Nov. 21, 1950 F. BIENERT 2,530,754

OAR

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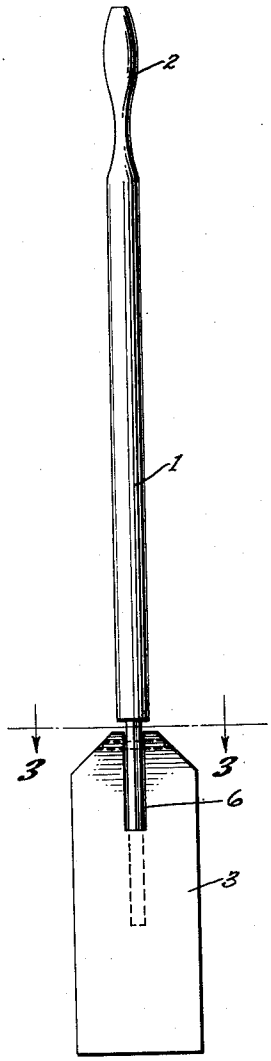


Fig. 1

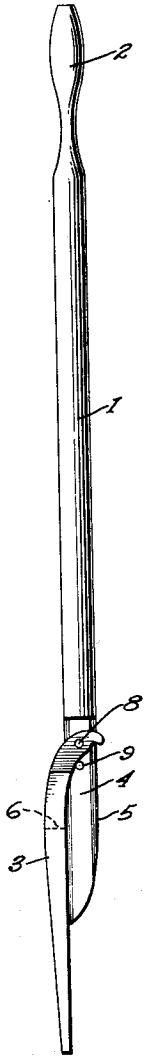


Fig. 2

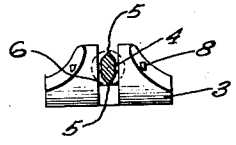


Fig. 3

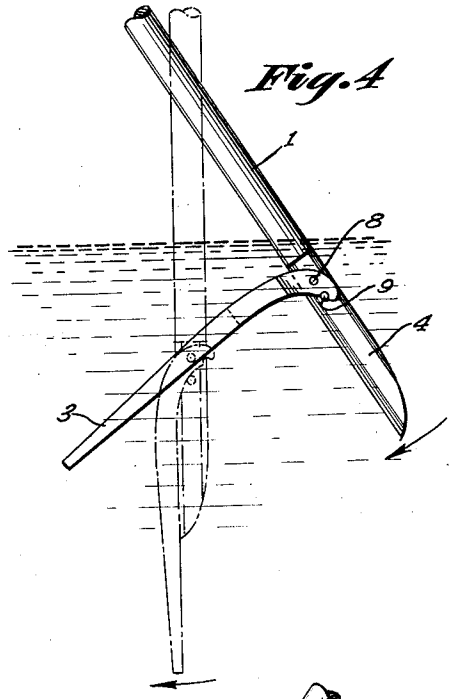


Fig. 4

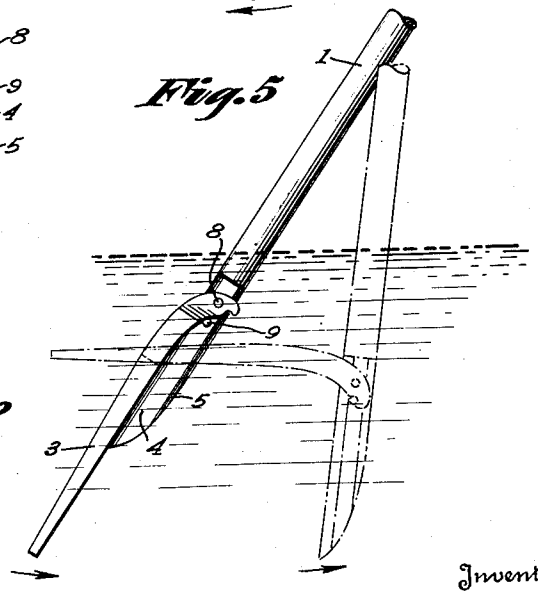


Fig. 5

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OAR

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4 Claims. (Cl. 9—24)

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This invention relates to oars, paddles or the like for use in the propelling of boats, and more particularly to oars adapted to automatically adjust the blade to the correct position during the propulsion stroke and also during the inactive return stroke.

