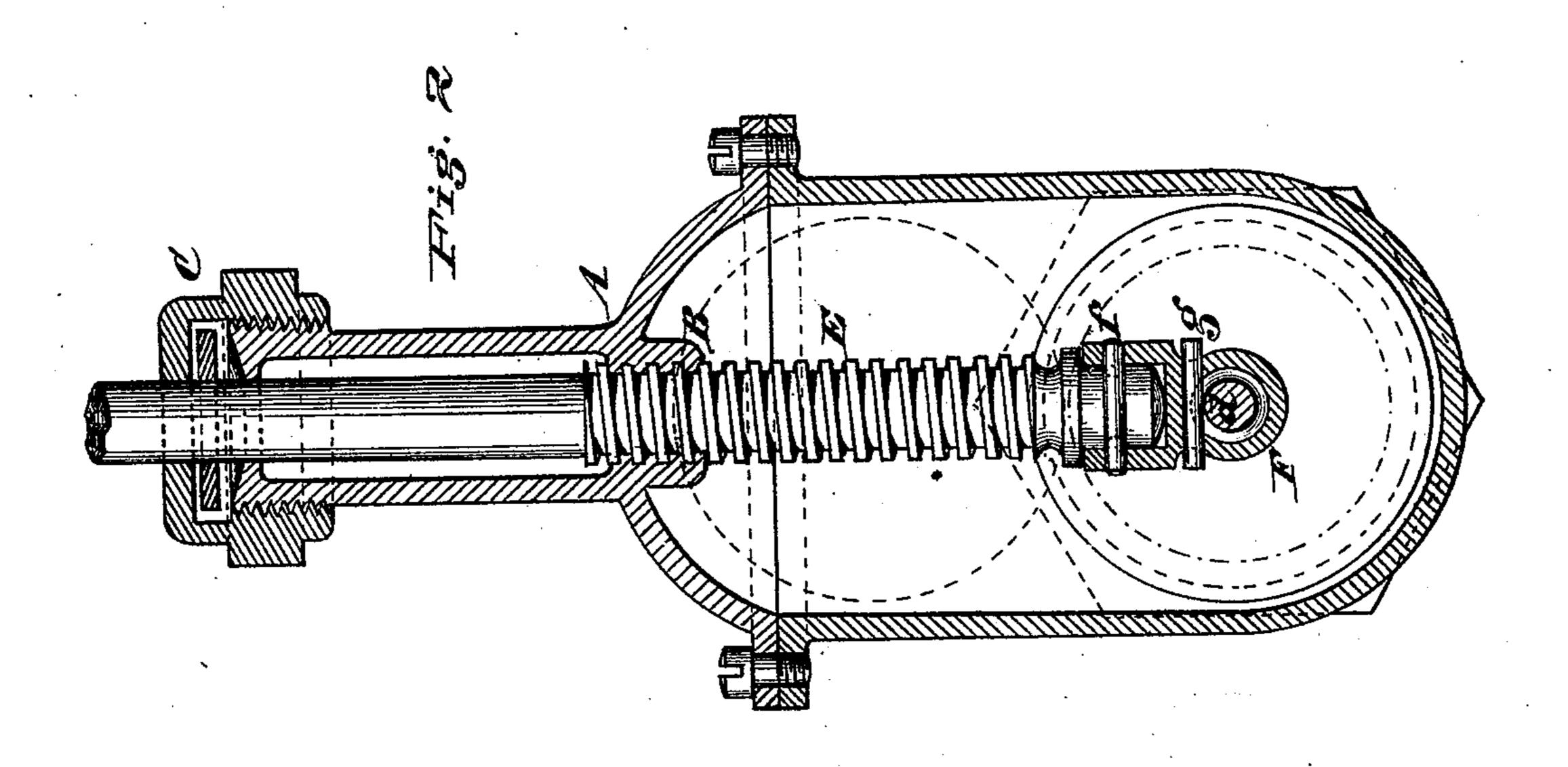
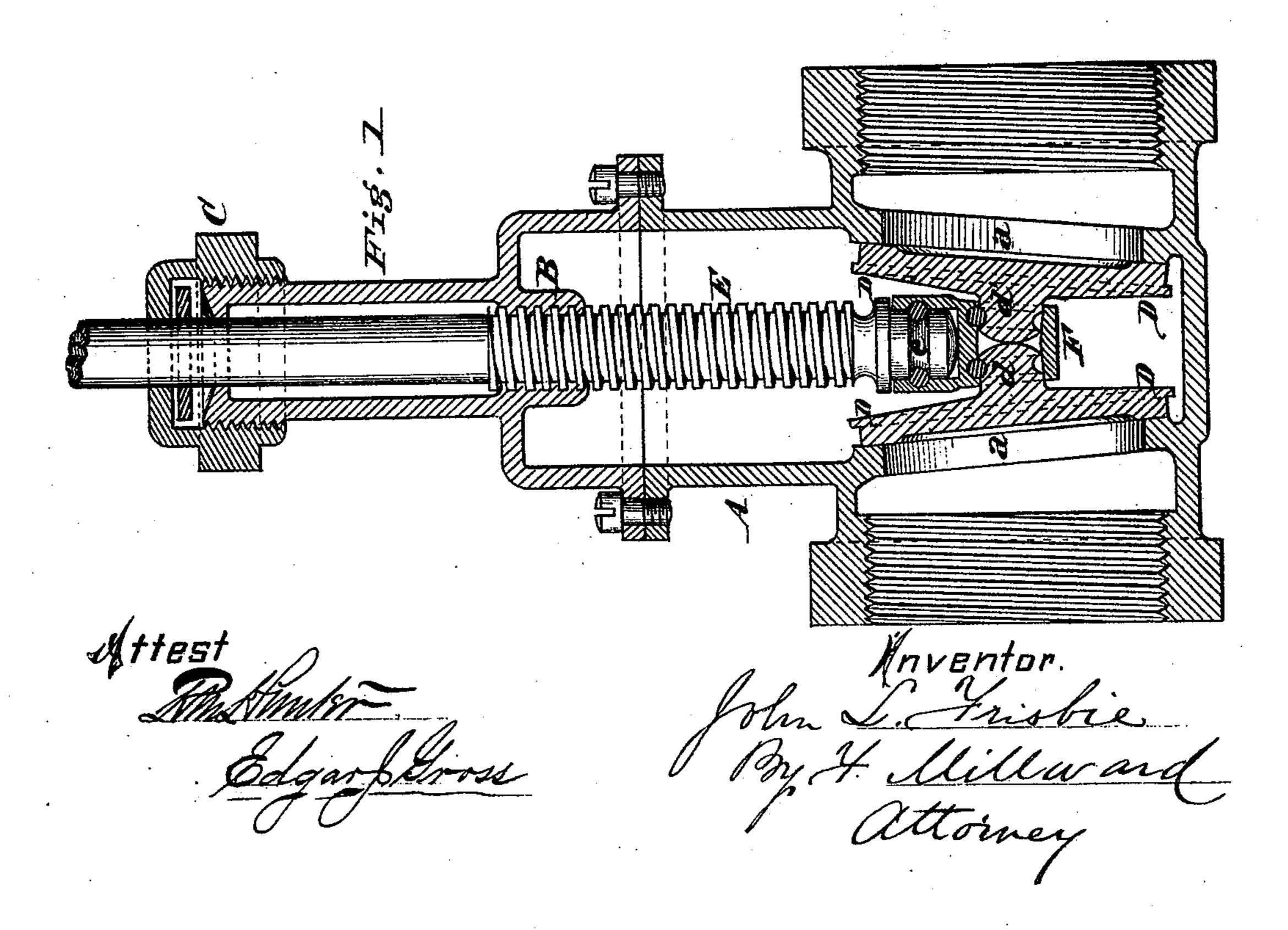
J. L. FRISBIE. Stop-Cock.

