

J. Lane,

Water Wheel.

No. 95593.

Patented Oct. 5. 1869.

Fig. 1.

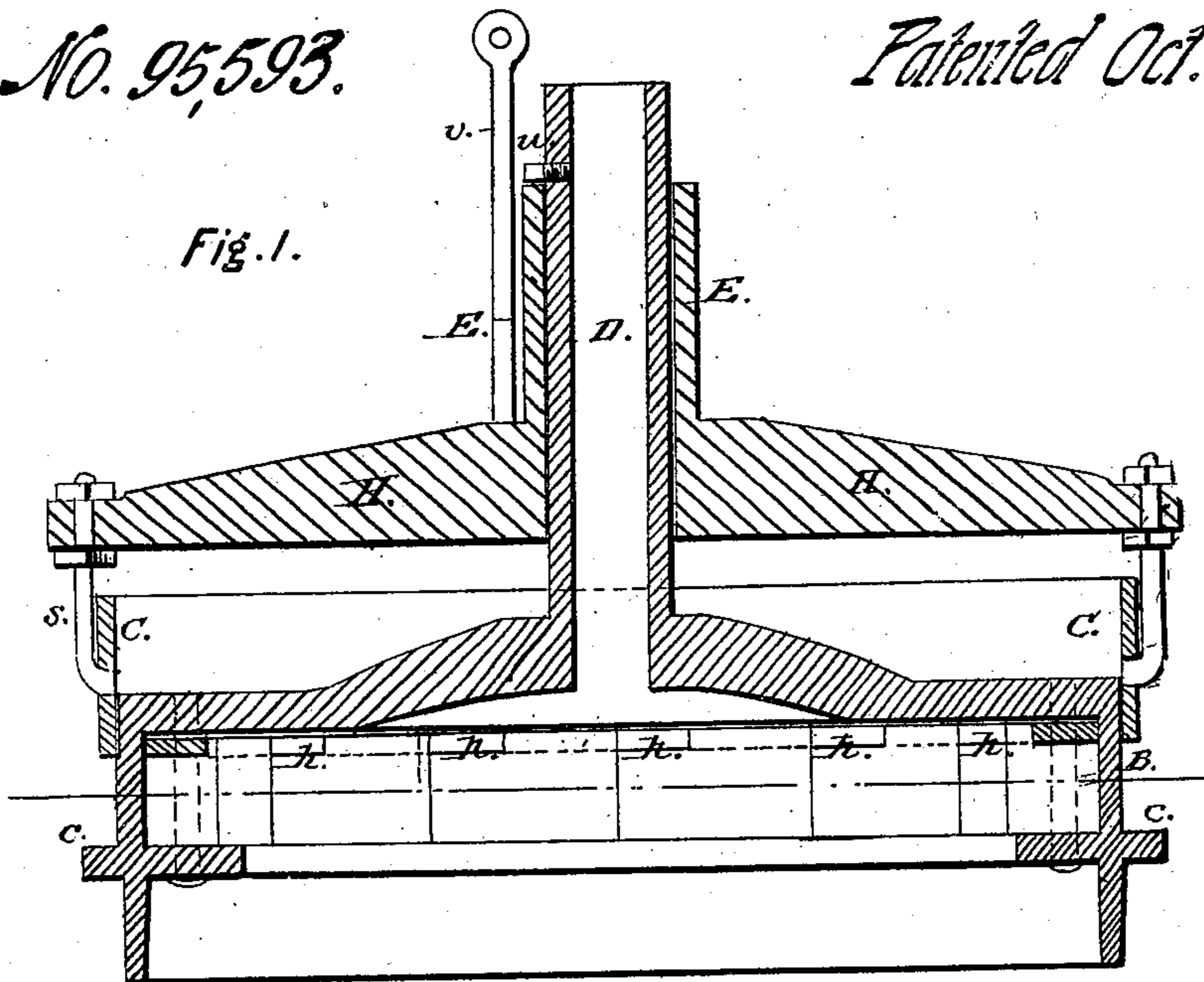
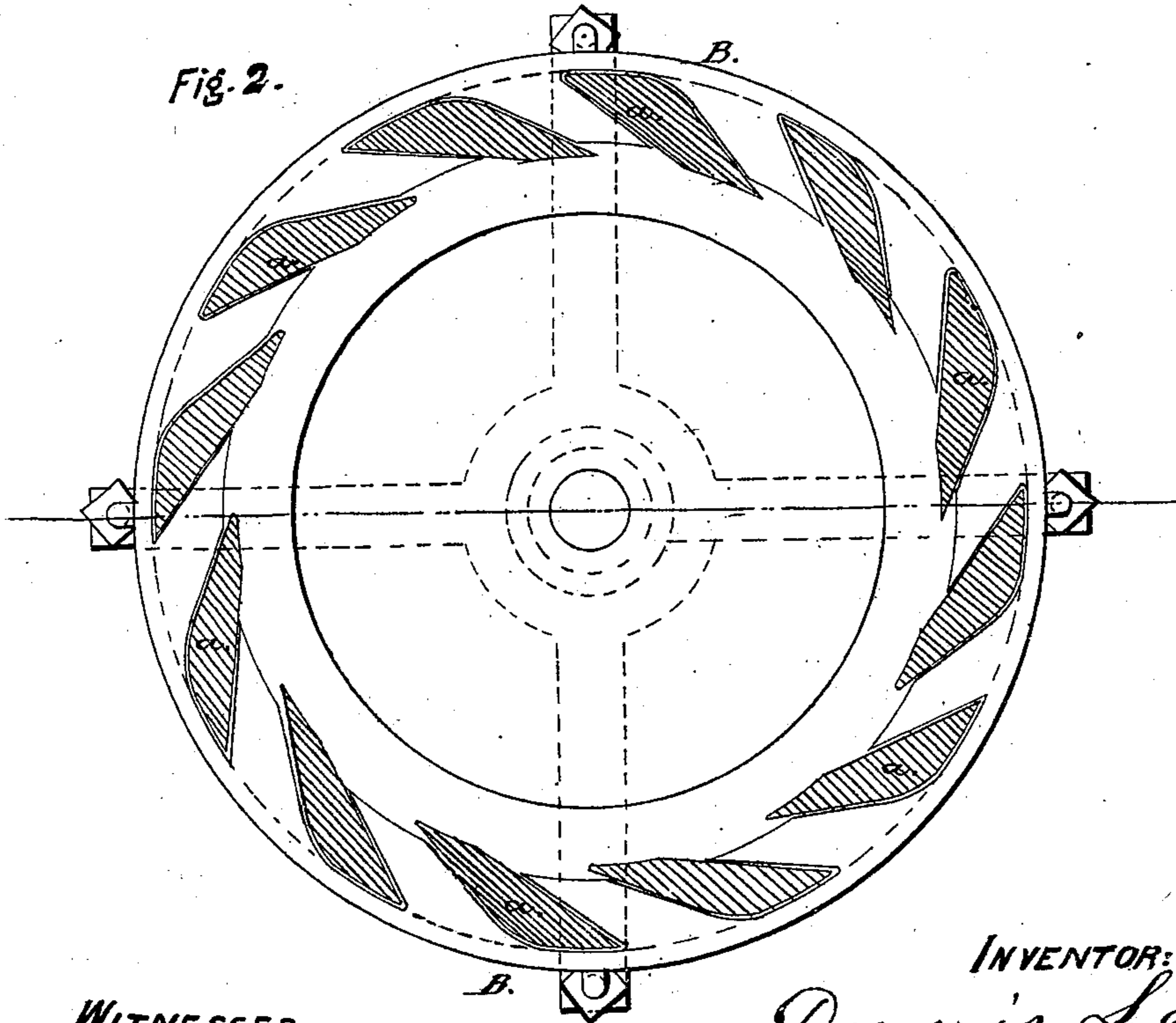


