

June 26, 1951

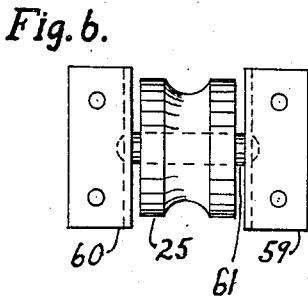
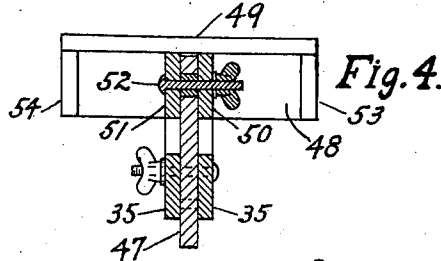
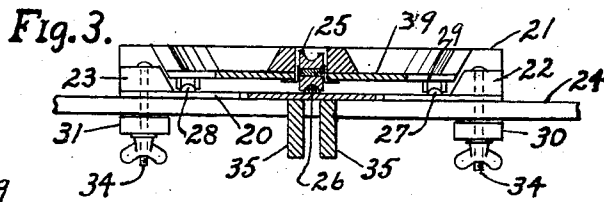
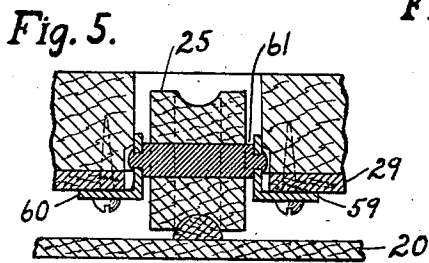
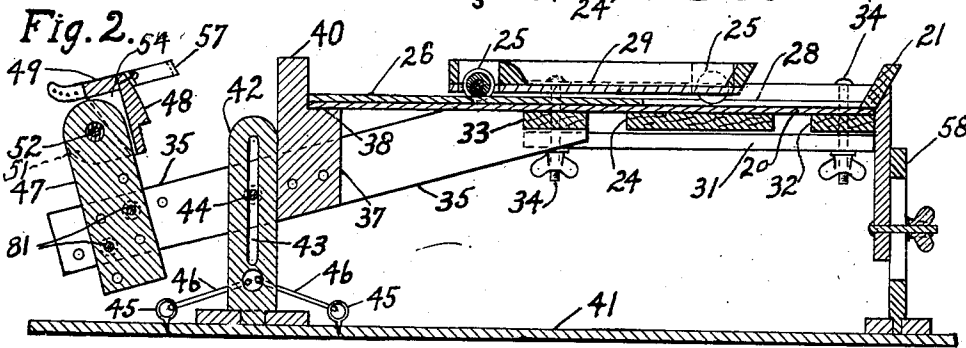
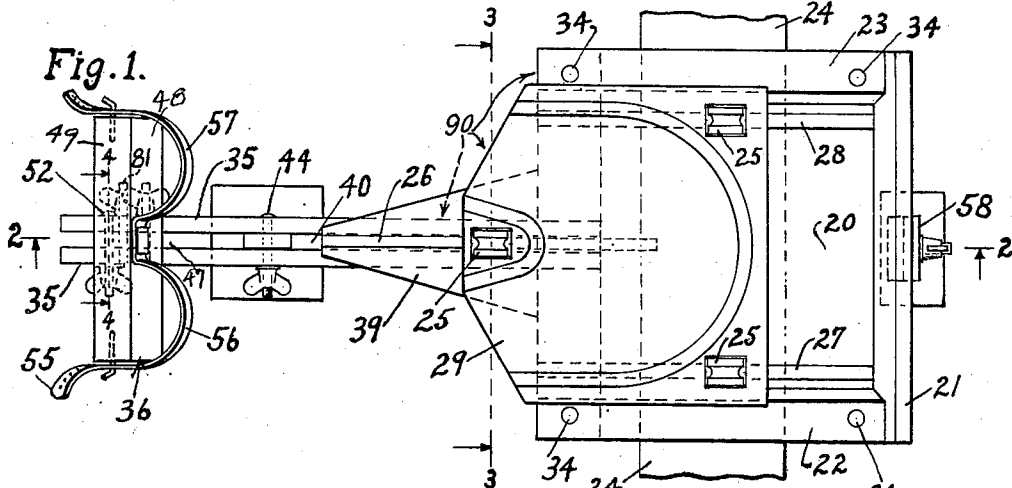
N. J. JEWETT

2,557,972

SLIDE SEAT ROWING APPARATUS

Filed July 10, 1946

2 Sheets-Sheet 1



INVENTOR

NELSON J. JEWETT.

