C. FRANKE.

Stop-Cock.

No. 167,397. Patented Sept. 7, 1875.

Fig 1

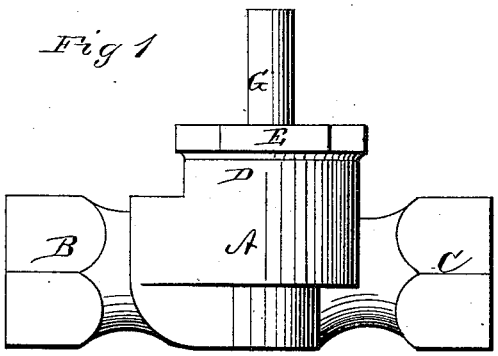


Fig 4.

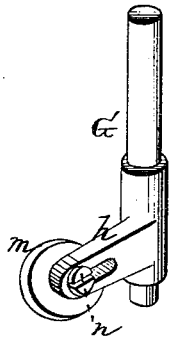


Fig 2

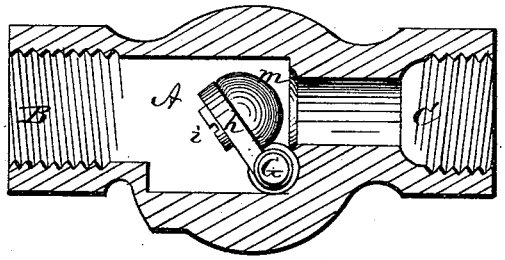
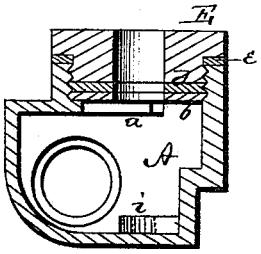


Fig 3



WITNESSES

Franck L. Durand.

C. L. Emerson.

By

INVENTOR

Charles Franke

Alexander Mason

Attorney

UNITED STATES PATENT OFFICE.

CHARLES FRANKE, OF NEW YORK, N. Y.

IMPROVEMENT IN STOP-COCKS.

Specification forming part of Letters Patent No. **167,397**, dated September 7, 1875; application filed April 6, 1875.

To all whom it may concern:

Be it known that I, CHARLES FRANKE, of New York city, county, and State, have invented certain new and useful Improvements in Stop-Cocks; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The nature of my invention consists in the construction and arrangement of a stop-cock that will allow a straight passage of the steam, water, or other fluid passing through it, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which forms a part of this specification, and in which—

Figure 1 is a side view of my stop-cock. Fig. 2 is a longitudinal section, and Fig. 3 a cross-section, of the same. Fig. 4 is a perspective view of the spindle, with arm and valve.

A represents the valve-chamber, provided at one end with the inlet B, and at the other end with the outlet C, on a direct line with each other. In the upper side of the chamber A is a circular opening, with collar or tubular projection D, at the bottom of which are flanges *a a*, forming supports for an annular metal disk, *b*. On top of this metal disk is placed a packing-disk, *d*, and a stuffing-box, E, with packing *e*, is screwed into the collar D down onto said disks. Through the center of the stuffing-box E and disks *b d* is passed the valve-stem G, the lower end of which rests in a socket, *i*, formed in the valve-chamber. On this stem is secured an arm, *h*, at right angles with the stem, and this arm is slotted longitudinally for the adjustment thereupon of the valve *m*, which is fastened by means of a set-screw, *n*, passing through the slot in the arm. The valve *m* closes the outlet C, the pressure of the steam, or water, or other fluid making the valve perfectly tight. The metal plate *b* under the packing *d* prevents the packing from pressing too tight on the stem.

By this construction, as described, of the valve-chamber, valve, and other parts, the friction is reduced to the smallest possible amount.

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

In a stop-cock having a valve-chamber, A, with the inlet B and outlet C on a straight line with each other, the combination of the valve-stem G, with slotted arm *h* extending therefrom at right angles, and the valve *m*, adjustable on said arm, substantially as and for the purposes herein set forth.

CHARLES FRANKE.

Witnesses:

HENRY E. ROEDER,

ISAAC AARON.