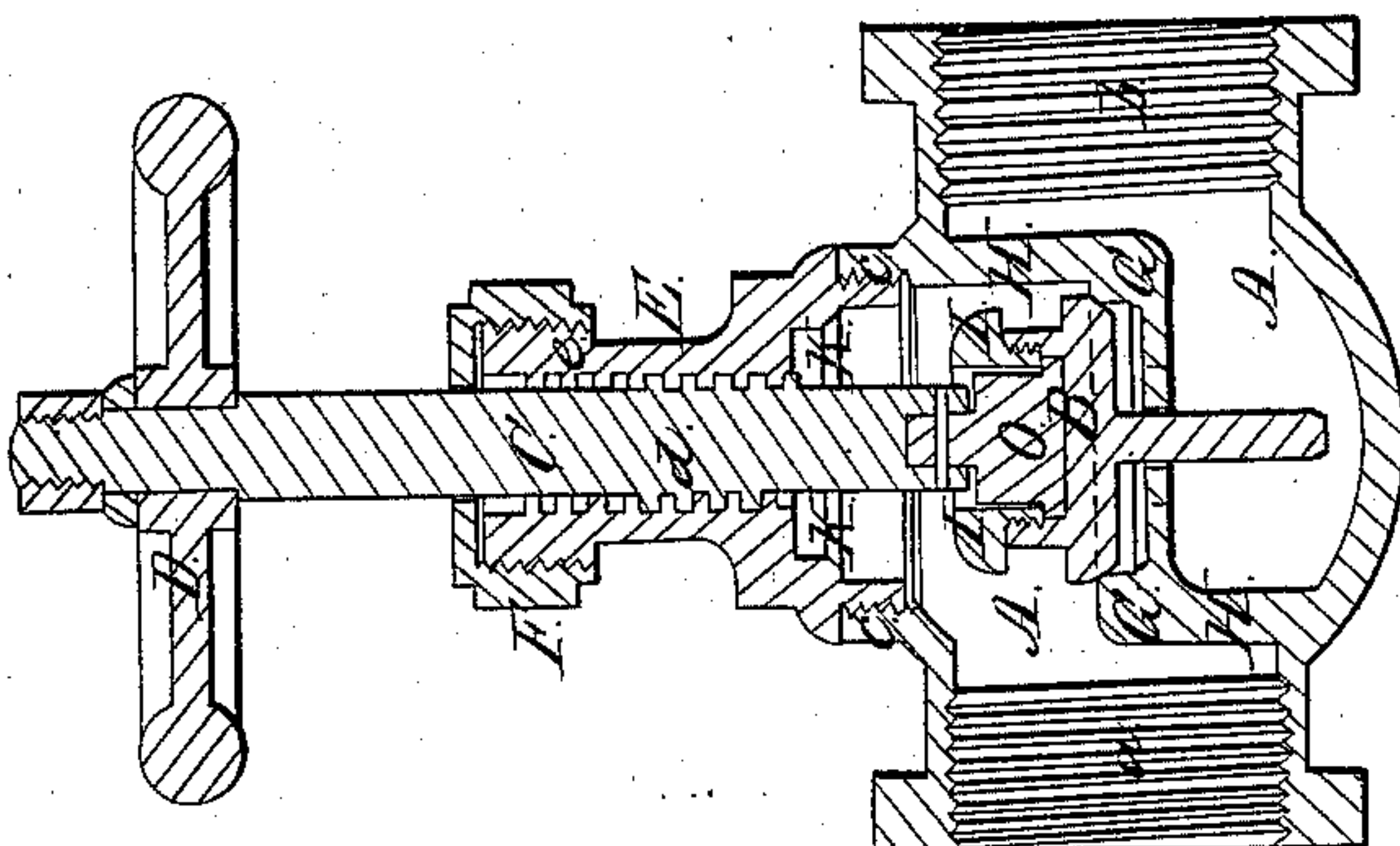
