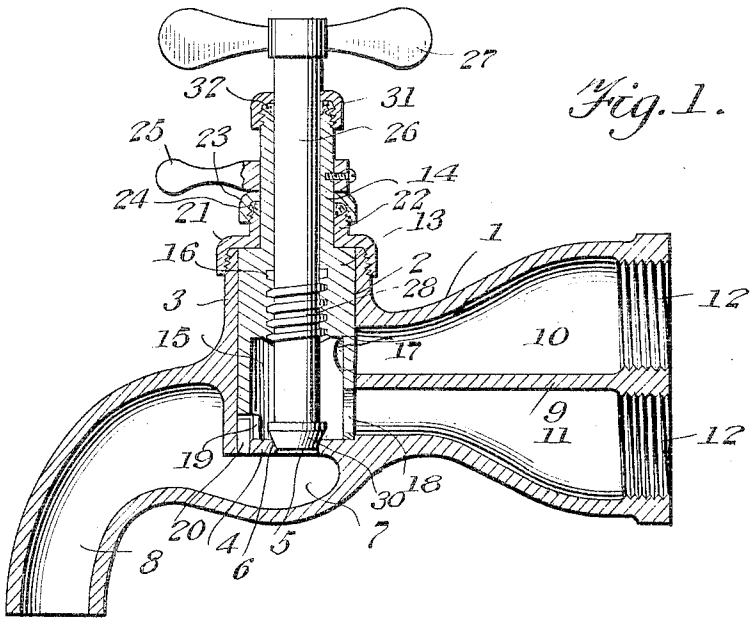


Fig. 2.

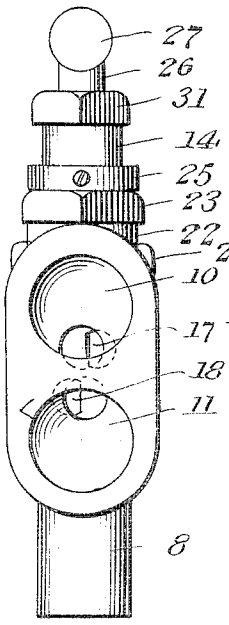
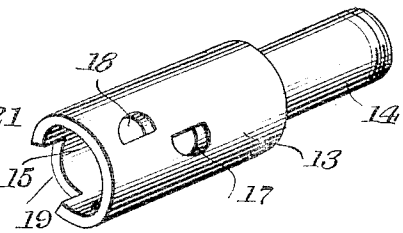


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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FAUCET.

1,097,433. Specification of Letters Patent. Patented May 19, 1914.

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To all whom it may concern:

Be it known that I, ROBERT P. HILL, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented new and useful Improvements in Faucets, of which the following is a specification.

The invention relates to an improvement in faucets, and particularly to a faucet constructed for connection with both the hot and cold water pipes, and arranged to permit a discharge of either the hot or cold water therefrom at will.

The main object of the present invention is the provision of a faucet having a manually operable valve member capable of movement to one of two positions, and formed with controlling ports so that in the respective positions communication is made with independent channels in the valve, a cut off plug controlling the outlet from the faucet, so that water from either channel may be discharged from the faucet at will.

The invention in its preferred form of details will be described in the following specification, reference being had particularly to the accompanying drawings, in which:—

Figure 1 is a longitudinal section of the improved faucet. Fig. 2 is a rear end elevation. Fig. 3 is a detail perspective of the valve.

The improved faucet comprises a body 1 formed with the usual vertically extending stem receiving opening 2 having an annular wall 3, to form a guide. The opening 2 is closed at the bottom by a partition 4 centrally formed with an opening 5 having the wall thereof shaped to provide a valve seat 6. Below the partition 4 the body is formed to provide an outlet chamber 7 communicating with the usual discharge spout 8 of the faucet, while in rear of the opening 2 the body is gradually enlarged and centrally divided by longitudinally extending partition 9 which extends from the rear edge of the body to a point in alinement with the peripheral wall of the opening 2, whereby the rear portion of the body forms independent longitudinally extending channels 10 and 11. The channels at their rear or inlet ends have interiorly threaded walls, as at 12 to provide for the connection of independent service pipes.

Rotatably mounted in the opening 2 is what I term a valve 13 comprising a cylindrical body snugly fitting the opening 2 throughout the length thereof and having a reduced hollow extension 14 rising above the upper edge wall of the opening. The body of the valve is hollow, the lower portion providing a chamber 15 and the upper portion, which is of reduced diameter as compared with the lower portion is interiorly threaded as at 16. The lower portion of the chamber 15 of the valve body is coextensive in height with the maximum dimension of the inner ends of the channels 10 and 11, and the wall of the valve body surrounding the chamber 15 is formed with offset ports 17 and 18, the former being in line with the channel 10 and the latter in line with the channel 11. The ports 17 and 18 are vertically offset so that it is impossible for both ports to aline with both channels at the same time, hence it is only possible to have one of the channels 10 or 11 in communication with the chamber 15 in any position of the valve. The lower edge of the wall of the valve body is cut away at 19 to provide recess, and a pin 20 is appropriately secured in the partition 4 to seat in said recess. By this means the play of the valve is limited in both directions by the end walls of the recess, the parts being so arranged that when the pin is engaged by one wall of the recess one of the ports 17 or 18 will be in alinement with the channel, the opposite limit of movement of the valve engaging the remaining port with the remaining channel. The guide wall 3 of the opening 2 is exteriorly threaded to receive the cap nut 21 having a vertical annular extension 22 to closely fit the extension 14 of the valve, a packing gland 23 having threaded connection with the extension 22 and serving to interpose the packing 24 to make the juncture water tight. An operating handle 25 is secured to the extension 14 immediately above the gland 23, whereby the valve may be operated as desired. The usual stem 26, provided at its upper end with an operating handle 27 is rotatably mounted in the extension 14 of the valve, said stem being appropriately threaded at 28 to coöperate with the threads 16 in the valve body, and being further formed at its lower end with a valve plug terminal 30 for coöperation with the seat 6. A packing gland 31 is threaded in connection with the upper end of the threaded extension 14,

snugly encircling the stem 26, and by means of interposed packing 32 forms a water tight joint.

Assuming for example, that the channel 10 is connected with the cold water pipe and the channel 11 with the hot water pipe, it will be obvious that either channel may be connected with the chamber 16 by suitable manipulation of the valve 13, and that having made proper connection operation of the stem 26 will permit the water from the selected channel to be discharged from the faucet.

While primarily designing the faucet for hot and cold water, it is obvious that it can be used for any distinctive fluids and the delivery of either controlled at will.

What is claimed is:—

A faucet having a valve chamber closed at the bottom by a partition, said partition being formed with an opening, said faucet beyond the valve chamber being formed with independent horizontal channels, a valve operative in the chamber and formed with ports to register with the respective channels in different positions of the valve, a plug having threaded connection with the valve and adapted to close the opening in the partition, said valve having an extension projecting above the faucet and rotatably receiving the plug, and a handle secured to said extension for operating the valve.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT P. HILL.

Witnesses:
GEORGE S. BURNETT,
WILLIAM EISELE.