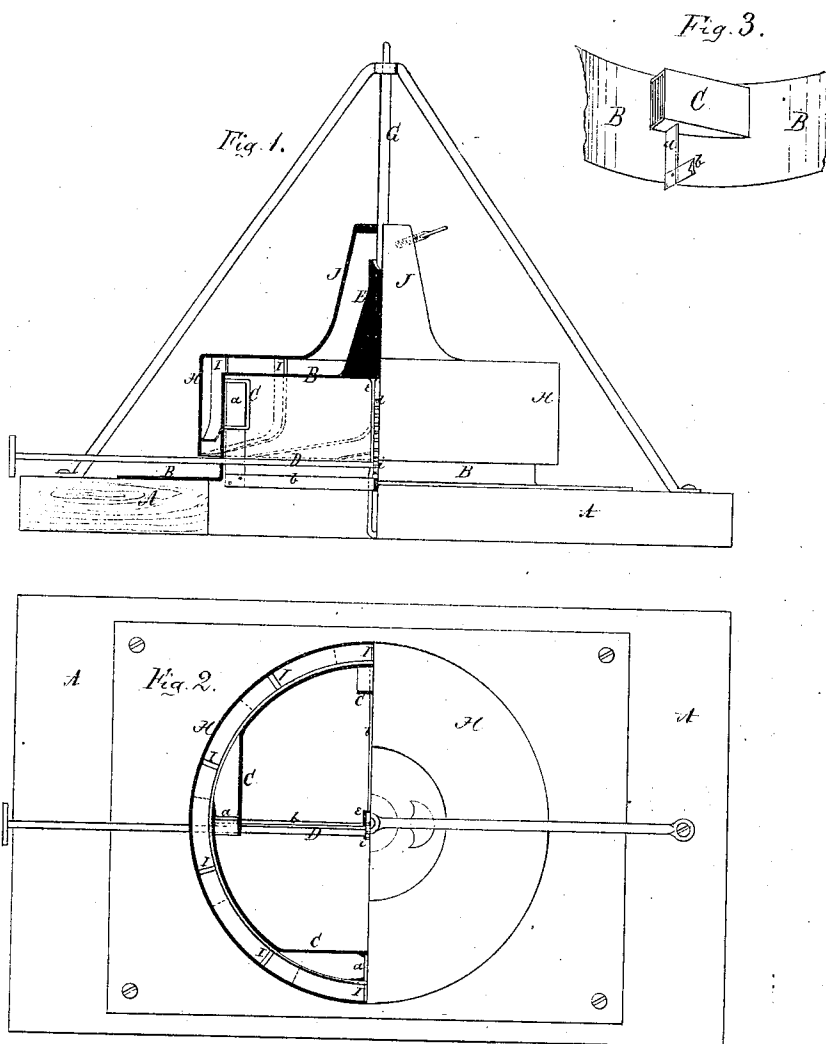


J. Nijtz, Jr.,

Water Wheel.

No. 106,715.

Patented Aug. 23, 1870.



Witnesses:

Chas. Brooks
J. V. White

Inventor:

John Clipp.

Per

T. A. Alexander
Att'y.

United States Patent Office.

JOHN NIPP, JR., OF RALEIGH, INDIANA.

Letters Patent No. 106,715, dated August 23, 1870.

IMPROVEMENT IN WATER-POWER WHEEL.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, JOHN NIPP, JR., of Raleigh, in the county of Rush and State of Indiana, have invented certain new and useful Improvements in Water-power Wheel; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a water-wheel, as will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a side view, one half in section;

Figure 2 is a plan view, one-half in section; and

Figure 3 is a perspective of one of the gates.

A represents the bed, provided with a round opening of any desired dimensions, over which opening is a circular casing, B, closed on top, as shown.

In the sides of the circular casing B is any desired number of openings, from which the chutes or water-guides C C lead inward.

The inner ends of these chutes or water-guides are provided with gates *a a*, which move up to shut off the water, or down to let it on.

The gates *a a* are, at their lower ends, provided with arms *b b*, all of which meet and are connected together in the center of the casing B.

From the connecting point of the arms *b b* a rack-bar, *d*, leads upward in a guide, *e*, attached to the casing, and said rack-bar is operated by means of a pinion, *i*, attached on the inner end of a shaft, D, which passes horizontally out through the casing B, and is, at its outer end, provided with suitable means for turning.

By the use of the shaft D it will be seen that all the gates *a a* are operated simultaneously to let on more or less water, or to entirely shut it off, the water entering from underneath, and passing outward through the chutes or guides C C.

In the center, on the upper side of the casing B, is a conical-shaped standard, E, in or on the upper end of which the wheel-spindle G has its lower bearing.

The wheel H is composed of a circular rim, of such dimensions that, when the buckets I I are suitably attached on its inner side, it will fit around the casing B. This rim is then provided with a top, from the center of which rises a conical, or rather bell-shaped hollow projection, J, to fit over the standard E.

The lower end of the spindle or shaft G passes through and is suitably secured in the upper end of the bell-shaped projection J, so as to allow it to rest on the upper end of the standard E, as above mentioned.

Having thus fully described my invention,

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

1. The combination of the gates *a a*, arms *b b*, rack-bar *d*, guide *e*, pinion *i*, and shaft D, all arranged as described, and used with the chutes C C, substantially as and for the purposes herein set forth.

2. The combination of the casing B, chutes C C, gates *a a*, with the described mechanism for operating the same, standard E, spindle G, wheel H, buckets I I, and bell-shaped projection J, all constructed and arranged substantially as shown and described, and for the purposes set forth.

In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnesses.

JOHN NIPP, JR.

Witnesses:

WILSON Y. JACKSON,
JACOB A. HALL.