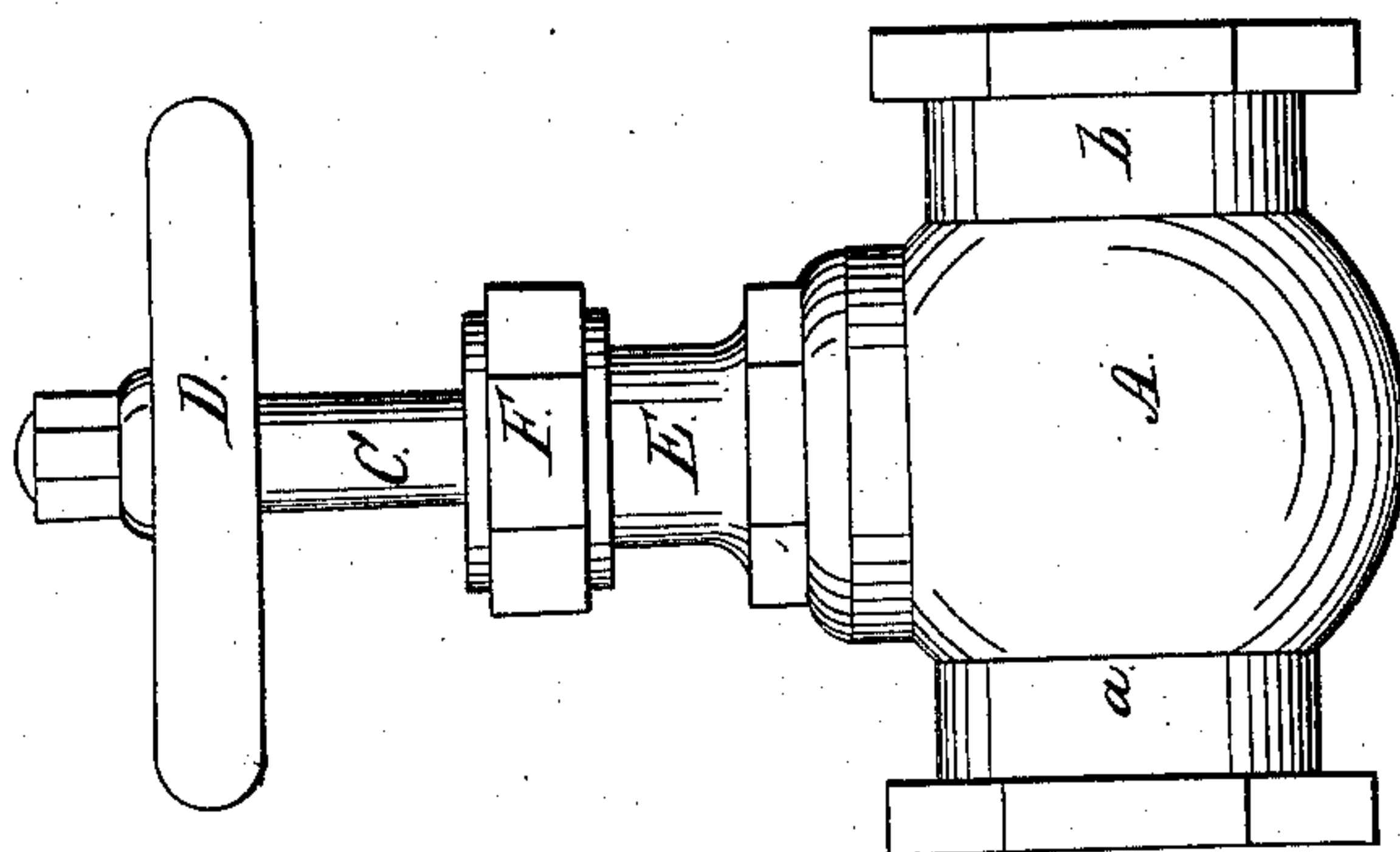