No. 164,538.

Patented June 15, 1875.





UNITED STATES PATENT OFFICE.

JOHN L. FRISBIE, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND THOMAS J. NOTTINGHAM, OF CINCINNATI, OHIO.

IMPROVEMENT IN STOP-COCKS.

Specification forming part of Letters Patent No. 164,538, dated June 15, 1875; application filed May 19, 1875.

To all whom it may concern:

Be it known that I, John L. Frisbie, of New York, New York county, State of New York, have invented a certain new and useful Improvement in Water-Valves, of which

the following is a specification:

My invention relates to the class of valves having separate double faces and double inclined seats, and a direct passage-way for the water when open; and consists in such a construction of the valves and their connection with the screw that both valves are carried by a swiveling-frame on the screw, and are so fitted to the swiveling-frame as to touch each back to back on rounded surfaces, and to revolve independently.

Figure 1 is a longitudinal vertical section of a valve embodying my invention. Fig. 2 is a

cross-section of the same.

A is the casing, having the inclined seats a a, nut B, and ordinary stuffing-box C. D D are the two valves, having central cylindrical projections d d', grooved as shown, and convex shaped at the ends where the valves come in contact with each other. The ends of the

projections being convex, and in contact with each other, the valves are enabled to force each to the seats without any strain upon the connection with the stem, and to adjust themselves independently to the seats. E is the valve-stem, and F the swiveling-carrier. The latter is attached to the stem by pin or pins f and groove e, and at the bottom embraces the projections d d', in the manner shown, the valves being kept in place by the pins g in the grooves of the projections.

I claim—

In combination with the inclined faces a a and carrier F, the valves D D, having swiveling projections d d', with convex ends in contact, substantially as and for the purpose specified.

In testimony of which invention I hereunto set my hand and seal the 14th day of December, 1874.

JOHN L. FRISBIE. [L. s.]

 $\operatorname{witnesses}$: $\operatorname{witnesses}$

OSCAR FRISBIE,
E. J. GRANGLE.