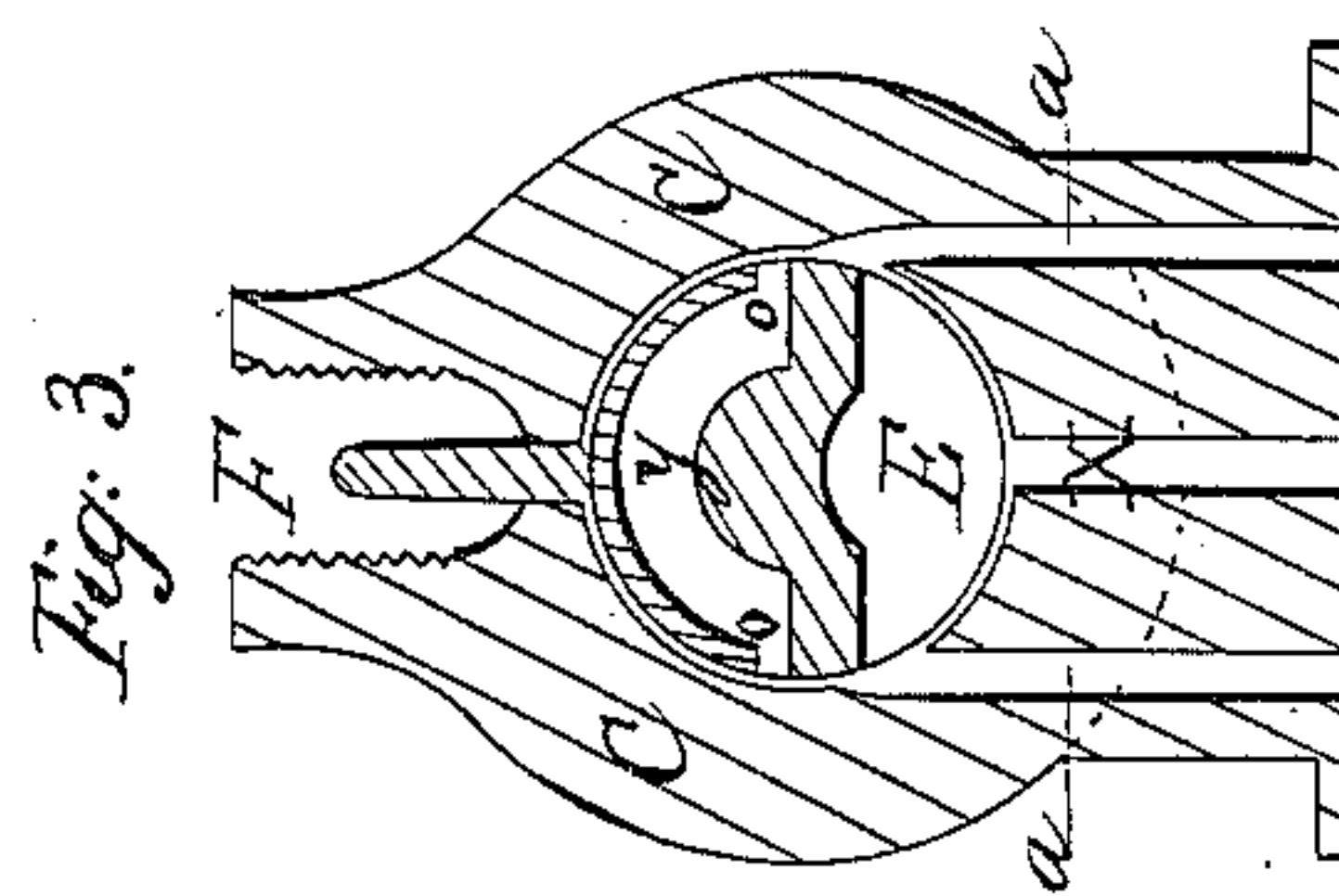
