

(No Model.)

A. D. GARRETSON.

CURRENT MOTOR.

No. 283,769.

Patented Aug. 28, 1883.

Fig. 1

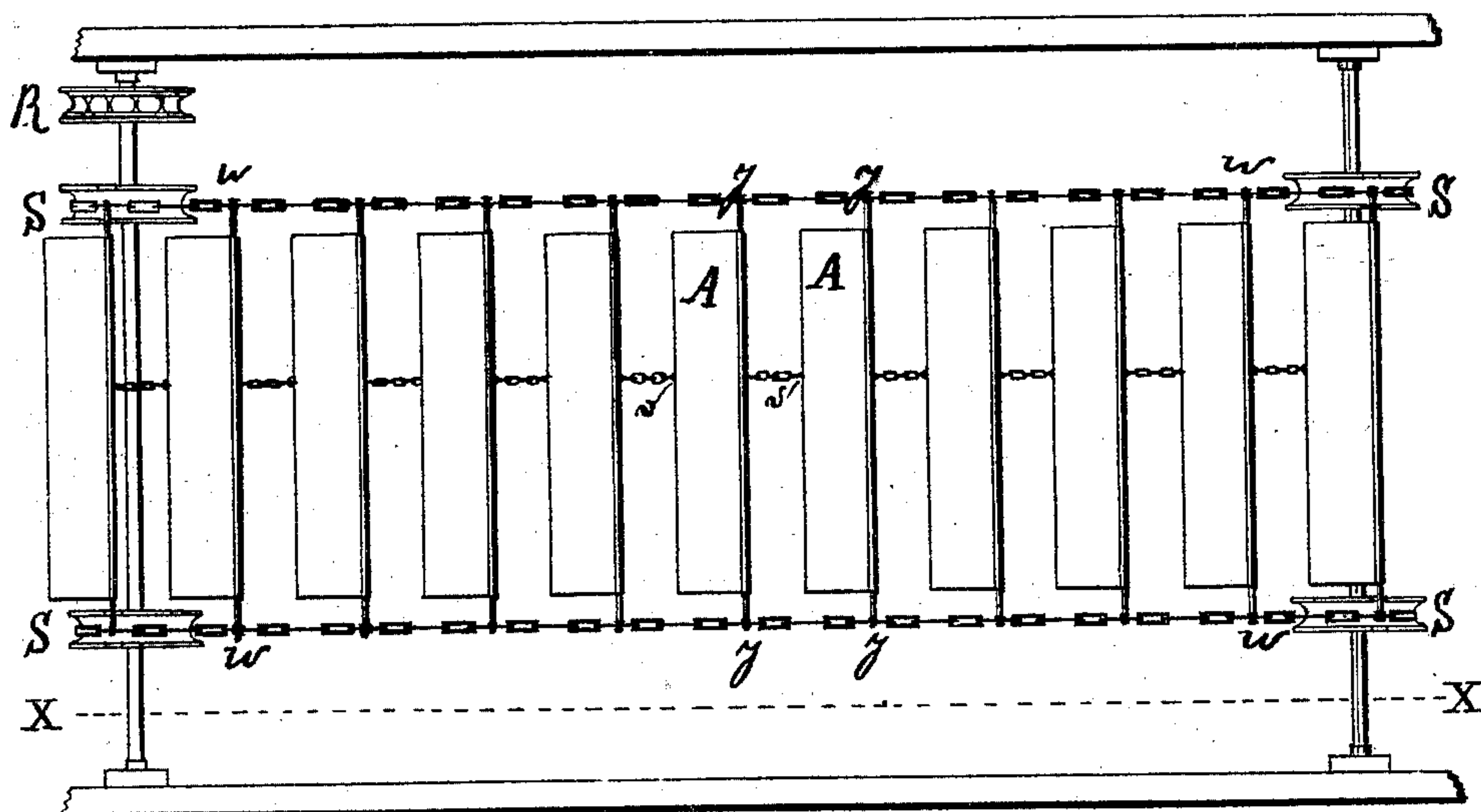
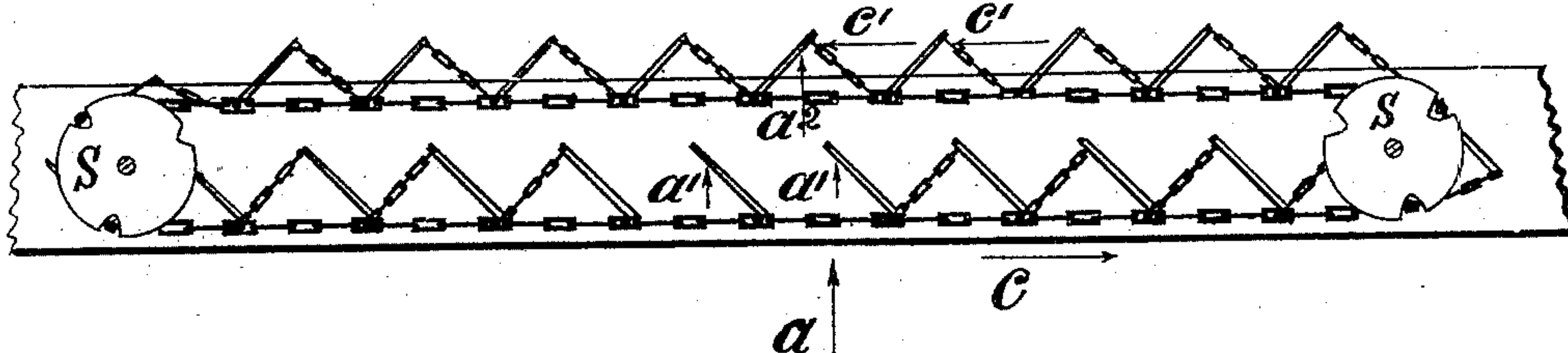


