## C. K. DICKSON, Jr. COCKS AND FAUCETS.

No. 173,849.

Patented Feb. 22, 1876.

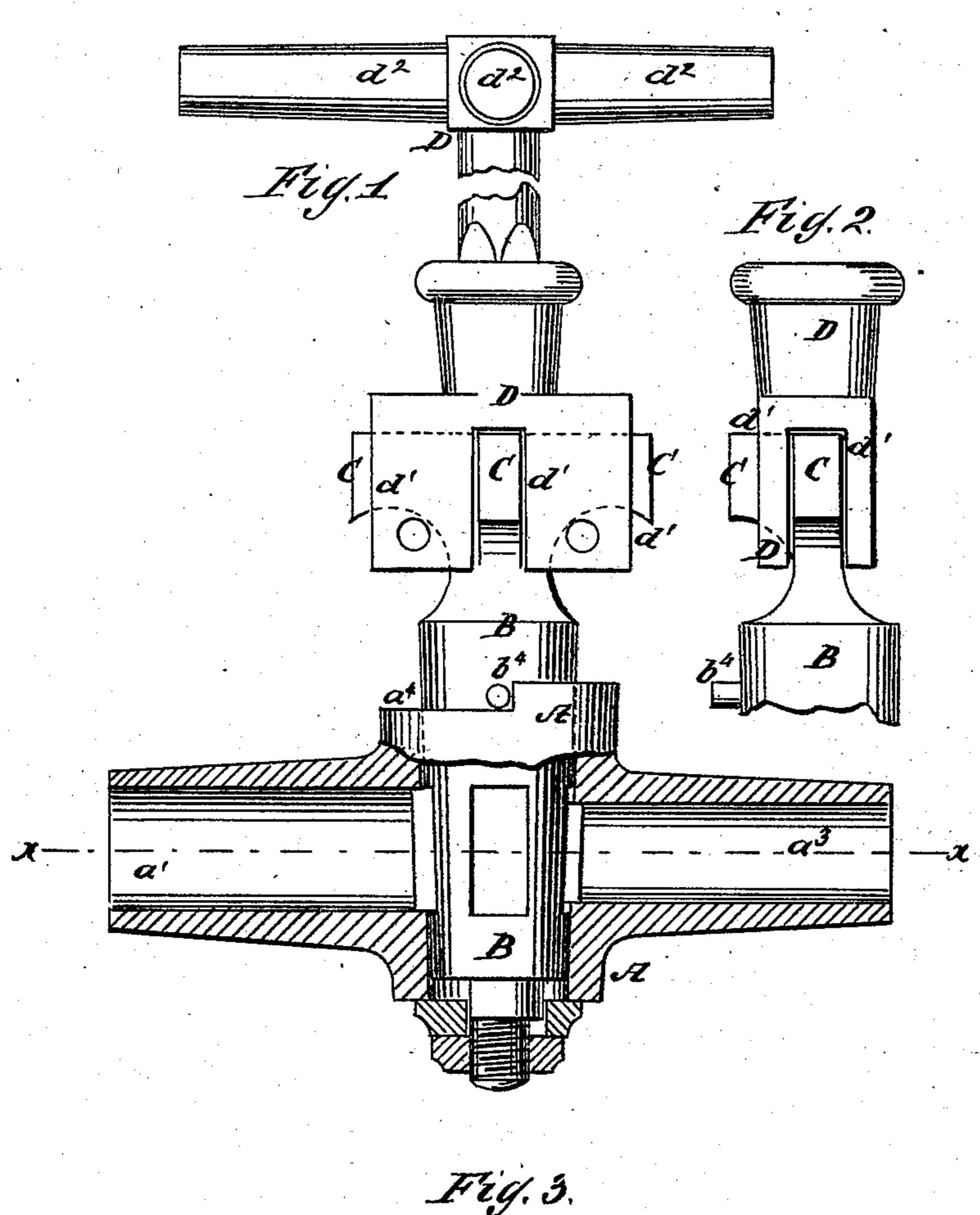


Fig. 3.

A B B B A A B A A B A A B A A B A A B A A B A A B A A B A A B A A B A A B

WITNESSES:

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## UNITED STATES PATENT OFFICE.

CHARLES K. DICKSON, JR., OF ST. LOUIS, MISSOURI.

