N. M. PRINCE.

WATER-WHEEL.

No. 174,436. Patented March 7, 1876.

*Fig. 1*

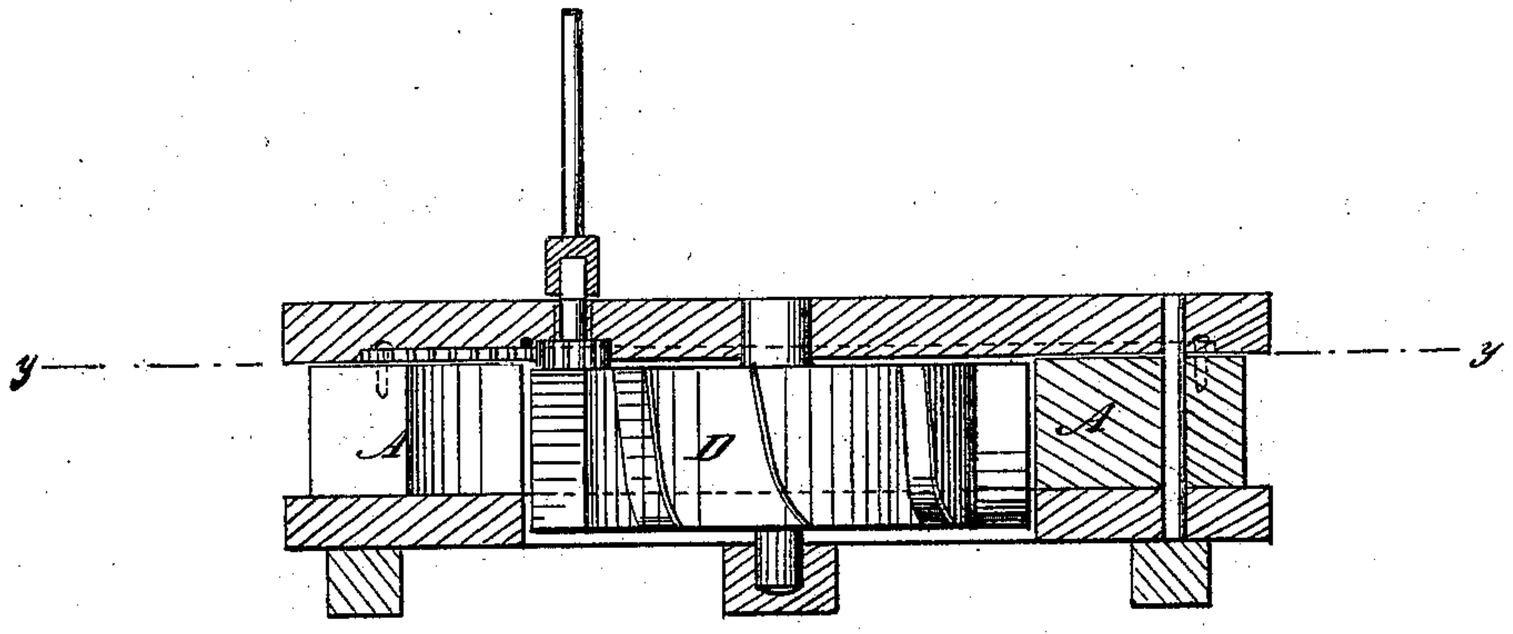
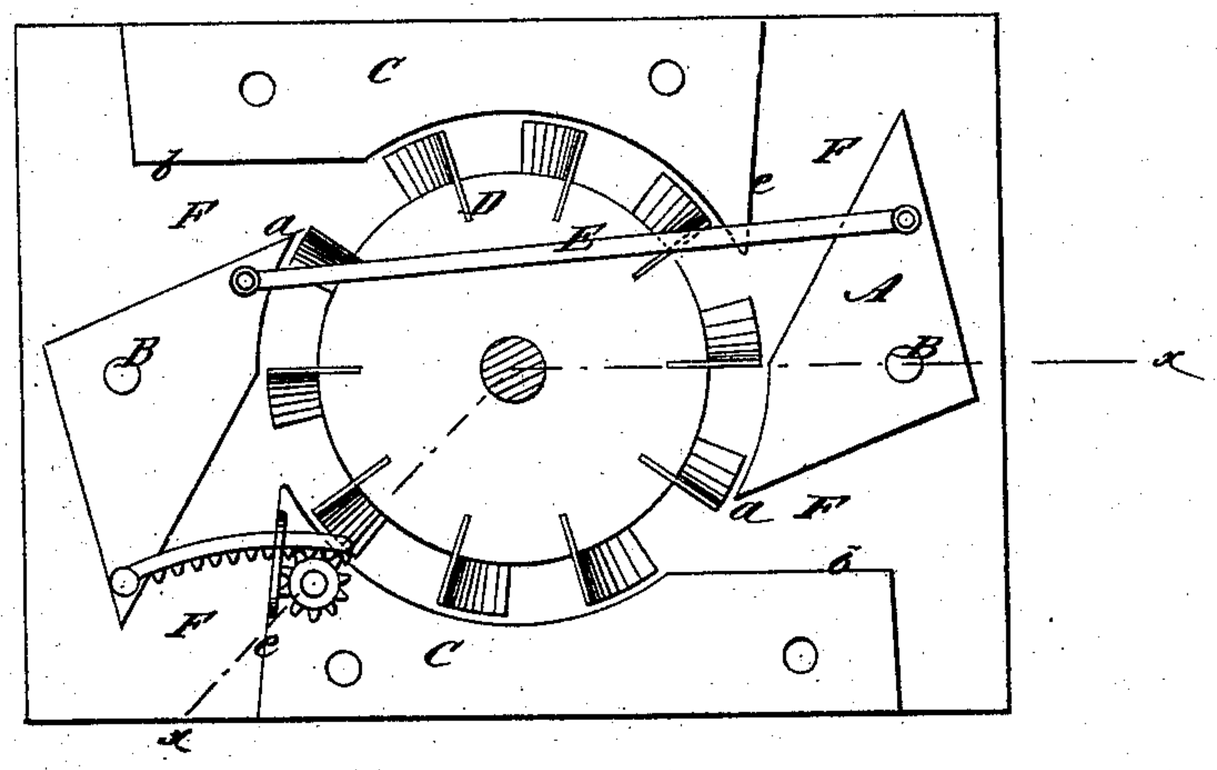



