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2,914,115

SEAT DIVIDER

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2 Sheets-Sheet 1

FIG. 1.

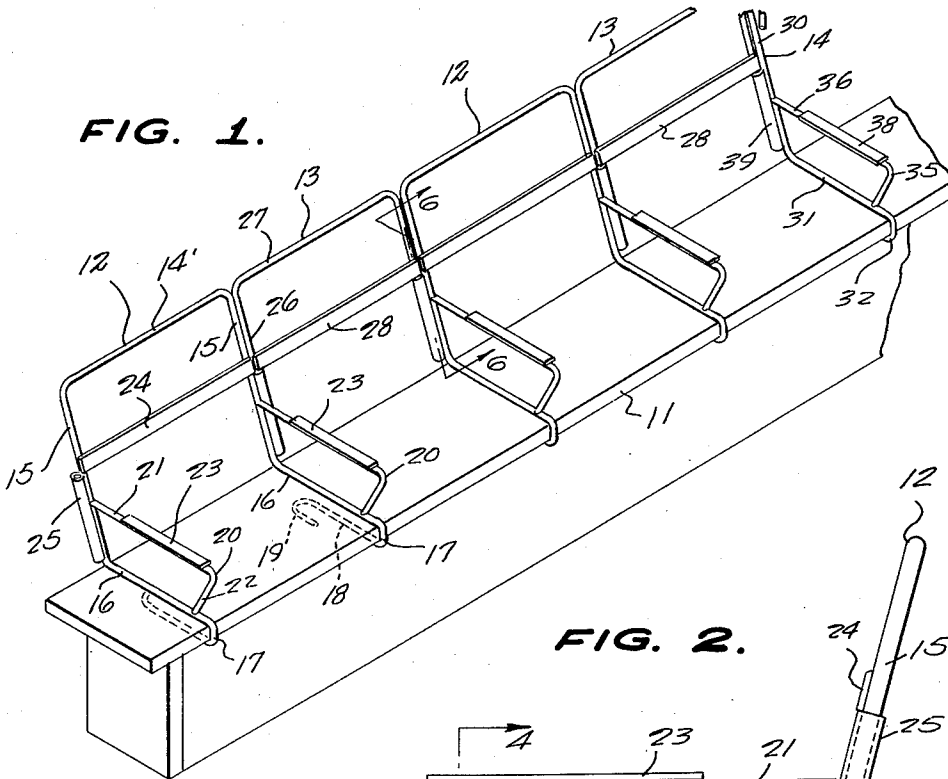


FIG. 2.

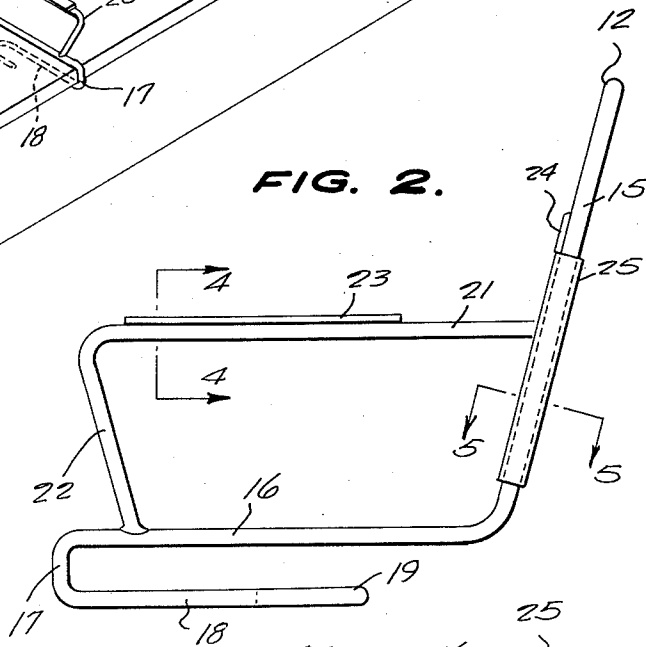


FIG. 4.

