March 13, 1928. 1,662,378

C. A. DUKE

SEAT

Filed Oct. 27. 1926

FIG. 1.

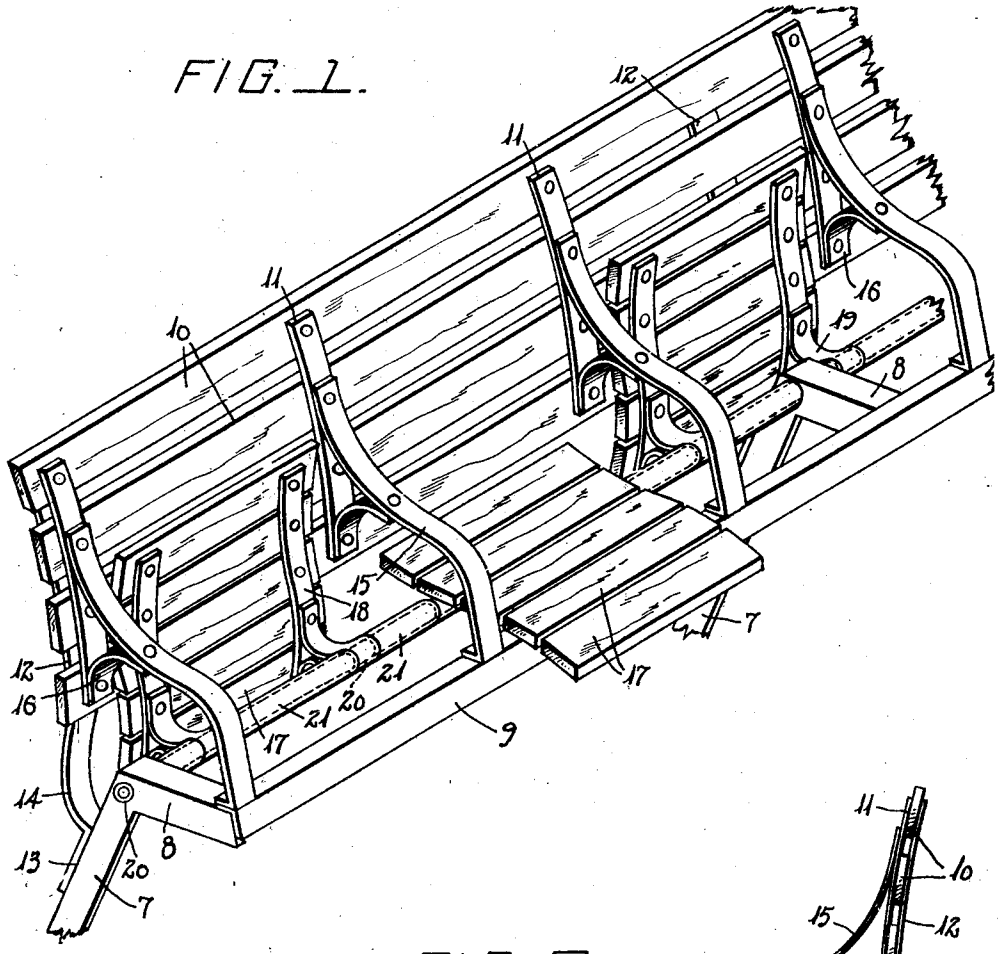
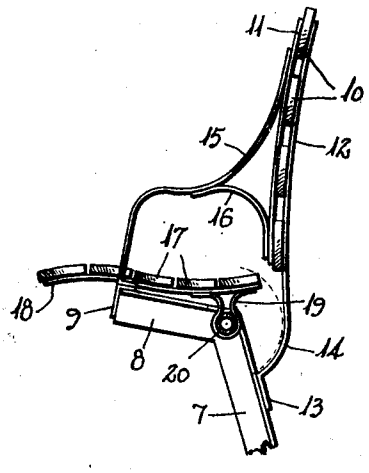


FIG. 2.



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UNITED STATES PATENT OFFICE.

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SEAT.

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The present invention relates to seats, especially those used for grandstands, auditoriums, and the like, wherein the seats are arranged in rows with several seats disposed side by side in a single unit, and the invention aims to provide a novel and improved seat structure of that kind.

It is the object of the invention to provide a novel and improved seat structure which is simple and substantial in construction, and which comprises a novel assembly and arrangement of the component elements, including novel means for mounting and supporting the seats and back.

With the foregoing and other objects in view, which will be apparent as the description proceeds, the invention resides in the construction and arrangement of parts, as hereinafter described and claimed, it being understood that changes can be made within the scope of what is claimed, without departing from the spirit of the invention.