Fig. 2.



WITNESSES:

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DENNIS LANE, OF MONTPELIER, VERMONT.

Letters Patent No. 95,593, dated October 5, 1869.

IMPROVEMENT IN WATER-WHEELS.

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, DENNIS LANE, of Montpelier, in the county of Washington, and State of Vermont, have invented a new and valuable Improvement in Water-Wheels; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1, of the drawings, is a vertical sectional view of my invention.

Figure 2 is a transverse sectional view of the same.

My invention relates to water-wheels; and

It consists mainly in a novel arrangement of devices intended as efficient means for introducing water there-to, and of cutting the same off at will.

The letters *a*, of the drawings, represent the guides of my arrangement, between which the water is conducted to the wheel. They are affixed upon a hollow cylindrical case, within which the wheel is to be placed, in the usual manner. This case is marked B on the drawings.

The letter C represents my gate. It consists of a ring, encircling the chutes *a*, and which, when not drawn upward, rests upon a shelf or flanch, marked *c*, that forms a part of the case B.

The letter D represents a tube or cylinder, that forms a part of the case B, as shown.

The letter E represents a sleeve, arranged around the cylinder D, constructed with four or more arms, marked H on the drawings, and the letters *s* are rods by which the arms H are united to the gate.

These rods *s* are attached rigidly to the gate, but are affixed to the arms H by means of threads cut

thereon, and nuts which are arranged upon said threads, one above and one below said arms respectively.

The object of this arrangement of threads and nuts is to provide for adjusting the arms at the required distance from the gate, so that the operator can regulate the amount of water he desires to have passed to the wheel at will, and also to provide means for the removal of said gate, when desirable so to do.

The letter *u* represents a pin, placed in the cylinder D, to serve as a stop when raising the gate.

The letter *v* represents a rod, having a staple-head, adapted to receive a rope or chain, by which the gate may be raised.

The letters *h* represent guides, which form a part of the gate, and arranged to move up or down between the guides *a*. These guides *h* serve to regulate the movements of the gate, and to prevent the water from flying upward when the same is raised. They also serve to direct the water against the wheel in solid masses.

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

1. The exterior case, forming a gate for the chutes, with its serrated flanges, all substantially as described.

2. The case and gate for water-wheels, herein described, having guides *a*, forming the chutes, case B, cylinder D, sleeve E, arms H, and rods *s* and *v*, constructed and arranged substantially as specified.

In testimony that I claim the above, I have hereunto subscribed my name, in the presence of two witnesses.

DENNIS LANE.

Witnesses:

R. A. HILL,
MAHLON TAPLIN.