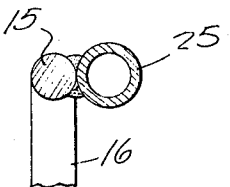
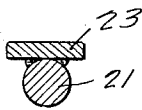
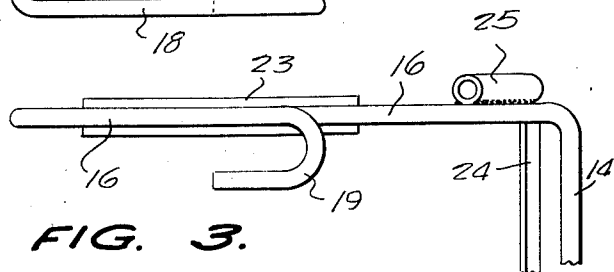


FIG. 5.

FIG. 3.



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SEAT DIVIDER

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3 Claims. (Cl. 155—133)

This invention relates to devices for dividing spaces on seats, and more particularly to a bleacher seat divider.

The main object of the invention is to provide a novel and improved device for dividing the spaces on seats, such as on bleacher seats, the device being simple in construction, providing individual seating spaces with back and arm rests, and requiring no reconstruction or modification of existing bleacher seat arrangements.

A further object of the invention is to provide an improved bleacher seat divider assembly which involves inexpensive components, which is easy to install, which does not eliminate any space on a bleacher seat on which it is mounted, and which is durable in construction.

Further objects and advantages of the invention will become apparent from the following description and claims, and from the accompanying drawings, wherein:

Figure 1 is a perspective view of a portion of a bleacher seat provided with dividers according to the present invention.

Figure 2 is an enlarged side elevational view of one of the dividers employed in Figure 1.

Figure 3 is a fragmentary bottom plan view of the divider shown in Figure 2.

Figure 4 is an enlarged transverse vertical cross sectional view taken on the line 4—4 of Figure 2.

Figure 5 is an enlarged cross sectional view taken on the line 5—5 of Figure 2.

Figure 6 is an enlarged vertical cross sectional view taken on the line 6—6 of Figure 1.

Figure 7 is a perspective view of one of the divider members and the end divider member of a seat divider assembly, such as is shown in Figure 1, illustrating the manner in which an end divider member is attached to the adjacent seat divider to define an end seating space.

Referring to the drawings, 11 designates a conventional bleacher seat, as employed in numerous stadiums and similar locations, the seats ordinarily being not divided into distinct spaces, whereby an individual is not ordinarily assured of obtaining a designated amount of space on the seat, and whereby excessive crowding ordinarily occurs so that an individual will not be comfortably seated.

In accordance with the present invention, a seat divider assembly is provided, said assembly comprising a series of main frame members 12 which are connected by intervening connecting frame members 13 equal in width to the main frame members and which may terminate in an end frame member 14, for example, where there are an even number of seating spaces.

Each main frame member 12 comprises a back frame consisting of a generally horizontal upper bar 14' integrally connected at its ends to depending side bars 15, 15 which are parallel to each other and which are formed at their lower ends with the horizontal, forwardly extending bar portions 16, 16, also parallel to each other. The respective bar members 16, 16 are formed at their ends with the U-bends 17, 17, defining reversely extending, resilient bottom arms 18, which extend rearwardly and which are substantially parallel to their associated for-

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wardly extending bar members 16, as shown in Figure 2. Each of the resilient bottom bar members 18 is formed at its inner end with a horizontal, hook-like portion 19, defining a horizontally extended contact element for engaging the bottom surface of the bleacher seat 11 to exert clamping pressure thereon relative to the associated bar element 16, as will be presently described.