The invention is illustrated in the accompanying drawing, wherein—

Figure 1 is a perspective view illustrating three seats of one unit.

Fig. 2 is an end view thereof.

Each unit, which may include any number of seats disposed side by side in a row, comprises a suitable number of standards or brackets 7, which may be of angle iron, and they are formed at their upper ends with forwardly extending arms 8 across the forward ends of which is secured a rail 9 of angle iron or other suitable stock.

The back for the several seats is composed of parallel horizontal slats 10 of wood or other suitable material, which are secured between the front and rear bars 11 and 12, respectively, the bars 12 extending downwardly beyond the lowermost slat 10 and being secured, as at 13, to the standards or supports 7. The portions 14 of the bars 12 between the back proper and standards 7 are curved rearwardly to provide a clearance in which the rear portions of the seats may move when the seats are swung upwardly to folded position.

Arm rests 15, which are formed from metal bars, have their upper rear ends secured to the bars 11 and have their lower front ends secured on the rail 9, and curved brace bars 16 are secured to the arm rests 15 and lower ends of the bars 11 to strengthen the construction.

Each seat is composed of parallel slats 17 of wood or other suitable material which are secured on bars 18 of suitable metal. The seats are hingedly mounted. Thus, bearings 19 are secured to the bars 18 near the rear ends thereof and are mounted for turning movement on the shaft 20 extending through the upper portions of the standards 7 in the rear of the rail 9. Metal piping may be used for the shaft 20, and the bearings 19, as shown, are formed from metal bars having their ends secured to the bars 18 and having loops between their ends loosely embracing the shaft 20. The seats may thus be readily swung upward to folded position, against the back, and when swung forwardly and downwardly they rest on the rail 9. The sliding movement of the seats on the shaft 20 is prevented by spacing sleeves 21 on the shaft between the bearings 19.

The construction, although simple, is strong, and the several parts may be readily made from available stock.

It will be noted that the seats when swung upwardly are folded in a position above the line of the standards or supports 7, and said standards or supports may be located at different points of the row of seats, either at the side edges of the seats or below the seats. The seats may also be of different sizes without restriction by the use of the standards or supports, and by withdrawing the rod or shaft 20, the seats are released so that they may be readily removed.

When the forward portions of the seats are swung upwardly, the rear portions of those seats which may be located above corresponding standards 7 are adapted to swing downwardly behind such standards. It will also be noted that the bars 12 have their lower terminals secured to the standards 7 at points below the shaft 20 and the portions 14 of the bars are spaced rearwardly from said standards so as to permit of the swinging movement of the rear portions of those seats which are located above the corresponding standards. Spaces are thus provided between the lower portions of the bars 12 and the upper portions of the standards 7 in which the rear portions of the seats may swing.

Having thus described the invention, what is claimed as new is:—

1. A seat structure comprising standards having forwardly extending arms, a rail se-

cured to said arms, a shaft carried by said standards in rear of said rail, seats mounted on said shaft for turning movement and adapted to rest on said rail, with one or more seats disposed above the corresponding standards, the rear portions of those seats which are located above the standards being arranged to swing downwardly behind said standards, a back for said seats, and bars secured to said back and having their lower ends secured to said standards below said shaft with the bars spaced rearwardly to provide clearances between the bars and upper ends of the standards in which the rear portions of the seats may swing.

2. A seat structure comprising standards having forwardly extending arms, a rail secured to said arms, a shaft carried by said standards in rear of said rail, seats mounted on said shaft for turning movement and adapted to rest on said rail, with one or more seats disposed above the corresponding standards, the rear portions of those seats which are located above the standards being arranged to swing downwardly behind said standards, a back for said seats, bars secured to said back and having their lower ends secured to said standards below said shaft with the bars spaced rearwardly to provide clearances between the bars and upper ends of the standards in which the rear portions of the seats may swing, and arm rests secured to said back and to said rail with the seats located between said arm rests.

3. A seat structure comprising standards having forwardly extending arms, a shaft extending through said standards, a rail secured to said arms, and seats having downwardly extending bearings between their front and rear edges mounted for turning movement on said shaft, said seats being adapted to bear on said rail, at least one of said standards being positioned below the corresponding seat; the rear portion of said seat being adapted to swing behind said standard and shaft, and the forward portion of said seat being adapted to swing forwardly above the arm of said standard.

In testimony whereof I hereunto affix my signature.

CHARLES ANDRE DUKE.