

# Joshua Register's Cock.

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PATENTED JUL 18 1871

Fig 1

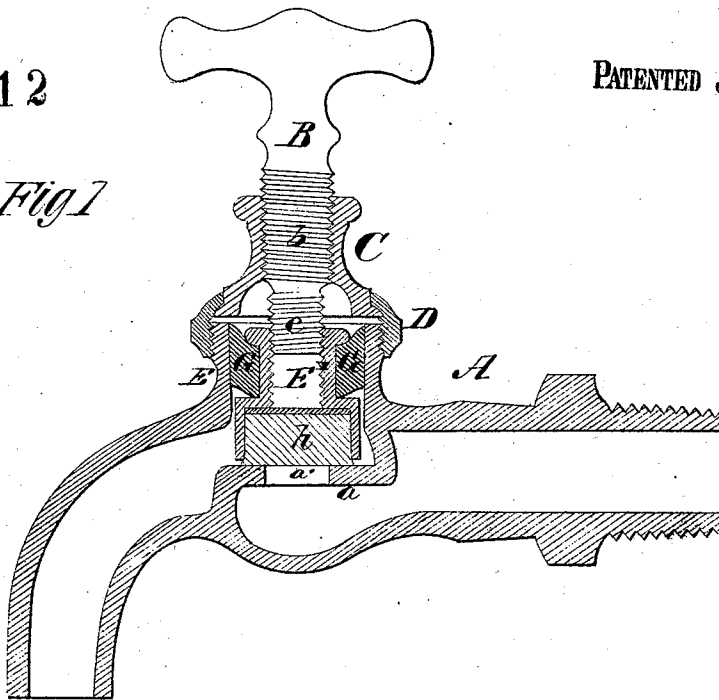
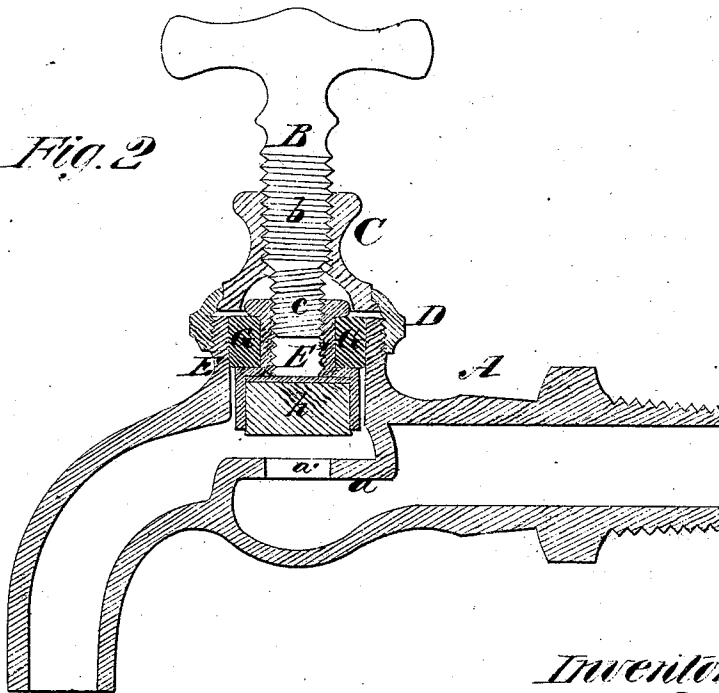


Fig. 2



Witnesses.  
R. J. Campbell.  
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# UNITED STATES PATENT OFFICE.

JOSHUA REGESTER, OF BALTIMORE, MARYLAND.

## IMPROVEMENT IN COCKS.

Specification forming part of Letters Patent No. 117,112, dated July 18, 1871.

### *To all whom it may concern:*

Be it known that I, JOSHUA REGESTER, of the city and county of Baltimore and State of Maryland, have invented a new and Improved Cock; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a section taken diametrically and vertically through the cock when shut. Fig. 2 is a similar view of the same parts, showing the plug open.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improvement in cocks, wherein a diaphragm is employed as a means for closing the plug and its cap against leakage. In cocks of this description hitherto made, the diaphragm, which was made of India rubber, was confined between the cap and body of the cock. The objections to this method of confining the diaphragm are that when the cap is screwed firmly down it is liable to cut the rubber, and also when the rubber is confined by the cap alone the cock is liable to leak at the opening made through the rubber diaphragm for the plug. The nature of my invention consists in an elastic packing, which is interposed between the neck of the cock and the plug, and forcibly compressed therein so as to form perfectly-tight joints, and at the same time to allow all the play of the plug which is necessary to open and close the cock, as will be hereinafter explained.

The following description of my invention will enable others skilled in the art to understand it.

In the accompanying drawing, A represents the body of the cock; *a*, the partition which is cast therein; and *a'*, an opening for the passage of the fluids through the partition. The neck E of this cock is cylindrical interiorly, and on the outside a screw-thread is cut for receiving a screw-cap, D. This screw-cap D confines down on the neck a cap, C, which is screw-threaded interiorly, and which receives through it a stem, B, on which

right-and-left screw-threads *b c* are formed. The lower screw-threaded portion *c* of the stem B is tapped into a plug, E', which moves up and down in the neck of the cock, and which may be constructed with a recess in its lower end to receive a wooden cock, *h*. An annular groove is made in the external surface of the plug E', above the corking portion, between which and the interior surface of the neck E of the cock and India-rubber diaphragm G is compressed so tightly as to form an effective packing to prevent the escape of fluid from below upward. This diaphragm is a thick elastic ring, of larger diameter than the interior bore of the neck E, so that when it is compressed into this neck it will not slip when the plug E' is moved up and down, but will yield centrally and allow the plug to be moved vertically a sufficient distance to fully open and shut the aperture *a'*. In Fig. 1 the plug is represented as bearing upon its seat, and the diaphragm G depressed in the center. In Fig. 2 the plug is shown raised from its seat, and the diaphragm very much compressed between the groove of the plug and the inner surface of the neck of the cock.

Thus it will be seen that the joint around the plug is more closely packed when the plug is raised from its seat.

I am aware that it is not new to use an India-rubber diaphragm, made large enough to cover the upper end of the neck E, and confined thereon by means of a screw-cap, and I do not claim such contrivance.

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

An elastic diaphragm, G, when compressed between the plug E' and the interior surface of the neck E, and caused to pack tighter when the cock is open than when closed, substantially as described.

JOSHUA REGESTER.

Witnesses:

S. W. REGESTER,  
J. WARD WILLSON.