D. SCANLAN.

FAUCET.

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1,145,271.

Patented July 6, 1915.

Fig. 1.

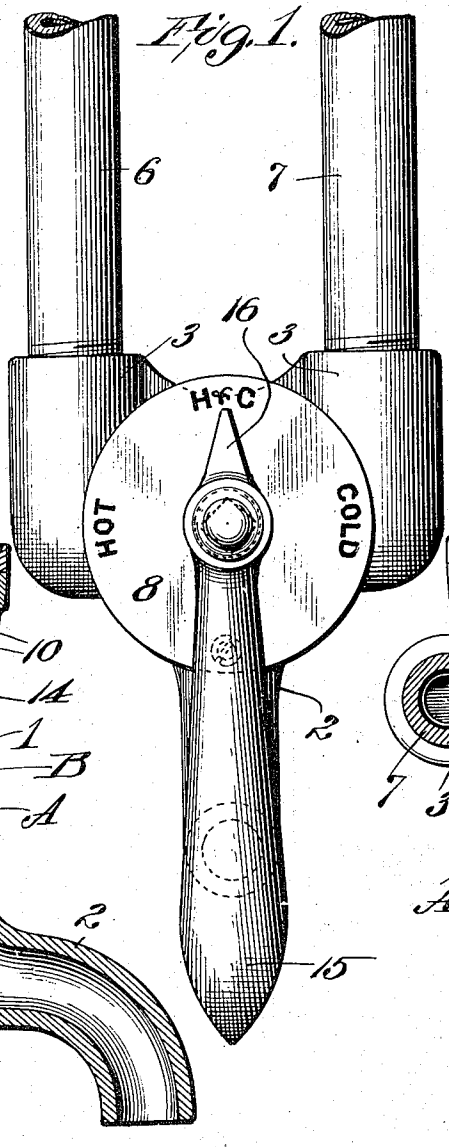


Fig. 2.

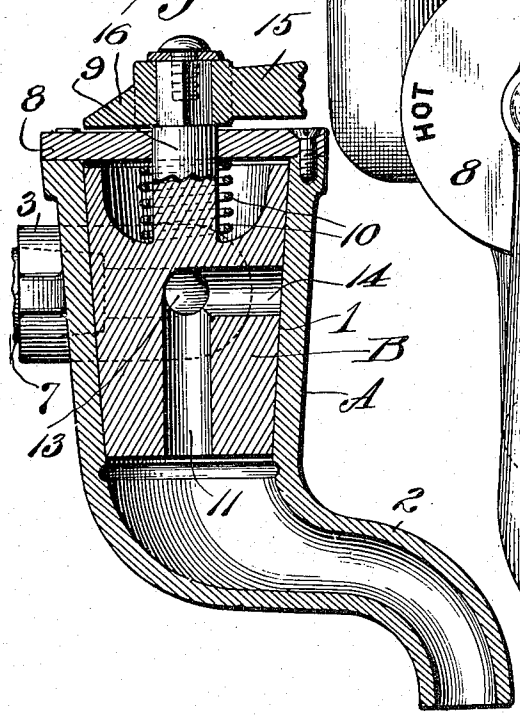


Fig. 3.

