No. 889,293. PATENTED JUNE 2, 1908.

E. H. BARNEY.

COURSE MARKER.

APPLICATION FILED AUG. 5, 1907.

Fig. 1.

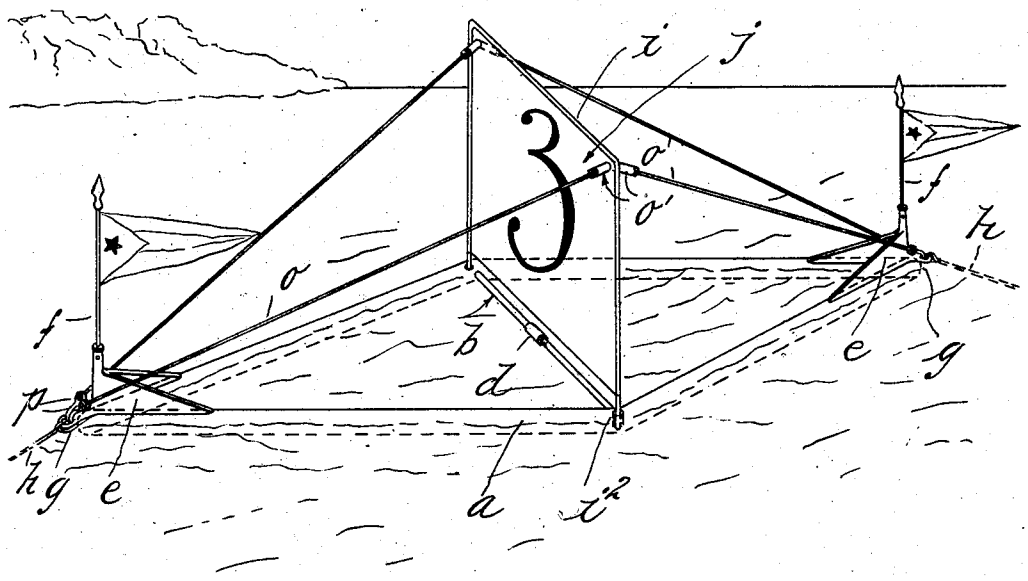


Fig. 2.

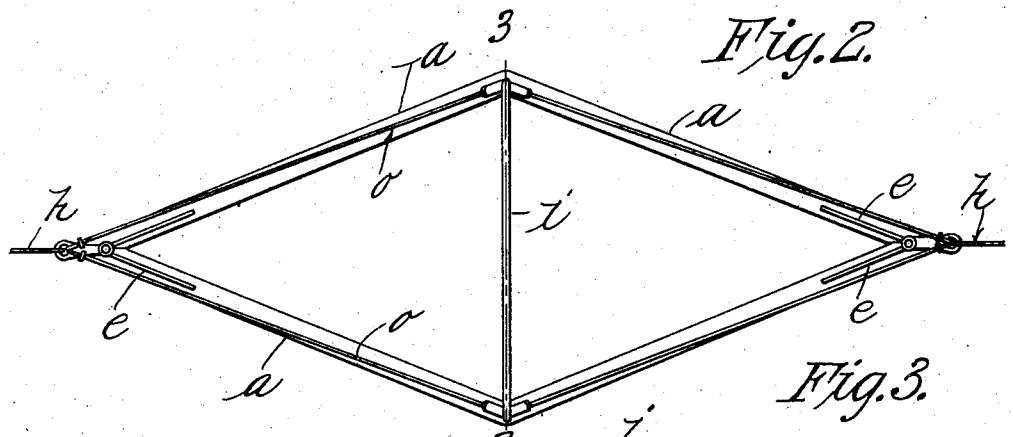
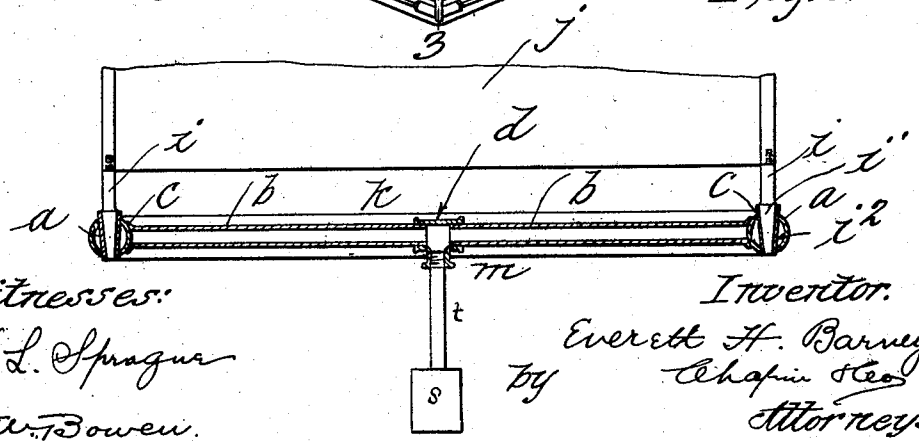


Fig. 3.



