

J. M. CONKLE.
 Rotary-Engines.

No. 134,464.

Patented Dec. 31, 1872.

Fig. 1.

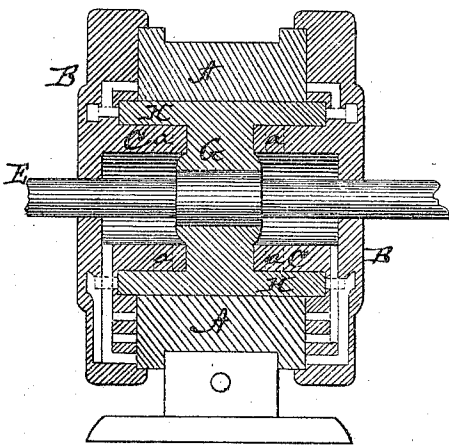


Fig. 2.

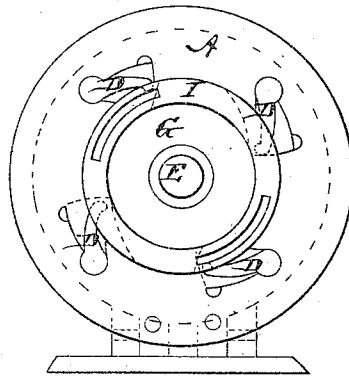


Fig. 3.

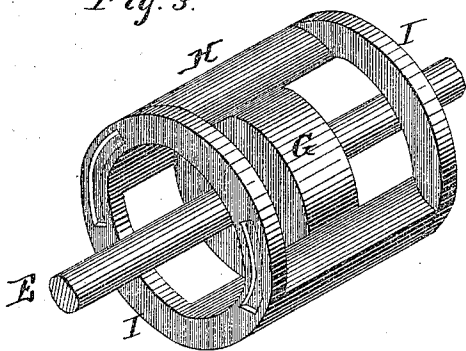
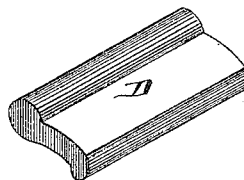


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES M. CONKLE, OF BEAVER FALLS, PENNSYLVANIA.

IMPROVEMENT IN ROTARY ENGINES.

Specification forming part of Letters Patent No. 134,464, dated December 31, 1872.

To all whom it may concern:

Be it known that I, JAMES M. CONKLE, of Beaver Falls, in the county of Beaver and in the State of Pennsylvania, have invented certain new and useful Improvements in Rotary Engine; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

My present invention is intended as an improvement upon the rotary engine for which Letters Patent were granted to me July 18, 1871; and it consists, first, in stationary rings projecting inward from the cylinder-heads, or outward from a stationary center to form rests or supports for the valves or steam rebutments; and, second, in the construction and arrangement of the piston or rotary head which revolves around said projecting rings or supports.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a vertical section of my rotary engine; Fig. 2 is an end view of the same with one of the heads removed; Fig. 3 is a perspective view of the interior revolving piston or head; and Fig. 4 is a perspective view of one of the buckets or valves.

A represents the cylinder with heads B B, said heads having substantially the same passages as described in my patent above referred to. From the inner side of each head B extends a ring, C, inward toward the center; or in place of these inward-projecting rings I may have a stationary center placed inside of the cylinder or outside shell A with projecting rings extending each way out to the heads,

in either case said projecting rings forming supports for the valves D D to rest upon. The valves D D are constructed and placed in the cylinder A in the same manner as in my former patent.

The rotating piston or head is secured to the shaft E, and consists of a central roller or head, G, formed with two cross-bars, H H, on opposite sides, and at the ends of said bars are formed rings I I. These rings fit in annular recesses around the projecting rings C C in the heads B B, and said projecting rings fit within said rings I I and the cross-bars H H. The valves or steam rebutments D D, after passing over the driving points or steam-surface of the piston-wheel, rest on the stationary supports B B, thus creating no friction on the piston-wheel. After the steam acts on the piston-wheel it exhausts or escapes through the issue-openings *a a* in the stationary rings C C and out through the regular exhaust.

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

1. The projecting rings C C provided with issue-ports *a a* and extending inward from the cylinder-heads or outward from a stationary center, substantially as and for the purposes herein set forth.

2. The rotary piston-wheel consisting of the central head G, cross-bars H H, and rings I I, and attached to the shaft E, substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 8th day of July, 1872.

JAMES M. CONKLE.

Witnesses:

MAURICE J. HICKEY,
JOHN MCCARTY.