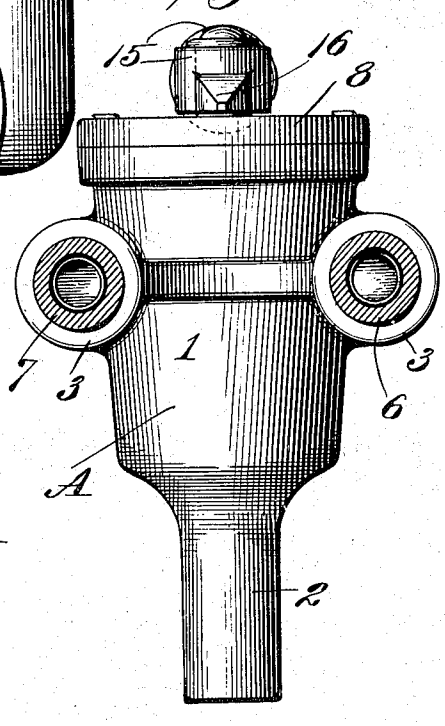
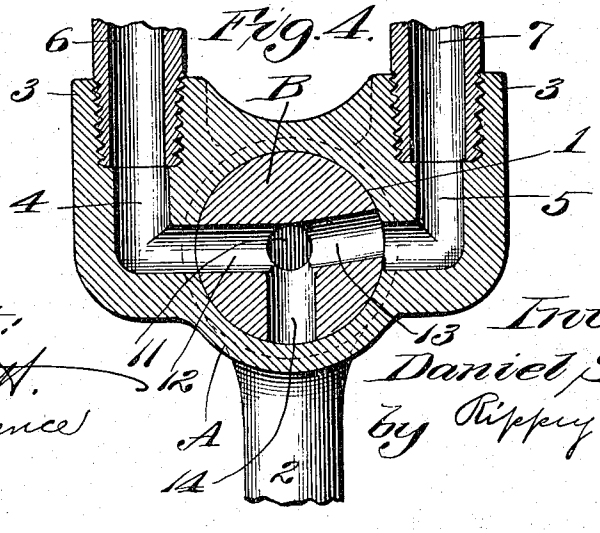


Fig. 4.



Attest:
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UNITED STATES PATENT OFFICE.

DANIEL SCANLAN, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-THIRD TO CLARENCE WORTMAN, OF ST. LOUIS, MISSOURI.

FAUCET.

1,145,271. Specification of Letters Patent. Patented July 6, 1915.

Application filed April 13, 1914. Serial No. 831,573.

To all whom it may concern:

Be it known that I, DANIEL SCANLAN, a citizen of the United States, residing at the city of St. Louis, state of Missouri, have invented a new and useful Faucet, of which the following is a specification.

This invention relates to faucets and consists in the novel design, arrangement and combination of parts hereinafter more fully disclosed.

An object of the invention is to provide a faucet for controlling, by means of a single valve, the passage of fluid from two supply pipes to a common spigot whereby fluid may be drawn from either or both supply passages in a predetermined proportion or amount.

With this object and other advantageous features of construction in view I have designed and arranged the several parts in the manner hereinafter described and illustrated in the accompanying drawings, in which like characters of reference indicate like parts, and in which—

Figure 1 is a plan view of my improved faucet. Fig. 2 is a vertical section through the faucet. Fig. 3 is a rear elevation, and Fig. 4 is a horizontal section through the faucet.

In the embodiment of my invention illustrated in the drawing case A is made from any suitable metal and is exteriorly finished so as to be artistic and symmetrical in design, and is particularly adapted to be mounted in bath tubs or wash bowls or fixtures of like character.

The case A is formed with a tapering valve chamber 1 in connection with a deflected discharge outlet or spigot 2 formed substantially as shown in the drawings and particularly in Fig. 2 thereof. Formed integral with the rear wall of the case A are enlarged portions 3 in which are formed angular passages 4 and 5 opening into the valve chamber 1 at diametrically opposite points. Supply pipes 6 and 7 are screwed into the enlarged portions 3 and communicate with the passages 4 and 5, respectively. When the device is used as a water faucet, it will be understood that one of the pipes may supply the hot water, and that the other pipe may supply cold water. The supply of the hot and cold water may be apportioned and mixed by control of the valve hereinafter described, so that the temperature of the mixture of the hot and cold water finally discharging through the outlet 2 may be varied as desired.