Witnesses:

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COURSE-MARKER.

No. 889,293. Specification of Letters Patent. Patented June 2, 1908.

Application filed August 5, 1907. Serial No. 387,218.

To all whom it may concern:

Be it known that I, EVERETT H. BARNEY, a citizen of the United States of America, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Course-Markers, of which the following is a specification.

This invention relates to improvements in course markers and is adapted primarily for boat races to indicate the limits of the courses to be rowed, and also the number of the course.

It consists broadly in providing a suitable tubular framework having means for supporting a frame at right angles thereto, and on which the number of the course may be placed; also in means for supporting at the opposite ends thereof anchor and flag-staff retaining devices.

An essential feature of my marker is to provide one that can readily be taken apart for shipment and again readily assembled when necessary.

Further details of the nature and object of my improvement will be fully set forth in the body of the specification, reference being made to the drawings in connection therewith.

In the drawings forming part of this application,—Figure 1 is a perspective view of the completed structure in an assembled position. Fig. 2 is a top plan view of the same. Fig. 3 is a detail transverse sectional view on the line 3—3, Fig. 2.

Referring to these drawings in detail, *a* designates the tubular diamond-shaped base portion of the marker, the tubes being preferably made of thin galvanized iron of suitable diameter so as to provide sufficient buoyancy for the structure. These tubes are secured to each other at the ends and side portions of the frame by any suitable means, as brazing or soldering.

b designates tubes extending from side to side of the base-piece *a* and are secured thereto by means of solder or other suitable means at the point *c*. Located intermediate of the sides *a* is a threaded casting or coupling *d* to which the transverse tubes *b* are secured.

e designates angular bracket-shaped elements, (preferably made of light castings or sheet metal) that are secured to the tubular base-piece *a* for supporting the flag-staff *f* and also having ears *g* to which the anchor ropes *h* are attached.

Located directly above the transverse tubes *b* is the framework *i*, preferably made of heavy wire. Rolled about the framework are the edges of the sheet metal panel *j* on which are placed the number of the course, as indicated in Fig. 1 by the numeral 3. The framework *i* is firmly held in place by means of the brace-rods *o* that are threaded at their inner ends so as to engage the internally threaded tubes o^1 that are soldered or brazed into the panel *j*. The opposite or outer end of the rods *o* are provided with hooks *p* that engage the eye portion *g* of the brackets *d*, the rods *o* having an upset or headed end portion that rotatably passes through the hooks *p* whereby the rods or braces *o* can be rotated for the purpose of threading the same into the tubes o^1 and securing the desired tension.

By means of this construction, it is seen that the buoy or course marker is rigidly braced from end to end, and that the framework *i* is securely held in place in the tubular side pieces *a*.

The lower end of the framework *i* is made wedge-shaped or conical, as shown at i^1. This conical portion engages a correspondingly shaped tubular portion i^2, as clearly shown in section in Fig. 3.

When it is required to take the marker or buoy apart, it is only necessary to rotate the brace-rods *o* to unscrew the same from the tubes o^1 when the hooks *p* can be disengaged from the eyes *g*. The framework *i* may then be removed from its sockets i^2.

Other uses than that described may be made of my invention as for instance an advertising medium.

Instead of the bracket *e* being made as shown and described, I may make it hollow for the purpose of providing the proper buoyancy for the marker.

A weight *s* is connected to the transverse tube *b* by means of the rod *t* at the coupling *d* for the purpose of rendering the marker stable when in use, as readily understood.

What I claim, is:—

1. In a course marker of the class described, a tubular base-piece, angular elements secured to the base-piece at diagonally opposite points thereof, a panel transversely located of the base-piece, and means for securing the panel to the base-piece, and bracing means extending from the panel to the angular elements, as described.

2. In a course marker of the class described

in combination with the tubular base piece thereof, brackets secured to the base-piece and provided with means for supporting a flagstaff, each bracket provided with means for securing the anchoring devices, a transversely located framework, a panel secured to the framework, and means for removably retaining the framework on the tubular base piece, and means extending from the panel to the bracket pieces for retaining the panel against movement endwise of the marker, as described.

3. A course marker having in combination with the tubular base-piece thereof, brackets secured to said base-piece, a transverse framework, connecting means between the brackets and framework, a transverse element, as *b*, a weight secured to the transverse element, whereby the course marker is rendered stable.

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Witnesses:
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