(No Model.)

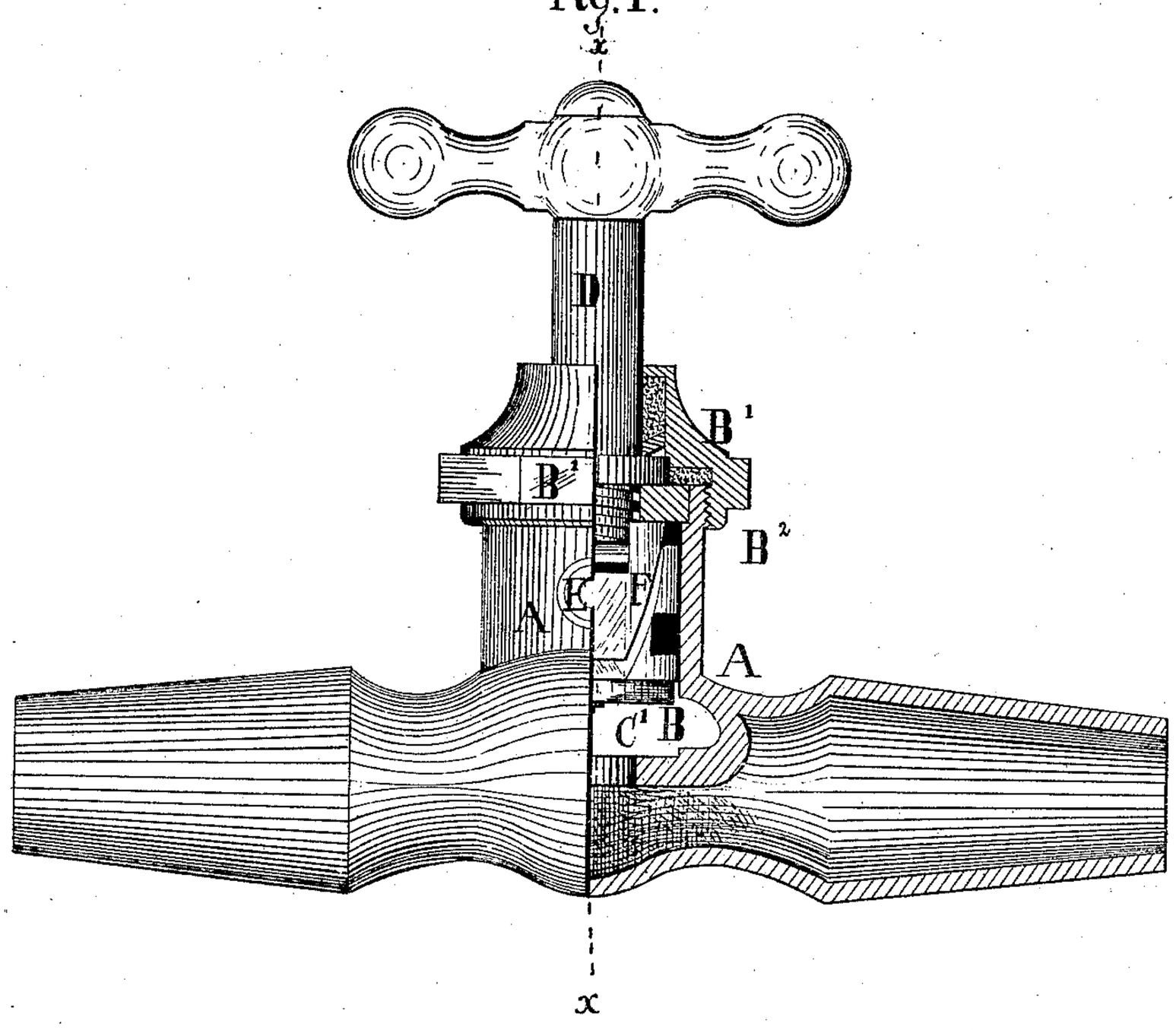
2 Sheets—Sheet 1.

E. W. McCORMICK.

WASTE COMPRESSION COCK.

No. 257,232. Patented May 2, 1882.

Fig. 1.



Witnesses
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Inventor
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Atty

(No Model.)

2 Sheets—Sheet 2.

E. W. McCORMICK.

WASTE COMPRESSION COCK.

No. 257,232. Patented May 2, 1882.

Fig. 3.

