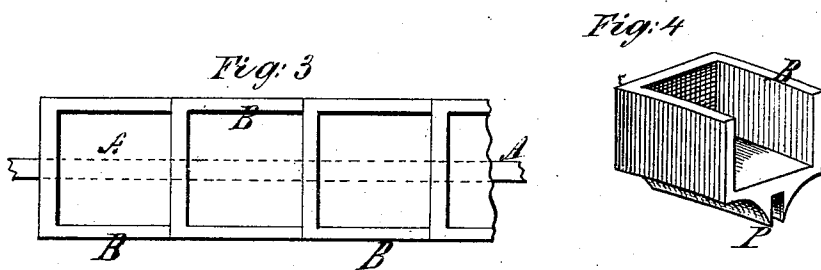
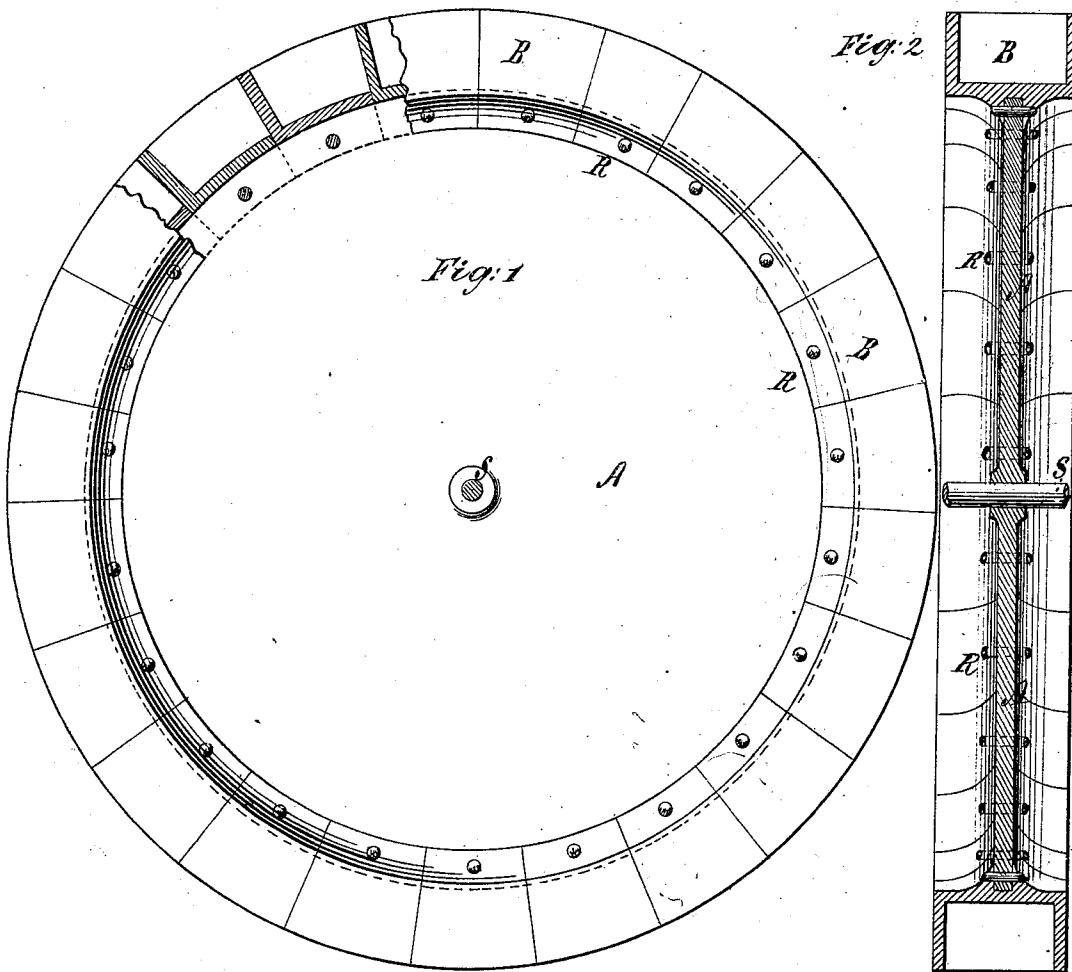


B. T. BABBITT.

BUCKET-WHEELS FOR ROTARY-ENGINES.

No. 170,328.

Patented Nov. 23, 1875.



Witnesses:
Michael Ryan
Fred Haynes

B. T. Babbitt
by his Attorneys
Brown & Allen

UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN BUCKET-WHEELS FOR ROTARY ENGINES.

Specification forming part of Letters Patent No. **170,328**, dated November 23, 1875; application filed April 16, 1875.

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 a new and useful Improvement in Bucket-Wheels for Rotary Steam-Engines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, which forms part of this specification.

My invention relates to the bucket or float wheels of steam-engines in which the *vis viva* of steam issuing from a steam-generator at high velocity is made to generate a rotary motion of high velocity. My invention consists in a peculiar construction of such bucket-wheels, which secures great strength with small weight.

Figure 1 represents a side elevation of my improved bucket-wheel, and Fig. 2 a vertical section through the central axis of the wheel. Fig. 3 is a face view of a portion of the perimeter of the bucket-wheel. Fig. 4 is a perspective view of one of the buckets.

In making my improved bucket-wheel, I take a disk, A, of plate-steel, such as is used for saws, and fasten to its outer edge, by rivets or bolts, or their equivalent, buckets B,

made of steel or iron, by forging or casting, and having the form shown in Fig. 4. The body of each of the buckets B has nearly the form of a rectangular box, with the top and one of the sides or ends removed. On the bottom of this box-shaped body is formed a grooved projection, P, the groove being of the same width as the thickness of the disk A, and deep enough to allow drilling and riveting to the edge of the disk A, as shown in Figs. 1 and 2, at R. The outer sides of the buckets are segmental in form, as shown in Fig. 1. When the buckets thus made are attached to the disk A they form a continuous series of rectangular-shaped recesses in the perimeter of the wheel, as shown in Fig. 1. The bucket-wheel thus made is fixed in any proper manner to a central shaft.

I claim—

The combination, with the plate A, of the buckets B, constructed of rectangular boxes, provided with grooved projections P, constructed to overlap the edge of the plate, substantially as and for the purpose described.

B. T. BABBITT.

Witnesses:

BENJAMIN W. HOFFMAN,
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