

No. 737,386.

PATENTED AUG. 25, 1903.

R. P. GIBBONS.
AUXILIARY SCREW PROPELLER.
APPLICATION FILED JAN. 5, 1903.

NO MODEL.

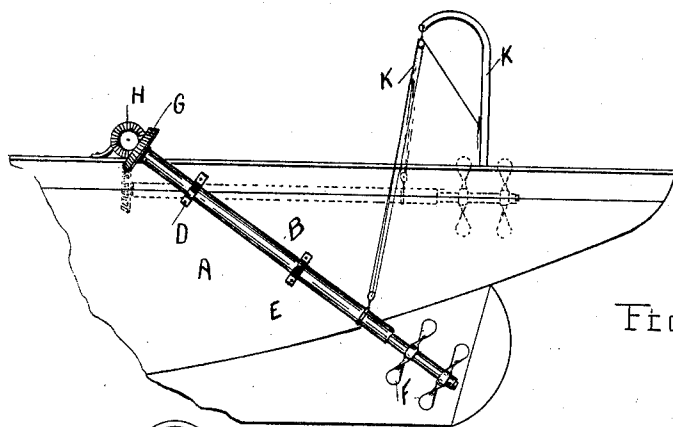


FIG: 1

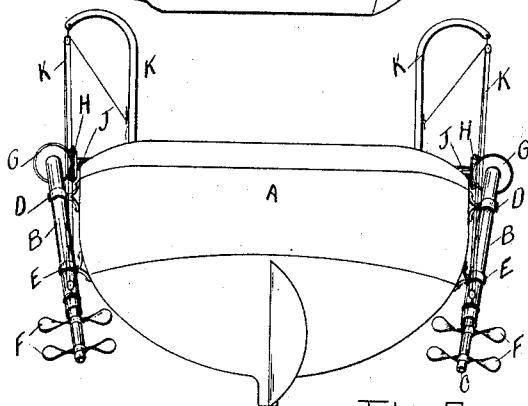


FIG: 2.

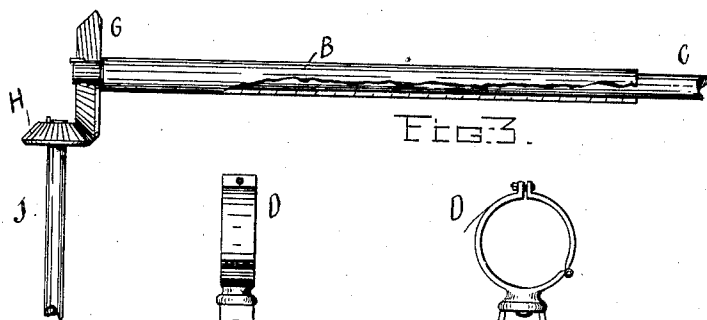


FIG: 3.

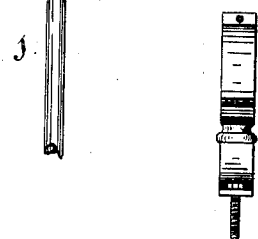


FIG: 4

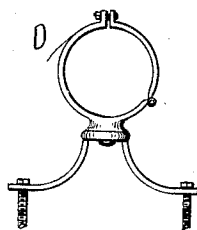


FIG: 5.

Witnesses:

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UNITED STATES PATENT OFFICE.

ROBERT PEARCE GIBBONS, OF KOPU, NEAR THAMES, NEW ZEALAND.

AUXILIARY SCREW-PROPELLER.

SPECIFICATION forming part of Letters Patent No. 737,386, dated August 25, 1903.

Application filed January 5, 1903. Serial No. 137,906. (No model.)

To all whom it may concern.

Be it known that I, ROBERT PEARCE GIBBONS, sawmill proprietor, a subject of His Majesty the King of the United Kingdom of Great Britain and Ireland, residing at Kopu, near Thames, in the Provincial District of Auckland and Colony of New Zealand, have invented a certain new and useful Auxiliary Screw-Propeller Attachment for Sailing-Ships and Disabled Steamers, of which the following is a specification.