The valve plug B is revolubly mounted in the valve chamber 1, and is retained therein by a cap 8 which is removably attached to the upper end of the valve case and is provided with a central opening through which the valve stem 9 extends. A spring 10 may be utilized to impart pressure upon the valve plug, said spring encircling the valve stem between the cap 8 and a recessed portion of the valve plug. This arrangement permits slight vertical movement of the valve plug such as may be required by varying temperatures or other causes. The valve plug is formed with a mixing and discharge passage 11 in which the water or other fluids from the passages 6 and 7 are received and mixed and subsequently discharged into the discharge outlet 2. Provision is made whereby the water or other fluids may be received from both of the supply passages 6 and 7 simultaneously, or from either of said passages alone, at the will of the operator. The valve plug is formed with a radial passage 12 having a capacity equal to the capacity of either of the supply passages 4 and 5. Another passage 13 of equal capacity is formed in the valve plug and is arranged with respect to the passage 12, so that when the passage 12 is in full communication with either of the passages 4 and 5, the passage 13 will be in partial communication with the other of said supply passages. Both passages communicate with the mixing and discharge passage 11, so that the water or other fluids entering said passages 12 and 13 at the same time will meet and become mixed in and discharged from the passage 11.

It is obvious, by reference to Fig. 4, that the quantity of water or fluid entering the passage 12 when said passage 12 is in full communication with the supply passage, will be considerably in excess of the quantity of the water or fluid which can enter the passage 13. It is also obvious that by turning the valve plug a slight distance, a part of the passage 12 may be placed laterally with respect to the supply passage, thus reducing the amount of water or fluid which may enter said passage 12, and at the same time increasing the flow through the passage 13, and thereby apportioning the quantity of

the water or fluid in passing through said passage 12 in any desired proportion to the quantity entering the passage 13. Thus, the amount of water entering the passage 12 may be varied at will so that the temperature of the mixture resulting from the two supplies may be varied as desired.

The valve plug B is further provided with a passage 14 arranged in the same plane as the passages 12 and 13 and at right angles thereto. Thus the passage 14 may receive liquid from either of the passages 4 or 5 and transmit the liquid to the discharge passage 11. When the passage 14 is in registration with either of the passages 4 or 5 the other will be closed by the valve plug as will be obvious.

For manual manipulation of the valve plug B a handle 15 is provided which has thereon a pointer 16 adapted to coöperate with a dial or indicating characters formed on the outer surface of the cap 10 to indicate the position of the valve.

I am aware that modifications of the structure may be made within equivalent limits and I do not limit myself, therefore, to the exact construction shown, but

What I claim and desire to secure by Letters Patent is:

1. A faucet, comprising a valve casing having a discharge outlet, two supply passages opening into said valve casing, a valve plug mounted in said valve casing, a discharge passage in said valve plug in constant communication with said discharge outlet, three receiving passages in said valve plug intersecting said discharge passage, two of said receiving passages being at right angles to each other and the other of which receiving passage being at greater than a right angle with respect to either of the other two receiving passages, and a handle for moving said valve plug to position to receive fluid from said supply passages through two of said receiving passages simultaneously in optionally variable proportions, or through one of said receiving passages alone, as desired, substantially as described.

2. A faucet, comprising a valve casing having a discharge outlet, two supply passages opening into said valve casing, a valve plug mounted in said valve casing, a discharge passage in said valve plug in constant communication with said discharge outlet, three receiving passages in the same plane in said valve plug intersecting said discharge passage, two of said receiving passages being at right angles to each other and the other of which receiving passage being at greater than a right angle with respect to either of the other two receiving passages, and a handle for moving said valve plug to position to receive fluid from said supply passages through two of said receiving passages simultaneously in optionally variable proportions, or through one of said receiving passages alone, as desired, substantially as described.

3. A faucet, comprising a valve casing having a discharge outlet at its lower part, two supply passages opening into said casing, a valve plug operatively mounted in said casing provided with a vertically arranged discharge passage in constant communication with said outlet passage, three receiving passages intersecting said outlet passage, said receiving passages being disposed with respect to said supply passages, so that when one of said receiving passages is in axial alinement with one of the supply passages entering the valve casing another of said receiving passages communicates with the other supply passage at an oblique angle, and the third receiving passage being so arranged as to register with either one or the other of said supply passages when the first two mentioned receiving passages are entirely out of registration with said supply passages, and means for manipulating said valve plug, substantially as described.

In witness whereof, I have signed this specification in the presence of two subscribing witnesses.

DANIEL SCANLAN.

Witnesses:
L. C. KINGSLAND,
R. M. LAWRENCE.