

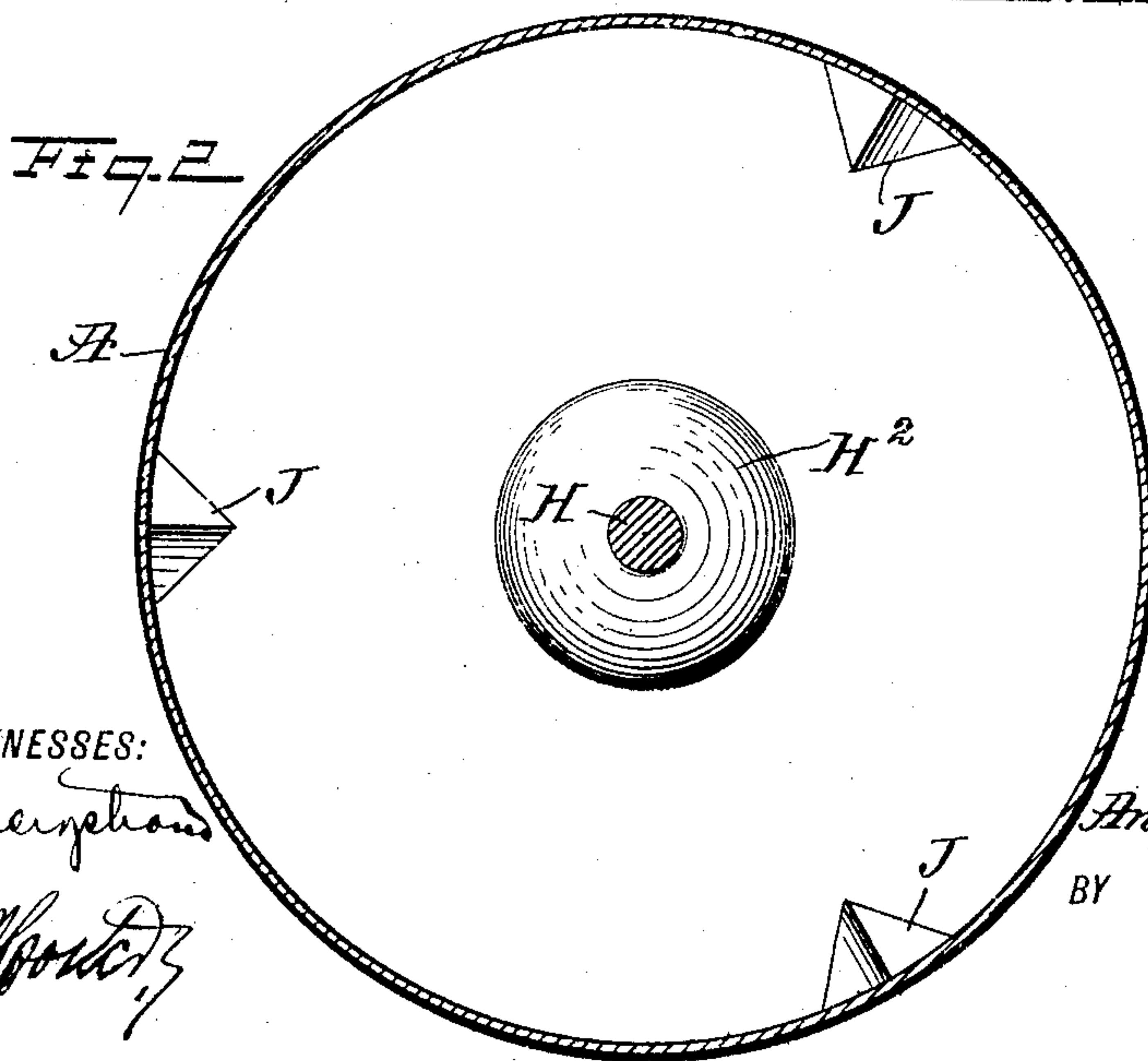