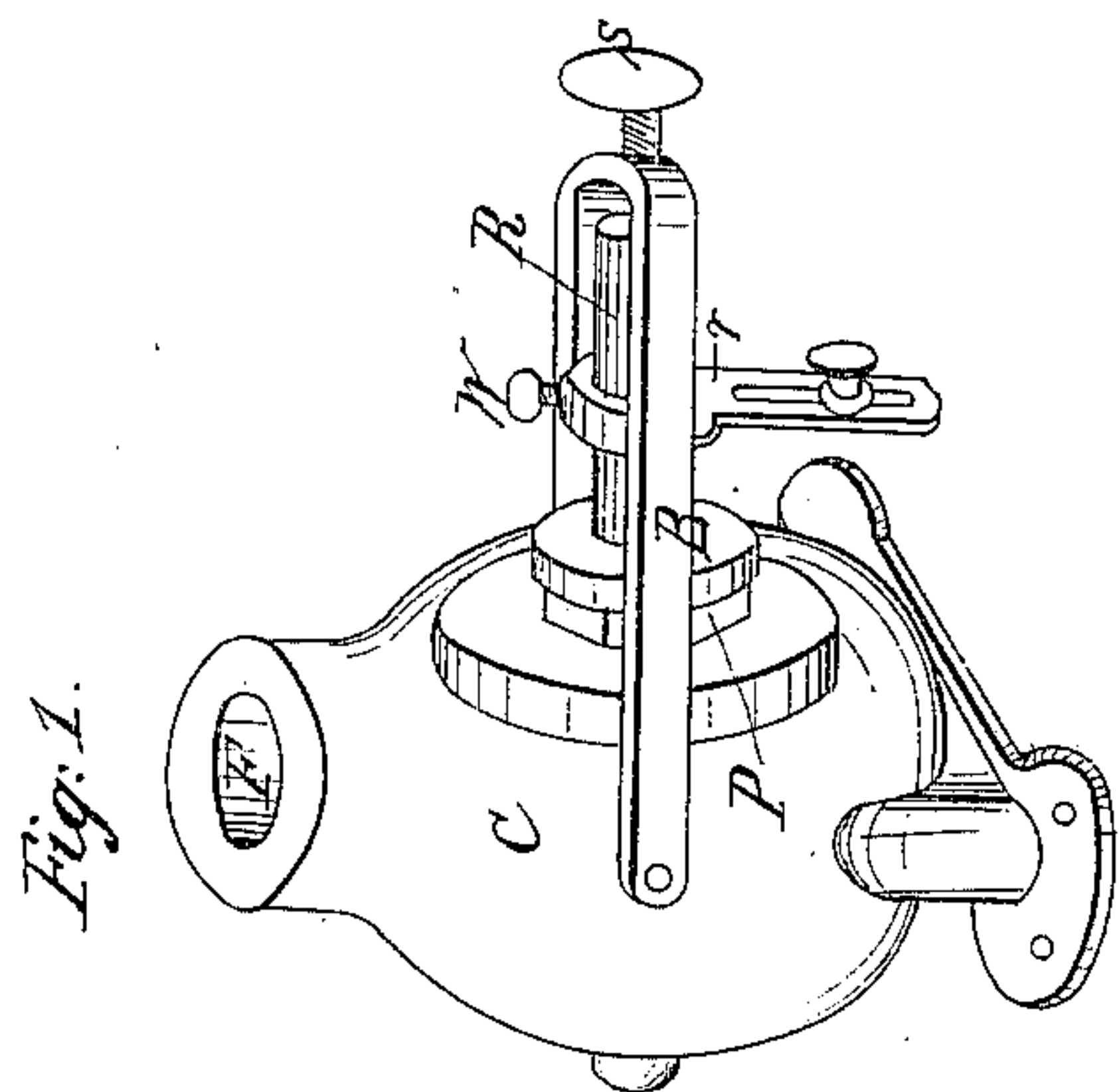
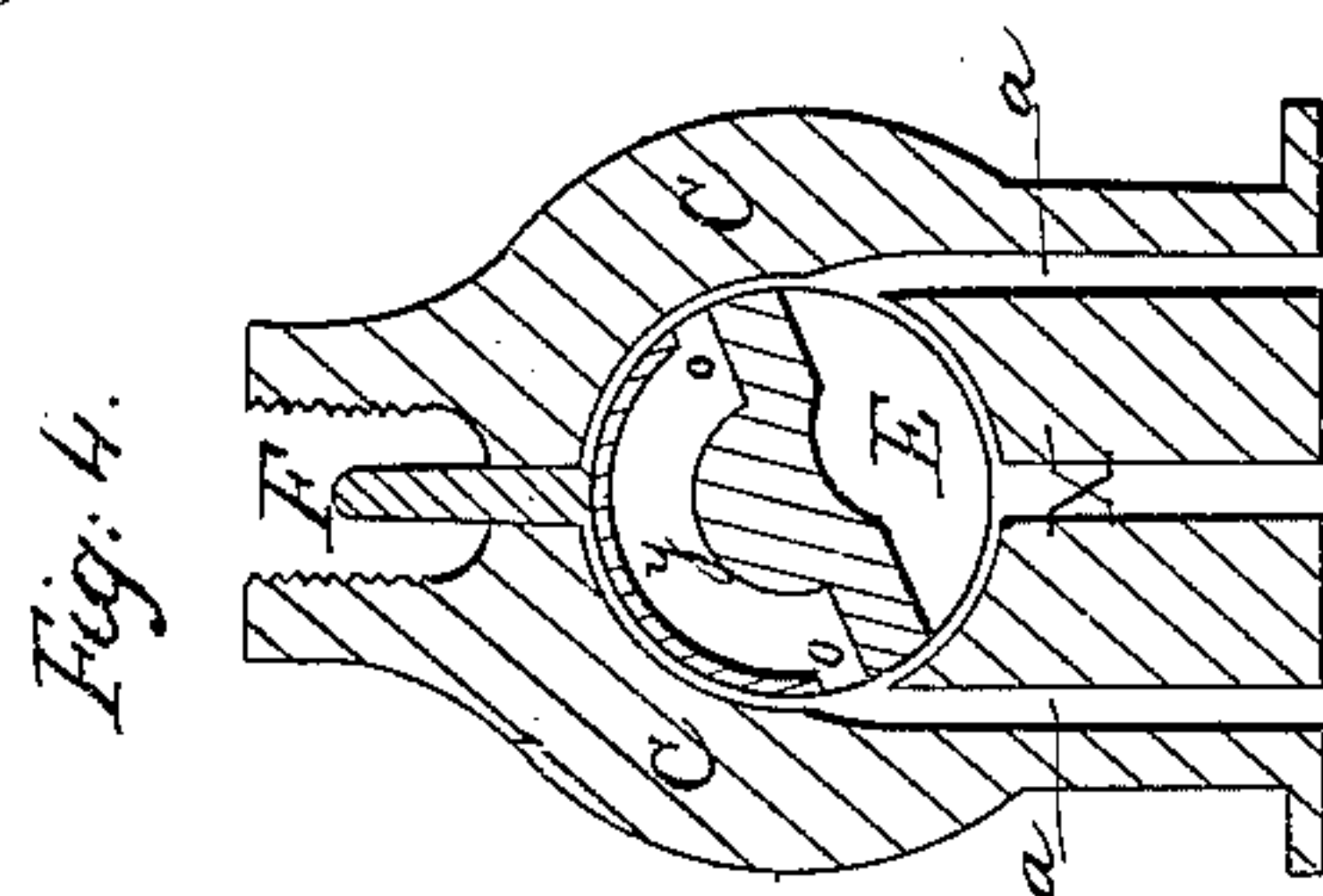