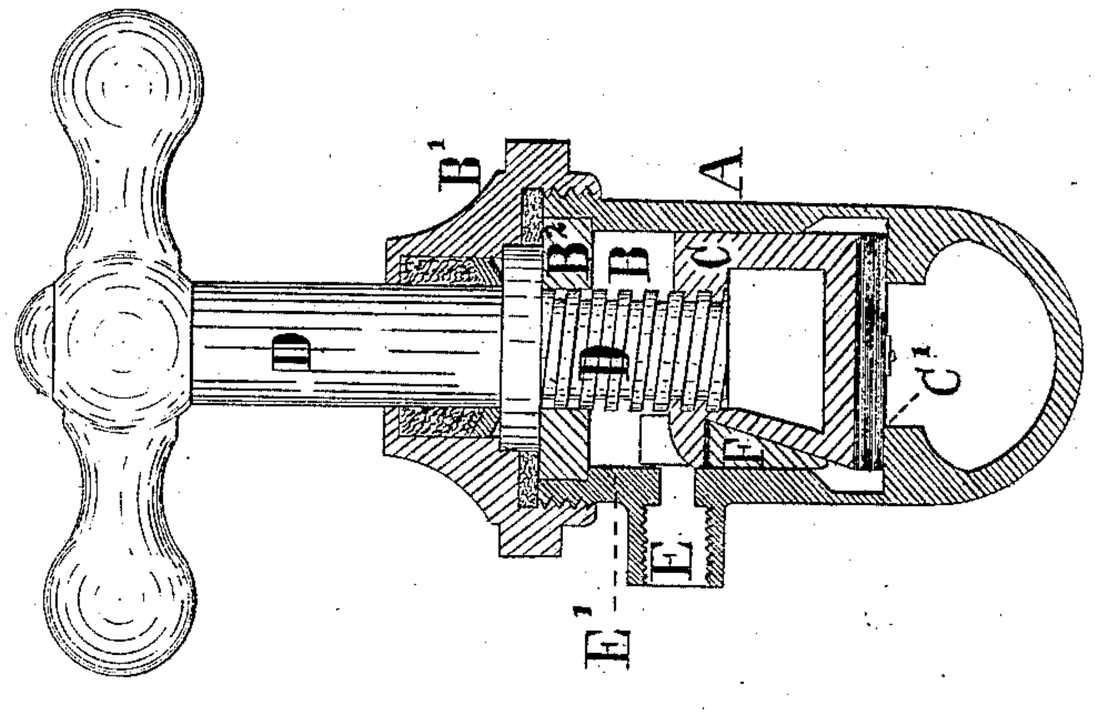


Fig. 4.

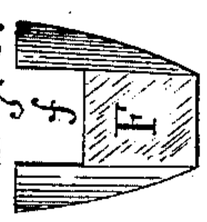


Fig. 5.

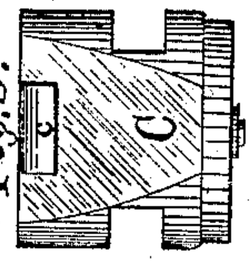
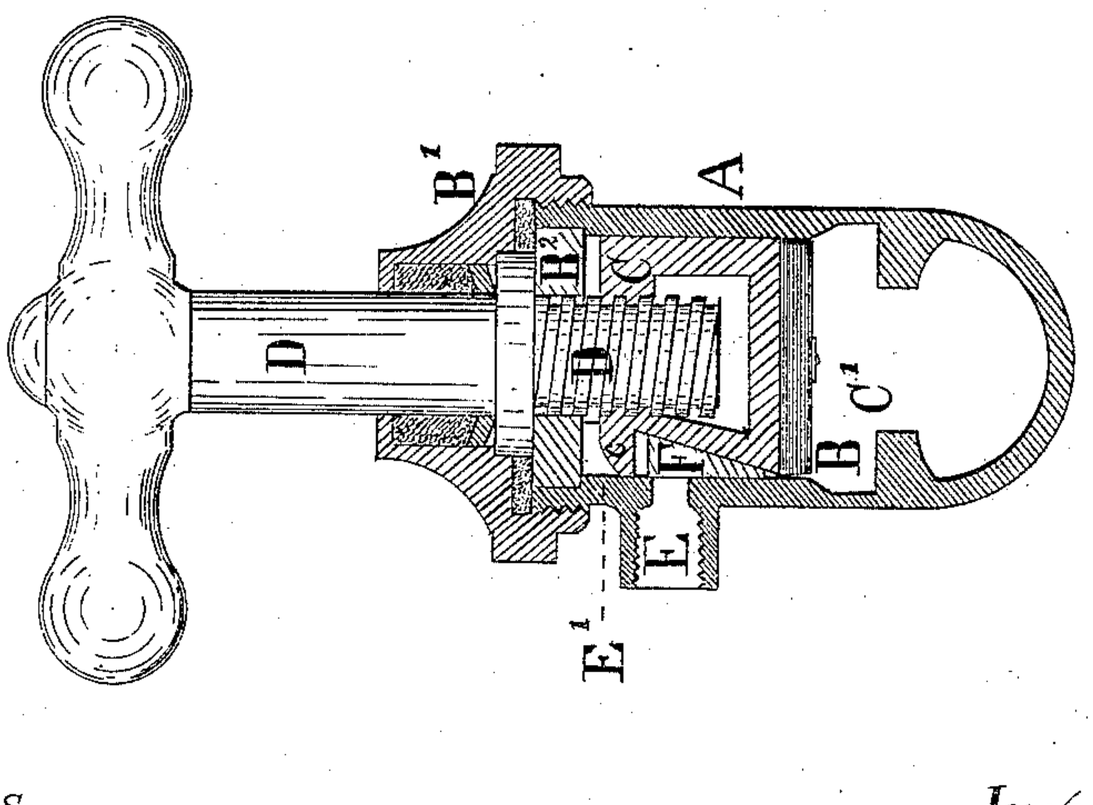


Fig. 2.



