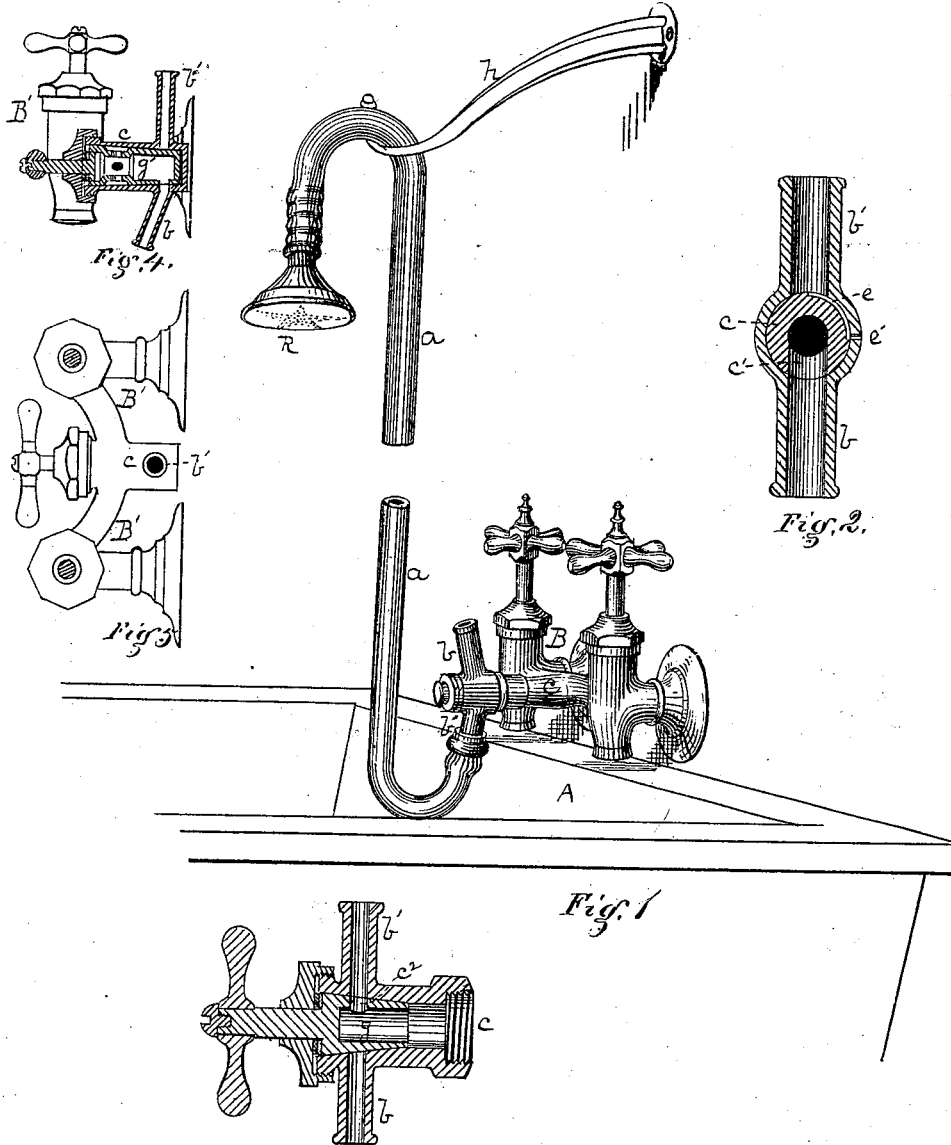
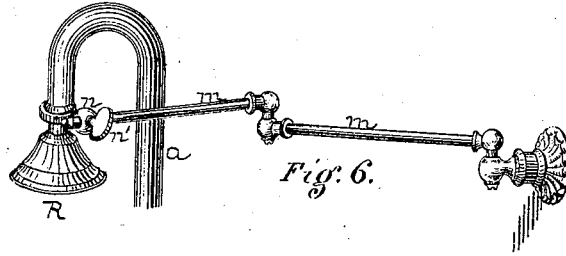


H. J. BAILEY.

Combined Shower and Bath Cock.

No. 167,817.

Patented Sept. 21, 1875.



Witnesses { *N. DeKewell*
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UNITED STATES PATENT OFFICE.

HARRY J. BAILEY, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN COMBINED SHOWER AND BATH COCKS.

Specification forming part of Letters Patent No. 167,817, dated September 21, 1875; application filed July 29, 1875.

To all whom it may concern:

Be it known that I, HARRY J. BAILEY, of Pittsburg, county of Allegheny, State of Pennsylvania, have invented or discovered a new and useful Improvement in Combined Shower and Bath Cock; and I do hereby declare the following to be a full, clear, concise, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which—like letters indicating like parts—

Figure 1 is a perspective view of my improved apparatus. Fig. 2 is an enlarged vertical cross-section through the discharge-nozzle; and Figs. 3, 4, 5, and 6 illustrate my improvement in some of the modified forms of its application.

