

(No Model.)

2 Sheets—Sheet 1.

J. HAUG.

PROPELLER DAM FOR TWIN SCREW VESSELS.

No. 473,745.

Patented Apr. 26, 1892.

FIG. 2.

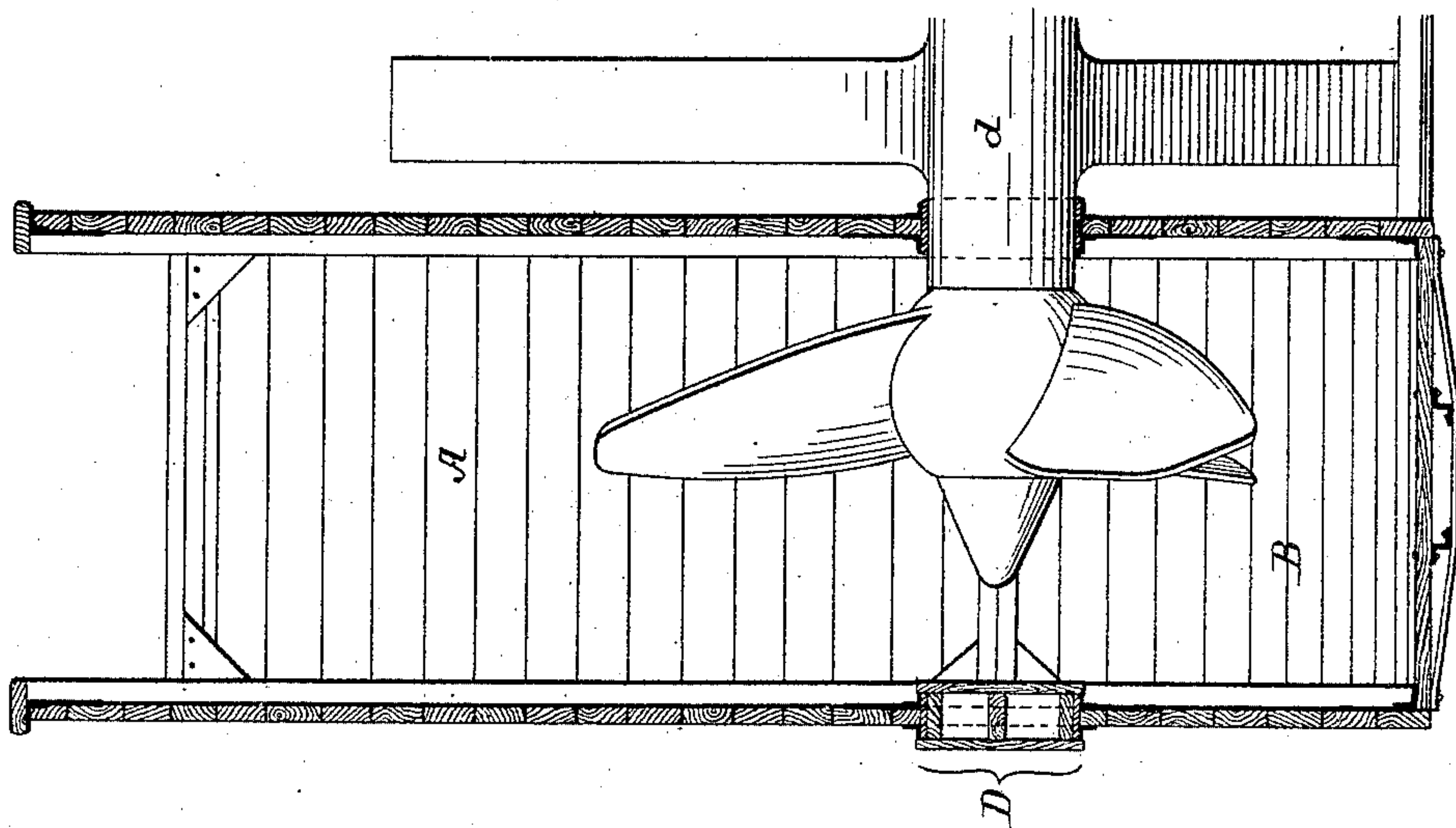
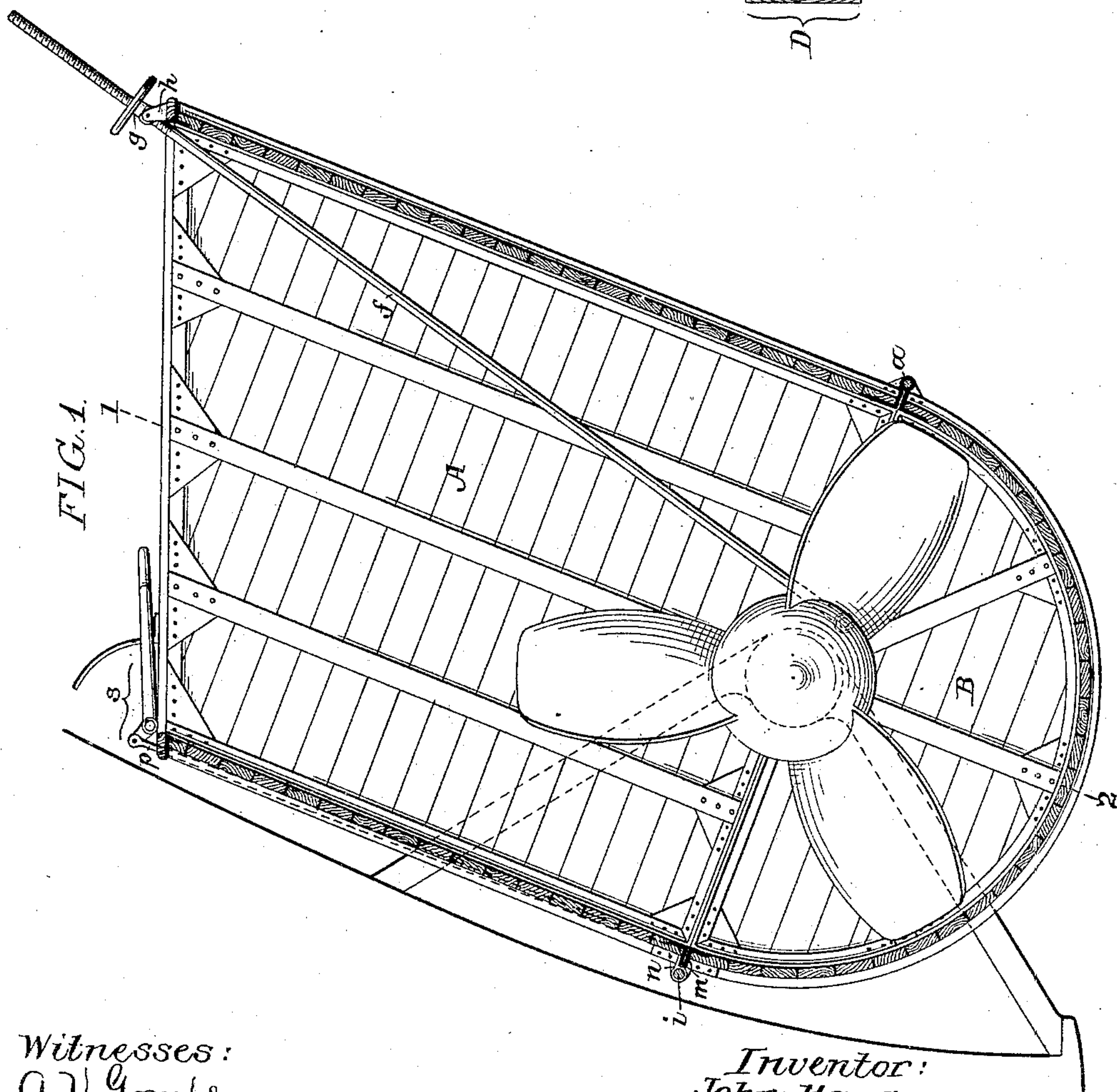


