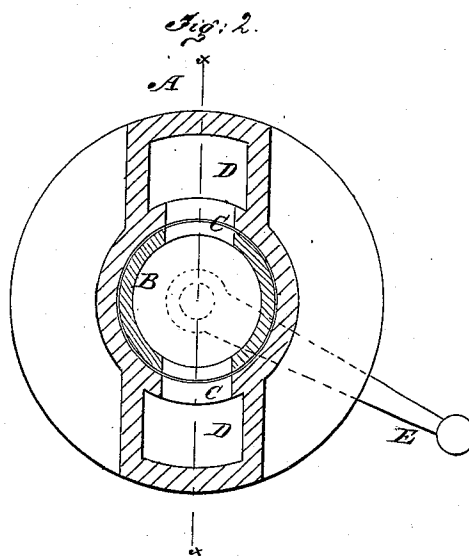
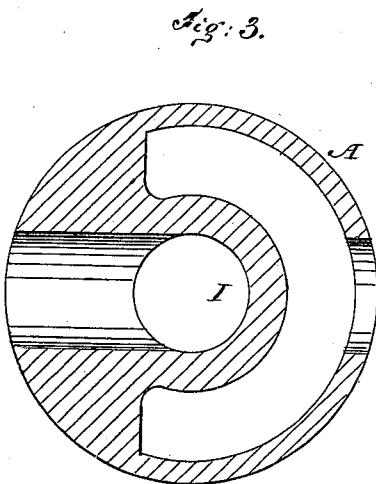
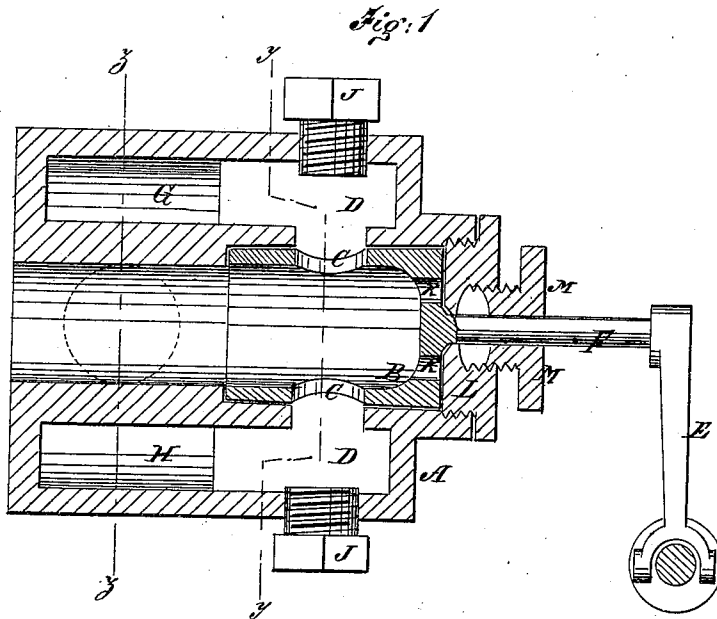


E. WARE.

Steam-Engine Governor-Valves.

No. 139,096.

Patented May 20, 1873.



Witnesses:

Chas. Nida
Witness

Inventor:

E. Ware

PER

Munroe
Attorneys.

UNITED STATES PATENT OFFICE.

ELIJAH WARE, OF NORFOLK, MASSACHUSETTS.

IMPROVEMENT IN STEAM-ENGINE GOVERNOR-VALVES.

Specification forming part of Letters Patent No. **139,096**, dated May 20, 1873; application filed February 15, 1873.

To all whom it may concern:

Be it known that I, ELIJAH WARE, of Norfolk, in the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Steam-Engine Governor-Valves, of which the following is a specification:

The invention consists in the improvement of governor-valves, as hereinafter fully described and pointed out in the claim.

Figure 1 is a longitudinal section of Fig. 2 on the line *x x*. Fig. 2 is a section of Fig. 1 on line *y y*. Fig. 3 is a section of Fig. 1 on the line *z z*.

Similar letters of reference indicate corresponding parts.

A is the shell; B is the valve; C C are openings in the sides of the valves, which allow the steam to enter the chambers D D, in the shells. There may be four instead of two of these openings and chambers, so as to balance the valve when it is made of large diameter. E is the arm which is attached to the valve-stem F and connected to the governor, by means of which the valve is partially revolved. The valve is made slightly tapering in the shell, so that any wear may be taken up readily and the valve made steam tight. The valve will work equally well in either direction, and the steam may enter and

be discharged from either of the openings G H or end opening I. J J are plug-screws, by the removal of either of which the position of the valve can be seen so that it can be varied or set by sight. K represents a small hole (one or more) in the top of the valve to equalize the pressure. L is the cap of the shell, and M is the stuffing-box around the valve-stem.

This valve may be placed in the steam-pipe in any position which may be most convenient.

Arranged, as shown in the drawing, the valve is balanced and will operate with very little friction. For large valves there may be four openings in opposite sides, as before stated.

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

The oscillating valve B, having one or more apertures K in the top and openings C in the side, arranged in a shell, A, and constructed and operated by suitable connections from the governor, as and for the purpose described.

ELIJAH WARE.

Witnesses:

HARRIET D. MCCLLOUD,
MYRON L. WARE.