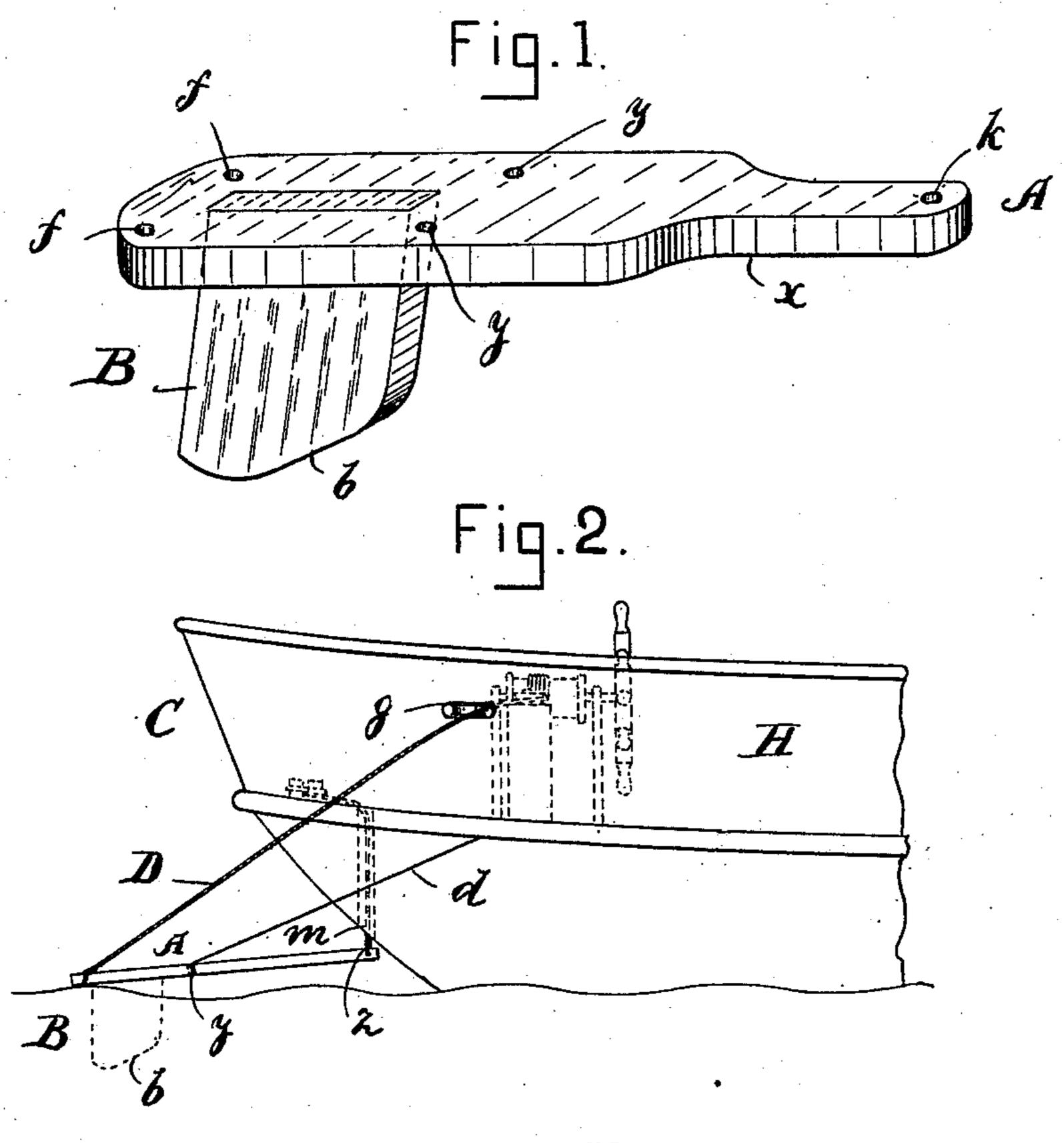
