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FOLDING SEAT

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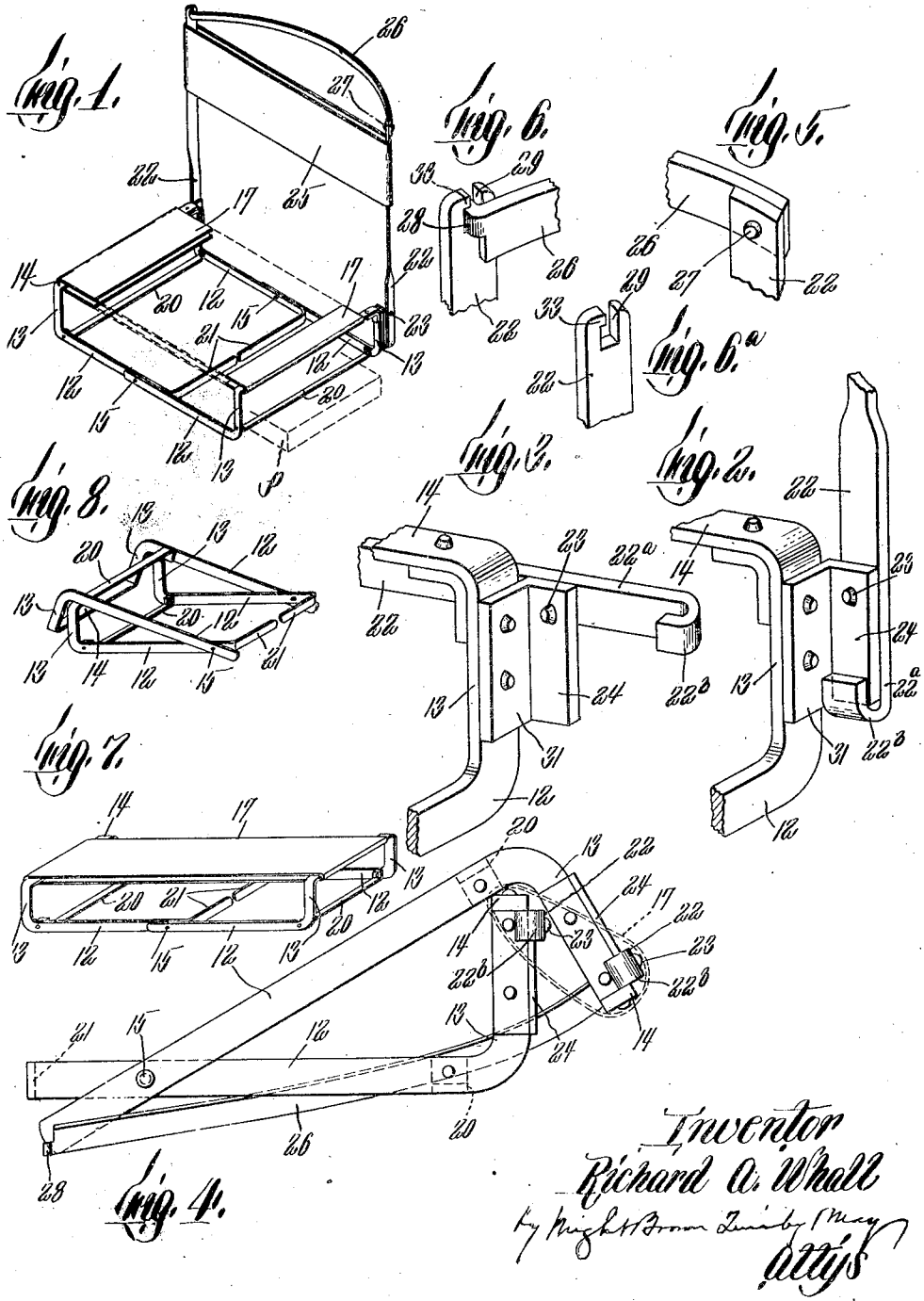


Fig. 1.

Fig. 6.

Fig. 5.

Fig. 6a.

Fig. 8.

Fig. 2.

Fig. 7.

Fig. 4.

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FOLDING SEAT.

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The object of this invention is to provide a folding seat, adapted to be carried in compact form by the user, and deposited on a fixed grandstand or open auditorium seat which is exposed to the elements and may become wet, or on the bottom of a boat, or elsewhere, a structure embodying the invention enabling the user to provide a seat which is adapted to be compactly folded, and to yieldingly and comfortably support the user.

This object is attained by the improvements hereinafter described and claimed.

Of the accompanying drawings forming a part of this specification,—

Figure 1 shows in perspective a seat embodying the invention, erected for use, a portion of the body rest hereinafter described being broken away.

Figures 2 and 3 are fragmentary perspective views of portions of the seat.

Figure 4 is an end view showing the seat folded.

Figures 5, 6 and 6ª are fragmentary perspective views, showing portions of the back shown by Figure 1.

Figure 7 is a perspective view, showing the seat without a back.

Figure 8 is a perspective view, showing the frame shown by Figure 7, in a folded condition, the body rest being omitted.

The same reference characters indicate the same parts in all of the figures.

