A. JAMISON.

WATER-WHEEL.

No. 185,541.

Patented Dec. 19, 1876.

fig:1.

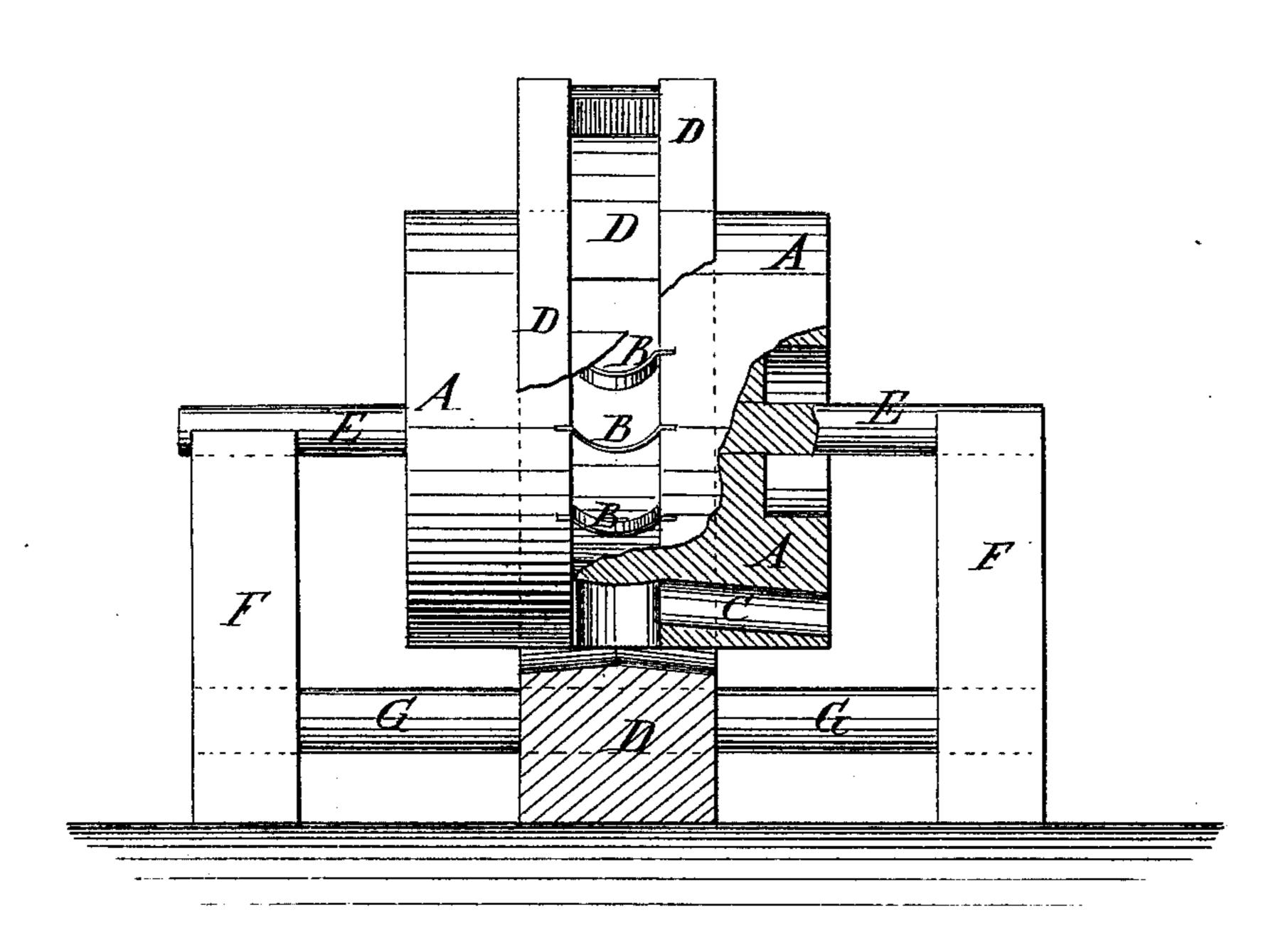
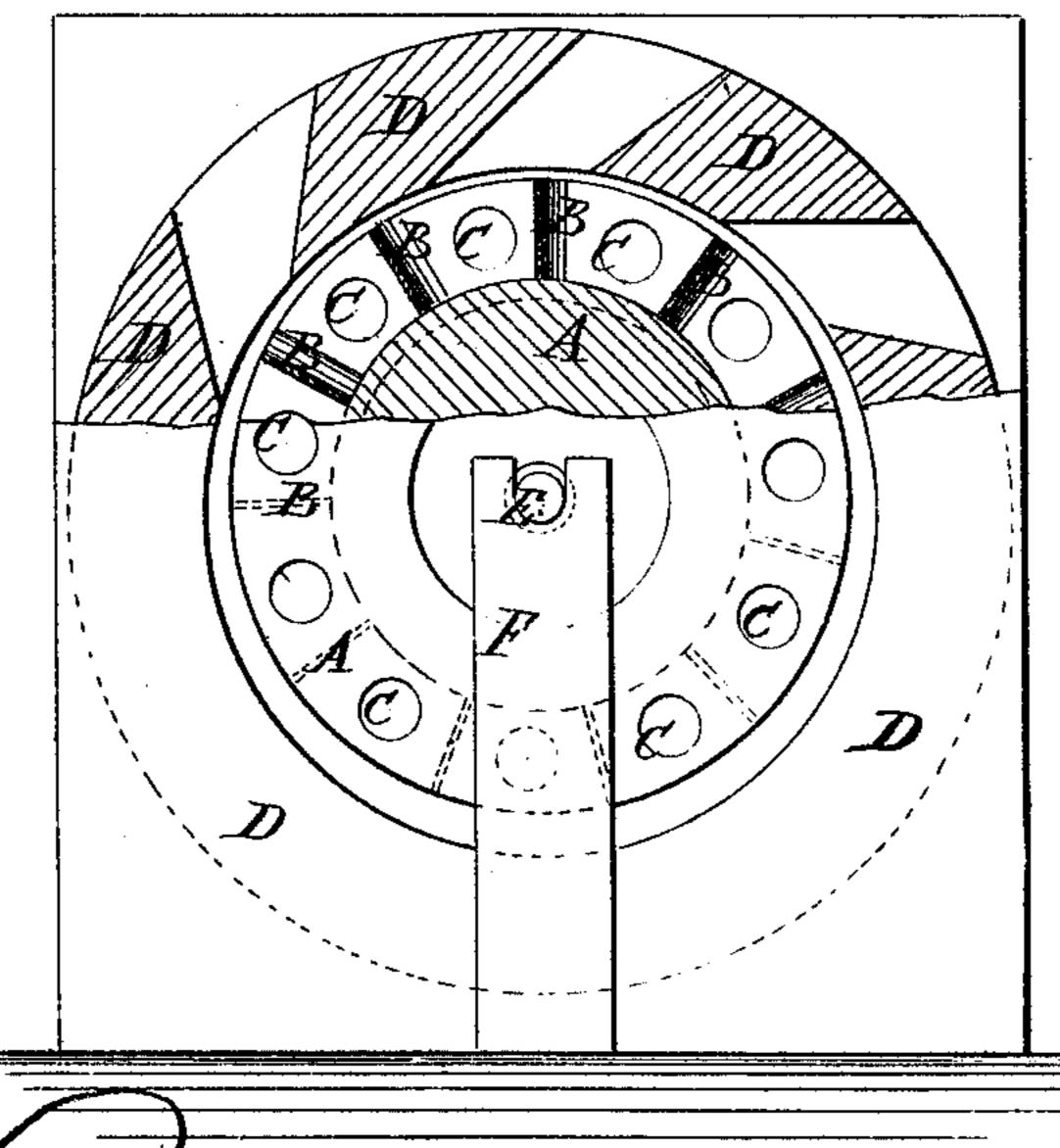