Jewett and Inrad

ATTORNEYS

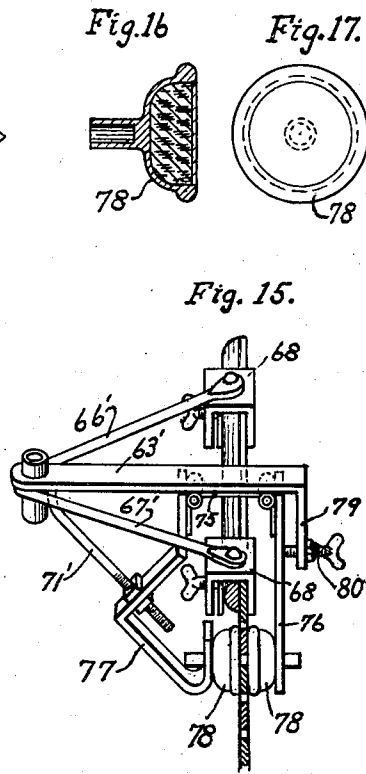
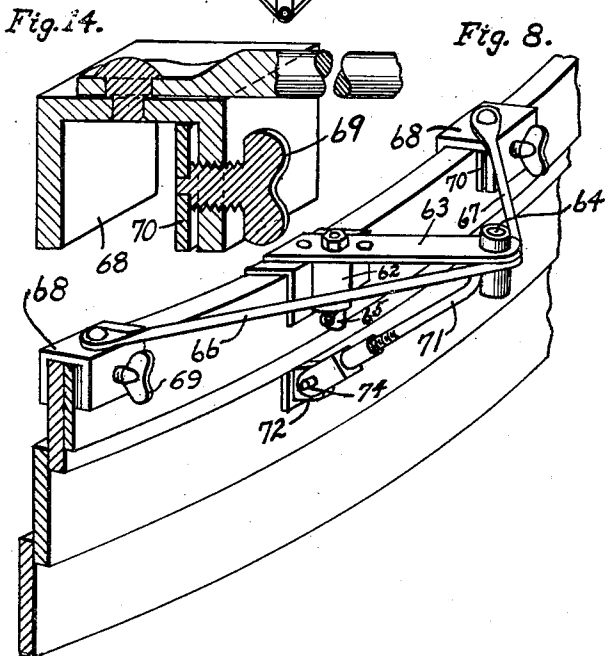
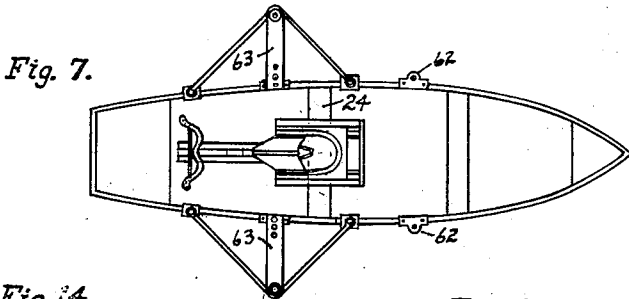
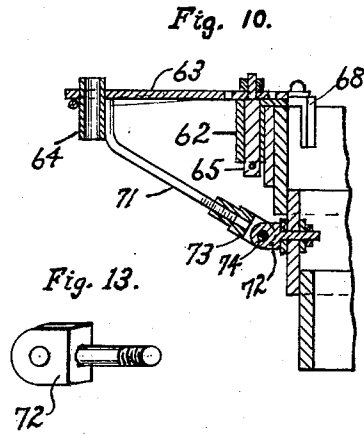
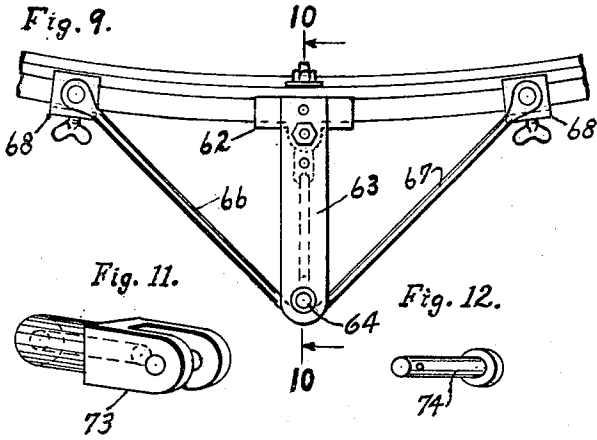
June 26, 1951