FIG. 1.



Witnesses:  
A. V. Group  
R. Schleicher

Inventor:  
John Haug  
by his Attorneys  
Howson & Howson

(No Model.)

2 Sheets—Sheet 2.

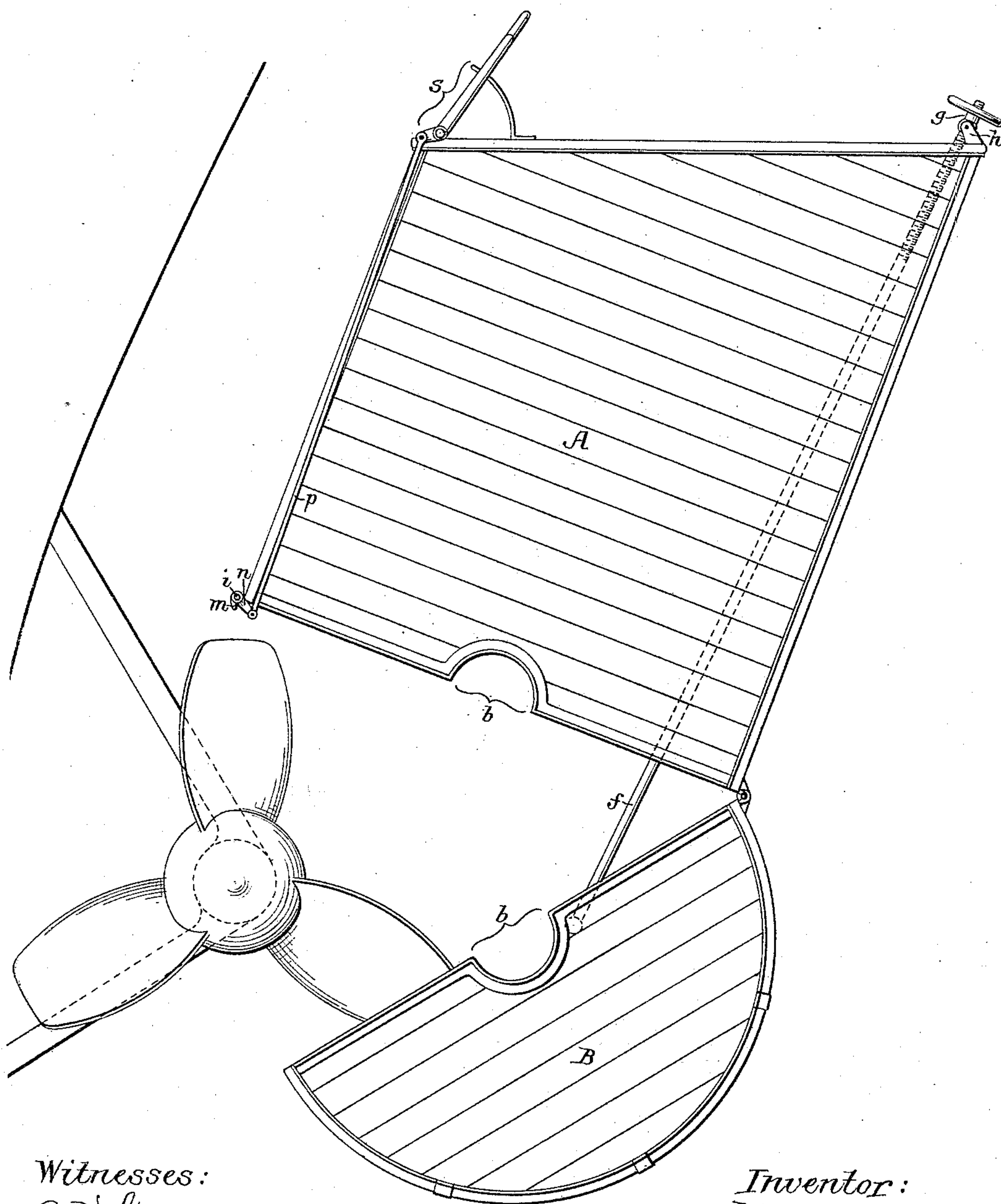
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FIG. 3.



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# UNITED STATES PATENT OFFICE.

JOHN HAUG, OF NORRISTOWN, PENNSYLVANIA.

## PROPELLER-DAM FOR TWIN-SCREW VESSELS.

SPECIFICATION forming part of Letters Patent No. 473,745, dated April 26, 1892.

Application filed January 9, 1892. Serial No. 417,441. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN HAUG, a citizen of the United States, and a resident of Norristown, Pennsylvania, have invented certain  
5 Improvements in Propeller-Dams for Twin-Screw Vessels, of which the following is a specification.

The object of my invention is to so construct a propeller-dam for twin-screw vessels that the  
10 same can be readily moved into position to inclose the propeller and can be as readily removed after inspection or repair has been completed, the dam being also constructed in such manner as to be applicable to either of the  
15 propellers and to be readily kept tight or free from water during the time that inspection or repair is being carried on.

