

R. H. CONNELLY.
PADDLE WHEEL.

No 106,331.

Fig. 1 Patented Aug. 16, 1870.

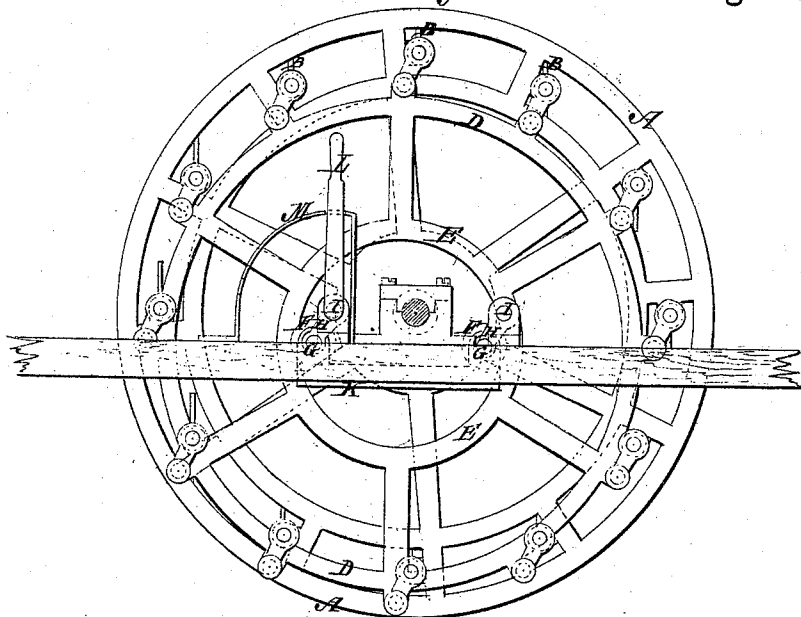
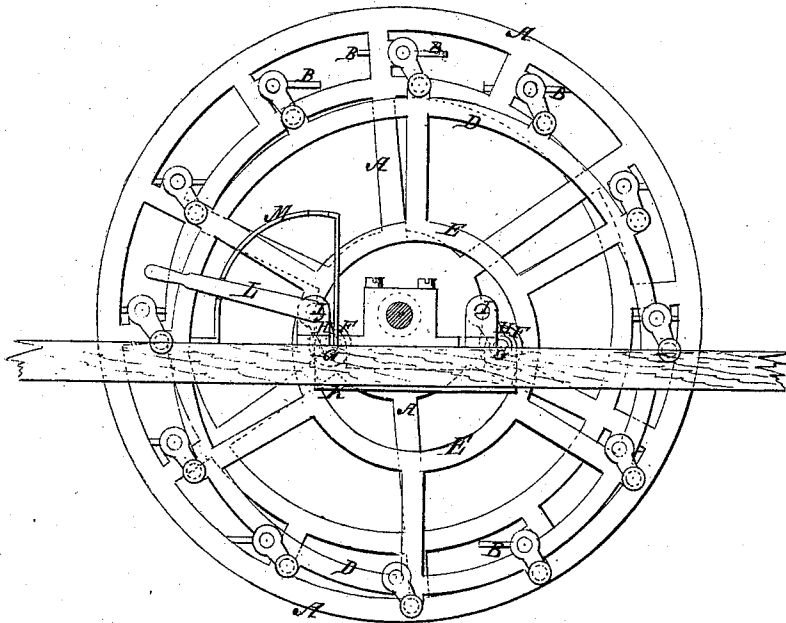


Fig. 2.



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United States Patent Office.

RICHARD H. CONNELLY, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 106,331, dated August 16, 1870.

IMPROVEMENT IN PADDLE-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, RICHARD H. CONNELLY, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and improved Paddle-Wheel; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to improvements in feathering paddle-wheels for steamboats, and consists in an improved arrangement of wheel or wheel-rim, mounted eccentrically to the paddle-wheel, and having the cranked axis of the buckets connected to it, for causing the feathering of the buckets, all as hereinafter more fully described.

Figure 1 is a side elevation of a paddle-wheel and feathering-apparatus, according to my invention, and in the working position.

Figure 2 is a side elevation of the same, when adjusted to throw the paddles out of action, as it is sometimes required to do with one wheel, to turn in a short space.

Similar letters of reference indicate corresponding parts.

A are the paddle-wheels.

B, the paddles.

C the cranks connected to the axles, on which the said paddles are capable of turning.

D is the wheel-rim to which the cranks are connected, and which is mounted eccentrically to the axis of the paddle-wheel.

This rim D has a smaller rim, E, by which it is mounted on the friction-rollers F, so as to run eccentrically in the manner required for the feathering action.

In this case the cranks are so set, relatively to the planes of the paddles, that the horizontal plane of the

axis of the eccentric wheel, when in the position for holding the paddles in the working position, is considerably below the plane of the axis of the paddle-wheel, and the vertical plane is a short distance to the left of the vertical plane of the paddle-wheel.

The grooved friction-wheels F, on which the wheel-rim D is mounted, are mounted on the journals G of the crank-arms H, which are journaled at I in suitable bearings, and these crank-arms are connected by bars K.

One of the axles at I is provided with a hand-lever, L, or it may be any other suitable device by which it can be oscillated and held in the required position for holding the said wheel-rim, and for shifting it to throw the paddles out of action.

When this lever is in the vertical position, as shown in fig. 1, the paddle will be in the working position, and when turned down to the position shown in fig. 2, the paddles will be shifted so as to run through the water edgewise, and have little or no propelling effect.

In this latter case the vertical plane of the axis of the wheel-rim D is thrown about as much to the right of the axis of the paddle-wheel as it is to the left of it when in the other position.

M is a notched bar, for holding the lever L in either position.

Having thus described my invention,

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

The combination, with the paddle-wheels and the paddles, of the wheel-rim D, rim E, grooved rollers F, crank-arm H, bar K, and a shifting-lever, L, all arranged substantially as specified.

RICHARD H. CONNELLY.

Witnesses:

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