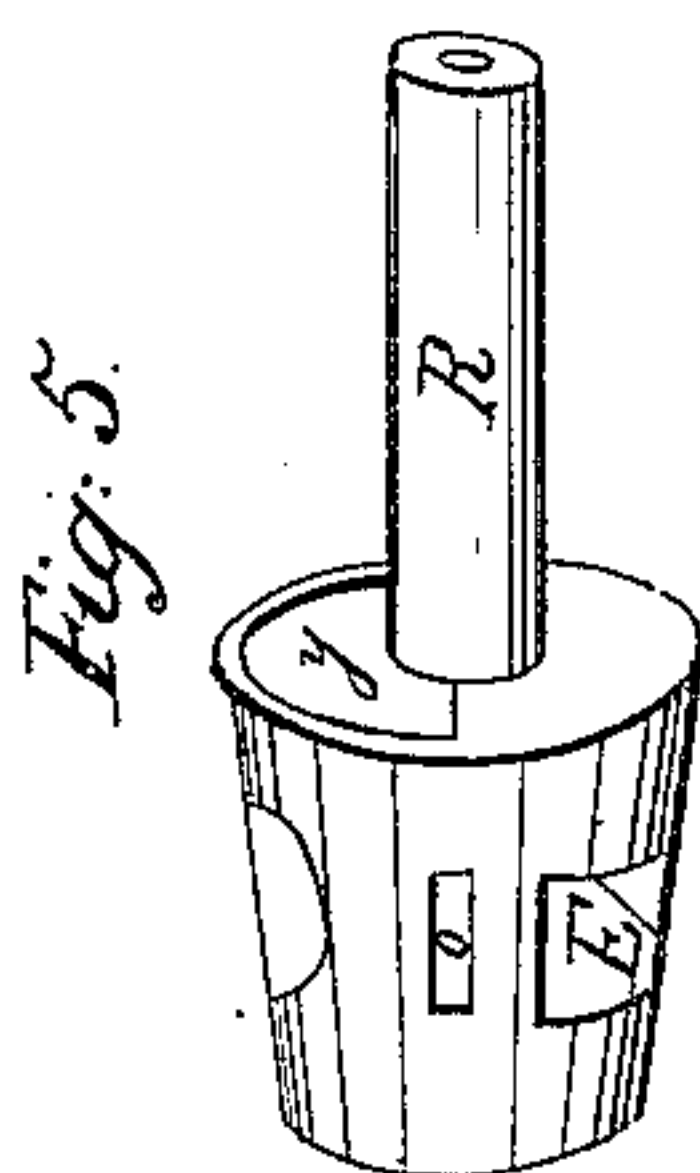