An object of the invention is to provide an oar of the type indicated of improved and simplified construction which will efficiently adjust the blade to the proper angle with respect to the water during both the propulsive and return strokes and which will eliminate the necessity for lifting the blade from the water, thus permitting a silent and effective propulsion device for use with hunting skiffs and the like.

The invention consists in the novel construction, arrangement and combinations of parts hereinafter more particularly described and claimed.

One sheet of drawings accompanies this specification as part thereof, in which like reference characters indicate like parts throughout.

In the drawings:

Figure 1 is a top plan view of the improved oar;

Figure 2 is a side elevation of the oar;

Figure 3 is a transverse cross section taken on line 3—3 of Figure 1; and

Figures 4 and 5 illustrate the positions of the blade in operation, Figure 4 showing a portion of the oar in side elevation at the beginning of the propulsive stroke, while Figure 5 shows the conclusion of the propulsive stroke and the commencement of the return or inactive stroke of the oar.

In accordance with the present invention, the loom 1 of the oar with its associated handle part 2 is made separate from the blade portion 3 and the lower or blade end of the loom is flattened to provide two parallel planar surfaces 4—4, while the edge portions of this flattened portion of the loom are preferably beveled, as indicated at 5.

The blade 3 of the oar is provided with a medially positioned longitudinally extending slot 6 of a width slightly greater than the flattened portion 4 of the loom, and shorter than said part of the loom, the flattened portion of the loom being adapted to seat within this slot and be pivoted thereto as by a transversely extending pivot pin 8.

Preferably, the blade is curved at its upper or pivot end away from the major plane of the blade and the pivot pin 8 is offset with respect to the major plane of the blade 3, as is well illustrated in Figure 2.

Conveniently, a stop pin 9 will be positioned in the flattened portion of the loom and below the pivot pin 8 to limit the pivoting of the blade during its return movement so as to prevent the blade from passing beyond the dead center which would preclude its automatically resuming the effective position in alignment with the loom at the end of the return stroke.

It will be observed that during the operative or

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propulsive stroke of the oar, the lower end of the flattened portion 4 of the loom extends below the medial slot 6 in the blade, so that the lower end of the loom engages against the back surface of the blade 3, thus providing a positive transmission of force from the loom to the blade and reinforcing a substantial portion of the blade during the propulsive stroke.

Various modifications in the shape and proportions of the blade and loom will readily suggest themselves to those skilled in the art, and it will be apparent that the present invention is equally applicable to oars intended for conventional use with locks or to paddles for use in canoes.

Having thus described the invention, what I claim is:

1. An oar comprising a loom having its lower end formed with parallel flat surfaces, a blade formed with a medial longitudinal slot extending in from its upper end to freely embrace the lower flattened end of the loom, the blade secured to the loom by a transversely extending pivot passing through the blade parts near their upper edge and the loom adjacent the upper end of the flattened part, with the end of the loom extending below the pivot to engage a substantial part of the blade.

2. Device of claim 1 with a stop formed on the blade end of the loom below and parallel with said pivot, whereby said stop will engage the blade above the pivot on the return or non-propulsive stroke to prevent the blade from passing above dead center during that stroke.

3. An oar comprising a loom, a separate blade having its upper end curved away from the major plane of the blade and said curved end formed with a medial longitudinally extending slot adapted to embrace the end of the loom, said end of the loom secured in said slot by a transverse pivot extending through the curved end of the blade and the loom with the end portion of the loom below said pivot extending beyond said slot to engage a substantial portion of the blade.

4. Device of claim 3 with a stop projecting from the end of the loom below the pivot arranged to engage the upper end of the blade during the retractive or non-propulsive stroke.

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