April 1, 1958 F. W. SCHWINN 2,828,804

AUXILIARY FOLDING SEAT FOR BOATS AND THE LIKE

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FIG. 1

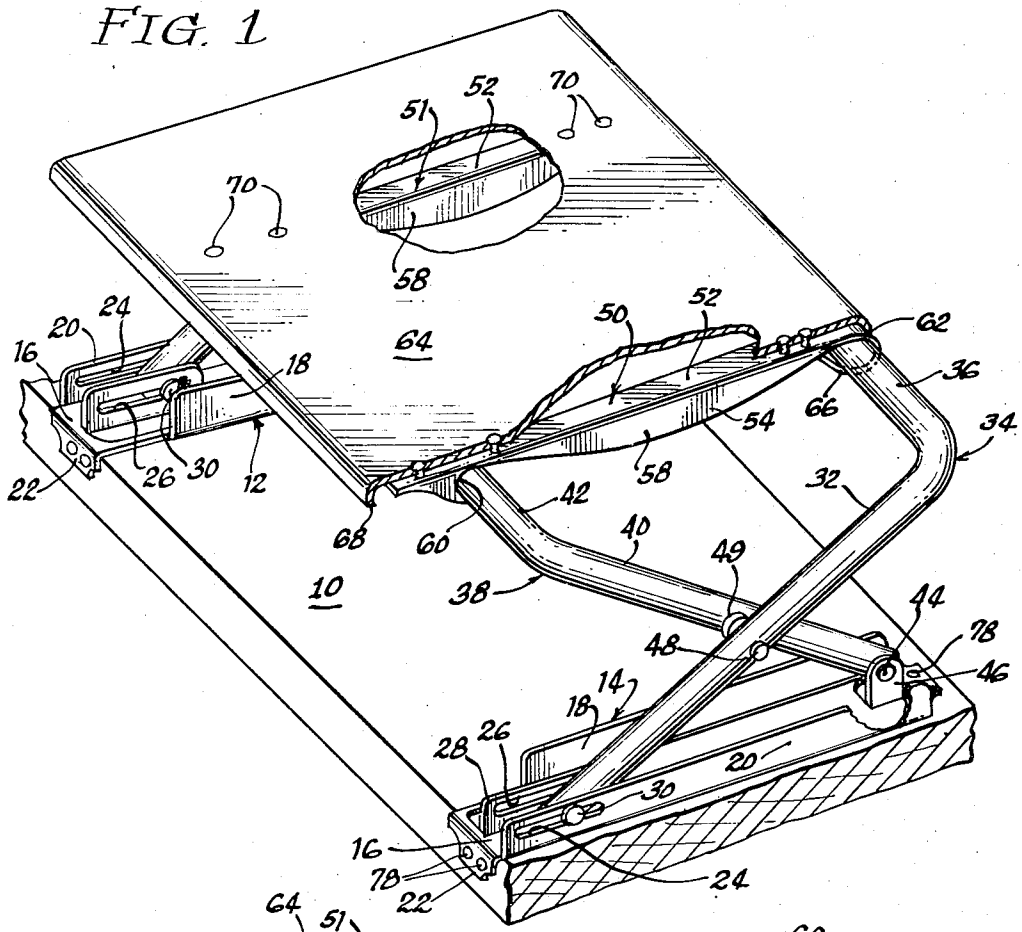
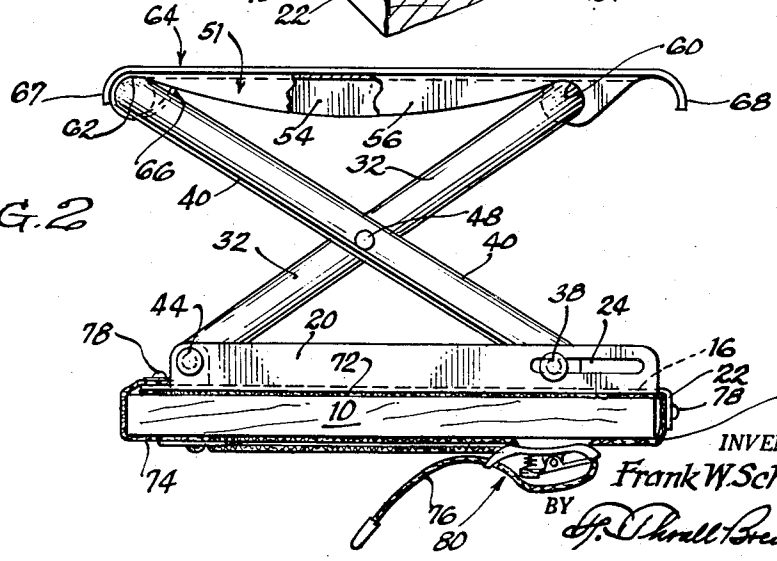


FIG. 2



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AUXILIARY FOLDING SEAT FOR BOATS AND THE LIKE

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3 Claims. (Cl. 155—133)

This invention relates to an auxiliary folding seat for boats and the like.