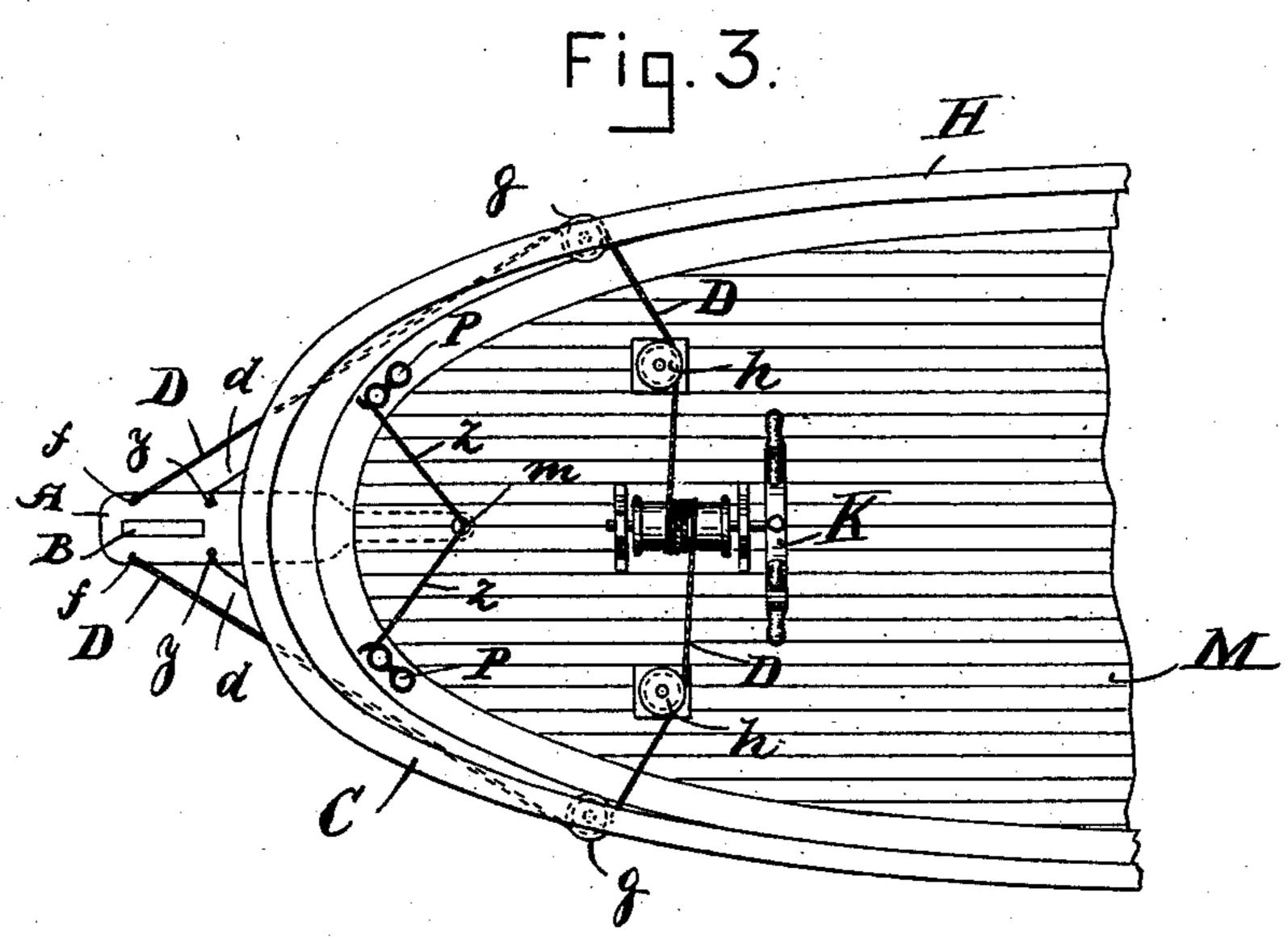
## R. FLEMING.

