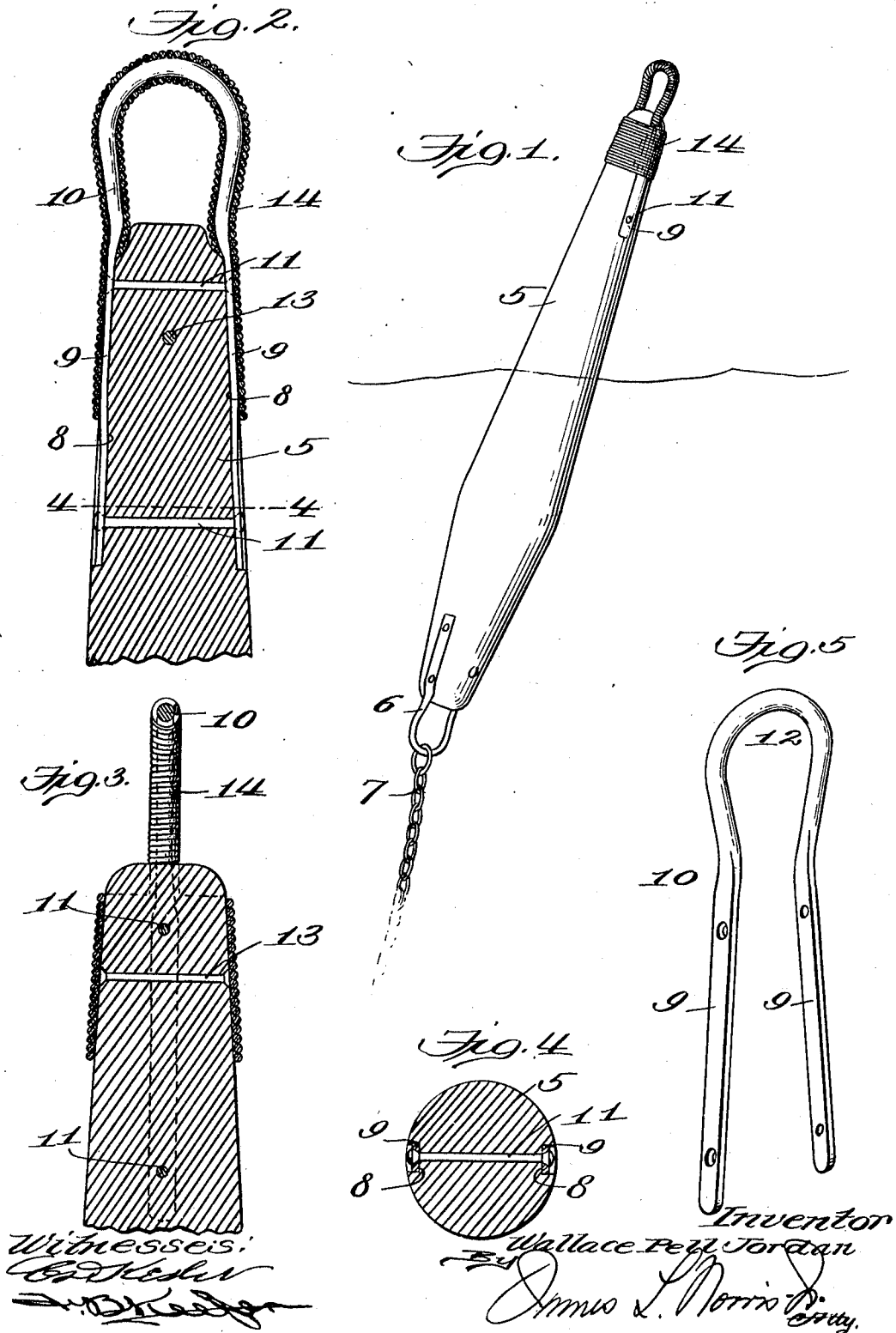


W. P. JORDAN.
 MOORING BUOY.
 APPLICATION FILED JUNE 18, 1910.

970,339.

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UNITED STATES PATENT OFFICE.

WALLACE PELL JORDAN, OF NORFOLK, VIRGINIA, ASSIGNOR OF ONE-HALF TO CARL M. JORDAN, OF NORFOLK, VIRGINIA.

MOORING-BUOY.

970,339.

Specification of Letters Patent. Patented Sept. 13, 1910.

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To all whom it may concern:

Be it known that I, WALLACE PELL JORDAN, a citizen of the United States, residing at Norfolk, in the county of Norfolk and State of Virginia, have invented new and useful Improvements in Mooring-Buoys, of which the following is a specification.