Fig. 2



Witnesses

James Sangster
Hugh Sangster

Inventor

A. D. Garrettson

UNITED STATES PATENT OFFICE.

ALBERT D. GARRETSON, OF BUFFALO, NEW YORK.

CURRENT-MOTOR.

SPECIFICATION forming part of Letters Patent No. 283,769, dated August 28, 1883.

Application filed July 26, 1882. (No model.)

To all whom it may concern:

Be it known that I, ALBERT D. GARRETSON, a citizen of the United States, residing in the city of Buffalo, county of Erie, and State of New York, have invented certain new and useful Improvements in Water-Motors, of which the following is a specification.

The nature of my invention relates to certain new and useful improvements in that class of motors which are designed to be driven by the impact of currents of wind or water without the employment of dams or other obstructions, except such as is offered by the motor when exposed or submerged.

The invention consists of a combination of endless belts or chains supported by a suitable frame, adapted to lie across the currents and carry a series of hinged wings, so arranged that the wings will receive the impact of the currents alternately on opposite faces, and thus utilize continuously all of the wings.

Figure 1 is a front elevation, and Fig. 2 a sectional perspective.

In the accompanying drawings, A A are reversing-wings, hinged at $y y y y$ to the endless chains $w w w w$, and connected by short chains at their outer or movable edges, $v v$, to the axis of the next wing, and of sufficient length to hold the wings in the proper position and angle. The current, moving in the direction of the arrow a in Fig. 2, will strike all the wings first at $a' a'$, causing them to move in the direction of the arrow c , and, being deflected by such impact, striking the second or returning series of wings at $a^2 a^2$, and

causing them to move in the direction of the arrows $c' c'$.

S S S S are drums to support the chains and wings, and R is a drum for the transmission of power.

When driven by water, it is preferable that the whole be submerged to a sufficient depth to avoid ice, drift-wood, or other obstructions.

What I claim as my invention is—

1. The drums S, suitably journaled in the frame and carrying the endless chains, in combination with a series of reversing-wings hinged to said chains, each of said wings being connected by short chains, one end of each of which is secured to the free or outer edges of the wings, and the other end to the axis of the wing next in series, substantially as and for the purposes described.

2. A water-motor wherein the series of reversing-wings are pivotally secured at their rear corners to endless chains running over drums journaled on opposite ends of the frame, said wings being secured together by chains connecting the front edges to the rear edges thereof, and arranged relatively to each other to receive the force of the current continuously and directly on a portion of the wings, and then, by deflection upon another portion of the wings, running in an opposite direction, substantially as specified.

ALBERT D. GARRETSON.

Witnesses:

JAMES SANGSTER,
HUGH SANGSTER.