T. C. ORR.

ROTARY-ENGINE.

No. 176,545. Patented April 25, 1876.

Fig. 2.

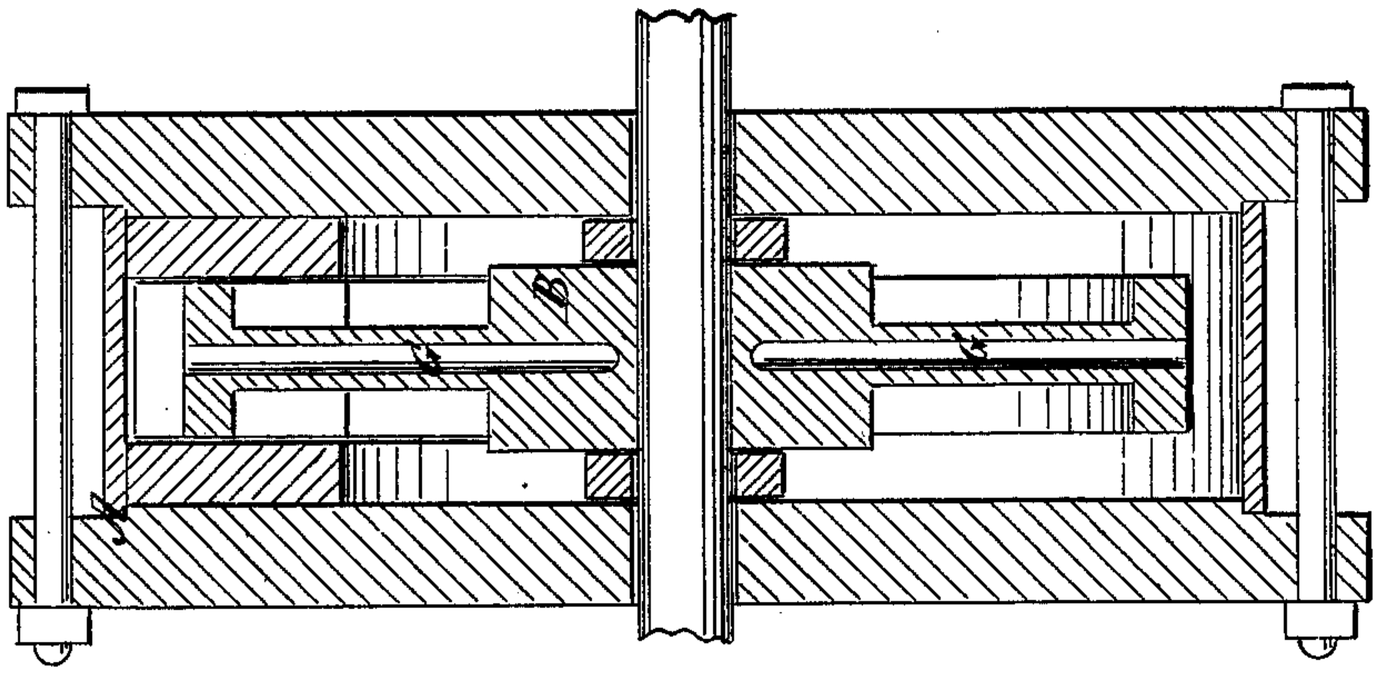
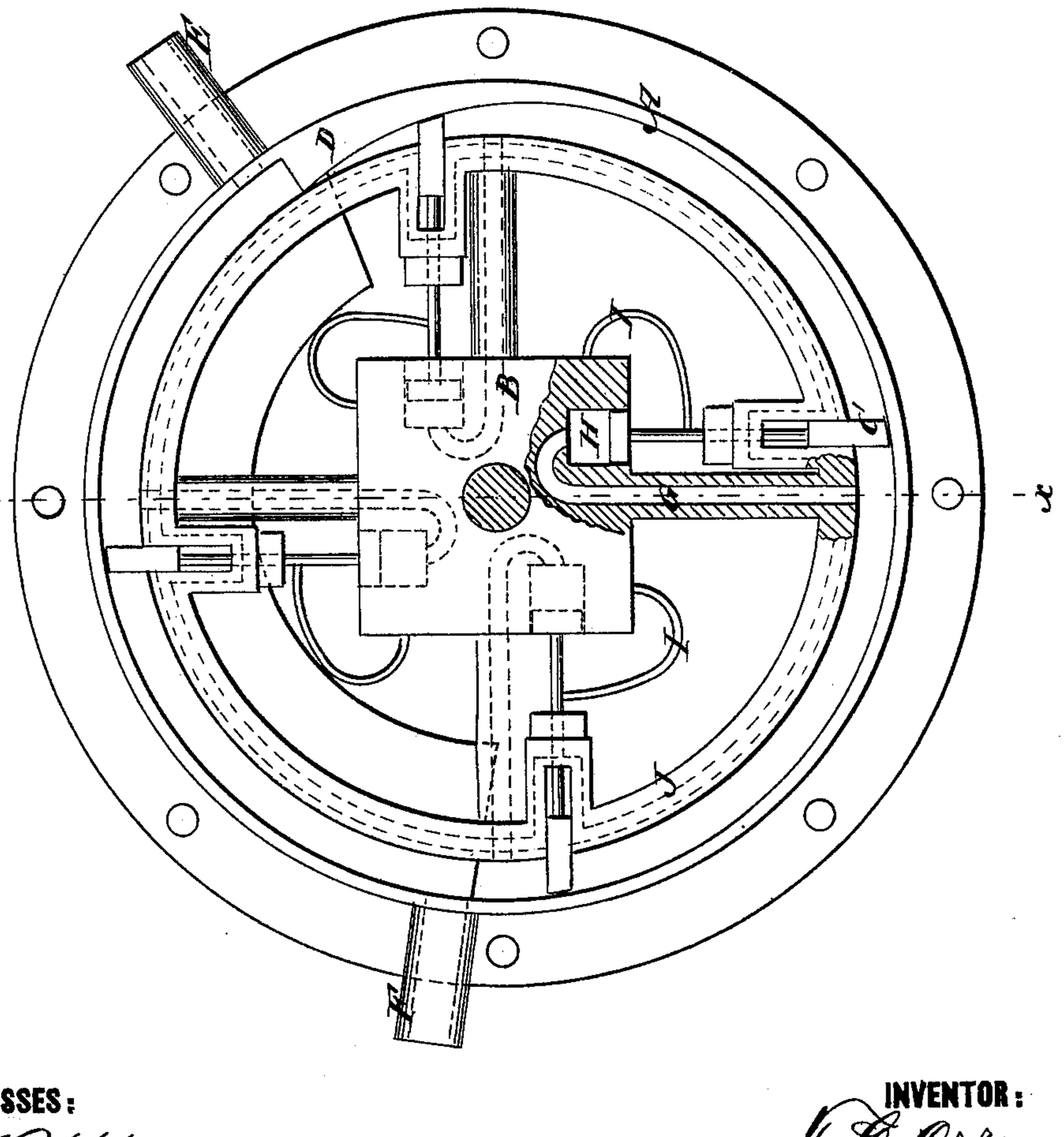


