(No Model.)

F. HICKMAN.

COCK AND FAUCET.

No. 270,066. Patented Jan. 2, 1883.

Fig. 1.

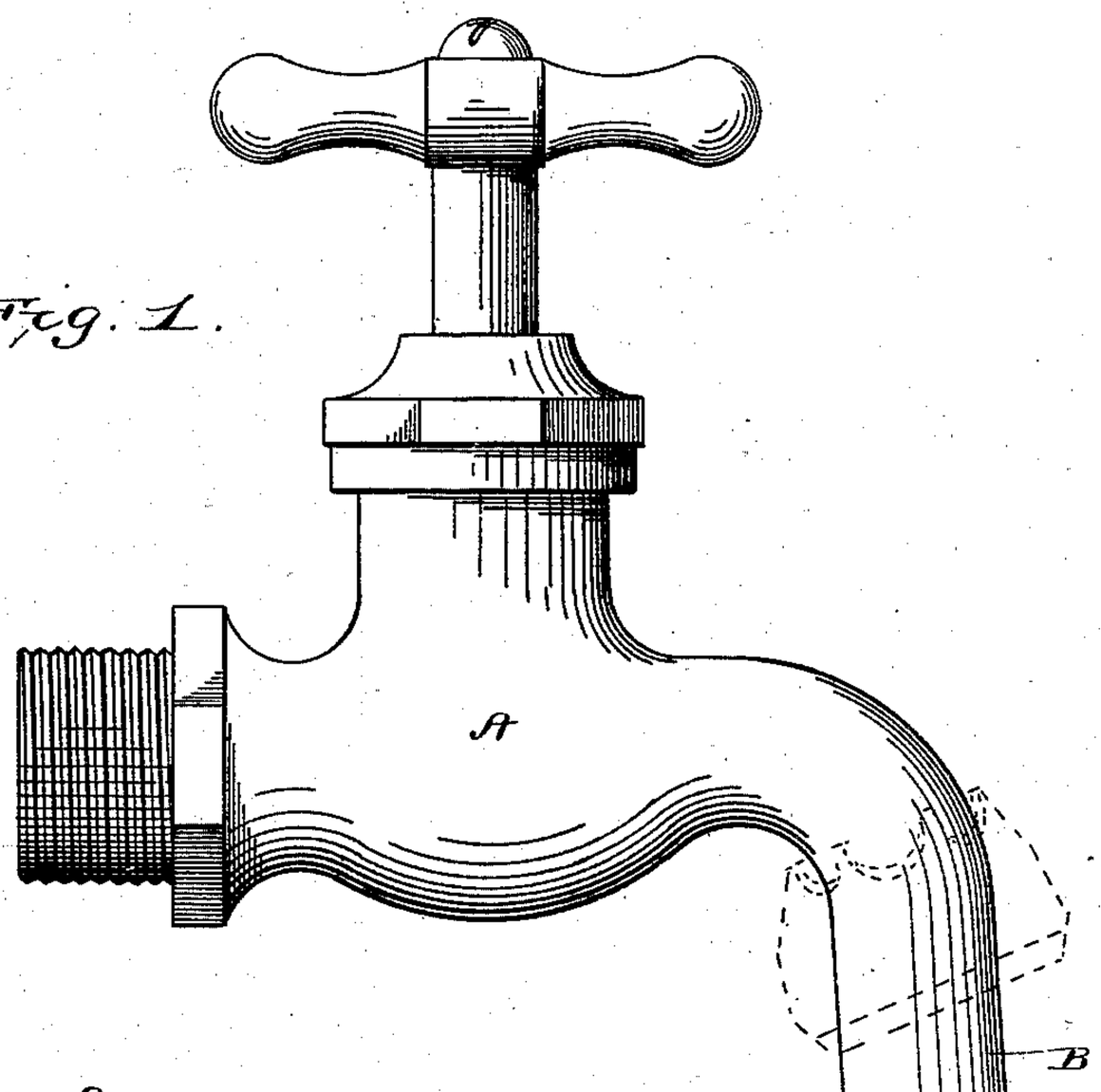


Fig. 2.