My invention relates particularly to the construction of cocks for bath-tub and shower-bath use. In such cocks heretofore a removable hose and rose have been employed, by the attachment of which to the ordinary discharge-nozzle which supplies water to the bath-tub the shower is employed.

By my improvement I provide a double nozzle, by the rotation or inversion of which, or by the turning of a cock therein, the water-supply is caused to flow from one nozzle only into the tub, or, from the other nozzle only into the rose, for a shower, or may be cut off from both at pleasure. The shower-nozzle is provided with a waste.

In the drawing, A represents an ordinary bath-tub, and R a rose for showering. The ordinary hot and cold water cock is represented at B. The ports of this cock unite in the usual pipe *c*, having a discharge-port, *c*¹, preferably on its under side, as shown in Fig. 2. Onto the end of this pipe I attach a double nozzle, *b b'*, so that it may be rotated thereon by the hand of the bather, and so that whichever nozzle may be down its bore will coincide with the discharge-port *c*¹, and the bore of the other nozzle will be cut off or closed. The nozzle *b*, when down, as in Fig. 2, discharges directly into the bath-tub.

If the bather desires a shower, he simply reverses or rotates the double nozzle *b b'* till the opposite nozzle *b'* comes below, as in Fig. 1, by which operation nozzle *b* is cut off, and the water, passing by the hose *a* and rose R, gives

the shower desired. When a sufficient showering has been done, the double cock is again reversed to the position shown in Fig. 2, and the water then in the hose *a* will readily escape through the waste-groove *e* and port *e'*.

When the rose R is not in use it may be suspended out of the way on a hook, *h*; or, when in use, may be suspended in the proper position by that or like means; or may be manipulated by hand.

It will thus be seen that I avoid the necessity of attaching and detaching the shower-hose every time a shower-bath is desired, and provide for either kind of a bath, as may be desired, without any necessary change from one to the other, except the rotation or reversal of a cock. This improvement is applicable to cold-water cocks as well as to combined hot and cold water cocks.

In Fig. 3 I have shown the discharge-nozzle *b b'* permanently affixed to the pipe *c*, and with an open port to each; but the water-supply is deflected from the tub-nozzle *b* to the shower-nozzle *b'* by the rotation of a hollow plug or key, *g*, the port *c*² of which is, by the rotation, brought opposite to the bore of either nozzle at pleasure. Otherwise the construction and operation are the same as in Figs. 1 and 2.

In Figs. 4 and 5, B' represents a hot and cold water cock, similar in its general construction to that shown in Fig. 1, except that the discharge-pipe *c* extends back toward the wall, for greater compactness in construction. The nozzles *b b'* are affixed to it, as in Fig. 2, and a rotating hollow plug or key, *g'*, is employed in like manner as in Fig. 3 to turn on the supply to one nozzle and cut it off from the other, as already explained. The attachment thus made is, in effect and mechanically, a two-way cock; and the mechanical difference between forms shown and described is that, in Figs. 1 and 2, the outer case or barrel of the cock turns on the pipe *c* as a fixed or stationary key or plug, while in the remaining figures the cock case or barrel is fixed or stationary, and the plug or key *g* or *g'* turns therein. Other modifications of the same invention will readily occur to those skilled in the art, and need not be set forth at length.

Where fixed nozzles are used a fixed pipe may take the place of the hose *a*; or, still re-

taining the hose *a*, it may be connected to an extensible bracket, *m*, as shown in Fig. 6; the bracket *m* then taking the place of the hook *h* of Fig. 1. As an advantageous means of making this connection I attach to the stem of the rose *R* a ring, *n*, the eye of which slips onto the end of the bracket *m*, and is secured at any desired point of adjustment by means of a set-screw, *n'*, or other device of like function. It will then be obvious that the rose may be adjusted in toward or out from the wall, or lengthwise of the tub; or, by being rotated on the bracket, may be caused to throw a shower laterally or obliquely onto the bather. Also, a piston-valve may be used instead of the plugs *g g'*, with an arrangement of ports adapted thereto.

The devices shown in Fig. 6 are not claimed herein, and will constitute the subject-matter of a separate application.

I claim as my invention—

1. In combination with a bath-tub supply-pipe and cock, a bath-tub discharge-nozzle, *b*, a shower-supply nozzle, *b'*, and a cock or valve intermediate between the nozzles and water-supply pipe, substantially as described, whereby the water-supply may be wholly shut off from both nozzles, or turned into either nozzle alone, by the adjustment or throw of the valve cock or case.

2. A double reversible nozzle, *b b'*, arranged on the discharge-pipe *c*, with ports arranged substantially as and for the purposes set forth.

3. The combination of cock *B*, pipe *e*, double nozzle *b b'*, hose *a*, and rose *R*, substantially as described.

In testimony whereof I have hereunto set my hand.

HARRY J. BAILEY.

Witnesses:

W. BAKEWELL,
JAMES M. CHRISTY.