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UNITED STATES PATENT OFFICE.

EDWARD W. McCORMICK, OF NEW YORK, N. Y., ASSIGNOR TO CHARLES HARRISON, OF SAME PLACE.

WASTE COMPRESSION-COCK.

SPECIFICATION forming part of Letters Patent No. 257,232, dated May 2, 1882.

Application filed February 6, 1882. (No model.)

To all whom it may concern:

Be it known that I, EDWARD W. McCORMICK, of the city and State of New York, have invented an Improvement in Waste Compression-Cocks, of which the following is a specification.

It is the object of my improvement to effect the closing of the waste-outlet of a compression-cock by the lifting of the valve-plug from its seat. I accomplish this object by means of a loose wedge bearing upon an inwardly and upwardly inclined plane formed upon the side of the valve-plug adjacent to the waste-outlet. The wedge drops below the waste-outlet when the valve-plug rests upon its seat, but when the valve-plug is lifted is carried up and binds between the inclined side of the plug and the part of the wall of the valve-chamber which is performed by the waste-outlet.

The accompanying drawings, representing a compression-cock containing my improvements, are as follows:

Figure 1 is a side elevation, partly in section, showing the valve-plug lifted from its seat. Fig. 2 is a transverse section through the line *x x* on Fig. 1, also showing the valve-plug lifted from its seat. Fig. 3 is a similar section, showing the valve-plug bearing upon its seat, the valve-stem in Figs. 1, 2, and 3 being represented in elevation. Fig. 4 is a front elevation of the wedge, and Fig. 5 is an elevation of the side of the valve-plug upon which the wedge bears.

The drawings represent a compression-cock, the shell A and the valve-chamber B of which are of ordinary form.

The raising and lowering of the valve-plug C for the purpose of opening or closing the cock are effected by the usual actuating screw-stem, D, having its bearing in the cap B′ of the valve-chamber. When the valve-plug C is lowered upon the valve-seat C′ the waste water escapes from the valve-chamber through the outlet E; but when the valve-plug is raised from its seat the waste-outlet E is closed by the wedge F, the outer face of which bears upon the wall of the valve-chamber and extends over the mouth of the waste-outlet.

The usual packing is provided between the top of the valve-chamber and its cap, and for the shank of the screw-stem.

The valve-plug C is a cylinder with flattened sides. Opposite portions of the wall of the valve-chamber are correspondingly flattened. The valve-plug is thus prevented from turning, and is compelled to move up or down in the valve-chamber, accordingly as the screw-stem is turned in one direction or the other.

The flattened portion E′ of the wall of the valve-chamber is provided with a perforation which serves as the outlet for the waste water. The adjacent side of the valve-plug is inwardly and upwardly inclined, and a wedge, F, is contained between the inwardly and upwardly inclined side of the valve-plug and the flattened portion E′ of the wall of the valve-chamber.

The wedge F is provided at its upper end with a recess, *f*, to admit the tongue *c*, which projects from the upper part of the inclined side of the valve-plug. The tongue *c*, by its engagement with the sides and bottom of the recess *f* in the upper end of the wedge, serves to hold the wedge in proper vertical alignment, and also to push the wedge downward when the valve-plug is lowered, in case the wedge does not fall by its own gravity. When the valve-plug is raised the wedge F is carried up until its upper end comes into collision with the washer B^2 at the top of the valve-chamber, after which the further upward movement of the valve-plug serves to tighten the wedge firmly against the flattened portion E′ of the wall of the valve-chamber, and thus completely close the waste-outlet, across the mouth of which the wedge F has been carried by the raising of the valve-plug.

It will be seen that the wedge F is a valve as regards the waste-outlet, and that the motions required for operating it are resultants of the motion of the compression-valve plug C, and hence that the screw-stem D is the common actuator of the main valve or valve-plug C of the waste-outlet valve or wedge F.

I claim as my invention—

In a compression-cock, the combination of the actuating-stem D, the valve-plug C, and the wedge F for closing the waste-outlet, substantially as set forth.

E. W. McCORMICK.

Witnesses:
JAS. B. ROWLEY,
WM. P. TOWNE.