*Fig. 2*




WITNESSES:

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# UNITED STATES PATENT OFFICE.

NELSON M. PRINCE, OF CONCORDIA, KANSAS.

## IMPROVEMENT IN WATER-WHEELS.

Specification forming part of Letters Patent No. **174,436**, dated March 7, 1876; application filed February 5, 1876.

*To all whom it may concern:*

Be it known that I, NELSON M. PRINCE, of Concordia, Cloud county, Kansas, have invented a new and Improved Water-Wheel, of which the following is a specification:

My invention is a contrivance of two gates, so pivoted on opposite sides of the wheel and connected together that the water-pressure is balanced, making the gate work easier, and the form of the gate is such that each one makes two chutes, through which the water enters upon the wheel tangentially, which gives the best results.

Figure 1 is a sectional elevation of my improved wheel, taken on line *x x*, Fig. 2; and Fig. 2 is a horizontal section on line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The gates consist of the triangular blocks A, which are arranged directly opposite each other on pivots D, between the stationary portions C of the curb surrounding the wheel D, and they are connected together by rod E, so that both are worked by power applied to one, and the pressure on one is balanced by that on the other; at the same time each gate opens two chutes, F, by turning on its pivot for opening, and it forms the front wall of one chute and the back wall of the other.

In closing, the pivot shuts against the side of one of the curb-pieces at *b*, closing one of the chutes, and the side chutes against the end of the other curb-piece, closing the other chute.

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

1. The triangular gate A, arranged on pivot B, in combination with curb-sections C and wheel D, as described.

2. The oppositely-located triangular gates A, pivoted at B, in combination with curb-sections C and wheel D, and connected together substantially as specified.

NELSON M. PRINCE.

Witnesses:

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