N. J. JEWETT
SLIDE SEAT ROWING APPARATUS

2,557,972

Filed July 10, 1946

2 Sheets-Sheet 2



INVENTOR
NELSON J. JEWETT.

Jewett and Mead

ATTORNEYS

UNITED STATES PATENT OFFICE

2,557,972

SLIDE-SEAT ROWING APPARATUS

Nelson J. Jewett, Arlington County, Va.

Application July 10, 1946, Serial No. 682,562

6 Claims. (Cl. 9-7)

1

The invention relates to manually propelled boats and has as an object the provision of apparatus for readily adapting the common skiff, punt, canoe or the like for slide seat rowing.

Rowing, as it is done in shells, is recognized as a very beneficial and enjoyable form of exercise. However, this form of exercise is not open to the masses for several reasons among which are: that shell rowing to the novice is akin to tight rope walking in the difficulty encountered in keeping right side up, and learning to row in this manner involves numerous involuntary baths; rowing shells are expensive and are of no value for use in any other manner.

It is an object of the present invention to provide a unitary sliding seat and foot rest assembly structure that can be placed upon a seat or thwart of any usual craft designed for rowing or paddling to adapt the same to propulsion in the well known racing manner, and be as readily removable to leave the craft in its former condition, to provide a two purpose craft.

In usual fixed seat rowing the travel of the handle end of the oar is limited to the reach of the arms and movement at the hips. In sliding seat rowing the leg motion is added. It follows that oars dimensioned for fixed seat rowing are not usable with a sliding seat. There must be more travel of the handles which means that the grip of the oar must be further from the lock. Therefore, in accordance with the present invention supplemental outrigger oar locks are provided so formed as to be readily placed and removed without interference with later normal fixed seat propulsion of the craft.

It is a further object of the invention to provide supplemental outrigger oar locks that utilize the usual gunwale sockets in attachment as well as a form usable where no oar locks are present, as with canoes.

Further objects will appear from the following description when read in connection with the accompanying drawings, showing illustrative embodiments of the invention and wherein—

Figure 1 is a plan view of a sliding seat device of the invention;

Figure 2 is a central vertical section on line 2—2 of Figure 1;

Figure 3 is a section on line 3—3 of Figure 1;

Figure 4 is a detail section on line 4—4 of Figure 1;

Figure 5 is a detail section of a roller shown in section on Figure 3, drawn to an enlarged scale;

Figure 6 is a bottom plan view of the roller assembly of Figure 5, omitting the supported parts;

2

Figure 7 is a plan view of a boat with the apparatus of the invention installed;

Figure 8 is a perspective view of a supplemental outrigger oar lock of the invention;

Figure 9 is a plan view of the structure of Figure 8;

Figure 10 is a detail section on line 10—10 of Figure 9;

Figures 11, 12 and 13 are perspective views on an enlarged scale of parts;

Figure 14 is a detail view in perspective and end section of a clamp;

Figure 15 is a perspective view looking downwardly of a form of outrigger, shown as applied to a canoe with a wall of the canoe in section;

Figure 16 is a central section drawn to an enlarged scale, of a pad shown in Figure 15; and

Figure 17 is a face view of the pad of Figure 16.