Fig. 1.



WITNESSES:

C. Wolff.

John Goethals

INVENTOR:

T. C. Orr

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

THOMAS C. ORR, OF ENFIELD, ILLINOIS.

IMPROVEMENT IN ROTARY ENGINES.

Specification forming part of Letters Patent No. **176,545**, dated April 25, 1876; application filed March 13, 1876.

To all whom it may concern:

Be it known that I, THOMAS C. ORR, of Enfield, White county, Illinois, have invented a new and Improved Rotary Engine, of which the following is a specification:

The pistons are pressed back in the hub by the abutment for passing it, and are pressed out against the case after passing it by steam which passes from the steamway into the hub behind the pistons, which are a little larger at that end to insure sufficient pressure to overcome the pressure on the outer end. A spring is used with each piston to keep it out when steam is not acting on it.

Figure 1 is a side elevation of my improved wheel with one side of the case off and a part in section, and Fig. 2 is a transverse section, taken on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

A is the case. B is the hub; C, the pistons; D, the abutment; E, the inlet; F, the exhaust; G, steam-passage into cylinder H behind the piston, to force it out, and I, spring to contract the piston when steam is not acting. The incline of the abutment is very gradual, to press the pistons back; but the opposite side is abrupt, to let them take steam immediately after passing it. The rim J of the hub is packed steam-tight between the two heads of the cylinders.

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

The combination of case A, hub B, spring-pistons C I, and abutment D, with the cylinder H, steam being allowed to enter at E, exhaust at F, and reach cylinder through passage G, as shown and described.

THOMAS C. ORR.

Witnesses:

B. B. MILLER,

JAMES H. GOWDY.