

No. 682,476.

J. MAROLF.
RUDDER.

Patented Sept. 10, 1901.

(No Model.)

(Application filed June 3, 1901.)

Fig. 1.

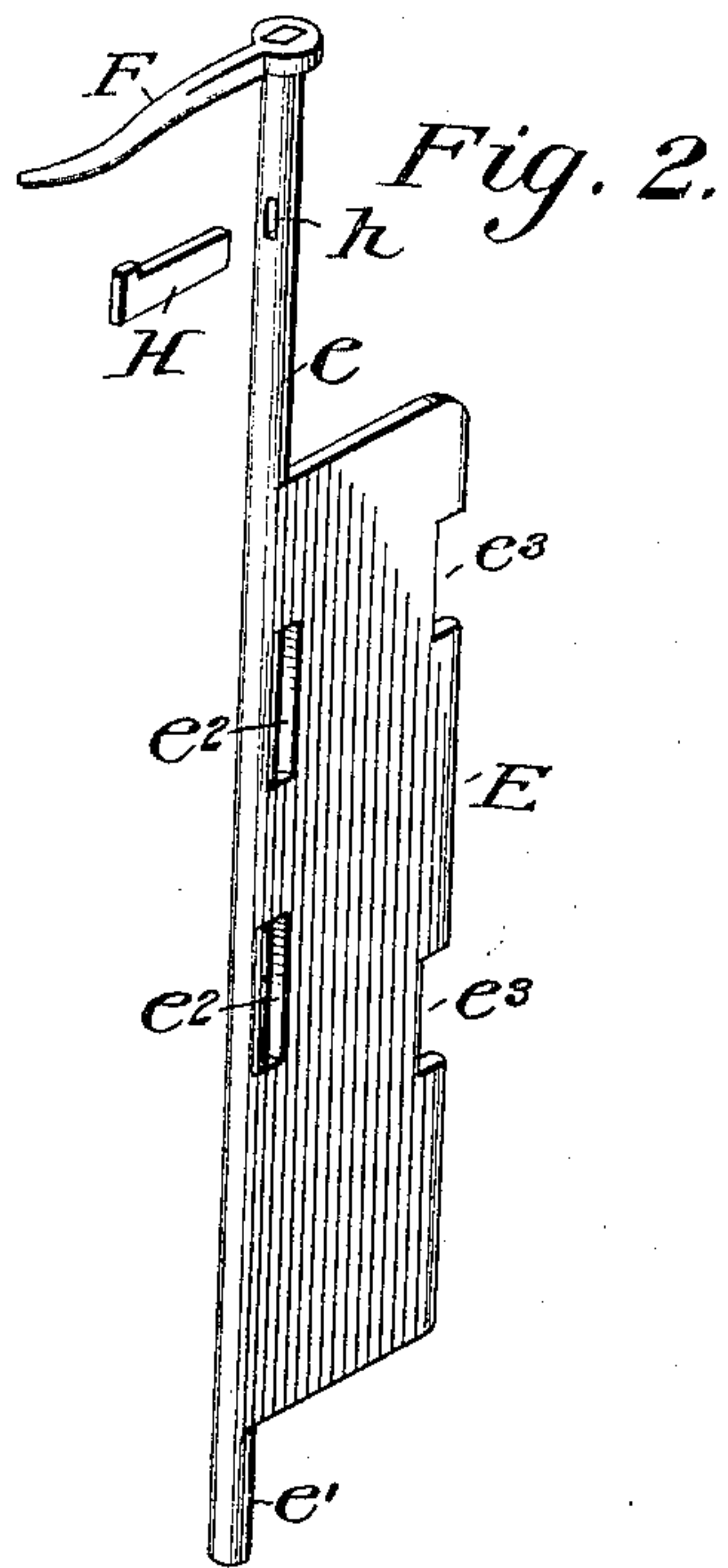
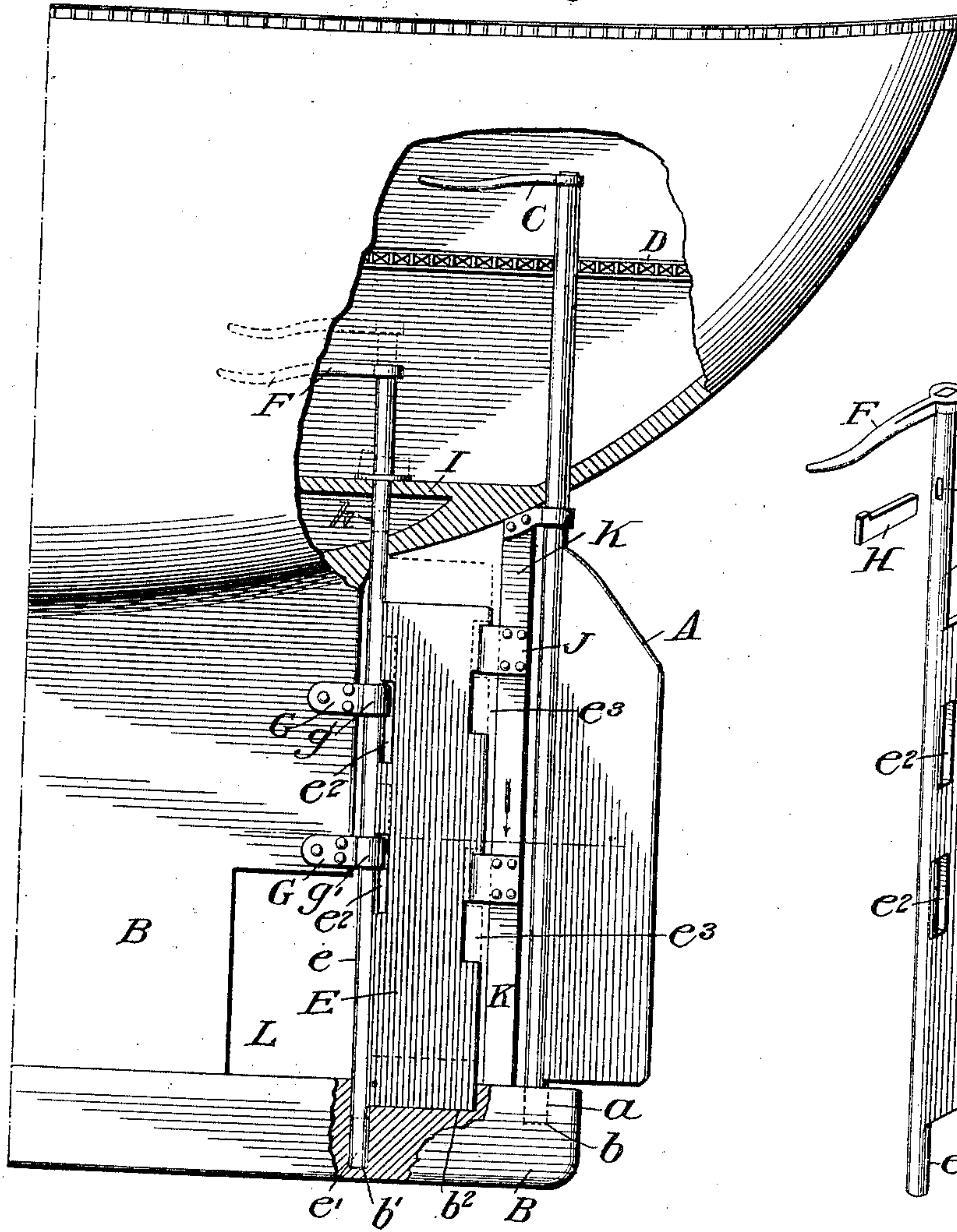


