No. 631,178. Patented Aug. 15, 1899.

T. REDDING.

APPARATUS FOR UTILIZING WAVE POWER.

(Application filed Jan. 7, 1899.)

(No Model.)

Fig. 1.

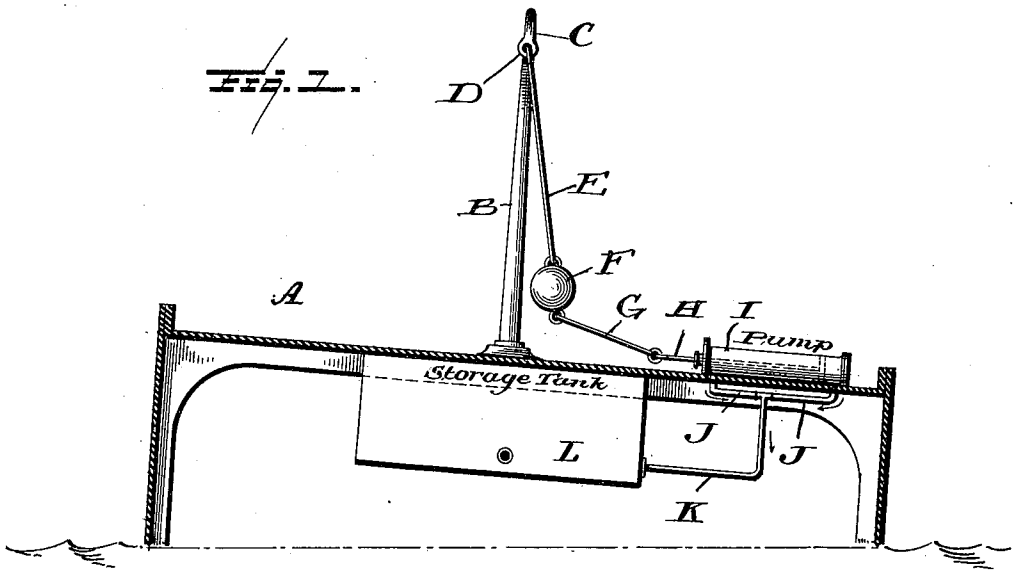
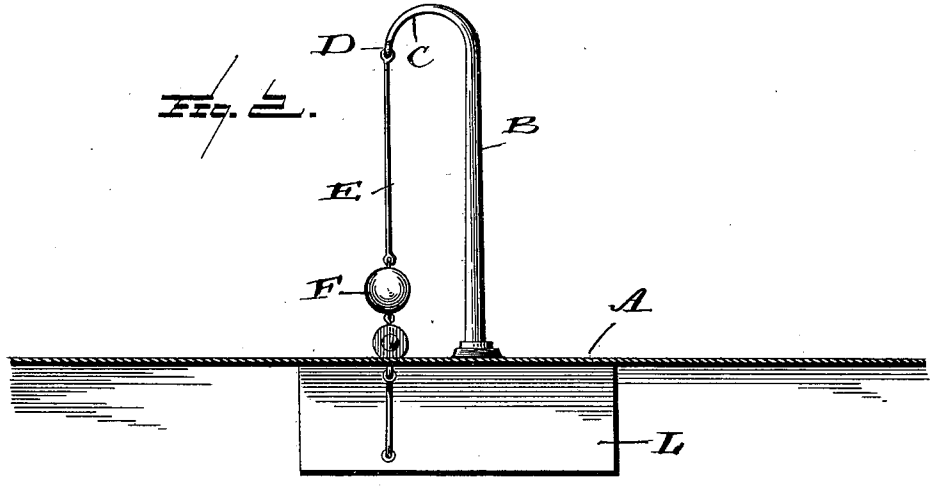


Fig. 2.



Witnesses

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APPARATUS FOR UTILIZING WAVE-POWER.

SPECIFICATION forming part of Letters Patent No. 631,178, dated August 15, 1899.

Application filed January 7, 1899. Serial No. 701,515. (No model.)

To all whom it may concern:

Be it known that I, THOMAS REDDING, a citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Apparatus for Utilizing Wave-Power; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in apparatus designed for use in utilizing wave-power.

The invention has more particular reference to the provision of simple and inexpensive apparatus for use upon shipboard which will serve to cause the rocking motion of the vessel at sea to operate a compression air-pump and to convey the air when so compressed into a suitable storage tank or reservoir, from which it may be utilized for operating machinery of any kind.

To this end and to such others as the invention may pertain the invention consists in the peculiar construction and in the novel combination, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the accompanying drawings, and then specifically defined in the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a vertical transverse section of a vessel provided with my improved form of apparatus, showing the air-compressing apparatus in actual use. Fig. 2 is a vertical central longitudinal section of the same.

Reference now being had to the details of the invention by letter, A designates the deck of a ship or other sea-going vessel. From the deck A rises an upright or post B, the upper end of which is bent to form an arm C, which arm extends rearwardly from the body portion of the upright B, and at its free end said arm C is provided with an eye or opening D, within which is linked or otherwise pivotally connected the upper end of the pendent link or rod E, said link or rod carrying at its free lower end the weight F. Connected with the weight F by a suitable link G is the outer end of the piston H of an air-pump I, said air-pump being secured to the deck of the vessel, as shown. Leading from the pump I are pipes J J, which communicate with a larger pipe K, which pipe K leads to a suitable air-storage tank or chamber L, located at any convenient or desirable point upon the vessel, and from which tank compressed air may be supplied to operate machinery for propelling the vessel or for any other purpose desired.

The operation of the device will from the foregoing description, in connection with the drawings, be readily understood. It will be seen that the rocking of the vessel by the action of the waves will serve to operate the air-pump through the connection of the piston of the pump with the weight carried by the pendulum-arm E, and it will also be seen that the air compressed by the pump will be forced into the storage-chamber L, from which chamber it may be conducted to any source of utilization.

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

An apparatus for utilizing wave-power, comprising in combination with a floating body the standard B erected thereon, the weighted pendulum adapted to swing on the upper curved end of said standard, the air-pump and connections between its piston and the lower weighted end of the pendulum, whereby as the float rocks, the piston may be actuated, as set forth.

In testimony whereof I affix my signature in presence of witnesses.

THOMAS REDDING.

Witnesses:
D. D. HARGER,
F. BAUCCHI,
H. J. GILLESPIE.