This invention relates to mooring buoys, and the primary object of the same is to provide a device of this class having a novel attaching means at its upper end for securing boats in mid-stream and embodying a strong and durable structure and means for preventing scratching or scoring of boats coming in contact therewith.

With this and other objects and advantages in view, the invention consists in the construction and arrangement of parts which will be more fully hereinafter specified.

In the drawing: Figure 1 is a perspective view of a buoy embodying the features of the invention and shown applied in operative position. Fig. 2 is an enlarged transverse vertical section through the upper extremity of the buoy. Fig. 3 is a transverse section through the upper portion of the buoy and taken in a plane at right angles to that shown by Fig. 2. Fig. 4 is a horizontal section taken in the plane of the line 4-4, Fig. 2. Fig. 5 is a detail perspective view of the mooring shackle secured to the upper end of the buoy.

The numeral 5 designates the buoy of any suitable shape, material and dimensions, and to the lower end thereof an anchoring shackle 6 is secured and has an anchor chain or analogous device 7 attached thereto. The upper end of the buoy is reduced and in diametrically opposite portions of the same longitudinal recesses or grooves 8 are formed and extend outwardly through the said upper end. In the recesses or grooves 8 the legs 9 of a shackle 10 are inserted and countersunk and secured by rivets or other fastenings 11 extending through the buoy. The rivets or fastenings 11 are headed over at opposite ends against the outer sides of the legs or shanks 9 and the said outer sides of the legs or shanks are located inwardly a distance from the outer surface of the buoy so as to avoid the least projection or exposure of the outer sides of the legs or shanks 9 beyond the outer terminals of the side walls of the recesses or grooves 8 to pre-

vent contact with portions of boats coming in contact with the buoy and thereby avoiding scoring, scratching or marring the surfaces of boats.

The shackle 10 has a looped head 12 which is round in cross-section, and as shown by Fig. 5 the legs or shanks 9 are flattened to snugly fit in the recesses or grooves 8. The legs or shanks 9 also extend over a considerable portion of the buoy extremity to which they are applied to render the attachment of the shackle stronger and more positive, and the rivets or other fastenings 11 are inserted through the legs or shanks a considerable distance apart so as to give the greatest amount of purchase possible and obviate any tendency to splitting or fracturing the upper extremity of the buoy which might result if the said rivets or fastenings were closely arranged.

To strengthen the upper extremity of the buoy a reinforce bolt or rod 13 is inserted transversely therethrough in a plane at an angle to the planes of the rivets or fastenings 11. This reinforcing bolt or rod 13 prevents the upper extremity of the buoy from splitting in a direction at an angle to the planes of the rivets or fastenings 11.

It is preferred that the shackle as a whole as well as the rivets or fastenings and the reinforcing bolt or rod 13 be galvanized or treated with a coating to render the same non-corrosive. As a protective means a tarred rope or other cordage 14 is closely wrapped or wound around the loop 12 of the shackle and a portion of the upper extremity of the buoy, this wrapping or winding of water-proof rope or cordage also serving as a buffing means to prevent injury to the surfaces of boats coming in contact with the buoy. The tarred rope or other cordage renders the loop 12 more durable and less liable to breakage, and if the loop should break it is obvious that the said tarred rope would be effective in preventing disengagement of the mooring line or cable by reason of the fact that the tarred rope is extended over and secured to a portion of the buoy body. The wrapping or winding of the tarred rope around or over the upper portions of the legs or shanks 9 serves as an auxiliary securing means for the shackle at a point where the greatest pulling or tugging strain is imposed on the shackle, namely, the loop 12, and any tendency toward the legs or

shanks pulling apart or becoming loose at the base of the loop with relation to the upper extremity of the buoy body is prevented with material advantages in the strength and durability of the loop as an attaching means. Furthermore, the reinforcing bolt or rod is preferably covered at its opposite exposed extremities by the tarred rope or other cordage winding and is therefore protected.

It is proposed to embellish the body of the buoy with any suitable surface design or to paint the same in any pleasing manner and the upper extremity of the buoy body may be given a contrasting color or shade or the tarred rope winding may be painted in a contrasting color relatively to the body of the buoy. It is also proposed to modify the proportions and dimensions of the several parts of the buoy.

What is claimed as new is:
In a buoy of the class specified, the com-

bination with a buoy body, of a shackle having a looped head extending above the upper end of the buoy body and the elongated legs countersunk in opposite portions of the upper extremity of said body, fastening devices extending transversely through the legs of the shackle and buoy body, a reinforcing means also extending transversely through the buoy body in a plane at an angle to the planes of the fastenings for the shackle legs, and a winding of water-proof cordage closely applied over the looped head of the shackle and the upper portion of the body of the buoy.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WALLACE PELL JORDAN.

Witnesses:

A. C. LAPP,
CARL M. JORDAN.