## IMPROVEMENT IN COCKS AND FAUCETS.

Specification forming part of Letters Patent No. 173.849, dated February 22, 1876; application filed January 29, 1876.

To all whom it may concern:

Be it known that I, CHARLES K. DICKSON, Jr., of St. Louis, in the county of St. Louis, and State of Missouri, have invented a new and useful Improvement in Indicating and Operating Device for Three-Way Cocks, of which the following is a specification:

Figure 1 is a side view of my improved device shown as applied to a three-way cock, the cock being shown in section. Fig. 2 is a view of the same turned one-quarter around. Fig. 3 is a detail section of the three-way cock, taken through the line x x, Fig 1.

Similar letters of reference indicate corre-

sponding parts.

The object of this invention is to furnish an improved three-way cock which shall be so constructed as to indicate at all times what openings are closed and what opened, and which shall be simple in construction and convenient in use.

The invention consists in the combination of the three-armed head with the plug of a three-way cock, in such a way that the said arms may be directly over the openings of said plug, to indicate the position of said openings with reference to the three pipes of the cock; and in the combination of the key, provided with a three armed head on its lower end and a three-armed handle upon its upper end, with the three-armed head of the plug of a three-way cock, to indicate the position of the openings of the said plug with reference to the three pipes of the said cock,

as hereinafter fully described.

A represents the body of the cock, which is made with three pipes,  $a^1 a^2 a^3$ , set at right angles with each other, as shown in Fig. 3. The valve-seat of the cock A is made tapering or conical, in the usual way, and into it is fitted the tapering valve or plug B, which is secured in place by a nut and washer, in the usual way. In the plug B are formed three openings,  $b^1$   $b^2$   $b^3$ , corresponding with the three pipes  $a^1 a^2 a^3$  of the cock. The openings  $b^1 b^2 b^3$  are at right angles with each other, and meet in the center of the plug B. The inlet-openings  $a^1$   $b^1$  should be larger than outlet-openings  $a^2 a^3 b^2 b^3$ , so as to furnish a full stream of water to the pipes leading from |

said outlet-openings. To the upper part of the plug B is attached a pen,  $b^4$ , which enters a notch,  $a^4$ , in the top of the cock A, and which extends three-quarters around said top. By this construction the plug B can be inserted in only one way, and can only be turned through three-quarters of a revolution. When the plug B is in the position shown in Figs. 1 and 3, all the openings are open. When the plug B is turned through one-quarter of a revolution the opening  $a^3$  is closed, leaving the openings  $a^1$   $a^2$  open. When the plug B is turned through one-half a revolution the opening  $a^2$  is closed, leaving the openings  $a^1 a^3$  open. When the plug B is turned through three-quarters of a revolution the opening  $a^1$  will be closed, which entirely shuts off the water. Upon the stem of the plug B is formed a three-armed head, C, the arms of which are at right angles with each other, and are directly over the openings  $b^1 b^2 b^3$ , so that the position of said arms with reference to the pipes  $a^1 a^2 a^3$ , indicates exactly in what position the openings of the plug B are with reference to the pipes  $a^1 a^2 a^3$ . D is the key by which the plug B is turned, and in the lower end of which is formed a three armed head,  $d^{1}$ , to fit upon the three-armed head of the plug B, as shown in Figs. 1 and 2. Upon the upper end of the key D is formed a threearmed head or handle,  $d^2$ , the arms of which are at right angles with each other, and are exactly over the arms C of the plug B, so as to indicate by their position with reference to the pipes  $a^1$   $a^2$   $a^3$  the exact position of the openings  $b^1$   $b^2$   $b^3$  of the said plug B. This device is especially applicable to water-pipes, to enable two houses, or a house and a streetwasher, to be supplied with water by tapping the water-main once, and in such a way tha the water can be shut off from either outletpipe without affecting the other, and to be shut off from both when desired.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of the three-armed head C with the plug B of a three-way cock, the said arms C being directly over the openings of said plug B, to indicate the position of said openings with reference to the three pipes of the cocks, substantially as herein shown and described.

2. The combination of the key D, provided with a three-armed head,  $d^1$ , on its lower end, and a three-armed head or handle,  $d^2$ , upon its upper end, with the three-armed head of the plug B of a three-way cock, to indicate the

position of the openings of the said plug with reference to the three pipes of the said cock, substantially as herein shown and described.

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Witnesses:

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