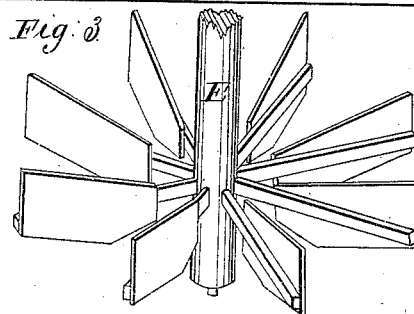
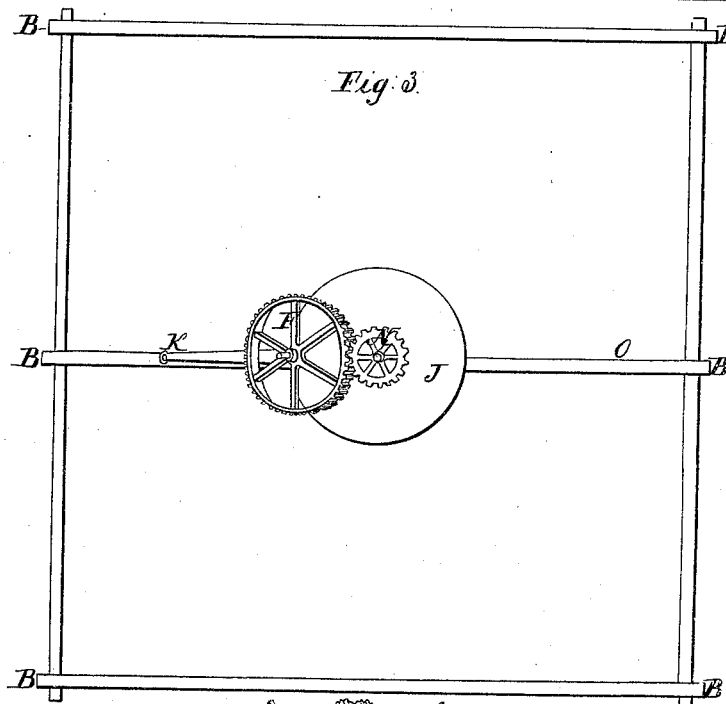
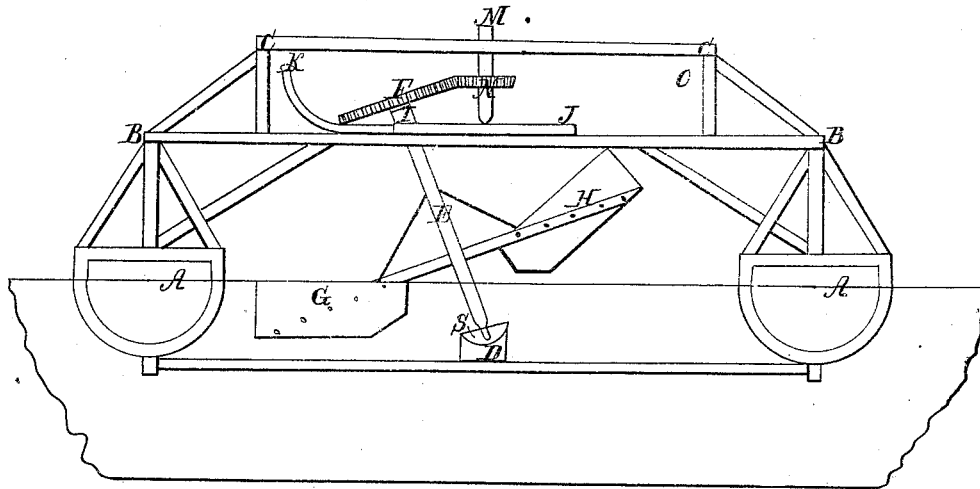


F. F. Myrick.
Wheels in Channels.

N^o 6,193.

Patented Mar. 20, 1849.



Inventor;
Shuman F. Myrick

UNITED STATES PATENT OFFICE.

FREEMAN F. MYRICK, OF LYNN, MASSACHUSETTS.

IMPROVEMENT IN TIDE-WATER WHEELS.

Specification forming part of Letters Patent No. **6,193**, dated March 20, 1849.

To all whom it may concern:

Be it known that I, FREEMAN F. MYRICK, of Lynn, in the county of Essex and State of Massachusetts, have invented a new and useful Tide-Wheel or Water-Wheel Peculiarly Adapted to Tide-Currents; and I do hereby declare that the following is a full and exact description of the construction and operation of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a transverse section of the wheel, frame, and floats by which it is supported; and Fig. 2 is a perspective view of the water-wheel only.

This invention is calculated to derive power from an ordinary tide-current without the aid of a head or fall of water; and it consists not so much in the construction of the water-wheel as in the mode of mounting and adjusting it.

Two boats or floats A A are arranged parallel to each other at such a distance apart as to accommodate the water-wheel between them. Over these boats a scaffold B B is supported by posts and braces, and over this is a horizontal beam C C. The keels of the two boats are connected by a horizontal plank or platform, on the center of which is a concave block D, in the cavity of which is placed a semi-globe S, which serves as a bottom bearing of a vertically-inclined shaft E, on the head of which is mounted a gear-wheel F.

From the shaft E, above the surface of the water, a series of eight or more arms project in different directions. To these arms are attached a series of large float-boards G H, and the shaft being adjusted in an inclined or oblique position the float-boards become immersed on one side, as G, while those opposite are raised above the surface, as H.

The shaft has its upper bearing in the block I, which is attached to a circular horizontal platform I J, resting on the scaffold B B, and to one side of the platform is attached a lever which terminates at K, and by means of which the platform is occasionally made to revolve on its center.

A small upright shaft M is mounted upon the center of the platform and supports a small gear-wheel N, which is driven by the wheel F. It will be seen by this arrangement that the position of the tide-wheel may be changed by means of the lever K revolving or changing the circular platform, yet without disconnecting the two gear-wheels.

In the position represented in the drawing Fig. 1 the direction of the current is supposed to be such as to propel the float-board G from the eye of the spectator; but when the tide-current changes the lever K is carried round to o, by which the float-board H becomes immersed and the motion of the wheel will be the same as before; and when the mill is to be stopped, the lever being moved to a position between these points, the current will have no influence on the wheel to move it in either direction. The boats A A are to be securely moored, so as to allow the water a free passage between them. The shaft M may support and carry the millstones of a corn-mill; or the motion and power of the water-wheel may be conducted by a long shaft or belt to a mill or machinery on the shore.

Fig. 3 is a top view of the horizontal revolving platform with the two gear-wheels attached thereto.

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

The arrangement of the shaft E in an inclined position, so that while the buckets of the water-wheel dip in the water on one side of the wheel those of the other side become elevated above the surface, in combination with the water-wheel and with the horizontal revolving platform, whereby the position of the water-wheel is occasionally changed without disconnecting the gear-wheel F from the wheel or pinion N, as herein fully set forth and described.

FREEMAN F. MYRICK.

Witnesses:

OLIVER PORTER,
CYRUS M. STIMSON.