No. 655,140. Patented July 31, 1900.

F. WENDLER.

DRAG BRAKE FOR MARINE VESSELS.

(Application filed Aug. 24, 1899.)

(No Model.)

Fig: 1.

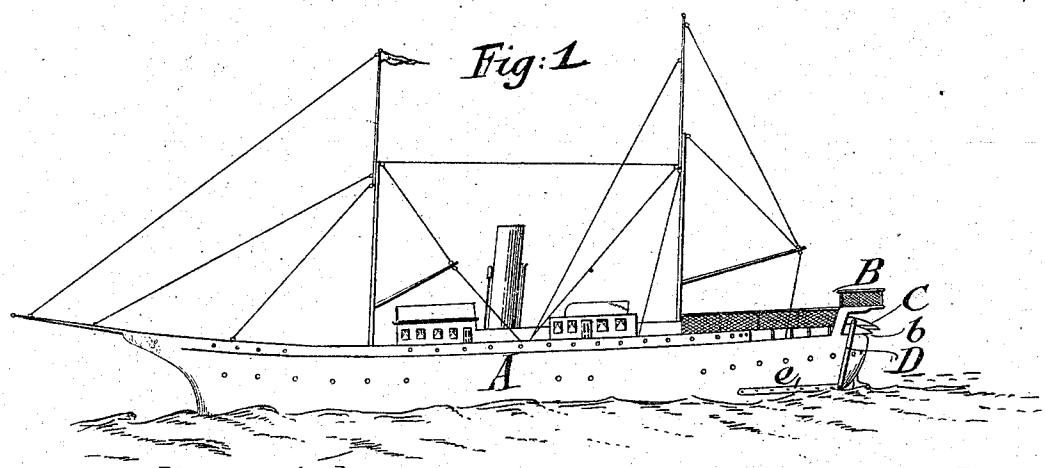


Fig: 2.

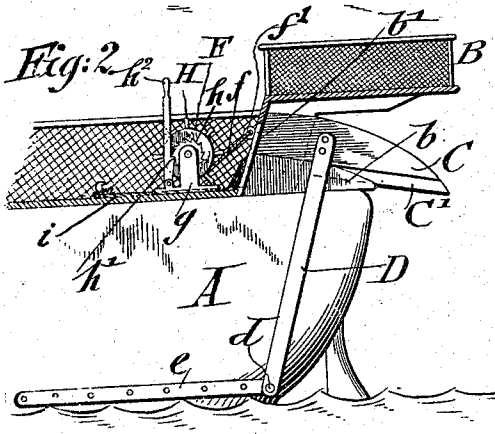


Fig: 3.

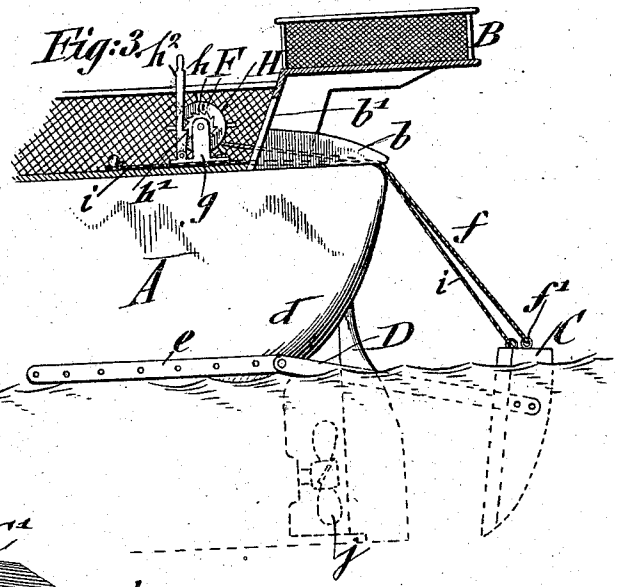
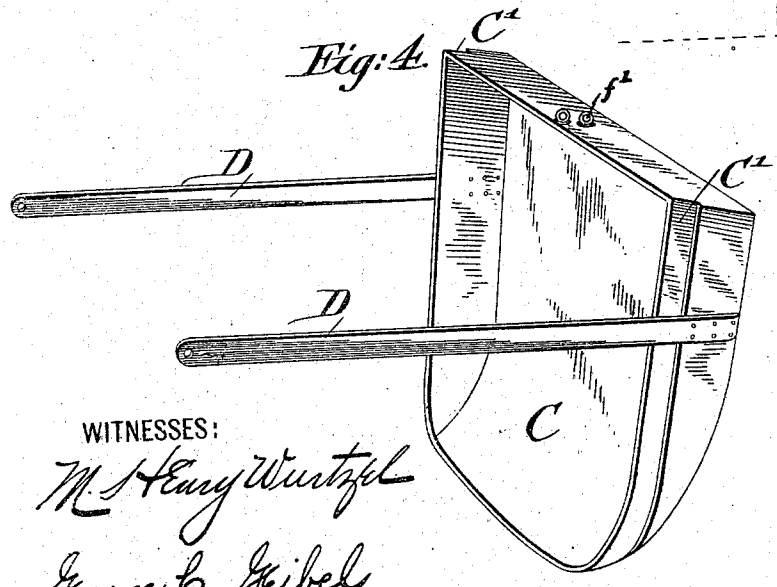


Fig: 4.



