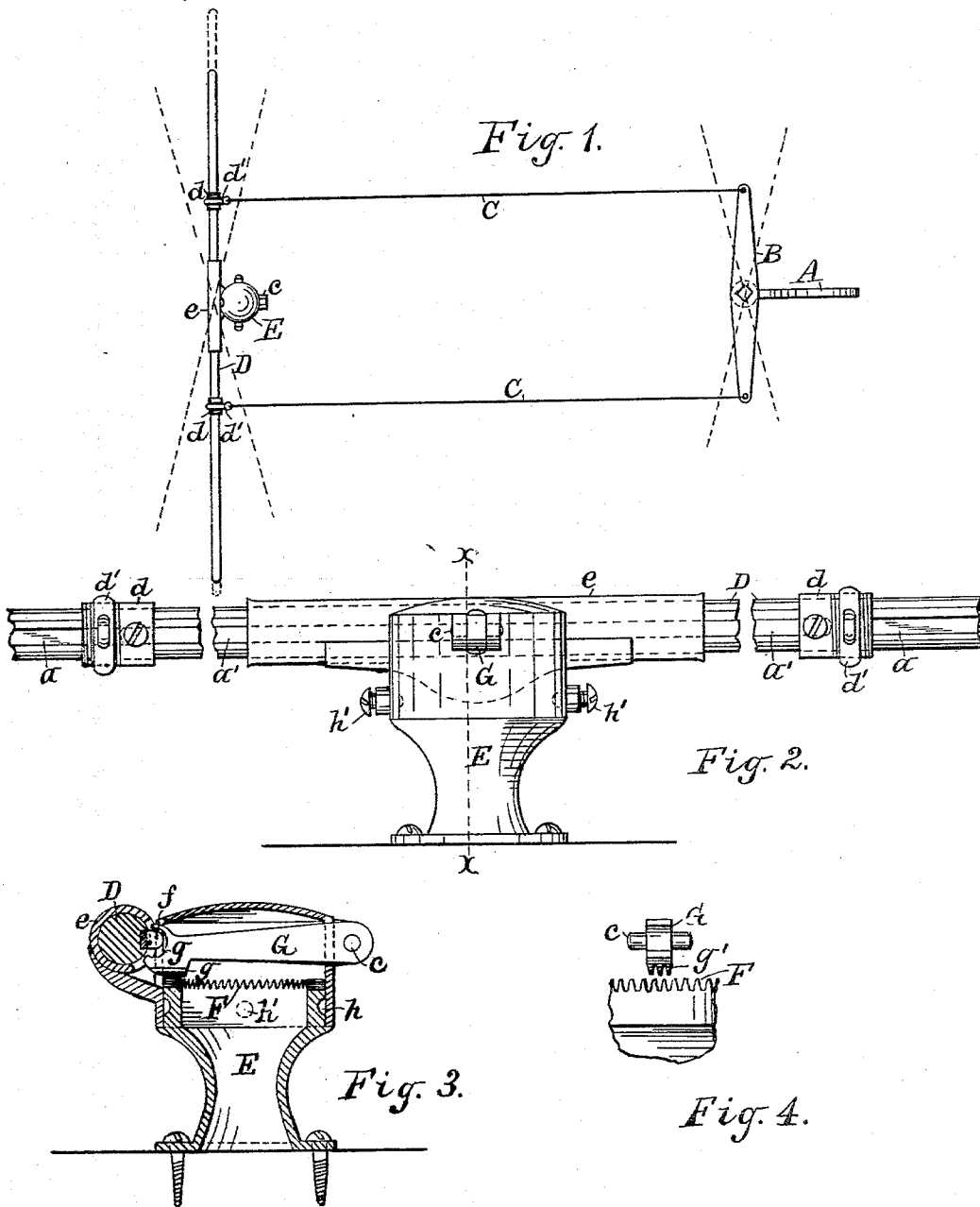


(No Model.)

W. R. BAKER.
RUDDER LOCKING APPARATUS.

No. 531,896.

Patented Jan. 1, 1895.



WITNESSES:
Mark W. Dewey
H. M. Seamans

INVENTOR,
William R. Baker
By *C. H. Duell*
his ATTORNEY.

UNITED STATES PATENT OFFICE.

WILLIAM R. BAKER, OF WATERTOWN, NEW YORK.

RUDDER-LOCKING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 531,896, dated January 1, 1895.

Application filed March 21, 1894. Serial No. 504,523. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. BAKER, of Watertown, in the county of Jefferson, in the State of New York, have invented new and useful Improvements in Rudder-Locking Apparatus, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to improvements in locking apparatus for rudders, and the object is to provide means whereby a single operator may manage a small sail-boat easily and effectively.

By my invention a man can sit in a part of the boat remote from the rudder on either side thereof, and steer the boat while managing the sail, or, if necessary, he can lock the rudder in any desired position while operating the sails or performing any other duties.

