

M. ELSAESSER.
Rotary Engines.

No. 138,744.

Patented May 13, 1873.

Figure II.

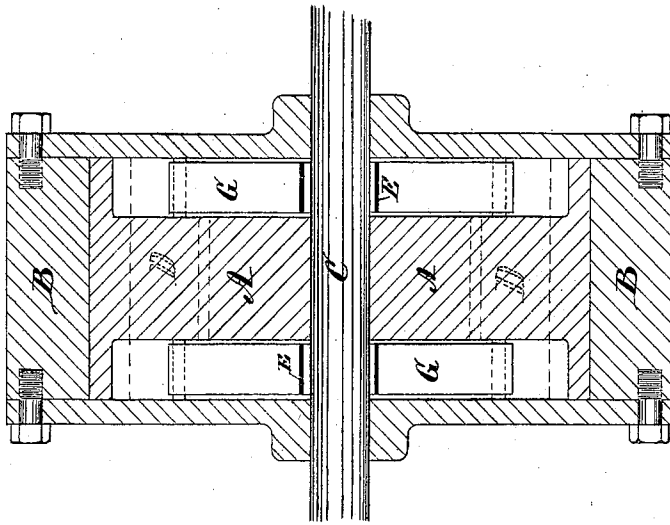
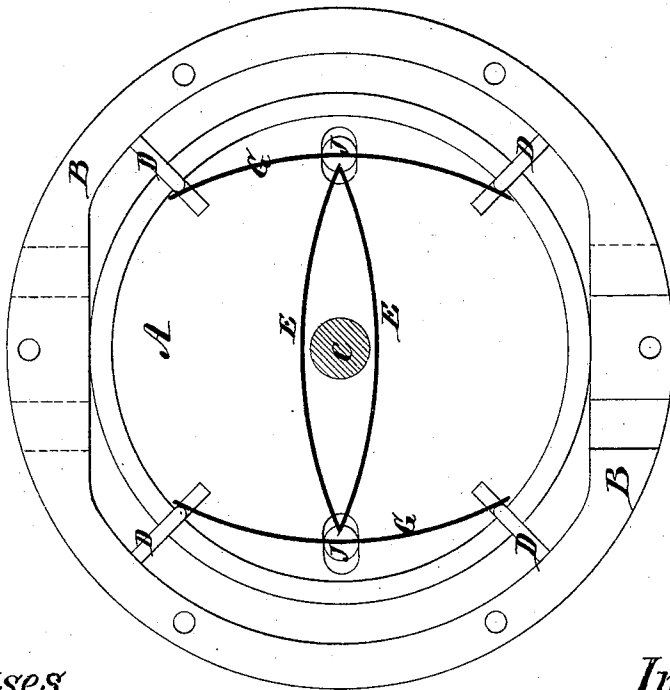


Figure I.



Witnesses.
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UNITED STATES PATENT OFFICE.

MICHAEL ELSAESSER, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN ROTARY ENGINES.

Specification forming part of Letters Patent No. **138,744**, dated May 13, 1873; application filed March 10, 1873.

To all whom it may concern:

Be it known that I, MICHAEL ELSAESSER, of Brooklyn, Kings county, State of New York, have invented certain Improvements in Rotary Engines, of which the following is a specification:

My invention relates to that class of rotary engines having sliding pistons; and consists in the combination, with said sliding pistons, of peculiarly-arranged elliptic springs for the purpose of forcing said pistons outward.

In the accompanying drawing, Figure I represents a side view of a rotary engine with a cover removed, embodying my improvement. Fig. II is a cross-section of the same.

A is the revolving disk, attached to the shaft C, and B is the external casing. D D are the sliding pistons fitted into the disk A, all constructed in the usual manner. The disk A is recessed on both sides to give the desired space for the springs, hereinafter described, acting against the ends of the pistons D. Through the central part of this disk A pins J J are placed in oblong holes to allow a free motion to said pins J, into the ends of which elliptic springs G G are fastened, bearing against the inner edges of the pistons

D D, each spring acting against two pistons at the same time. (See Fig. I.) Between the pins J J two elliptical springs, E E, passing on each side of the shaft C, are fitted into suitable recesses in said pins J, and so arranged as to act at right angles to the springs G G. By this arrangement the pins J are kept in their proper positions, and the desired tension is given to the elliptical springs G G. The inner edges of the pistons D, against which the ends of the elliptical springs G bear, are rounded to reduce the friction. The recesses on each side of the disk A must be made sufficiently deep to give perfectly-free play or action to the elliptic springs G and E, and that the same do not come in contact either with the disk or with the side covers.

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

The combination of the elliptic springs G G E E and pins J J with each other and with the pistons D D, substantially as and for the purpose hereinbefore set forth.

M. ELSAESSER.

Witnesses:

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