As shown, the sliding seat of the invention comprises a relatively thin member 20 formed with thickened edges 21, 22, 23 adapted to rest on any usual thwart or seat 24. The entire sliding seat assembly or structure 90 should be designed to raise the seat surface as little as possible above the existing seat surface of the craft. Therefore, the member 20 may be made of sheet metal or preferably of plywood. To achieve the stated objects of the invention, the assembly must be inserted with the thwart-seat still in place, the thwart being a hull stiffening member. Since the existing oar locks are to be utilized, the assembly must occupy substantially the same fore and aft location as the thwart and hence will overlie the thwart. As described below, the assembly preferably has partial support 58 and 42 from the bottom of the hull. It is apparent that the entire support may thus be had, although partial or entire support by the thwart is preferred. The words "over the thwart," as used in some of the following claims are, therefore, to be interpreted as location defining words.

To guide rollers 25 upon which the seat may slide, tracks 26, 27, 28 are shown and indicated as half round to coact with the grooved rollers. As shown three tracks and rollers are shown, giving three point support for the sliding seat 29. The edges of the seat 29 are shown as beveled and the thickened edges 21, 22, 23 are shown as inwardly beveled to agree, by virtue of which structure if the rollers get off the tracks they will be guided back to place.

To hold the member 20 in place on a thwart there are shown strips 30, 31 spaced downwardly by blocks or strips 32, 33, the latter being equal in thickness to the usual thwart or boat seat.

3

The structure may be clamped to the thwart by means of bolts 34 equipped with wing nuts.

To support a foot rest to which the driving reaction of the oars is transmitted, a strut 35 is shown rigidly connected to the seat structure and carrying the foot rest structure 36.

As shown, the strut 35 comprises spaced bars having rigidly secured between them an upright 37 formed with a shoulder 38 to which the end of a narrow projection 39 of the base member 20 is secured, and the central track 26 extends to the upwardly projecting end 40 of the upright. There is thus provided a support for the track 26 and a stop for forward sliding of the seat. The triangular structure comprising the strut 35, the upright 37 and the portion 38 of the seat will provide great strength and rigidity with lightness.

To support the strut from the bottom of the boat, indicated at 41, an upright member 42 is shown received between the spaced members of the strut, and formed with a slot 43 to provide adjustment on a clamp bolt 44. If desired the base of the upright 42 may be removably secured to the bottom of the boat by means of screw eyes 45 and links or hooks 46.

As shown the foot rest structure 36 comprises an upright central member 47 and an angle portion comprising a foot rest proper 48 and a cap member 49. Secured in the angle of these members there are shown spaced blocks 50, 51 through which and through the upright a clamp bolt 52 passes by which structure the foot rest may be angularly adjusted. End blocks 53, 54 are also shown secured in the angle. A strap 55 is shown providing toe loops 56 and 57 against which the forward pull on the sliding seat is exerted.

A pair of clamp bolts are shown to secure the foot rest structure to the strut 35 with extra holes for variation of the height of the foot rest and for length of limb of the user.

If desired a rear support 58, may be provided made for length adjustment as illustrated.

As shown, the roller structure comprises a pair of metal angles 59, 60, rigidly connected by the axle 61 upon which the roller 25 freely revolves. The angles 59, 60 and the axle 61 are the only portions of the seat structure necessarily formed of metal.

It is obvious that the foot rest may be secured to the bottom of the boat either removably or permanently and the strut 35 may then terminate at its point of connection with support 42.

The form of outrigger oar lock shown in Figures 7 to 14 inclusive, is for use with boats equipped with the usual gunwale oar lock socket 62.

As shown in said figures the structure comprises a bar 63 having an inboard end to be supported on the gunwale and carrying a socket 64. To secure the arm 63 to the gunwale there is shown a pin 65 rigid with the arm, entering the gunwale socket and retained by a cotter pin.

To brace the arm 63 horizontal braces 66, 67 are shown, illustrated as continuous past the socket 64 to which the arm 63 and the braces may be welded. To secure the braces to the gunwale for ready removal, a clamp 68 is shown at the free end of each brace.

As shown in Figure 14, the clamps are swivelly connected to the ends of the respective braces, as shown in Figure 14 whereby the clamp nut 69 may be placed either inboard or outboard.

To protect the gunwale a shoe 70 is shown at the end of the clamp screw.