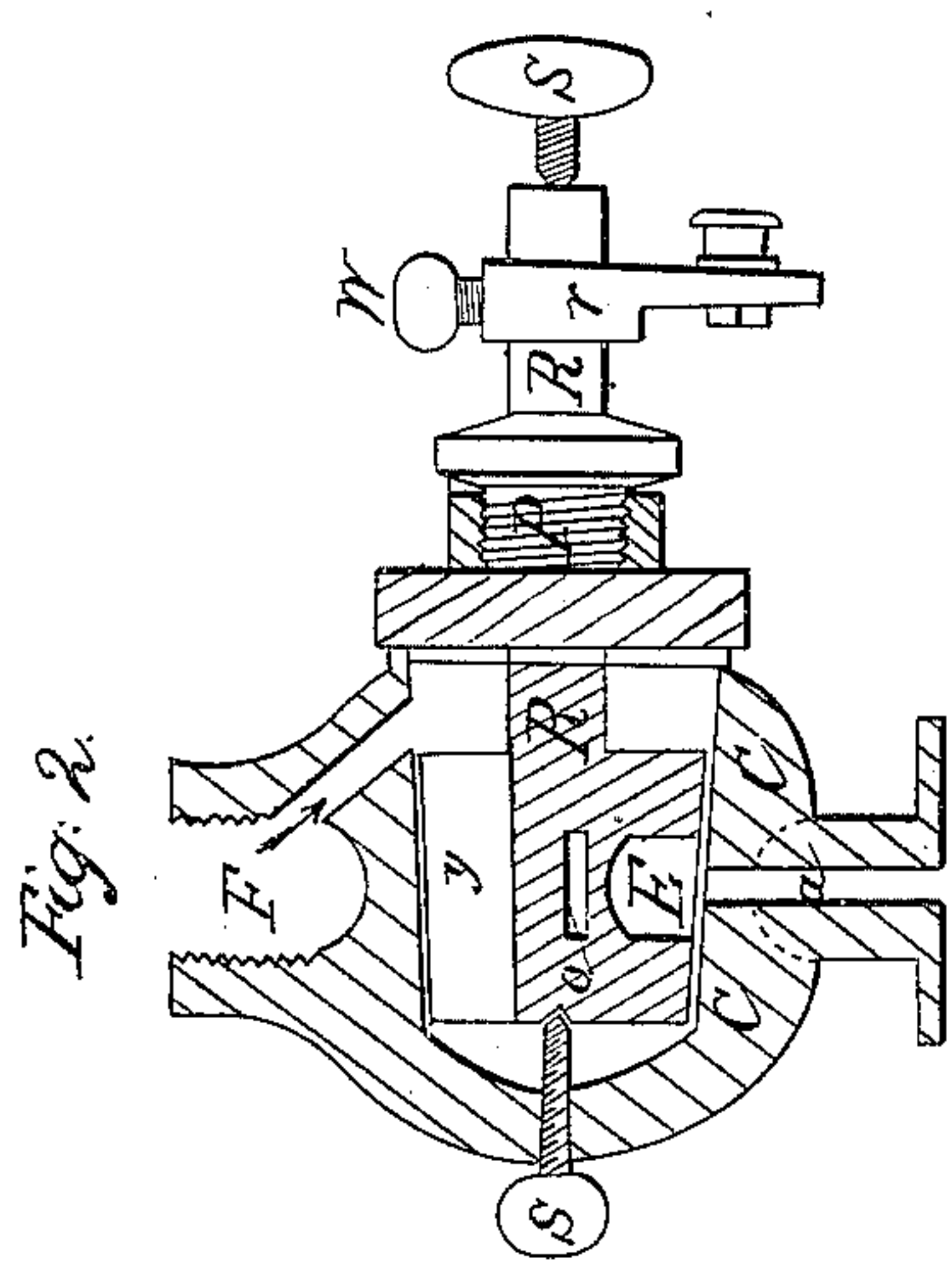