The purpose of this attachment to vessels is to give them an auxiliary power whereby sailing-ships and smaller vessels can insure getting safely over a bar at the entrance to a bar harbor or making some progress in a calm or whereby disabled steamers can keep moving on, though but slowly.

The attachment consists in having a shaft loosely fitted in a sleeve or tube which is suitably connected to the ship's side in a slanting direction, with one or more propellers on lower end of shaft projected into the water and with a cog-wheel keyed to upper end of shaft which is geared to work with a bevel-wheel working from any suitable form of power in such a way that the propellers will be caused to rotate and propel the vessel.

The accompanying drawings show five figures, of which—

Figure 1 is a side elevation of the stern of a vessel with propeller attachment connected thereto. Fig. 2 is a stern view of a vessel with a propeller attachment on each side of the vessel. Fig. 3 is a horizontal view of the shaft inside of sleeve or tube with bevel-wheel connections and power-shaft vertically placed thereto. Fig. 4 is a side view of pivoted collar, and Fig. 5 is a front view of same.

The vessel A has the tube or sleeve B with the shaft C therein held to it by the swivel fastening or collar D and rests in the collar E, which is made to open up, being hinged in its center. One or more screw-propellers F are keyed or otherwise securely fastened to the lower end of the shaft C, and a cog-wheel G is keyed or otherwise suitably fastened to the head or top of the shaft C. A beveled wheel H is geared to work and rotate the wheel G and with it the shaft C and propellers F, the power being given to the wheel H by the shaft J, which is connected to any suit-

able form of power which may be available. A davit K may be used for hoisting the whole attachment to beneath or to the bulwarks and keeping it swung there, as shown in dotted lines, ready to be dropped into position for action and working at a moment's notice.

The invention is intended for use principally with disabled steamers; but it may be used by sailing vessels to advantage in calms and when progress is an absolute necessity to avoid danger and disaster. In the case of steamers having their tail-shaft broken or the screw propeller or propellers becoming disabled from any cause one or more of these auxiliary propeller attachments will save the vessel from possible disaster and her owners from considerable loss. When in use, the auxiliary screw-propellers F of this attachment will be put and kept in motion by any form of power available on the vessel A; but most probably steam donkey-engines, of which every vessel of any size has one or more, will supply the power wanted, as the wheel H and shaft J can be connected thereto, and so operate the wheel G and so work the shaft C and screws F. Any suitable form of bearing can be fitted inside the sleeve or tube B to facilitate the working of the shaft C, and the whole attachment can be further secured to the side of the vessel above described, if found necessary.

One attachment, as shown in Fig. 1, will probably be found sufficient to give a speed of about three knots—enough to overcome the usual sea-currents—but more can be fitted, if desired, so as to give increased speed, care being taken in all cases to have the propellers working below the bilge of the vessel, so as to avoid contact. Two blades only are shown to each propeller F on the drawings; but more can be used, if desired. In fact, any form of propeller can be used that will meet requirements.

The collar E is hinged in its center, so that the fastening of the upper half can be undone and the upper half thrown back, thus allowing the sleeve B and shaft C to be lifted thereout, while the collar D, working on a swivel-joint, will retain its hold on the sleeve B, so that as the propellers F on being drawn up by the rope and blocks K rise to the level of the bulwarks the wheel G will detach itself

from the wheel H and drop below the bulwarks in line with the propellers F. The whole attachment is shown on the drawings as being adjusted to work from the main deck 5 of the vessel; but it may be fixed to work from any deck, either upper or lower, as may be found most advantageous.

Having fully described my invention, what I desire to claim and secure by Letters Patent is— 10

The auxiliary screw-propeller attachment consisting in combination with a vessel, of a sleeve or tube pivotally mounted near its up-

per end on the side of the vessel, a hanger for supporting and removably holding the 15 lower end of said sleeve, a shaft mounted in said sleeve, one or more propellers mounted on the lower end of said shaft, driving mechanism connected to the upper end of the shaft, and means on the vessel for raising and 20 lowering said attachment.

ROBERT PEARCE GIBBONS.

Witnesses:

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