To secure the diagonal brace 71, a fitting 72 is shown which may be permanently attached to

4

the side of the boat. Coacting with the fitting 72 there is shown a clevis 73 and clevis pin 74 for its ready detachment. The clevis is shown as formed with a hollow internally screwthreaded socket to screw on the threaded end of the brace 71, whereby the length of the brace may be adjusted. The upper end of the brace 71 may be welded to the socket 64 and arm 63.

For use with craft not equipped with a gunwale socket the form of Figure 15 may be utilized. As there shown the arm 63' which rests on the gunwale carries the central member 75 of a double hinge to one leaf of which is secured the bar 76 and to a second leaf is secured the angularly formed bar 77. A diagonal brace 71' is adjustably secured to the bar 77 and the ends of bars 76 and 77 carry pads 78. To clamp the bar 63' to the craft an end 79 is turned downwardly and equipped with a clamp screw 80 to press the inner pad against the wall of the craft.

The pad 78 may be formed from a readily available rubber cup filled with relatively soft but sufficiently resistant material as cork composition. To complete this form of the outrigger the braces 66' and 67' may be constructed as in the first form described.

The apparatus of the invention may be made and sold for use in existing boats or canoes. Also it is contemplated that boats may be especially designed as two-service boats and supplied to the user with the apparatus of the invention and with conventional oars, and oar locks. Such a special boat might well have a somewhat less beam per length and slightly lower sides whereby they may be amply safe for quiet waters and yet may go through the water with less resistance.

Minor changes may be made in the physical embodiment of the invention within the scope of the appended claims, without departing from the spirit of the invention.

I claim:

1. Slide-seat rowing apparatus for use with manually driven craft having a thwart, comprising in combination: a base member for support on the thwart; a plurality of tracks secured to said base member in parallelism; a seat slidable on said tracks; a foot rest strut secured to said base member and projecting therefrom; and a foot rest secured to said strut.

2. The structure of claim 1 with means to adjust the foot rest on the strut for height and angularity.

3. The structure of claim 1 wherein the base member is formed with a central projection over and supported on said strut; the tracks are three in number, the central thereof extended on said projection; and the seat has means for three-point support on said tracks.

4. In apparatus of the class described, in combination: a boat structure including a thwart; a slide-seat assembly comprising a base member to over-lie said thwart, a plurality of tracks arranged in parallelism upon said base member, a seat slidable on said tracks, a plurality of rollers projecting below said seat to coact with said tracks; and readily detachable securing means coacting between said thwart and said assembly acting to prevent relative movement therebetween.

5. In apparatus of the class described, in combination: a boat structure including a thwart; a slide-seat assembly comprising a base member to over-lie said thwart and including a narrowed projection to extend toward the stern of the boat; a pair of tracks secured in parallelism at oppo-

5

site sides of the base member in positions to be substantially parallel with the gunwales of the boat, a third track secured on said base member parallel with the first named tracks and extending along said narrowed projecting; a seat slidable on said tracks, and readily detachable securing means coacting between said assembly and said thwart acting to prevent relative movement therebetween.

6. The combination of claim 5 with a foot rest strut secured to said base member and said narrowed projection; and with a foot rest secured to its free end.

NELSON J. JEWETT.

REFERENCES CITED

The following references are of record in the file of this patent:

	Number	Name	Date
	107,392	Luffbarry -----	Sept. 13, 1870
	149,913	Blakey -----	Apr. 21, 1874
5	185,032	Isaacs -----	Dec. 5, 1876
	282,855	Davis -----	Aug. 7, 1883
	421,080	Kerns -----	Feb. 11, 1890
	441,534	Chubb -----	Nov. 25, 1890
	609,956	Brosnihan -----	Aug. 30, 1898
10	1,058,855	Gerardin et al. -----	Apr. 15, 1913
	1,223,512	Neville -----	Apr. 24, 1917
	1,691,396	Lindstrom -----	Nov. 13, 1928
	2,399,500	Montlbano -----	Apr. 30, 1946
15	2,463,042	Mathias -----	Mar. 1, 1949

FOREIGN PATENTS			
	Number	Country	Date
	420,637	France -----	Nov. 29, 1910
	513,510	Great Britain -----	Oct. 13, 1939