To this end my invention consists in the combination with the rudder, of a pivoted lever remote from the rudder and connected therewith, and means whereby the lever may be locked in any position desired; and my invention consists in certain other combinations of parts hereinafter described and specifically set forth in the claims.

In the drawings hereto annexed and forming a part of this specification, Figure 1 is a top plan view of my locking and operating device connected to a rudder. Fig. 2 shows the rear side elevation of my invention with the ends thereof broken away. Fig. 3 is a sectional view on line *x, x*, of Fig. 2; and Fig. 4 is an end view of the locking lever together with a portion of the annular stationary rack to engage the locking lever.

Specifically referring to the drawings, A indicates the rudder of a boat.

B is the steering yoke secured to the rudder, and C, C are the steering cords or connections extending between the steering yoke and the operating rod or lever, D, which is pivoted upon a standard, E, fixed to the deck or other part of the boat. The pivoted rod or lever, D, preferably extends parallel or approximately parallel to the steering yoke which is secured to the rudder post at right angles to its blade.

The connections, C, are preferably cords but may be rods or wires as desired, or the

cords may be wound around the rudder post and the yoke dispensed with.

The rudder may be turned in either direction as shown clearly by the dotted lines in Fig. 1 of the drawings.

On the rod, D, which is provided with a groove, *a*, on its rear side extending its entire length, except perhaps at its extreme ends to prevent it from being entirely removed from the standard, E, are three sleeves, *e*, and *d*, *d*, which are connected together by a narrow strip of metal, *a'*, which lies loosely in the said groove. This construction allows the rod or lever, D, to be moved longitudinally in either direction while the sleeves are held apart by the strip *a'*. The longer and central sleeve, *e*, is rigidly secured to the upper part of the standard, E, which rotates with it. The short sleeves *d*, *d* are provided with rings, *d'*, *d'*, which are threaded to engage thread on the sleeves, the object of which is to hold the rings in place on the sleeves, and, at the same time allow the sleeves, *d*, *d*, to be rotated with the rod without rotating the rings, *d'*, *d'*. The said rings are provided with eyes to which the cords, C, C, are attached.

The standard, E, is in two parts, viz: The base which is secured to the deck, and the cap, carrying the sleeve, *e*, which cap is sleeved upon the upper part of the said base. To prevent the cap from being raised from the base, I provide a groove, *h*, around the upper part of said base and two screws *h'* passing through the cap on diametrically opposite sides thereof engage the groove so as to allow the cap to be turned easily. The top edge of the base within the cap is provided with a series of notches forming an annular rack F, which is adapted to be engaged, when desired to lock rod D and rudder A in position, by a lever G lying within and pivoted to the cap at *c*. The said lever, G, extends across the interior of the cap and is provided with a recess, *g*, in its free end which is engaged by a projection, *f*, on the strip, *a'*, which projection extends through a slot between the rod and the interior of the cap of the standard E.

It will be obvious that by simply twisting or rotating the rod, D, on its axis, with the strip, *a'*, and projection, *f*, thereon, the lever, G, will be raised or lowered, to release or en-

gage the rack F. Several teeth, g' , on the lower side of the free end of the lever serve to engage the teeth of the annular rack. When the lever is raised the rod and cap are free to rotate on a vertical axis to turn the rudder but when the lever is lowered, the cap is locked to the base of the standard E and the rod, D, and rudder is held in the desired position.

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

15 1. In a steering mechanism, the combination with the rudder, of a pivoted lever connected to the rudder, a stationary rack, a small lever adapted to oscillate with the first mentioned lever and to engage the rack, and means carried by the first lever to operate the latter, as and for the purpose described.

20 2. In a steering mechanism, the combination with the rudder, a standard secured to the boat remote from the rudder, a sleeve pivoted to the standard, a rod in the sleeve adapted to slide longitudinally in the said sleeve and connections between the sleeve and the rudder as set forth.

25 3. In a steering mechanism, the combination with the rudder, a standard secured to the boat remote from the rudder, a sleeve piv-

oted to the standard, connections between the sleeve and the rudder, a rod in the sleeve adapted to slide longitudinally in the said sleeve, and means to lock the rudder connected to the rod and adapted to be operated by rotating the said rod on its axis, substantially as described and shown. 35

4. In a steering mechanism, the combination, with the rudder, a yoke, a standard secured to the deck remote from the yoke, a sleeve pivoted to the standard, a rod in the sleeve adapted to slide longitudinally in the sleeve, a sleeve on both sides of the first mentioned sleeve on the rod, a strip connecting the sleeves together, a groove in the rod for the strip to slide in, connections between the sleeves and the steering yoke, a stationary circular rack on the standard, a lever carried by the sleeves and adapted to engage the rack, and a projection on the said strip engaging the lever to operate the same, substantially as described and shown. 45 50

In testimony whereof I have hereunto signed my name.

WILLIAM R. BAKER. [L. S.]

Witnesses:

A. D. CHATTAWAY,
F. R. HUNTINGTON.