

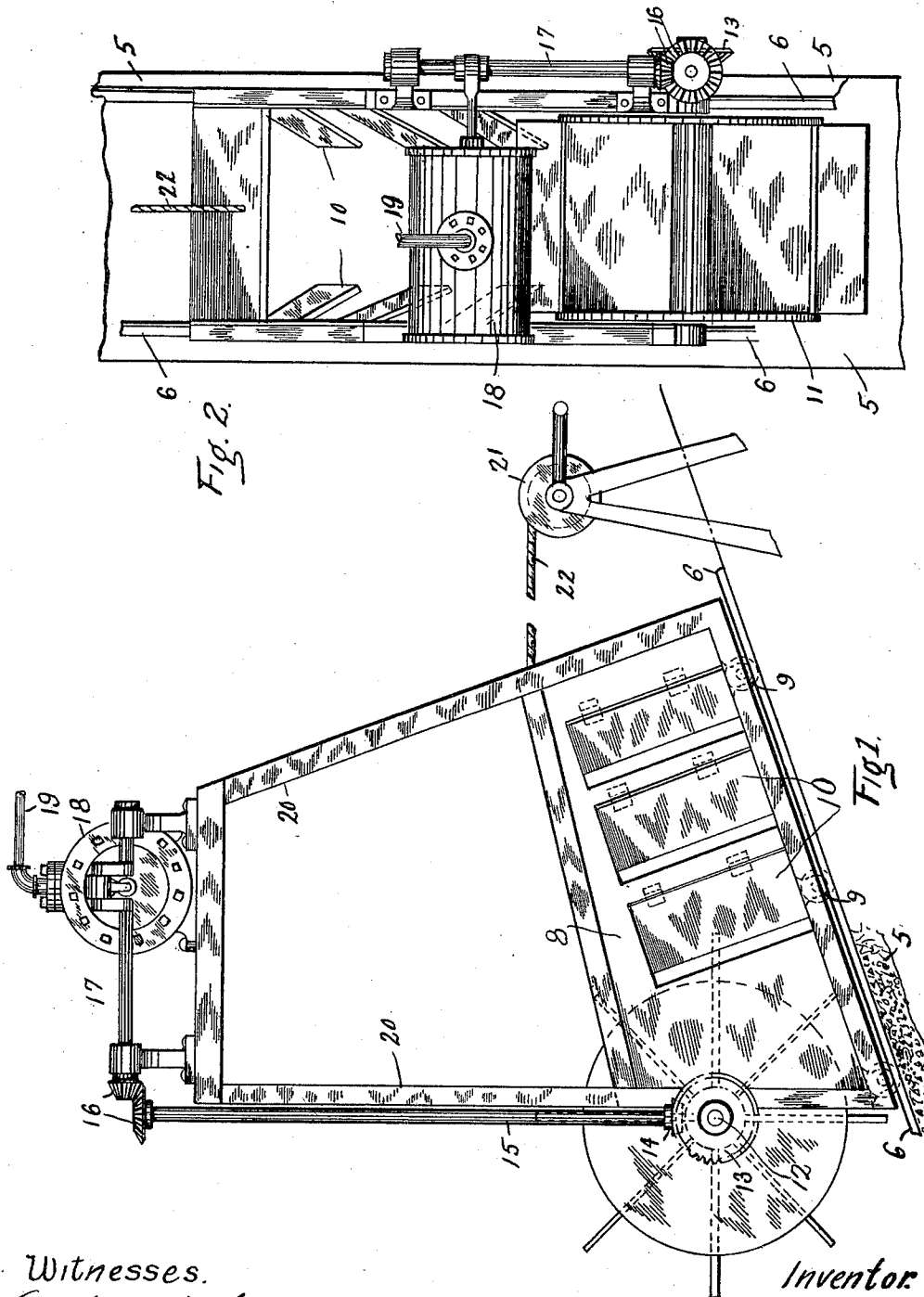
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WAVE MOTOR.

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1,032,343.

Patented July 9, 1912.



Witnesses.
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UNITED STATES PATENT OFFICE.

JACOB NYSWANDER, OF PUENTE, CALIFORNIA.

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Specification of Letters Patent.

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Application filed November 6, 1911. Serial No. 653,643.

To all whom it may concern:

Be it known that I, JACOB NYSWANDER, a citizen of the United States, residing at Puente, Los Angeles county, California, have invented a new and useful Wave-Motor, of which the following is a specification.

My invention relates to the type of power generators usually known as wave motors.

The object of my invention is to construct a machine for transforming the energy now wasted in waves along the shore lines into commercial power units adapted to be utilized for practical purposes. The mechanism by means of which I attain this result is shown in the accompanying drawings in which—

Figure 1 is a side elevation and Fig. 2 a top plan view of my complete device.

In both views like characters indicate like parts, and referring to the details of construction, 5 is a floor or platform. This floor as shown consists of concrete placed on the earth, but in many instances a wooden or metal platform, carried on a piling or otherwise supported, would be found more desirable. In any event the platform is inclined away from the shore line. A track or pair of guide rails 6 are suitably secured to the platform. A rectangular open bottom tank 8 having rollers 9 is supported upon said platform. This tank 8 has two sides and one end, the lower end being left entirely open. The rollers are adapted to run between the guide rails upon the floor of the platform. The sides of the tank almost touch the guide rails.

10 are hinged swinging doors provided in the two sides of the tank.

11 is a water wheel mounted upon a horizontal shaft 12 across the front end of the tank.

13 and 14 are miter gears adapted to transmit power from the shaft 12 to the vertical shaft 15. Thence the power is transmitted through gears 16 and the shaft 17 to the air

compressor 18 supported on the framework 20 attached to the said tank 8.

19 is an air discharge pipe.

It is necessary to raise and lower the motor along the inclined platform 5. This is accomplished by a hoisting machine designated as 21 pulling upon a cable 22 attached to the tank. Any type of hoisting may be used and no particular preference is found, everything varying according to conditions.

The operation of the device is very simple and is briefly described as follows:

By means of the hoist the tank is raised or lowered and is kept within reach of the waves. The waves coming in around the sides of the tank press open the doors and the water rushing in fills the tank. Some water also enters at the front revolving the wheel as it enters. As each wave recedes, the pressure of the water closes the doors and gravity forces the water out of the tank under the water wheel 11. This wheel revolving backward when water is entering and forward as it passes out, operates the compressor 18 and the air compressed thereby is piped to any desired point where it is utilized as desired.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:—

In a wave motor: an inclined platform; a tank having an open front; doors in the sides of said tank; means for moving said tank along said platform; a water wheel mounted in the front end of said tank; gearing and shafting for transmitting power from said wheel to an air compressor; an air compressor supported above said tank; and means for conveying the compressed air from said compressor to the point where the same is to be utilized, all as described.

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Witnesses:

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