Rigidly connected to the side bars 15 and their associated forwardly extending bottom elements 16 are respective arm rest frames 20, 20, said frames having horizontal upper portions 21 and downwardly and inwardly inclined forward end portions 22 which are welded or otherwise suitably connected to the respective associated members 15 and 16. Rigidly secured, as by welding or the like, to the horizontal members 21 are the respective flat bars 23, defining the main supporting elements of the arm rests.

Rigidly connecting the intermediate portions of the depending pairs of side bars 15, 15 are the flat bars 24, which extend horizontally and which define back rest elements associated with the respective back frames 14.

Welded to the lower portions of the respective depending side bars 15, outwardly thereof, are respective tubular sleeves 25, said tubular sleeves telescopically receiving the depending side arms 26 of the connecting frames 13, said connecting frames having horizontal top portions 27 which are integrally formed at their ends with said depending side arms 26. Welded to the intermediate portions of the side arms 26, 26 of each connecting frame 13 is a flat cross bar 28, similar to the flat bar 24, previously described, defining a back rest element when the connecting frame 13 is engaged between a pair of main back rest frames 12, 12, in a manner illustrated in Figure 1.

As shown in Figure 1, the tubular sleeve 25 terminates immediately subjacent the bottom edges of the flat bars 24, and in the case of the connecting frames 13, the flat bars 28 are spaced from the top members 27 by the same distances as the flat bars 24 are spaced from the top portions of the main back rest frames 12. Thus, when the connecting frames 13 are engaged between a pair of main back rest frames 12, 12, the connecting frame 13 will be supported so that its top element 27 is flush with the top elements of the adjacent main frames 12, 12, and so that the back rest element 28 thereof is in alignment with the back rest elements 24, of said adjacent main frame members 12, 12.

As shown in Figure 7, the end frame member 14 comprises a main body element 30 formed with the forwardly extending horizontal bottom portion 31 provided with the U-bend 32 at its forward end, defining the horizontally extending, reverse bar element 33 which is vertically aligned with and which is parallel to the horizontal member 31. The member 33 is formed at its inner end with the U-bend 34, defining a horizontal hook member, similar to the hook members 19, previously described, adapted to grippingly engage the bottom surface of a bleacher seat, the member 33 being yieldable relative to the member 31 to provide a spring clamping action. An arm rest frame 35 is secured respectively to the members 30 and 31, as by welding or the like, the arm rest member 35 comprising the horizontal top portion 36 and the downwardly and inwardly inclined forward end portion 37, rigidly secured, as by welding, or the like, at their ends respectively to members 30 and 31, as is clearly shown in Figure 7. An arm supporting bar 38, similar to the bars 23, is rigidly secured on the upper portion 36 of the arm rest frame 35, as shown.

Rigidly secured to the lower portion of the body 30 is a tubular sleeve member 39, similar to the tubular sleeve members 25, previously described, and adapted to receive one side arm 26 of a connecting frame 13. The tubular sleeve 39 is located substantially at the same

level as the tubular sleeves 25, relative to the U-shaped lower portion of the end frame, so that it will be aligned with the members 25 when the end frame is connected to the end of a series of seat divider elements.

The main body 30 is formed at its top end with a loop 40, which is smoothly curved, as shown in Figure 7, facilitating the handling of the end frame.

As will be readily understood, the members are installed on a bleacher seat 11 by engaging the resilient U-shaped clamping hooks defined by the members 18, 16 and 17 on the forward marginal portion of the bleacher seat 11 in the manner illustrated in Figure 1, and by also engaging the resilient U-shaped member 31, 33, 32 of an end frame 14, when employed on the bleacher seat. The main frame members are connected by employing connecting frames 13, in the manner illustrated in Figure 1, and in the case of the end frame 14, when employed, said end frame is connected to an adjacent main seat frame by a member 13, as illustrated.

When thus assembled on a bleacher seat 11, the divider elements provide seating spaces of substantially identical width, each provided with arm rests, insuring that each individual will be provided with the full seating space to which he is entitled and providing substantially more comfort than ordinarily is derived from a bleacher seat.

