(No Model.)

E. D. JOYNER.

RUDDER CONNECTION FOR BOATS.

No. 317,460. Patented May 5, 1885.

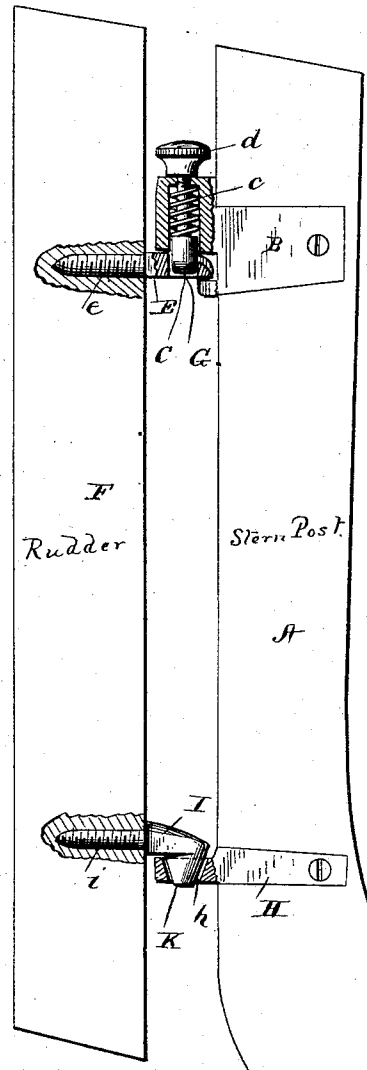
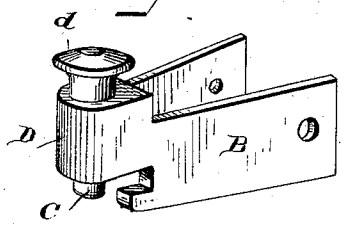


Fig. 1.

Fig. 2.



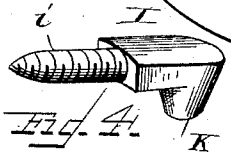
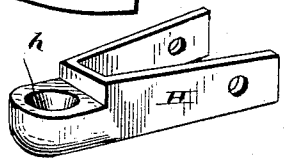


Fig. 4.

Fig. 5.



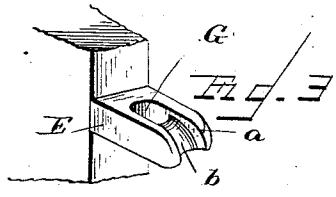


Fig. 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

EDGAR D. JOYNER, OF GLENS FALLS, NEW YORK.

RUDDER-CONNECTION FOR BOATS.

SPECIFICATION forming part of Letters Patent No. 317,460, dated May 5, 1885.

Application filed November 20, 1884. (No model.)

To all whom it may concern:

Be it known that I, EDGAR D. JOYNER, a citizen of the United States, residing at Glens Falls, in the county of Warren and State of New York, have invented certain new and useful Improvements in Rudder-Connections for Boats; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has relation to rudder-connections, or more particularly to devices for hanging the rudder to the stern of the boat, and the object is to provide a simple and reliable means whereby the rudder may be instantly attached or detached with the greatest facility and in the simplest manner; and to these ends the novelty consists in the construction, combination, and arrangement of the parts of the same as will be hereinafter more fully described, and particularly pointed out in the claims.

In the accompanying drawings the same letters of reference indicate the same parts of the invention.

Figure 1 is a side elevation, partly in section, of my invention as it appears in operation. Fig. 2 is a perspective view of the spring-bolt connection detached from the stern-post. Fig. 3 is a similar view of the upper socket; Figs. 4 and 5, detached perspective views of the lower stud and socket.

A is the stern-post to which is secured the spring-bolt connection B, which is provided with a bolt, C, extending through the boss D, and terminating in a head or handle, *d*, and *c* is a spiral spring, which normally presses the said bolt downward.

E is the female socket, and it is provided with a screw-threaded shank or tang, *e*, by means of which it is firmly secured to the rudder F. This socket has a guiding-channel, *a*, having its base *b* inclined, so that when the end of the bolt C enters the channel *a* it strikes and rides up the incline *b*, and then drops into the hole G.

H is the lower female socket suitably secured to the stern-post, and provided with a conical recess, *h*.

I is the lower stud, and it has a screw-threaded shank, *i*, for securing it to the rudder, and its outer end terminates in a depending conical lug, K, corresponding in form to the recess *h* in the socket H.

It will thus be seen that if the lug K be inserted in the recess *h*, and the upper female socket, E, pressed against the bolt C, the bolt slides up the incline *b* and drops into the hole G, and the rudder is thus simply and securely attached to the boat, while to remove it it is only necessary to raise the bolt-head *d*, so as to let the rudder drop back and then raise it from the socket H, an operation that is done in less time than it takes to describe it. As the weight comes upon the lower stud and socket, they are made large and strong, and the conical bearing furnishes a broad bearing, so that the wear and tear of use will be a mere minimum, and the whole device being made of brass or other anti-corrosive metal will not be affected in salt-water.

Besides the use to which my invention is here described, it will be understood that I do not limit myself to such application, as it will be found just as effective, reliable, and convenient for removable summer doors, blinds, screens, and various other uses that will readily suggest themselves, and in applying it to these uses it is only necessary to reverse the parts—that is, to turn the connections upside down—and put the upper set in place of the lower one, and vice versa. Of course the shanks in this case will be formed the same as ordinary hinge-butts, the connection proper remaining the same.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

1. In a rudder attachment for boats, the combination, with the spring-bolt connection B, of the female socket E, having inclined portion *b* and bolt-hole G, as and for the purpose set forth.

2. In a rudder attachment for boats, the combination, with the connection B, having bolt C, of the socket E, having channel *a*, incline *b*, and bolt-hole G, as and for the purpose set forth.

3. In a rudder attachment for boats, the combination, with the connection B, having bolt

C, spiral spring *c* and handle *d*, of the socket E, having incline *b* and hole G, as and for the purpose set forth.

4. In a rudder attachment for boats, the combination, with the socket H, having conical recess *h*, of the stud I, having the depending conical lug K, as and for the purpose set forth.

5. In a rudder attachment for boats, the combination, with the spring-bolt connection B and female socket E, of the socket H, and stud I, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

EDGAR D. JOYNER.

Witnesses:

EDWARD L. MILLS,
FLETCHER JOYNER.