The improved folding seat comprising the present invention has been designed for use primarily in connection with row boats, motor boats, and other small navigable craft of the open hull variety such as are commonly used for fishing and similar pleasure expeditions. The invention is, however, capable of other uses and the folding seat of the present invention may, with or without modification, be used as an auxiliary seat for application to picnic benches and various articles of furniture whether designed for outdoor or indoor use. Irrespective, however, of the particular use to which the present invention may be put, the essential features thereof are at all times preserved.

It is among the principal objects of the invention to provide a folding seat construction which is universally applicable to row boat and similar seats of the wood plank variety and which, when applied and erected for use, will afford a raised or elevated supporting seat of limited width thus giving good maneuverability to the occupant thereof for casting purposes, as well as improving his visibility.

Another object of the invention is to provide a folding seat of the character briefly outlined above which may readily be folded into a small space for storage with the normal fishing gear and which may just as readily be erected for use with a minimum of effort.

A further object is to provide a seat of this character which, when applied to a boat seat or other support and erected for use, will afford a solid elevated support incapable of dislodgment from the support under ordinary conditions of usage.

The provision of a boat seat of this sort which is comprised of a minimum number of parts, especially moving parts, and which therefore may be manufactured at a low cost; one which is rugged and durable and which therefore is unlikely to get out of order; one which is attractive in its appearance and pleasing in its design, and one which otherwise is well adapted to perform the services required of it, are further desirable features that have been borne in mind in the production and development of the present invention.

Other objects and advantages of the invention, not at this time enumerated, will become apparent as the following description ensues.

In the accompanying single sheet of drawings a preferred embodiment of the invention has been shown. In these drawings:

Fig. 1 is a fragmentary perspective view of a boat seat constructed in accordance with the principles of the present invention and showing the same in erected condition and applied to a plank which may constitute one of the transverse seats of a row boat or the like; and

Fig. 2 is a side elevational view of the structure shown in Fig. 1.

Referring now to the drawings in detail, the regular or conventional boat seat has fragmentarily been shown at

10 and may constitute one of the wooden cross planks associated with a row boat or other open hull craft. The present auxiliary seat is illustrated in its erected condition as being applied to the seat 10.

The auxiliary seat involves in its general organization a pair of base bars 12 and 14 of similar, but left- and right-handed, construction. Each bar is generally of channel shape design and is formed with a base portion 16 and upstanding side flanges 18 and 20 the former being somewhat shorter than the latter and terminating short of the front end of the bar. The forward end of each bar is turned downwardly as at 22 to provide a locating flange or hook to assist in properly positioning the seat assembly on the plank 10 as will be described presently.

The flange 20 is substantially coextensive with the base portion 16 and is formed adjacent its forward end with an enlongated slot 24 therein. The slot 24 registers transversely with a similar slot 26 provided in an ear or bracket 28 which is struck up from the metal of the base portion 16. The pairs of slots 24 and 26 in the two base bars 12 and 14 respectively serve to slidingly support therebetween transverse pins 30 which are carried at the lower or free ends of the parallel legs 32 of a tubular U-shaped leg and seat support 34. The parallel legs 32 merge with a transverse seat-supporting portion 36.

The leg and seat support 34 constitutes one of two similarly constructed lazy tong members, the other member being designated at 38 and having parallel legs 40 and a seat-supporting portion 42 connecting the legs. The free ends of the legs 40 are pivotally connected to the respective base bars 12 and 14 by means of transverse pins 44 which extend through transversely aligned openings provided in the flanges 18 and in ears 46 which are struck up from the metal of the base portions 16 of the two base bars.

The U-shaped leg and seat supports 34 and 38 respectively cross each other in the medial regions of the leg portions 32 and 40 thereof and are hingedly connected together by pivot pins 48. Spacing washers 49 are provided between adjacent pivoted legs to reduce frictional drag.

Pivotally secured to the horizontal seat supporting portion 36 of the member 34 are a pair of seat side frame members 50 and 51 of substantially identical construction and thus a description of one of these members will suffice for the other. The side frame members each comprises a generally channel-shaped member having a base portion 52 and depending side flanges 54 and 56. These side flanges are contoured for purposes which will be made apparent presently, and provide reinforcing webs 58 which taper toward their ends. The base portions 51 and 52 are curved at their ends to form hook portions 60 and 62. The pivotal connections between the members 50, 51 and the horizontal seat-supporting portion 36 of the member 34 are effected by the provision of a terminal bend or loop 66 at the rear end of the base portion 52 of each member 50 and 51, the loop partially encircling the seat-supporting portion 36. At the forward ends of the members 50 and 51, the hook portions 60 are adapted to extend over the seat-supporting portion 42 of the member 38 so that downward thrust on the members 50 and 51 will lock the various parts of the seat construction in its erected condition.