In the accompanying drawings, Figure 1 is a transverse sectional view of my improved  
20 propeller-dam for twin-screw vessels, showing the same applied to the starboard-screw. Fig. 2 is a longitudinal section on the line 1 2, Fig. 1, and Fig. 3 is a rear elevation illustrating the manner of applying the dam to or  
25 removing it from the propeller.

A represents a rectangular box or casing open at top and bottom and composed of suitable timbers secured, by preference, to frame-work of wrought-iron or steel bars, and  
30 Bisasemi-cylindrical box likewise constructed and hung to the bottom of the box A at the outer side of the same by means of a suitable hinge or pivot rod *a*, whereby the two parts of the dam can be permitted to swing open,  
35 as shown in Fig. 3, so as to permit of the application of the dam to or its removal from the propeller, or can be closed, as shown in Figs. 1 and 2, after the dam has been applied to the propeller.

40 Suitable semicircular openings *b* are formed in the bottoms of the fore and aft sides of the box A and in the tops of the fore and aft sides of the box B for the reception of the bracket-bearing *d*, which projects from the hull of the  
45 vessel and carries the propeller-shaft. By forming openings in both the fore and aft sides of the boxes A and B the dam is rendered either applicable to either the starboard or port propeller, the openings in the forward  
50 sides of the boxes always embracing the bracket-bearing and the openings in the after

sides of the boxes being then closed by means of a suitable plug or stopper D, as shown in Fig. 2.

Various means may be adopted for open- 55  
ing and closing the lower box B of the dam and for retaining the same in position when closed. In the drawings I have shown a rod *f*, pivoted at the lower end to the forward side of the box B and threaded at the upper end 60  
for adaptation to a nut *g*, pivoted to a bearing *h*, mounted at the top of the box A, one of these operating devices being intended to be employed both at the forward and aft sides of the dam. At the inner side of the dam I 65  
have shown a rod *i*, having hooked catches *m* for engaging with a projecting flange on the frame-work at the inner portion of the box B, as shown in Fig. 1, said rod *i* having arms *n*  
70 connected by rods *p* to operating-levers *s* at the top of the box A, so that the catches *m* can be readily operated to engage with or release the flanged frame of the box B.

By making the dam in the form of the two boxes, the lower of which is closed except at 75  
the top and the upper closed except at the top and bottom, and by hinging the lower box to the upper one at the outer side, the dam can be applied to or removed from the propeller with the greatest facility and can be 80  
readily kept tight or free from water when in use, the only joint being one extending around the dam, so that the length of the joint is less than if it extended vertically from the bottom to the top of the dam. 85

Although I prefer the semi-cylindrical form for the lower box B of the dam because of the minimum displacement which results when this form is adopted, it will be evident that said lower box might be triangular rectangu- 90  
lar, or of any other available shape without departing from the main feature of my invention.

Having thus described my invention, I claim and desire to secure by Letters Patent— 95

1. The within-described propeller-dam for twin-screw vessels, the same consisting of upper and lower boxes hinged together at their outer sides, whereby the inner portion of the lower box can be dropped so as to permit the 100  
dam to pass over the propeller, substantially as specified.

2. The within-described propeller-dam for twin-screw vessels, the same consisting of upper and lower boxes hinged together at their outer sides, and each having, both in its fore and aft sides, openings for receiving the bracket-bearing for the propeller-shaft, whereby the dam is applicable to either the star-board or port propeller, substantially as specified.
- 10 3. The within-described propeller-dam for twin-screw vessels, the same consisting of an upper rectangular box and a lower semi-cylindrical box, said boxes being pivoted together at their outer sides, substantially as specified.
- 15 4. The combination, in a propeller-dam for twin-screw vessels, of the upper and lower boxes pivoted together at their outer sides, with operating screws and nuts whereby the movement of the lower section of the dam in respect to the upper section is controlled, substantially as specified.
5. The combination, in a propeller-dam for twin-screw vessels, of the upper and lower boxes pivoted together at their outer sides, with retaining-catches for locking together the inner portions of the two boxes when the dam is closed, and with rods and levers for operating said catches, substantially as specified.
- 30 In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN HAUG.

Witnesses:

EUGENE ELTERICH,  
HARRY SMITH.