fig: p.



WITNESSES:

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MITORNEYS.

INVENTOR:

THE GRAPHIC CO.N.Y.

UNITED STATES PATENT OFFICE.

ANDREW JAMISON, OF TAYLORSTOWN, PENNSYLVANIA.

IMPROVEMENT IN WATER-WHEELS.

Specification forming part of Letters Patent No. 185,541, dated December 19, 1876; application filed May 22, 1876.

To all whom it may concern:

Be it known that I, Andrew Jamison, of Taylorstown, in the county of Washington and State of Pennsylvania, have invented a new and useful Improvement in Water-Wheels, of which the following is a specification:

Figure 1 is a side view of my improved water-wheel, part being broken away to show the construction. Fig. 2 is an end view of the same, part being broken away to show the construction.

Similar letters of reference indicate corre-

sponding parts.

The object of this invention is to furnish an improved water-wheel, which shall be so constructed that it may receive motion partly from the force of the water and partly from the weight of the water, and which shall be simple in construction and reliable in operation, running more rapidly than the old-fashioned overshot-wheel, and not requiring to be any larger than the ordinary turbine wheels.

The invention consists in a water-wheel provided with semi-cylindrical or wedge-shaped buckets, placed in a channel in the middle part of said wheel; in a water-wheel provided with holes leading from the ring-channel in said wheel at the ends of the buckets, out through the ends of the wheel; in a water-wheel provided with a casing around its middle part, in which the buckets are placed, and in the combination of the posts and the beam with the shaft and the casing of the water-wheel, as hereinafter fully described.

A is the wheel, in the middle part of which is formed a ring-channel, in which are secured the buckets B. The buckets B are semi-cylindrical or wedge-shaped, so as to divide the water, after receiving its impulse, and send it out through the ends of the wheel A, through the holes C, which lead in through the two ends of the wheel to the ends of the buckets B. The middle part of the wheel A,

in which the buckets B are placed, is inclosed with a case, D, through which are formed one, two, three, or more chutes, through which the water enters. The wheel A is attached to a shaft, E, from which motion is taken to the machinery to be driven, and the journals of which revolve in bearings in the upper ends of two posts, F. The lower parts of the posts F are attached to the ends of a beam, G, that passes through, and is attached to, the lower part of the casing D.

By this construction the water, as it enters the wheel, impinges upon the buckets B, and by its force gives motion to the wheel, and at the same time the rapid motion of the wheel keeps the buckets B and holes C in the lower part of the wheel full of water, so that the wheel will be driven by both the force and the

weight of the water.

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

1. A water-wheel, A, provided with semicylindrical or wedge-shaped buckets B, placed in a channel in the middle part of said wheel, substantially as herein shown and described.

- 2. A water-wheel, A, provided with holes C, leading from the ring-channel in said wheel, at the ends of the buckets B, out through the ends of the wheel, substantially as herein shown and described.
- 3. A water-wheel, A, provided with a casing, D, around its middle part, in which the buckets B are placed, substantially as herein shown and described.
- 4. The combination of the posts F and beam G with the shaft E and the casing D of the water-wheel A, substantially as herein shown and described.

ANDREW JAMISON.

Witnesses:

JOHN H. LITTLE,

I. N. BURT.