Extending above, and supported by, the side members 50 and 51 is a seat proper 64 which preferably is in the form of a generally flat plate and which may be formed of sheet metal, plywood, or a suitable synthetic composition. The rear edge region 67 of the plate follows the curved contour of the hook portion 62 of the base portions 52 while the front edge region is turned downwardly as at 68 on a small radius for seating comfort

and to form a hook for the reception of the seat supporting portion 42 when the seat is in folded condition. The edge regions of the seat 64 are secured to the side frame members 50 and 51 by means of suitable rivets 70 appropriately spaced along the members.

As best illustrated in Fig. 2, an anti-skid friction member 72 which may be in the form of an elongated rubber or other elastomeric strip bonded or otherwise secured to the underneath side of the base portion 16 of each of the members 12 and 14, the strips being substantially coextensive with the members but terminating short of the downturned flanges 22. Composite attachment straps 74 and 76 respectively are riveted as at 78 at their ends to the flanges 22 and to the extreme rear ends of the base portion 16 of the base bars 12 and 14, one of the straps carrying at its free end a conventional clamping buckle 80 which is capable of infinite adjustment and which may be of the self-locking airplane seat strap type.

In applying the auxiliary seat of the present invention to a boat seat such as the seat 10 or other similar support, the base bars 12 and 14 are placed squarely on the plank and the bars are slid rearwardly until the locating flanges 22 engage the front edge of the plank. The composite straps 74 and 76 are passed around the plank and are fastened together beneath the plank by means of the fastening buckle assemblies 80. The auxiliary seat may be applied to the plank in either its collapsed condition or in its erected condition and, in either event, the net result when the seat is ultimately erected is the same.

It is to be noted that the forward end of the slot 24 in each of the members 12 and 14 is spaced from the axis of the pivot pin 44 a distance at least as great as the combined extent of the lower portions of the legs 32 and 40 below the pivot pin 48 so that when the forward end of the seat proper 64 is elevated from the seat supporting bar 42 to release the hook portions 60 therefrom, the legs may be collapsed into the plane of the base bars 12 and 14 with the pivot pins 30 moving forwardly in the slots 24 without obstruction. In this collapsed condition of the legs 32 and 40, the seat proper 64 may be folded down over the legs with the downwardly turned edge 68 embracing supporting bar 42 so that the assembly will require but little space. If desired, straps 74 and 76 may be brought around over seat proper 64 with the buckles 80 turned over so that the collapsed seat may be securely fastened in that condition for easy portability.

The invention is not to be limited to the exact arrangement of parts shown in the accompanying drawings or described in this specification as various changes in the details of construction may be resorted to without departing from the spirit of the invention. Only insofar as the invention has particularly been pointed out in the accompanying claims is the same to be limited.

I claim:

1. In an auxiliary collapsible seat construction adapted to be secured to the main seat plank of a boat, a pair of U-shaped leg and seat supports each having parallel leg portions and interconnecting seat supporting portions arranged in collapsible lazy-tong fashion with adjacent legs crossing each other medially and hingedly connected together at their points of crossing, said supports having their interconnecting portions extending in parallelism, a pair of elongated base members arranged in parallelism and adapted to be supported on said plank, each base member comprising a channel member having upstanding side flanges and a base portion extending between the flanges, a bracket extending upwardly between said flanges at each end of the base member and spaced therefrom, the free end of each leg portion of one support being pivoted between one bracket of one base member and one side flange of the latter, pin and slot connections slidably connecting the free ends of each leg portion of the other support to the other bracket and side flange of one base member, and a seat member having its rear end pivoted to one of said seat supporting portions and having its front end releasably engageable with the other seat supporting portion.

2. In an auxiliary collapsible seat construction adapted to be secured to the main seat plank of a boat, a pair of U-shaped seat supports each having parallel leg portions and interconnecting seat supporting portions arranged in collapsible lazy-tong fashion with adjacent legs thereof crossing each other medially and hingedly connected together at their points of crossing, said supports having their interconnecting portions extending in parallelism, a pair of elongated base members, the free end of each leg portion of one support being pivotally connected to one of said base members adjacent one end of the latter, the free end of each leg portion of the other support being pivotally and slidably connected to one of said base members adjacent the other end thereof, the extent of such sliding connections being sufficient to permit said supports to be moved from a raised position to a collapsed position wherein the supports and base members occupy substantially the same common plane, a pair of spaced seat frame members each having an end pivoted to the interconnecting seat supporting portion of one support, means on the seat frame members providing a hook portion adjacent the free end of each of said frame members for interlocking engagement with the interconnecting seat supporting portion of the other support when the seat construction is erected, a seat proper fixedly secured to the frame members, each of said frame members being in the form of an inverted channel member having depending side flanges, each side flange terminating short of the channel base of the pivoted end of the member, and the channel base at said pivoted end being wrapped around the seat supporting portion of said one support to constitute its pivotal connection therewith.

3. In an auxiliary collapsible seat construction adapted to be secured to the main seat plank of a boat, the combination set forth in claim 2 wherein each of said side flanges is relieved adjacent the free end of the frame member to provide a notch, said notch constituting said hook portion for interlocking engagement with the interconnecting seat supporting portion of said other support.

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