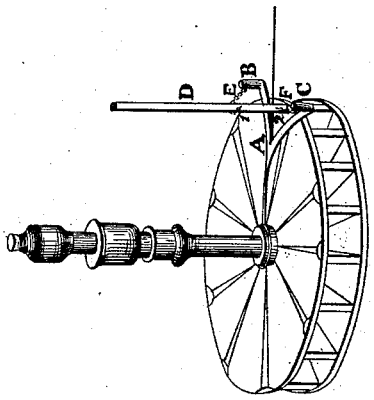
(No Model.)

J. McCOID.

MEANS FOR OPERATING WATER WHEEL GATES.

No. 265,971. Patented Oct. 17, 1882.



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MEANS FOR OPERATING WATER-WHEEL GATES.

SPECIFICATION forming part of Letters Patent No. 265,971, dated October 17, 1882.

Application filed April 27, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES McCOID, a citizen of the United States, and a resident of Logan, in the county of Harrison and State of Iowa, have invented a new and useful Means for Operating Water-Wheel Gates, of which the following is a specification, reference being had to the accompanying drawing, which shows a perspective view of a water-wheel embodying my invention.

My invention relates to an improved means of opening and closing the gates of water-wheels; and the objects of my invention are, first, to provide means for moving the arm which opens and closes the gates by the use of two chains attached to the arm and connected with the upright shaft, in lieu of the old method of moving the arm by means of cog-wheels. The system of moving the arm by the chains will be much more durable, have greater power, and be much more easily repaired, should it become necessary to repair the same, than the old method of moving the arm by means of cog-wheels connecting the arm with upright shaft; and, second, to construct the arms with terminal points turned up in such a manner that the chains connecting it with upright shaft can be attached. I attain these objects by the mechanism illustrated in the accompanying drawing, in which—

A represents the arm; B, one of the terminal points, and C the other terminal point; D, the upright shaft; E, one of the chains, and F the other chain. Now, fasten chain E to the terminal point of the arm B, also attach the other end of chain E to shaft D at the point marked 1, then turn shaft D until chain E is fully wound around shaft D, thus bringing terminal point B and shaft D together. Now fasten one end of chain F to terminal point C and the other end to upright shaft D at the point marked 2, which should be from four to six inches lower than point 1, so the chains will not interfere one with the other while being wound around the upright shaft D. Now turn upright shaft D in the opposite direction and chain E will be unwound, allowing the terminal point of arm B to move away from upright shaft D, and at the same time chain F will be wound around shaft D, drawing terminal point of the arm C to shaft D. Thus by turning shaft D the arm A can be moved back and forth as desired, and the arm A being connected with the water-wheel gates, the same can be opened and closed by moving the arm A at the pleasure of the operator.

I am aware there are now in use many kinds of water-wheels with many different kinds of arms which are connected with the gates in many different ways. I do not therefore claim any improvement on the water-wheel, or on the method of attaching the arm to the wheel, or on the method of connecting the arm with the water-wheel gates; but

What I do claim as my invention, and for which I desire Letters Patent, is—

1. As a means for operating the gates of water-wheels, the arm A, having terminal points B and C, combined with the shaft D and chains E and F, operating substantially as set forth.

2. As a means for operating the gates of water-wheels, the arm A, having terminal points B and C, turned up, as shown, combined with the shaft D and chains E and F, substantially as set forth.

JAMES McCOID.

Witnesses:
H. C. McCLEARY,
S. J. KING.