

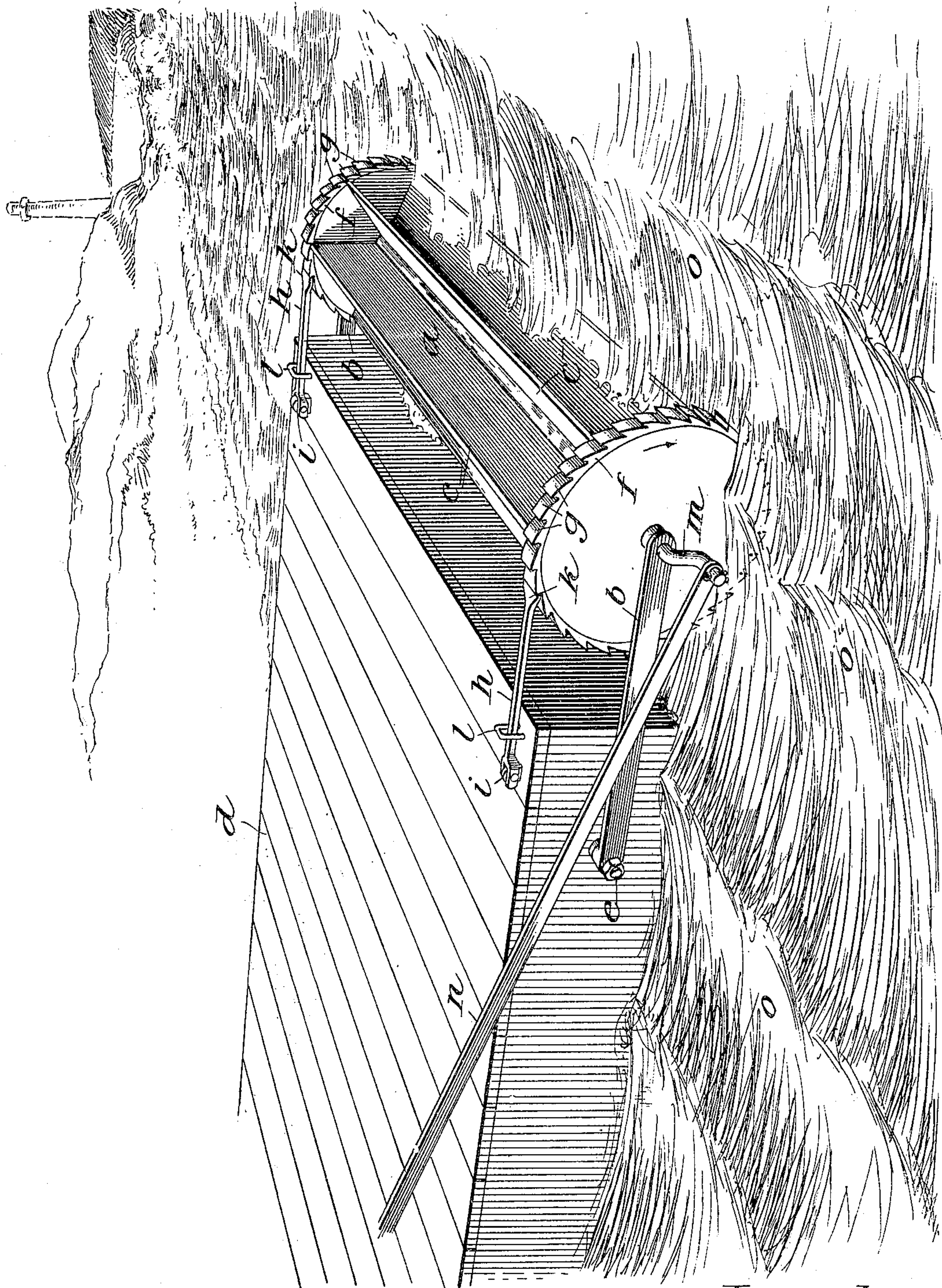
No. 808,688.

PATENTED JAN. 2, 1906.

C. A. SAHLBERG.

WAVE MOTOR.

APPLICATION FILED APR. 24, 1905.



Witnesses:  
Henry J. Johnson  
William Richee

*Inventor,*  
*Carl August Sahlberg*



# UNITED STATES PATENT OFFICE.

CARL AUGUST SAHLBERG, OF CHICAGO, ILLINOIS.

## WAVE-MOTOR.

No. 808,688.

Specification of Letters Patent.

Patented Jan. 2, 1906.

Application filed April 24, 1905. Serial No. 257,213.

*To all whom it may concern:*

Be it known that I, CARL AUGUST SAHLBERG, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Wave-Motor, of which the following is a specification.

A paddle-wheel *a* is at both ends of the shaft attached to iron bars *b* in such a way that it can turn around in hole-bores in the iron bars. The paddles *c* pass through the center or shaft of the wheel, and the whole paddle-wheel is massive and tight, so no water can escape through any space between the paddles and the shaft. The iron bars *b*, that hold the paddle-wheel in position, are again attached to a pier *d* with screws *e* in such a way that the position of the paddle-wheel can be regulated up and down according to the height of the water in which the paddle-wheel partly stands, so the lashing of the waves can catch the paddles and move the paddle-wheel around. The pier can also be so constructed that it can be turned around and get the waves to catch the paddles without regard to the direction of the waves.

Both ends of the paddle-wheel have iron plates *f*, with teeth *g* of the form the drawing shows, pointing a little inward toward the pier. Two iron bars *h* are attached to the pier in such a way that they can move around iron rollers *i*. These iron bars have at the other end a claw *k*, that catch the teeth on the paddle-wheel, as shown on the drawing. As the waves move the paddle-wheel around the claws on the iron bars will catch the teeth on the paddle-wheel and prevent it from swinging back. Two iron clamps *l*, attached to

the pier and passed over the iron bars, keep these slightly in position and prevent them from jumping up when the paddle-wheel turns around. In that way one wave of the sea turns the paddle-wheel around, the iron bars with the claws prevent the wheel from turning back, and another wave will continue this motion. The shaft of the paddle-wheel is passed through the holes in the iron bars *b*, that hold it in position and form an angle *m*, as shown at the drawing. A bar *n*, attached to each of these angles, then brings the motion over to the pier. The waves of the sea are on the drawing marked by the letter *o*. In that way one gets perpetual motion almost for nothing, as one has lashing of waves on every coast more than one needs. When one has motion, one can transform that to electricity, light, and heat in the regular way.

The invention can probably also be attached to ships and put to useful account.

It is unnecessary to call attention to the great importance of such an invention that makes it possible for mankind to take into service the millions of horse-powers buried in the waves of the ocean.

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

A surf-motor consisting of the combination with a pier or like, support of arms or bars *b* pivoted to the pier, a buoyant paddle-wheel *a* mounted to rotate in said arms and to rise and fall with the tide, and means *h* to prevent back movement of the paddle-wheel.

CARL AUGUST SAHLBERG.

Witnesses:

HARRIET E. MERCER,  
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