G. A. LAMB.

ROTARY STEAM ENGINE.

No. 51,389. Patented Dec. 5, 1865.

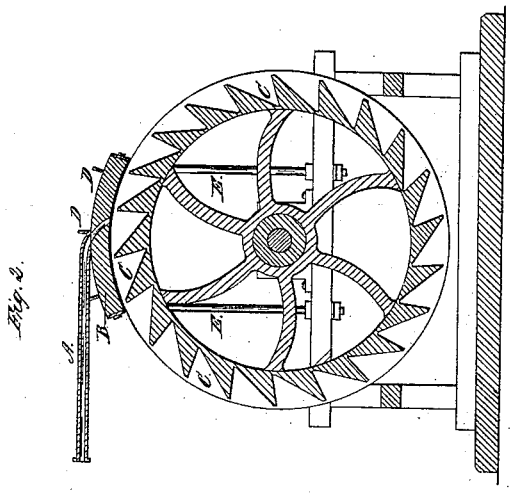

Fig. 2.

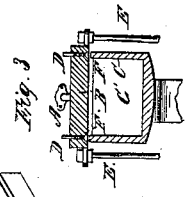

Fig. 3.

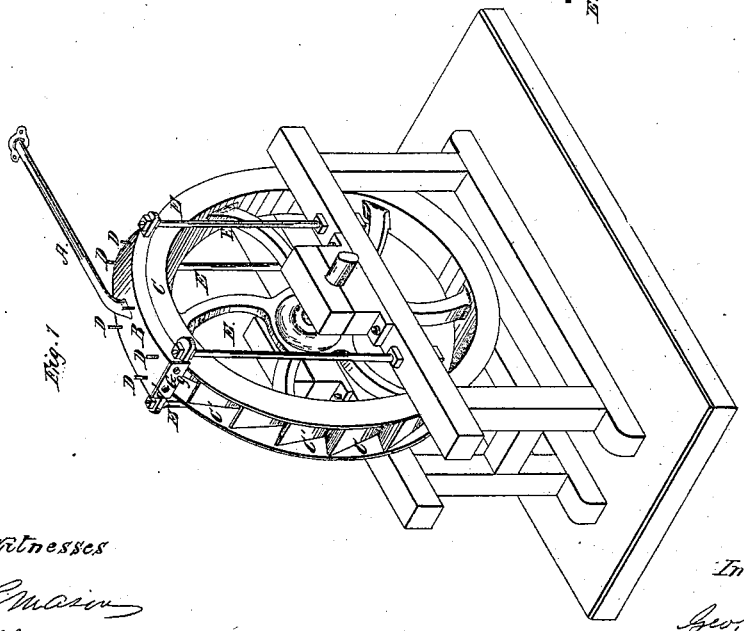

Fig. 1.

Witnesses

R. Mason

L. Murphy

Inventor

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UNITED STATES PATENT OFFICE.

GEORGE A. LAMB, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR TO HIMSELF AND SAMUEL SURBRUG.

IMPROVEMENT IN ROTARY STEAM-ENGINES.

Specification forming part of Letters Patent No. **51,389**, dated December 5, 1865.

To all whom it may concern:

Be it known that I, GEORGE A. LAMB, of Washington, in the District of Columbia, have invented a new and useful Improvement on Rotary Steam-Engines; 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, made a part of this specification, in which—

Figure 1 is a perspective view. Fig. 2 is a vertical section. Fig. 3 is a longitudinal section, showing the cap and part of the wheel.

C is a metallic wheel revolving upon an axis set into a pillow-block of ordinary construction.

The buckets C′ have two faces, one of which is set radially to the wheel or slightly inclined toward the point of induction when receiving the jet of steam.

The cap B has the curve of the periphery of the wheel. On the lower side of the cap are the grooves F F, Fig. 3. These grooves run the entire length of the cap, and receive the rims of the wheel C, which project a little beyond the points made by the junction of the faces of adjoining buckets. In these grooves are fitted thin strips of elastic metal, which are kept in contact with the edges of the rims of the wheel by means of the set-screws D D, making a packing to prevent the lateral escape of the steam.

The steam is admitted through the induction-pipe A, passing through an orifice in the cap B, having such a direction as that the jet of steam shall fall upon the radially-disposed faces of the bucket, and drive the wheel forward, the steam being set free when the bucket has passed beyond the end of the cap.

The cap B is supported upon rods E E, which rest upon the frame supporting the pillow-blocks, and which, by means of nuts working upon screws on their upper ends, hold the cap firmly in place against the pressure of the steam.

The ends of the cap B are closed by the adjustable plates G, which, by means of the slots and set-screws g' g', fit against the wheel C, so as to prevent the escape and waste of the steam.

Having fully explained the construction and operation of my improved rotary steam-engine, what I claim as my invention, and seek to secure by Letters Patent, is—

1. The construction of the cap B, with the grooves F, metallic packing, and set-screws D D, substantially as and for the purposes set forth.

2. The combination of the cap B and adjustable end plates, G, substantially as and for the purposes set forth.

3. The combination of the cap B and wheel C, constructed substantially as and for the purposes set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses.

GEO. A. LAMB.

Witnesses:

R. MASON,

L. MURPHY.