The seat frame includes two approximately U-shaped members, each composed of a metal strip, bent to form two parallel base arms 12, adapted to bear on a supporting surface, standards 13, rising from the arms 12, and a neck 14, connecting and supported by the standards and offset thereby above the base arms when the frame is erected for use, as shown by Figure 1. The frame also includes pivots 15, connecting overlapping portions of the base arms, and permitting the folding of the frame as shown by Figures 4 and 8.

17 designates a flexible body rest performing the function of the bottom of a chair. Said rest is engaged with the offset necks 14, and elevated by the latter above the base arms 12, when the seat is in use. The pivots 15 are nearer one neck 14 than the other, the arrangement being such that when the frame is folded, the neck 14 of one member enters the recess formed by the base arms 12, standards 13, and neck 14 of the other member, as shown by Figures 4 and 8, so that the folded frame occupies a minimum space.

The body rest 17 is preferably an endless band of canvas, or other suitable flexible material, bearing loosely on the outer edges and the upper and lower sides of the necks 14, and extending in parallel stretches between the necks, the band being slidable on the necks, so that it may be adjusted to locate any desired portion at the upper side, and thus renew a portion that may have become wet or defaced.

When the seat is deposited on a fixed seat which is wider than the space between the base arms 12, said arms bear on the fixed seat, so that the folding seat is adequately supported. To enable the folding seat to be supported by a plank p (Figure 1), or other fixed support which is narrower than the space between the base arms 12, transverse bars are provided, these being fixed to the base arms 12 and extending across the space between the same, so that they may bear on a narrow support p. In this instance the transverse bars include two continuous bars 20, riveted to the outer end portions of the base arms 12, as shown by Figure 1, and an intermediate non-continuous bar formed by inwardly bent extensions 21 of two of the base arms 12.

The seat preferably includes a folding back including back posts 22, connected by pivots 23 (Figure 2) with ears 24, riveted to two of the standards 13. The posts 22 are adapted to project upward from the standards, as shown by Figure 1. The back also includes a flexible back rest 25, connected with the posts and extending across the space between the same, the rest being preferably an endless band like the body rest 17.

To prevent the upper ends of the posts 22 from spreading apart, a curved metal brace 26 is provided. One end of said brace is connected by a pivot 27 (Figure 5) with one of the posts 22, so that the brace is adapted to swing. The swinging end of the brace, and the other post 22, are provided with means for separable engagement with each other, said means being preferably embodied in a tongue 28 (Figure 6), formed on the swinging end of the brace, and a slot 29 formed in the post and adapted to receive the tongue. The brace is located above the back rest 25, and is curved, so that the user's back does not contact with the brace.

Backward swinging of the posts 22 from their operative position is prevented by stop means provided for this purpose, and preferably embodied in extensions 22^a of the posts, and abutments 31, on the standards 13, on which said extensions bear, as shown by Figure 2, when the posts are swung rearward to their operative position. When the posts are swung forward beside the necks 14, in folding the seat, the extensions 22^a move away from the abutments, as shown by Figure 3. The extensions are preferably provided with hooked ends 22^b adapted to engage the lower ends of the ears 24, as shown by Figure 2, and strengthen the engagement of the posts with the ears when the posts are upright.

In folding the seat, the posts 22 are swung forward until they are parallel with the necks 14, as shown by Figure 3, the brace 26, the swinging end of which has been detached from the slotted post 22, is swung forward on the pivot 27, and the frame members are closed together, all as shown by Figure 4, the body rest 17 being folded at the same time, as indicated by dotted lines.

It is obvious that the back may be omitted, as shown by Figures 7 and 8.

To interlock the swinging end of the brace 26 with the slotted post, we widen the inner portion of the slot 29, as shown by Figure 6^a so that the mouth of the slot is narrower than the inner portion, one side of the mouth being formed by a detent 33, overhanging the wider portion of the slot. The brace is flexed slightly from its normal curvature, to permit the insertion of the tongue 28 in the mouth of the slot 29. When the tongue is below the detent 33, the resilience of the brace forces the tongue under the detent, as shown by Figure 6, so that the brace is prevented from swinging out of the slot.

I claim:

1. A folding seat comprising a frame including two approximately U-shaped frame members, each composed of a metal strip bent to form two parallel base arms, adapted to bear on a supporting surface, standards rising from the base arms, and a neck connecting and supported by the standards, and offset by the latter from the base arms, and pivots connecting the base arms of said members and permitting the folding of the frame; and a flexible body rest engaged with the offset necks and elevated by the latter above the base arms, the frame including also transverse bars fixed to the base arms and extending across the space between the same, to bear on a relatively narrow support, located between the base arms.

2. A folding seat comprising a frame including two approximately U-shaped members, the cross bar of each member being vertically offset from the parallel base arms thereof, pivots connecting the base arms of said members, a flexible body rest supported by and extending between the cross bars of the frame members, and a supplemental transverse bar connecting the base arms of each frame member, and providing means whereby the seat may be supported on a support of less width than the frame members, the base arms of one of the frame members being provided with lateral projections providing additional contact between the seat frame and a relatively narrow support therefor.

In testimony whereof I have affixed my signature.

RICHARD A. WHALL.