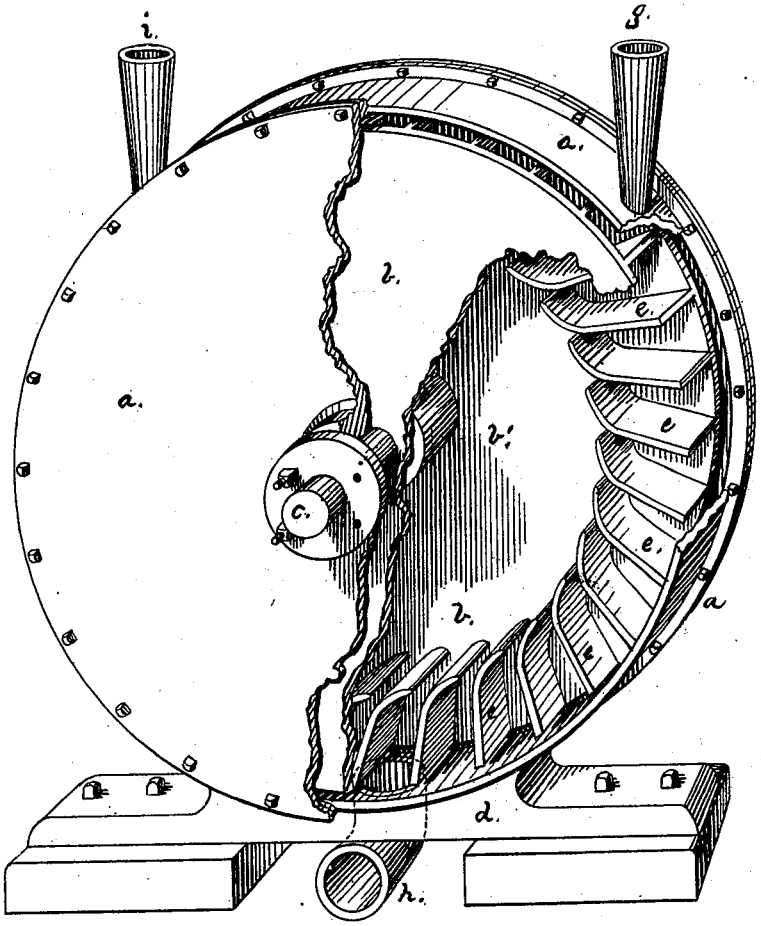
B. T. BABBITT.
Rotary Engine.

No. 202,134. Patented April 9, 1878.



Attest.

A. B. Hyde

Hasly Heiser

Inventor:

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UNITED STATES PATENT OFFICE.

BENJAMIN T. BABBITT, OF NEW YORK, N. Y.

IMPROVEMENT IN ROTARY ENGINES.

Specification forming part of Letters Patent No. **202,134**, dated April 9, 1878; application filed December 27, 1877.

To all whom it may concern:

Be it known that I, BENJAMIN T. BABBITT, of the city, county, and State of New York, have invented certain new and useful Improvements in Steam-Engines, which improvements are fully set forth in the following specification and accompanying drawing.

My invention relates to that class of rotating steam-engines which are actuated by the percussive action or force of the steam which escapes direct from the pipe or nozzle, and impinges against a bucket, blade, or other resisting object that is attached to an arm, shaft, or plate of a wheel or other revolving contrivance. It thus forces away such impediment and brings another into its place, thus, by continuous repetition, causing the shaft or prime mover to rotate.

a a represent the outer shell or casing, partly cut away, of a motor or prime mover, *b*, securely fast upon a driving-shaft, *c*, between which and the casing proper stuffing-boxes are provided, the whole being secured to and held in position by a base plate or block, *d*. The motor *b* is formed of parallel plates of steel or other proper metal, securely fastened together by ties and stay-bolts, to provide against lateral distention. It runs freely from and clear of the sides of the shell, as also from its periphery, having a free space all around between them. *e e* show curved blades secured between the side plates of the motor, and forming buckets or steam-cells, open at both ends. *g* represents the steam-inlet pipe, at which the steam enters, and, striking against the outer end of the blade, forces it away, bringing another blade into its place, and thus, consecutively moving them away, causing the wheel to rotate. Meantime the steam freely enters the central space of the wheel from the bottom of the bucket, or into the outer-circle space, and between the wheel and shell, by the mouths of the buckets, escaping by the exhaust-pipe *h*, made large to give free discharge to the steam, and prevent all pressure within the casing, so that with all parts made in due proportion and properly adjusted, the entire force of the steam should be exhausted upon the buckets, leaving simply dead steam, or nearly such, to escape to the air. *i* shows a second inlet-pipe to branch from *g*, to act as a brake in stopping the engine or to reverse the engine.

The bottoms of the buckets may be closed, and openings made through the plates on each side at the bottom, for escape of the steam into an enlarged space between the motor and the shell; or the blades may be flat or without a curve, and open, as described; but the described plan has been found most economical.

I claim—

In a rotary steam-engine, the directing steam-inlet pipe *g*, the prime mover or wheel *b*, with its open-bottomed blades *e*, and central steam-space, with the exhaust-ports *h*, in combination, substantially as set forth.

B. T. BABBITT.

Witnesses:
J. B. HYDE,
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