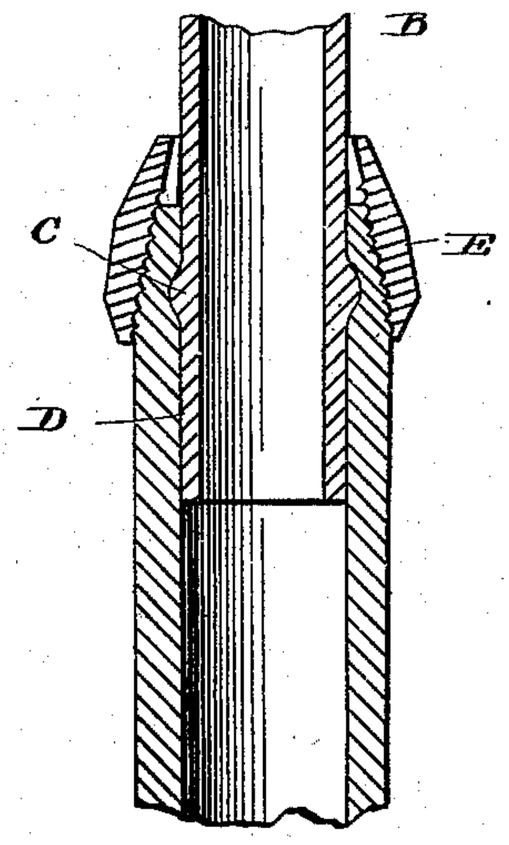
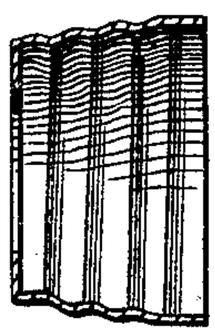


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

FRANCIS HICKMAN, OF NEW YORK, N. Y.

COCK AND FAUCET.

SPECIFICATION forming part of Letters Patent No. 270,066, dated January 2, 1883.

Application filed April 19, 1882. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS HICKMAN, of New York, in the county of New York, and in the State of New York, have invented certain new and useful Improvements in Cocks and Faucets; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to a new and useful improvement in cocks or faucets; and the nature of my invention consists in a cock or faucet having a raised bead or annular ridge formed on its nozzle, and an extension beyond said bead or ridge, in combination with an internally-screw-threaded coupling-ring, which is permanently but movably applied to the nozzle of the cock, and adapted for tightly and firmly compressing and holding the end of a flexible hose on said nozzle, as will be fully understood from the following description, when taken in connection with the annexed drawings, in which—

Figure 1 is a side view of a well-known kind of cock having my improvement applied to it. Fig. 2 is a diametrical section through the nozzle of the cock, showing the end of a hose secured to it. Fig. 3 is a section of a spun coupling-ring.

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

The letter A designates the body of a cock or faucet, which may be constructed and provided with a valve in any of the well-known ways known to the trade.

B designates the nozzle of the cock, on the exterior surface of which I form an annular bead or rounded ridge, C, and below this bead I extend the nozzle so as to form the tubular extension D. (Shown in all the figures of the drawings.)

E designates an internally-screw-threaded coupling-ring, which is permanently but loosely applied on the nozzle B above the annular ridge or shoulder C, the latter serving to prevent the said ring from being detached from the nozzle. The internal screw-threaded surface of the ring E flares downward, and at all points is of greater diameter than the diameter of the ridge or shoulder C, as shown in Fig. 2. The external surface of the ring E is preferably ribbed or roughened to allow this ring to be firmly grasped in the hand when it is desired to couple or uncouple a hose, G. The upper end of the ring E, if made of cast metal, is constructed with teeth or spurs *a*, which, when the ring is slipped over the ridge or shoulder C, are compressed about the upper portion of the nozzle, but not so close thereto as to prevent free play of the ring. The ring shown in Figs. 1 and 2 is made of cast metal, with a thread cut inside of it.

Instead of a cast or rigid ring, E, I shall sometimes use a spun ring, or a ring formed of sheet metal, having a thread spun on it instead of cut, as in the cast-metal ring.

To couple a hose to the nozzle, I slip the end of the hose over the end of the nozzle B, so as to extend well over the shoulder C, as shown in the sectional view, Fig. 2. The coupling-ring E is then screwed over the end of the hose, so as to compress the latter firmly about the nozzle and shoulder C and cause the thread of the ring to embed itself into the end of the hose.

While I prefer to use the extension D beyond the shoulder C for the purpose of preventing casual detachment of the hose when deflected out of a straight line, still I may omit this extension in some cocks or faucets.

It is obvious that by constructing both ends of the tubes shown in Fig. 2 with shoulders C and extensions D beyond these shoulders I have an excellent coupling for the ends of two sections of hose. Such a coupling will be provided with two screw-threaded rings, E.

It will be seen from the above description that my improved coupling is self-tightening—that is to say, the ring E is endwise movable on its tube; and when there is a pressure of water in the hose the tendency is to forcibly draw the ring against the hose at the annular shoulder C. Consequently the greater the head or pressure of water the tighter will be the joint.

Having described my invention, I claim—

As a new and improved article of manufacture, a cock or faucet having a bead or shoulder on its nozzle, in combination with a coupling-ring of flaring form, having a screw-thread in it, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 18th day of April, 1882.

F. HICKMAN.

Witnesses:
J. J. MCCARTHY,
CHAS. D. DAVIS.