

C. E. Allan,

Faucet.

No. 59,939.

Patented Nov. 27, 1866.

Fig. 1.

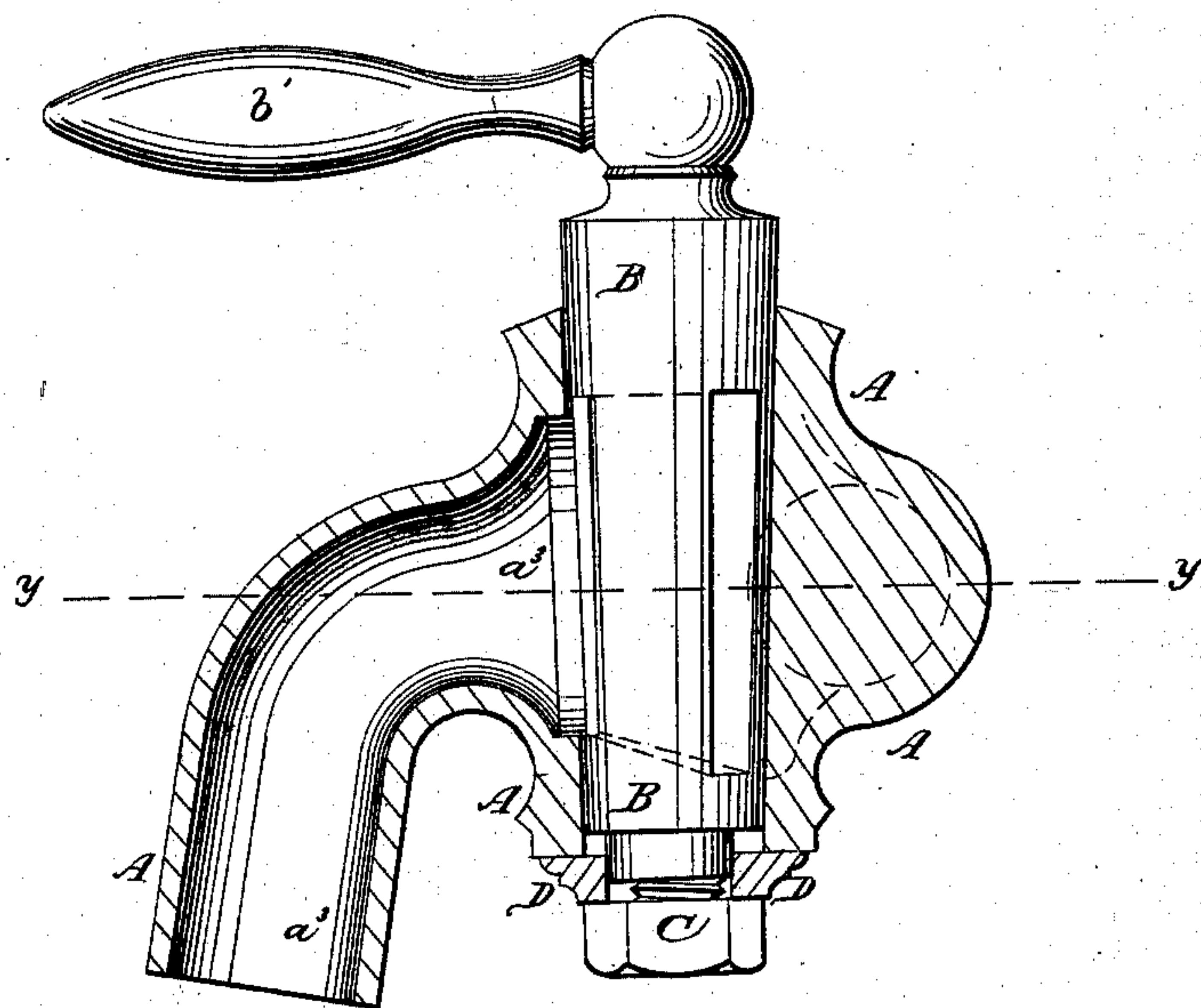
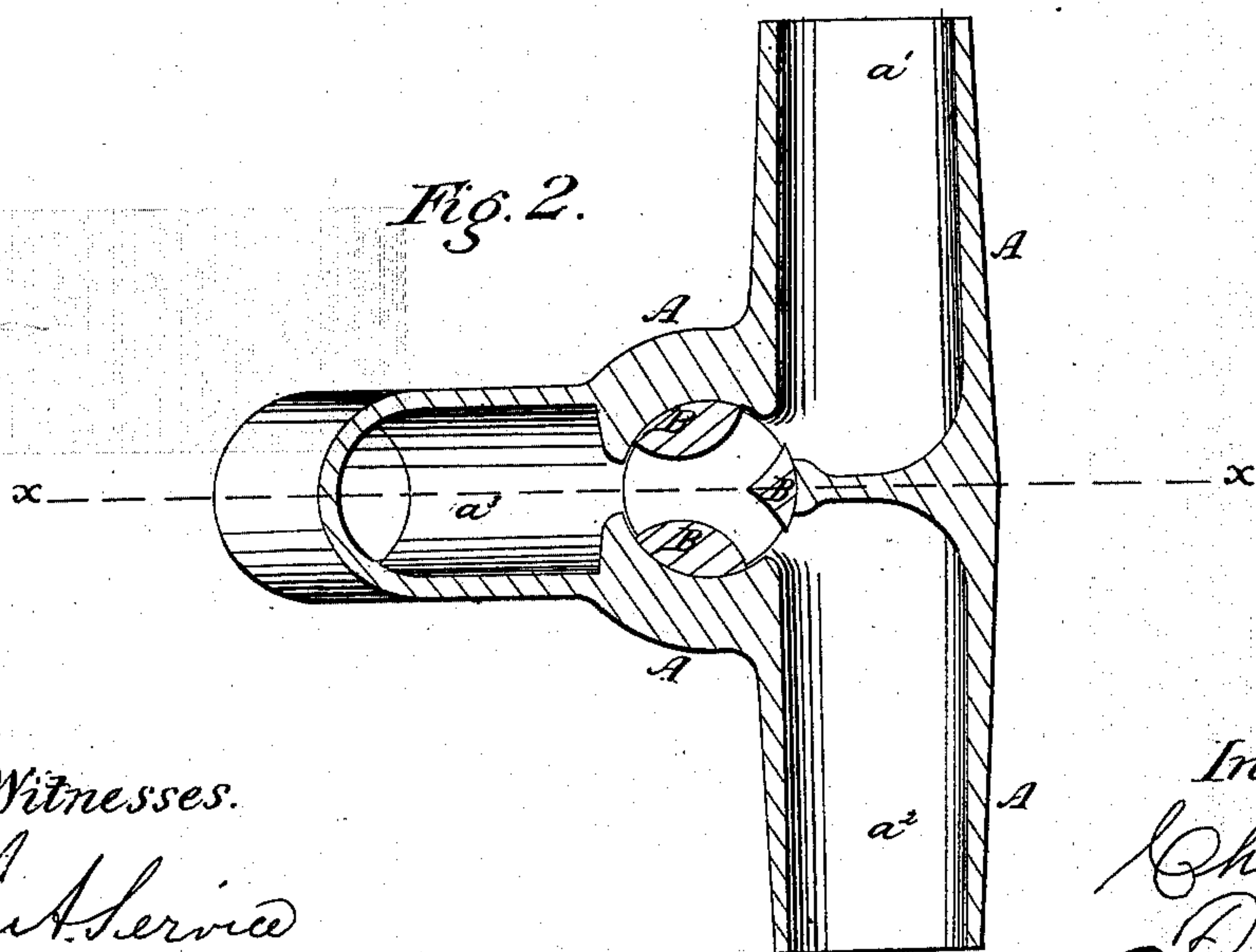


