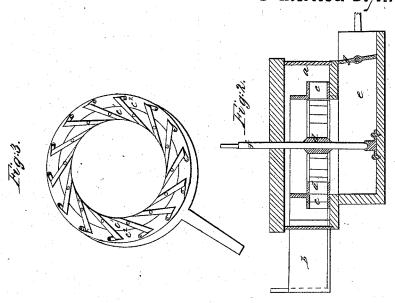
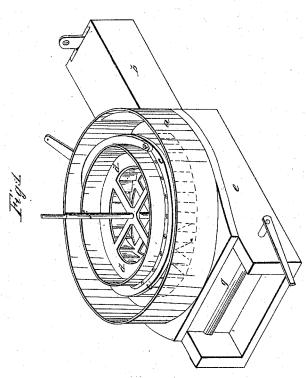
A.Shimpson, Water Wheel,

Nº3,567

Patented Apr. 25, 1844





UNITED STATES PATENT OFFICE.

ALBERT STIMPSON, OF ROCKINGHAM, VERMONT.

IMPROVEMENT IN WATER-WHEELS.

Specification forming part of Letters Patent No. 3,567, dated April 25, 1844.

To all whom it may concern:

Be it known that I, ALBERT STIMPSON, of Rockingham, in the county of Windham and State of Vermont, have invented a new and useful Improvement in 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, which form a part of this specification, in which—

Figure 1 is an isometrical view; Fig. 2, a section; Fig. 3, movable chutes.

The nature of my invention consists in combining movable adjustable chutes with a flood-

ing-gate in the race.

The curb a is formed with a circular rim having a tangent spout b opening into it, and having a bottom which makes the curb watertight. In said bottom there is a hole made large enough to admit the wheel, around which are conductors c for conveying the water onto the wheel. The conductors are curved chutes, which are so constructed that they turn on centers in the rim c'. The outside of rim c' is surrounded by a movable ring c^2 . This ring is coupled with each of the conductors by a short rod, as shown in Fig. 3. In moving said ring in one direction all the chutes or conductors can be closed. In the other direction they are opened and the size of the opening adjusted to the amount of

power required. The action of these chutes is somewhat similar to a Venetian blind.

The wheel is of a construction similar to center-vent wheels now in use, d being the

wheel and f the shaft.

Below the curb, which is elevated, the tail-race is inclosed at e, one side only being left open for the escape of the tail-water. In said opening a gate g, of any ordinary construction, is placed, which when closed stops the head-water, renders the wheel motionless, and keeps it flooded, the head-water being retained in the curb. By this arrangement the wheel is prevented from freezing up in cold weather, and the conductors are always free to move. When the gate g is opened, the water escapes freely through the wheel into the space e, it being regulated only by the conductors as to quantity; and the tail-race being larger than the apertures through the wheel, there is no flood-water below.

What I claim as my invention, and desire

to secure by Letters Patent, is-

The combination of the movable conductors with gate in the tail-race below the wheel, constructed and arranged in the manner and for the purpose herein set forth.

ALBERT STIMPSON.

Witnesses:

FREDERICK A. WATRISS, SAMUEL WALES.