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DRAG-BRAKE FOR MARINE VESSELS.

SPECIFICATION forming part of Letters Patent No. 655,140, dated July 31, 1900.

Application filed August 24, 1899. Serial No. 728,291. (No model.)

To all whom it may concern:

Be it known that I, FRIEDRICH WENDLER, a citizen of the United States, residing at New York, in the borough of Brooklyn and State of New York, have invented certain new and useful Improvements in Drag-Brakes for Marine Vessels, of which the following is a specification.

The present invention relates to a drag-brake for marine vessels; and its object is to provide a simple, convenient, and efficient means for instantaneously applying the brake by dropping it astern the vessel behind the propeller.

The invention consists in a scoop-like drag which is connected with each side of the stern of a vessel by means of pivoted links or arms, and is provided with suitable raising and lowering means, so that the drag can be swung up onto the deck when out of use or be permitted to swing down aft of the vessel by its own weight, as will be hereinafter described in detail and then particularized in the claims.

In the accompanying drawings, Figure 1 is an elevation of the port side of a vessel, showing my improvement. Fig. 2 is an enlarged side view, parts being in section, of the stern of a vessel, showing my improvement in position of rest. Fig. 3 is a similar side view showing the drag in lowered using position, and Fig. 4 is a perspective detail of the drag and its arms or links.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A indicates a vessel provided with a raised stern-seat B on which the helmsman may sit, while below the seat, on the deck of the vessel, is fixed a pair of side cheeks or guides *b*, only one of which is shown, the other on the starboard side being apparent. Guided upon and resting on the guide-cheeks *b* is a scoop-shaped drag C, which is provided at each side with rigid arms or links D, that are pivoted at *d* to the opposite sides of the stern of the vessel A, the pivots being preferably applied to metallic side strips or cleats, such as *e*. The sides of the drag C are formed with guide grooves or ways C', so as to facilitate its being guided upon the cheeks *b*.

The drag is operated by means of a windlass F, mounted in suitable brackets *g* on the deck of the vessel, said windlass being connected by means of a rope or cable *f*, which passes through an opening *b'* in the riser of the seat, with an eye *f'* at the back of the drag, said windlass being turned by means of a hand-wheel H, so as to wind the rope *f* upon it and to raise or lower the drag. The shaft of the windlass carries a ratchet-wheel *h*, which is engaged by the tooth *h'* of a pivoted hand-lever h^2, arranged in front of seat B.

The downward movement of the drag is limited by means of a limit rope or cable *i*, so that the drag will sink into the water just behind the propeller *j*.

The operation is as follows: When out of use, the drag is supported out of sight upon the guide *b* under the seat B, and the cable or rope *f* is wound tightly upon the windlass, the parts being retained in position shown in Fig. 2 by the toothed hand-lever h^2 and ratchet-wheel *h*. If the vessel is to be suddenly stopped, the helmsman grasps the hand-lever h^2 and disengages it from the ratchet-wheel *h*, so that the weight of the drag will cause it to drop immediately aft in braking position, and in doing so to unwind the rope or cable *f* from the windlass. The separate limiting rope or cable *i* is provided so that the shock from the release and falling of the drag will not injure the windlass, else the rope *f* could be used to limit the downward movement of the drag. The braking action or resistance furnished by the drag and the action of the propeller (if it has not been itself stopped) in throwing the water against the drag now bring the vessel quickly to a standstill. The drag can now be shipped by the helmsman by turning the hand-wheel of the windlass and winding up the rope or cable *f* until the drag rests in normal position under the seat B and upon the guide therefor.

The drag-brake described is comparatively simple and may be quickly applied, so as to stop the vessel provided therewith.

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

1. The combination, with a marine vessel, of a swinging scoop-like drag-brake extending transversely across the stern, and means for raising and lowering the said drag-brake, substantially as set forth.

2. The combination, with a marine vessel, of a single scoop-like drag-brake, rigid links or arms extending from opposite sides thereof and pivoted to the sides of the lower part of the stern of the vessel, and means for raising and lowering the said drag-brake, substantially as set forth.

3. The combination, with a marine vessel, of a drag-brake, links or arms extending therefrom and pivoted to the sides of the lower part of the stern of the vessel, means for guiding and supporting the drag-brake on the deck, and means for raising and lowering the drag-brake, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

FRIEDRICH WENDLER.

Witnesses:
PAUL GOEPEL,
M. H. WURTZEL.