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN MAROLF, OF TILLAMOOK, OREGON.

RUDDER.

SPECIFICATION forming part of Letters Patent No. 682,476, dated September 10, 1901.

Application filed June 3, 1901. Serial No. 62,861. (No model.)

To all whom it may concern:

Be it known that I, JOHN MAROLF, a citizen of the United States, residing at Tillamook, in the county of Tillamook and State of Oregon, have invented certain new and useful Improvements in Rudders, of which the following is a specification.

The object of my invention is to provide boats, ships, and other like vessels with a spare rudder that may be conveniently used in the event of the main rudder being carried away or disabled. Heretofore when the rudder has become disabled or carried away it has been necessary either to repair the old rudder or to lower and adjust in place a new one.

According to my invention I provide a boat, ship, or other similar vessel with two rudders so mounted and arranged that one of the rudders may be used ordinarily, while the other rudder may be readily brought into action when the first one is lost or disabled. The main rudder may be mounted at the stern of the ship or vessel in the usual way, while the spare rudder may be mounted immediately forward of the main rudder, devices being provided for locking the spare rudder to hold it stationary when the main rudder is in use and for readily allowing it to be moved into operative position when desired.

In the accompanying drawings, Figure 1 is a view, partly in side elevation and partly in section, of the stern of a boat or vessel with my improvements applied. Fig. 2 is a perspective view of the spare rudder. Fig. 3 shows a transverse section on the line 3-3 of Fig. 1.

The main rudder A is mounted at the extreme rear end of the keel B, its post being provided with a downwardly-projecting portion a , seated in a socket b in the keel. The post extends upwardly through the hull of the vessel and may be provided with any suitable operating means, as a handle C. As shown in the drawings, the handle C is located above the deck D. The spare rudder E is located immediately forward of the main rudder A, and it is hinged to the rear end of the keel B. The rudder-post e has a downwardly-projecting portion e' , that enters a socket b' in the keel. The lower edge of the rudder extends into a recess b^2 , formed in the keel.

The rudder-post is prolonged upwardly and extends through the hull of the vessel and at its upper end is provided with operating means, such as a handle F, which, as shown in the drawings, is located below the deck D. At its forward edge the rudder is formed with slotted openings e^2 close to the post e , and the eyes g' on the straps G embrace the rudder-post e and pass through the slots e^2 , the straps being secured to the rear end of the keel. By this means the rudder E may be raised and lowered and may also be turned in either direction about a vertical axis. As shown in the drawings, the rudder E is lowered; but it may be raised and held at an elevated position by means of a key H, passing through or into an opening h in the rudder-post e above the partition I in the hull of the vessel. I have shown by dotted lines in Fig. 1 how the rudder may be raised and held at an elevated position. In order to guide the rudder when being moved vertically and to lock it when lowered, I provide bifurcated guides J, which are secured to a post K, extending vertically from the hull of the vessel to the keel between the two rudders. The bifurcated ends of the guides embrace the rear edge of the rudder E, as indicated in Fig. 3. The rudder E is provided with recesses e^3 , which register with the guides J when the rudder E is elevated. When the spare rudder is thus elevated and held in the position shown by dotted lines, it may be turned in either direction about a vertical axis; but when the rudder is lowered to the position shown by full lines in Fig. 1 it is prevented from turning both by the guides J and by reason of the fact that the lower end of the rudder projects into the recess b^2 .

When a boat, ship, or other vessel is equipped with two rudders in this way, the main rudder may be used ordinarily without interference from the spare rudder. If the main rudder is carried away, the spare rudder may be brought into action, or if the main rudder is disabled it may readily be removed and the spare rudder used. The rear end of the keel may be cut away at L to provide space for a screw-propeller, if desired.

I claim as my invention—

1. The combination with the keel of a vessel, of a main rudder and a spare rudder mounted

adjacent to the main rudder, movable independently thereof, and provided with means for locking it when not in use.

2. The combination with the keel of a vessel,
5 of a main rudder, a spare rudder mounted adjacent thereto, but independently movable, means for raising and lowering the spare rudder, and means for locking the spare rudder when not in use.

10 3. The combination with the keel of a vessel, of a main rudder, means for operating it, a spare rudder mounted forward of the main rudder, means for independently operating

the spare rudder, and devices for locking the spare rudder when not in use.

4. The combination with the keel of a vessel,
15 of a main rudder, a spare rudder movable vertically, means for guiding the spare rudder when moved vertically, and for locking it when not in use.

20 In testimony whereof I have hereunto subscribed my name.

JOHN MAROLF.

Witnesses:

LOUIS OLSEN,
B. L. EDDY.