Fig. 2.



Witnesses.

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IMPROVEMENT IN FAUCETS.

CHARLES E. ALLAN, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 59,939, dated November 27, 1866.

SPECIFICATION.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, CHARLES E. ALLAN, of Boston, Suffolk county, State of Massachusetts, have invented a new and improved Combination Cock; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a vertical section of my improved combination cock, taken through the line *x x*, fig. 2.

Figure 2 is a horizontal section of the same, taken through the line *y y*, fig. 1.

Similar letters of reference indicate like parts.

My invention has for its object to furnish an improved combination cock, by the use of which hot water or cold may be drawn, or both in equal quantities, or in any desired proportions, so that the mixture may be of any desired temperature; and it consists in an improved combination cock formed by the combination of the plug with the body of the cock, when the passage-ways through said plug are formed and arranged in the manner hereinafter more fully described.

A is the body of the cock, which is formed with two inlet-tubes, a^1 and a^2 , and an outlet-tube or nozzle, a^3 , as shown in fig. 2. One of those tubes, as a^1 , is connected with the hot-water pipe, and the other, as a^2 , is connected with the cold-water pipe. B is the plug, which is made in the form of a tapering cylinder, as shown in figs. 1 and 2. The plug B is held in place by the screw C, and leakage is guarded against, and the screw C kept from being worked out or loosened, by operating the plug B, by a washer, D, attached to and moving with the said plug B. The main body of the plug B does not quite descend to the washer D, so that compensation may be made for the wear of the parts by drawing the plug down by means of the screw C. The orifices through which the liquid passes from the tubes a^1 a^2 to the plug B, and from the said plug to the tube or nozzle a^3 , are all in the form of rectangular slots, as shown in the drawings. The passage-ways B are made in the form and arranged in the manner shown in figs. 1 and 2; so that when the plug B stands with its handle b' directly over the tube or nozzle a^3 , that is to say, in the position shown in the drawings, the orifices and passage-ways will all be open, and the hot and cold water will flow out mixed in equal proportions. If now the handle b' be moved slightly to the right, the passage leading from the hot-water tube a^1 will be partially closed, and the passage-way leading from the cold-water tube a^2 will be more widely opened, while the passage leading into the nozzle a^3 will remain of the same size. In this position the cock will discharge the same amount of liquid as before, but the mixture will contain a larger amount of cold water than of hot. By moving the handle b' a little to the left, the same effect will be produced, but in this case the amount of hot water contained in the mixture will predominate. By turning the plug B in either direction a little less than one-eighth around, the passage leading from the tube towards which the handle b' is turned will be opened to its fullest extent, while the passage leading from the other tube will be completely closed. By turning the plug B in either direction one-quarter around, the discharging orifice, and one or the other of the inlet orifices, will be completely closed; and when the said plug B is in this position there will be no communication open between the tubes a^1 and a^2 , as there is in the ordinary three-way cock. It will be observed that the plug B need never be turned more than one-quarter around in either direction. This allows the plumber to place the cock close up to the wall when necessary. This improvement is applicable to all cocks where it is desired to use hot and cold water, separately or mixed, such as bath cocks, basin cocks, shower cocks, shampoo cocks, &c. It can also be used for counter cocks, using one cock for drawing two kinds of beer, ale, &c.

I claim as new, and desire to secure by Letters Patent—

An improved combination cock, formed by the combination of the plug B with the body A, of the cock, when the passage-ways through said plug are formed and arranged substantially in the manner herein shown and described, and for the purposes set forth.

The above specification of my invention signed by me this 27th day of July, 1866.

CHAS. E. ALLAN.

Witnesses:

GEO. H. QUINCY,
D. P. BALCOM.