J. H. Scott,
Rotary Steam Valve.
No 31,629. *Patented Mar. 5, 1861.*



Witnesses:
W. C. Dodge
C. P. Parker

Inventor:
James H. Scott
per A. DuBois
Atty.

UNITED STATES PATENT OFFICE.

JAMES H. SCOTT, OF MILLPORT, NEW YORK.

STEAM-VALVE.

Specification of Letters Patent No. 31,629, dated March 5, 1861.

To all whom it may concern:

Be it known that I, JAMES H. SCOTT, of Millport, in the county of Chemung, in the State of New York, have invented certain new and useful Improvements in Steam-Valves; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the case or shell containing the valve, together with the stuffing-box, lever and strap; Fig. 2 a longitudinal section; Fig. 3 a transverse section; Fig. 4 a transverse section showing the position of the valve during the passage of steam from the feed pipe to the cylinder; Fig. 5 a perspective view of the valve and stem.

The upper half of the valve is cast hollow, as shown at *y*, with two ports *o, o*, directly opposite each other, through which the steam passes from the chamber *y* to either end of the cylinder, alternately, by way of the tubes or pipes *a, a*. On the underside of the valve is exhaust chamber *E*. The two ports *o, o*, being directly opposite each other the pressure of the steam is counterbalanced so as to prevent friction, and the chamber *y* admitting steam to both ends of the valve at the same time also prevents friction which would otherwise occur. The only friction of the valve is confined to the bearings of the set screws *s, s*. The steam

being admitted at the feed pipe *F F* passes through the steam chamber *y* into the steam ports *o o* alternately and from thence to either end of the cylinder through the tubes or pipes *a, a*, and exhausts through the chamber *E* and exhaust pipe *x*.

The shell or case *c c c* is cast in one piece with the cavity for the valve seat and passages for the steam as shown above. This case is fastened to the cylinder over ports corresponding to the passages *a, a*, which lead to either side of the piston. The lever *r* is attached to the stem *R* and secured by the set screw *W*. To this lever is attached the connection rod leading to the eccentric, which gives to the valve the necessary rocking motion.

P, P, is the ordinary stuffing box, and *B* a strap by means of which the valve is held between the set screws *s, s*. The valve is fitted steam-tight into the cavity in the case *c, c*, and covered by the stuffing box.

What I claim as my invention and desire to secure by Letters Patent is—

The construction of the valve with chamber *y*, ports *o, o*, exhaust chamber *E* and stem *R*, as set forth, in combination with the case *c, c*, feed-pipe *F*, tubes or pipes *a, a*, and *x*, lever *r*, set screws *s, s*, and strap *B*, the whole constructed and arranged substantially as and for the purposes described.

J. H. SCOTT.

Witnesses:

H. L. PIERCE,
E. S. RUMSEY.