MEANS FOR ATTACHING AND CONTROLLING JURY RUDDERS.

No. 361,277.

Patented Apr. 19, 1887.





Wicnesses.

## United States Patent Office.

RICHARD FLEMING, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND VINCENT FOGARTY, OF SAME 'PLACE.

MEANS FOR ATTACHING AND CONTROLLING JURY-RUDDERS.

SPECIFICATION forming part of Letters Patent No. 361,277, dated April 19, 1887.

Application filed January 10, 1887. Serial No. 223,854. (No model.)

To all whom it may concern:

Be it known that I, RICHARD FLEMING, of Boston, in the county of Suffolk, State of Massachusetts, have invented a certain new and useful Improvement in Means for Attaching and Controlling Jury-Rudders, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an isometrical perspective view of my improved rudder detached from the vessel; Fig. 2, a side elevation of the stern of a vessel with the rudder attached, and Fig. 3 a top plan view of the same.

Like letters of reference indicate corresponding parts in the different figures of the

20 drawings.

My invention relates more especially to that class of rudders known as "jury-rudders;" and it consists in a novel construction and arrangement of parts, as hereinafter more fully set forth and claimed, the object being to produce a simpler and more effective device of this character than is now in ordinary use.

around the sheaves g g in the bulk-head, and thence around the pulleys h h, to the steering-wheel K. This arrangement of parts permits the body of the rudder to float freely on the water, the rudder proper, B, being immersed, thereby serving the purpose of the ordinary rudder and enabling the helmsman to steer

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following

explanation.

In the drawings, A represents the body of the rudder, B the rudder proper, and C the stern of the vessel. The body consists of a 35 broad heavy piece of plank, one end, x, of which is narrowed and rounded to fit the rudder-port m, and is provided with holes k y, adapted to receive the ropes or chains z d, by which it is secured to the vessel.

The rudder proper, B, is preferably composed of heavy plank, its upper end being secured in a mortise in the outer end of the body A, so that when in use it is suspended perpendicularly from said body, its free end being slightly beveled on the inner or forward

ing slightly beyeled on the inner or forward side, as shown at b. Two holes, f f, are provided in the rear or outer end of the body A, for receiving the steering or tiller ropes D.

In either side of the bulk-head H are jour-50 naled horizontally-arranged pulleys or sheaves g, and upon the deck M, between the pulleys

g and the wheel K, are journaled horizontally-

arranged sheaves or pulleys h.

My improvement is designed for use when the rudder of a vessel has been lost or acci- 55 dentally unshipped or broken; and in its use the ropes or chains z are secured in the hole k of the body A, and then passed through the rudder-port m and drawn taut until the end of the body is firmly held against the stern of 60 the vessel, when the ropes z are secured to cleats P on the deck M, thereby flexibly connecting the rudder and hull of the vessel and permitting the rudder to roll as it floats in the water. Stays or guards d are fastened at 65 one end in the holes y y of the body, their other ends being secured to the bulk-head H of the vessel, their purpose being to hold the rudder more firmly in position and prevent it from "slatting." The tiller-ropes D are se- 70 cured at one end in the holes f f, and passed around the sheaves g g in the bulk-head, and wheel K. This arrangement of parts permits the body of the rudder to float freely on the 75 water, the rudder proper, B, being immersed, thereby serving the purpose of the ordinary rudder and enabling the helmsman to steer the vessel, by means of the wheel K, in the usual manner.

I do not confine myself to the use of two ropes, z, for suspending the body  $\Lambda$  or securing the same to the stern of the vessel, as one may be employed, if preferred; neither do I confine myself to the use of the stays or guard-85 ropes d, as these may be omitted, if desired; nor to the use of the wheel K, as any other suitable mechanism may be employed for operating the tiller-ropes; nor to the use of the intermediate sheaves, h, for relieving any sud-90 den strain or shock on the wheel, as these may be omitted, if preferred. Chains may also be used in place of the ropes.

Having thus explained my invention, what I claim is—

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1. In a rudder of the character described, a longitudinally-arranged body adapted to float on the water and provided with a downwardly-projecting rudder proper, in combination with a rope or ropes for securing one end of said 100 body to the stern of the vessel, tiller-ropes for controlling said rudder, attached to said body

and working on pulleys disposed in the bulwarks of said vessel, stays secured to the side of said body and to said vessel, and a wheel for governing said rudder, substantially as de-5 scribed.

2. In a rudder of the character described, the combination of the following instrumentalities, to wit: a longitudinally-arranged floating body provided with a downwardly-projecting rudder proper, a rope or ropes for securing the inner end of said body to the vessel, said ropes being inserted in the rudder-post hole, tiller-ropes secured to the outer end of

said body, pulleys for said ropes journaled in the bulwarks of the vessel, a wheel for working the tiller-ropes, and sheaves disposed on the deck of the vessel between the bulwarks and wheel, around which the tiller-ropes pass to relieve the strain on the wheel, all being constructed, combined, and arranged to operate 20 substantially as set forth.

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RICHARD FLEMING.

Witnesses:

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