Since the divider elements occupy very little space, the seating capacity of the area is not reduced to any appreciable extent, and unoccupied seats may be easily spotted since these are readily visible to an usher or other person attempting to locate empty seats.

As will be readily apparent, the seat divider elements may be readily slipped onto a bleacher seat and similarly may be quickly removed when their use is no longer required. As above explained, not only do the divider members provide a means for equally dividing up the space on a bleacher seat but also provide increased comfort by the availability of arm rests and back rests for the individuals occupying the seats.

While a specific embodiment of an improved bleacher seat divider assembly has been disclosed in the foregoing description, it will be understood that various modifications within the spirit of the invention may occur to those skilled in the art. Therefore, it is intended that no limitations be placed on the invention except as defined by the scope of the appended claims.

What is claimed is:

1. A bleacher seat divider assembly comprising a first frame member having depending parallel side portions provided with forwardly extending parallel arm rest members, resiliently depending vertical clamping hook members secured to the forward ends of said arm rest members and adapted to engage around the forward marginal portion of a bleacher seat, opposing inwardly extending horizontal hook-like portions on the inner ends of said hook members, defining horizontally extended contact elements engageable with the bottom surface of the bleacher seat to exert clamping pressure thereon, a second frame member comprising a forwardly extending arm rest member, a depending vertical resilient clamping hook member on the forward end of said arm rest member adapted to engage around the forward marginal portion of the bleacher seat, a horizontal hook-like portion on the inner end of said last-named clamping hook member defining a horizontally extended contact element, a rigid generally U-shaped back rest member having a horizontal upper portion and depending side arms, and sleeve members of substantial length on the second frame member and on one of the side portions of the first frame member slidably receiving said depending side arms and

detachably connecting said second frame member to said first frame member in parallel side-by-side spaced relationship.

2. A bleacher seat divider assembly comprising a first frame member having depending parallel side portions provided with forwardly extending parallel arm rest members, resilient depending vertical clamping hook members secured to the forward ends of said arm rest members and adapted to engage around the forward marginal portion of a bleacher seat, opposing inwardly extending horizontal hook-like portions on the inner ends of said hook members, defining horizontally extended contact elements engageable with the bottom surface of the bleacher seat to exert clamping pressure thereon, a second frame member comprising a forwardly extending arm rest member, a depending vertical resilient clamping hook member on the forward end of said arm rest member adapted to engage around the forward marginal portion of the bleacher seat, a horizontal hook-like portion on the inner end of said last-named clamping hook member defining a horizontally extended contact element, a rigid generally U-shaped back rest member having a horizontal upper portion, a cross bar spaced from said upper portion, and depending side arms, and sleeve members of substantial length on the second frame member and on one of the side portions of the first frame member slidably receiving said depending side arms and detachably connecting said second frame member to said first frame member in parallel side-by-side spaced relationship, said cross bar being located to engage the top edges of said sleeve members and to support said upper portion substantially at the same level as the top of said first frame member.

3. A bleacher seat divider assembly comprising a pair of substantially similar spaced back frame members, each back frame member having a horizontal top portion and a pair of depending parallel side portions provided with forwardly extending arm rest members, resilient depending vertical clamping hook members secured to the forward ends of said arm rest members and adapted to engage around the forward marginal portion of a bleacher seat, opposing inwardly extending horizontal hook-like portions on the inner ends of said hook members, defining horizontally extended contact elements engageable with the bottom surface of the bleacher seat to exert clamping pressure thereon, respective tubular sleeves secured to the side portions of said back frame members, and a generally U-shaped back rest member having a horizontal bight portion, a cross bar portion spaced below said bight portion, and depending side bars telescopically received in the tubular sleeve on the adjacent side portions of said back frame members, said cross bar portion being located to engage the top edges of said sleeves to support said bight portion substantially at the same level as the horizontal top portions of said back frame members.

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