*A. Swackins,*  
*Globe Valve,*  
*No. 32,212,      Patented Apr. 30, 1861.*

*Fig. 2.*



*Fig. 1.*



*Witnesses.*

*R. H. W. W.*  
*J. P. Hale Jr.*

*Inventor.*

*Alfred Swackins*



# UNITED STATES PATENT OFFICE.

ALFRED SWADKINS, OF SOUTH BOSTON, MASSACHUSETTS.

## STEAM-COCK.

Specification of Letters Patent No. 32,212, dated April 30, 1861.

*To all whom it may concern:*

Be it known that I, ALFRED SWADKINS, of South Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful or Improved Steam-Cock; and I do hereby declare the same to be fully described in the following specification and illustrated in the accompanying drawings, of which—

Figure 1, is an external view or elevation; and Fig. 2, a vertical and longitudinal section of a steam cock constructed on my improved plan.

In carrying out my invention, I not only apply in the usual manner to the valve rod and the case of the steam cock, a valve and corresponding valve seat, but I apply to such rod and valve case an auxiliary valve and seat, these latter being for the purpose of preventing the escape of steam through the female screw of the valve rod while the main valve may be raised off its seat. These two valves, I combine and arrange with the stem by means of a swivel or devices by which both valves or the upper one may swivel or be turned around with respect to the stem. I also arrange the valve operating screws between the auxiliary valve and the stuffing box or its screw cap.

The common valve cock, whose valve is operated by means of a screw, is liable to leakage about the valve rod and through its female screw, the condensation of the escaped steam being productive of a dripping of water from the cock or its rod, and this especially when the valve rod is arranged horizontally. With my improved cock, such leakage and its bad results are prevented.

In the drawings, A is the case of the cock which is globular in form and constructed with female screw projections, *a, b*, for the attachment to two conduits or pipes, and I attain other important advantages.

In my valve the operating screws, (*d, e*) of the stem and case by being arranged between the auxiliary valve and the stuffing box cap F, (hereinbefore referred to) operate with both valve and stuffing box to prevent the escape of water or steam. In this respect my arrangement is better than one where the operating screws are arranged outside of the stuffing box and with the latter placed between them and the valves.

By means of the mode of applying the

valves together and to their stem or spindle the latter can revolve freely and independently of them, so as to prevent them from grinding on their seats. The upper valve can also be rotated on its stem so as to grind it close upon its seat with emery whenever such may be necessary. To accomplish this latter, the stuffing box cap should first be removed from the neck or part to which it is screwed. Next such cock should be unscrewed from the valve case, and the stem C, should be unscrewed so as to bring the auxiliary valve close up to its seat—after which the valve may be turned about and ground to the seat with emery.

The main valve of the cock is shown at B, as fixed to a cylindrical stem C, whose upper end is provided with a hand wheel D. The rod or stem C, screws into a neck E, which is secured to the valve case by screws as shown at *c, c*, in Fig. 2. A head or cap F, extends around the rod C, and is screwed down upon the neck E. This serves to compress packing around the rod should the same be required.

The seat of the valve B, is shown at G, G, in Fig. 2, it being formed in the usual manner in a partition H, extending across the interior of the valve case. The auxiliary valve is represented at I, I, as affixed to the valve rod C, the seat of such auxiliary valve being shown at K, K, as formed in the lower part of the neck E, of the valve case. During the act of raising the valve B, off its seat by means of the rotation of the screw *d*, of the valve rod, the auxiliary valve I, will be elevated and moved up against its seat K, which not only serves as a stop to the further elevation of the main valve, but operates with the auxiliary valve to prevent the escape of steam through the female screw *e*, of the neck E.

By inspection of Fig. 2, it will be seen that the two valves B, and I, are chambered and screwed together. Also that the foot of the stem C, is connected to a separate piece O, which I term the swivel, it being a cylindrical block furnished with a flanch to extend underneath the screw of the upper valve as shown in said Fig. 2. The said swivel is connected with the valve stem not only by means of a tenon extending into the stem, but by a pin passed through both stem and tenon as shown in such figure, this

mode of application of the two valves together and to the stem being productive of advantages as above set forth.

I claim—

- 5 The combination and arrangement of the two valves B, I, with the swivel o, of the stem C, such valves being constructed and

connected by screws or mechanical equivalents therefor substantially as specified.

ALFRED SWADKINS.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.