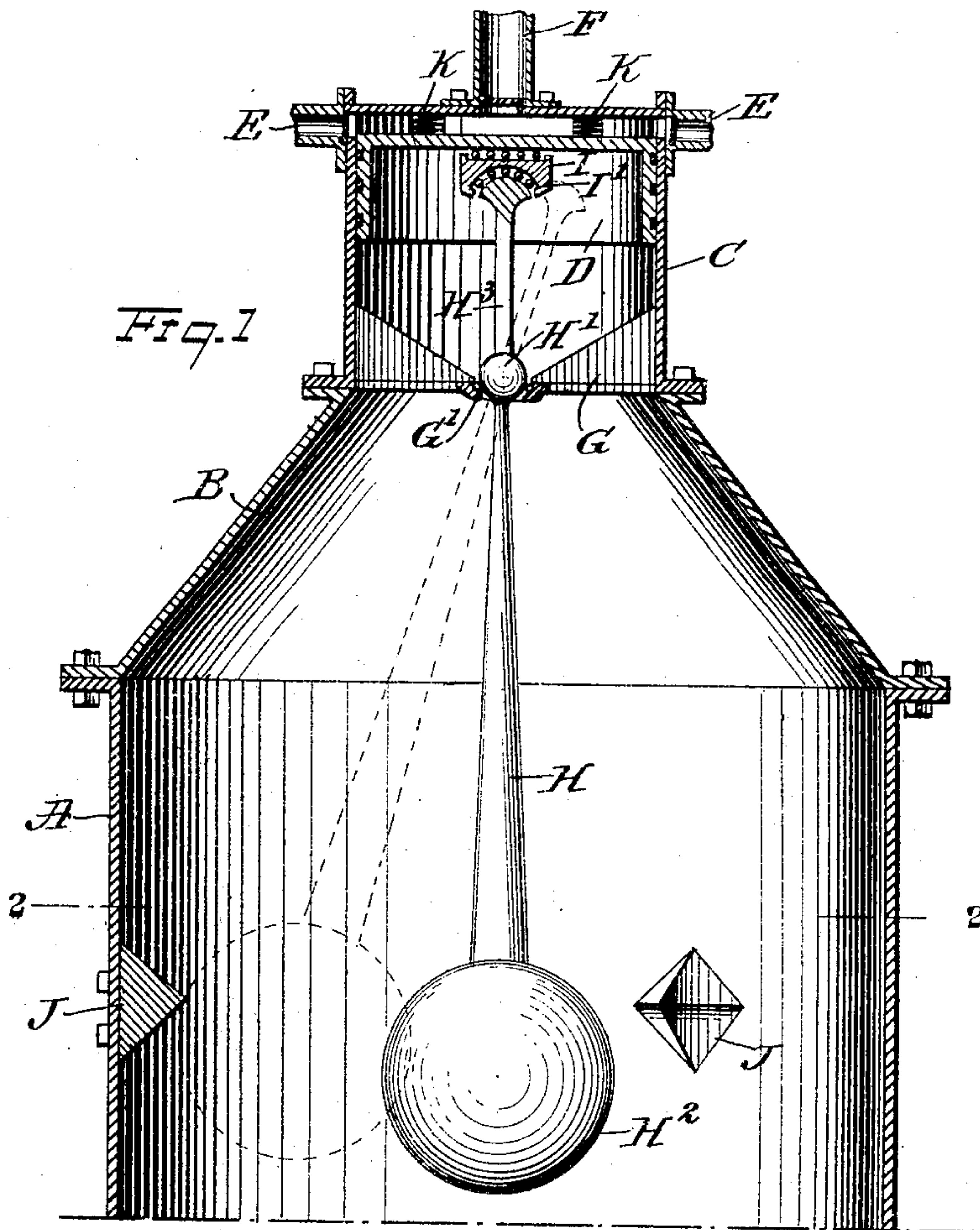
No. 764,957.

