

C. Aylsworth,

Water Wheel,

No 3,152,

Patented June 24, 1843.

Fig. 1

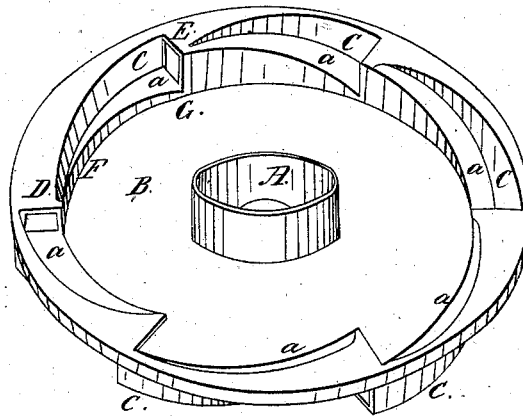
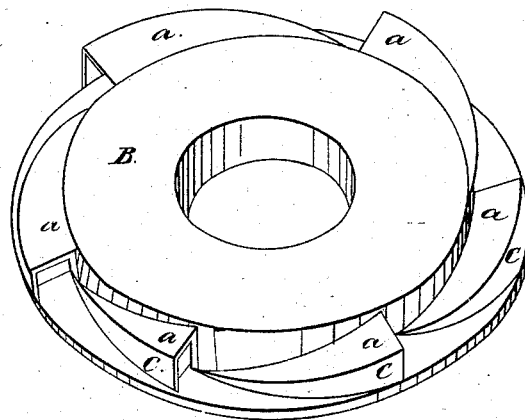


Fig. 2.



Witnesses:

Geo. Park
Ans. A. Park

Inventor:

Chadwick Aylsworth

UNITED STATES PATENT OFFICE.

CHADIAH AYLSWORTH, OF BAINBRIDGE, NEW YORK.

IMPROVEMENT IN WATER-WHEELS.

Specification forming part of Letters Patent No. 3,152, dated June 24, 1843.

To all whom it may concern:

Be it known that I, CHADIAH AYLSWORTH, of the town of Bainbridge, in the county of Chenango and State of New York, have invented a new and useful Improvement in Reaction Water-Wheels; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective of the upper side of the wheel; Fig. 2, a perspective of under side of the wheel.

The nature of my invention consists in bringing the water into more immediate contact and direct action with that portion of the bucket which is more effective than the reaction wheels now in use, in most of which the great mass of water near the shaft tends by its weight to impede the motion of the wheel and cannot readily be made effective. For this purpose all that portion of the bucket in ordinary wheels not deemed necessary to its action is by improvement removed.

The wheel may be made of cast-iron or other suitable material, and it can be cast in one piece. There is a flat ring or disk B of proper diameter for the size of the wheel required, around the center hole of which a ring A rises up the thickness of the wheel.

Around the circumference of the bottom plate B there is a rim of height and thickness sufficient to form the buckets in rising

its whole thickness above the face of the plate B. This rim is divided into as many parts as the number of buckets required. From each of these division-marks a notch is cut, commencing at the upper inside corner, running downward and outward to the next division, where it terminates. The cross-section of this notch is an exact square at any point, the outer side of the bucket *c* being vertical and gradually enlarging, and the bottom of it being at right angles to it and descending from the commencement at the top corner of the rim to the bottom on a level with the plate B and the whole width of the rim. The under side of this rim is cut away, so as to leave the metal of nearly the same thickness in every part, and at the lower part of the bucket a hole is cut clear through, forming a square opening for the mouth or vent of the bucket. All the buckets are of the same form, the bottom and side inclining downward and outward in the manner described.

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

The two-sided open bucket constructed as herein described.

CHADIAH AYLSWORTH.

In presence of—

GEO. PARK,

JNO. H. H. PARK.