PATENTED JULY 12, 1904.

A. T. PRATHER.
PENDULUM POWER.

APPLICATION FILED DEC. 3, 1903.

NO MODEL.



WITNESSES:
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UNITED STATES PATENT OFFICE.

ANDREW THOMAS PRATHER, OF DOUGLAS, ARIZONA TERRITORY.

PENDULUM-POWER.

SPECIFICATION forming part of Letters Patent No. 764,957, dated July 12, 1904.

Application filed December 3, 1903. Serial No. 183,671. (No model.)

To all whom it may concern:

Be it known that I, ANDREW THOMAS PRATHER, a citizen of the United States, and a resident of Douglas, in the county of Cochise and Territory of Arizona, have invented a new and Improved Pendulum-Power, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved pendulum-power more especially designed for use on marine vessels, land-vehicles, and the like, and arranged to utilize the swaying motion of the vehicle for actuating an air-pump or like motor.

The invention consists of novel features and parts and combinations of the same, as will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a sectional side elevation of the improvement, and Fig. 2 is a sectional plan view of the same on the line 2 2 of Fig. 1.

The pendulum-power is mounted on a suitably-constructed support A, secured to a marine vessel, land-vehicle, or the like, so as to sway with the same. The dome-shaped top B of the said support A carries a vertically-disposed cylinder C, in which is mounted to reciprocate a piston D, and the said cylinder is provided with valved inlets E and a valved outlet F, as plainly illustrated in Fig. 1.

In the bottom of the cylinder C is secured a spider G, having a central socket G', in which is hung the ball H' of a pendulum H, provided at its lower end with the usual suitable heavy ball H² to cause the pendulum to swing whenever a swaying motion is given by the vehicle to the support A. By the arrangement described the pendulum H is free to swing in any desired direction, and in order to use the pendulum for imparting a reciprocating motion to the piston D the said pendulum is provided with an extension-arm H³, extending upwardly from the ball H' and connected at its terminal by a ball-bearing with a socket I', formed in the under side of a plate I, having a ball-bearing connection with the inner face of the

piston D, so that when the pendulum H swings from its normal vertical position then the piston D is free to move downward, and thereby draws the air into the upper end of the cylinder through the valved inlets E, and when the pendulum swings back to a central position then the piston D is pushed upward by the action of the extension H³ and plate I, and consequently the air previously drawn into the upper end of the cylinder is forced out of the same through the valved outlet F into a suitable reservoir or the like, from which the compressed air may be utilized for driving other machinery or for other purposes.

In order to prevent the pendulum from swinging around in the cylindrical support A, a plurality of projections J are arranged in a circle on the inner face of the support A in alinement with the ball H², so that the latter in striking one of the projections J is caused to rebound to insure a constant up-and-down sliding movement of the piston D to pump air, as previously explained. The projections J are preferably pyramidal in shape, as indicated in the drawings, to insure a proper rebounding of the ball H². The piston D falls by its own weight; but, if desired, springs K may be used and interposed between the upper head of the cylinder C and the piston to insure a ready downward movement of the piston.

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

1. A power comprising a pendulum mounted on a swaying vessel or vehicle, a pump in axial alinement with the vertical center line of the pendulum, and a sliding connection between the pendulum and inner face of the piston of the pump, as set forth.

2. A power comprising a support, a pendulum hung in the said support and having an extension beyond its fulcrum-point, a cylinder mounted on the said support and into which the extension of the pendulum projects, a piston reciprocating in the said cylinder, and a connection between the inner face of the piston and the extension of the pendulum, as set forth.

3. A power comprising a support, a pendulum hung on the said support and having an

extension beyond its fulcrum, a cylinder mounted on the said support and having inlet and outlet valves, a piston reciprocating in the said cylinder, and a plate mounted to slide
5 and engaging the said piston, and connected with the said extension, as set forth.

4. A power comprising a support, a pendulum hung in the said support and having an extension beyond its fulcrum-point, a cylinder
10 mounted on the said support, a piston reciprocating in the said cylinder, a connection between the said piston and the extension of the pendulum, and projections in the said support, in alinement with the weighted end of
15 the said pendulum, as set forth.

5. A power, comprising a support, a cylinder mounted on the support, a piston in the cylinder, and a pendulum hung on the support and having an extension beyond its fulcrum,

said extension projecting into the cylinder and
20 having a sliding connection with the inner face of the piston, as set forth.

6. A power, comprising a support, a cylinder on the support, a piston in the cylinder, a pendulum hung on the support and having
25 an extension beyond its fulcrum, said extension terminating in a ball, and a plate in sliding engagement with the inner face of the piston and provided on its under face with a
30 socket to receive the ball on the end of the extension of the pendulum, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ANDREW THOMAS PRATHER.

Witnesses:

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E. A. VON ARNIM.