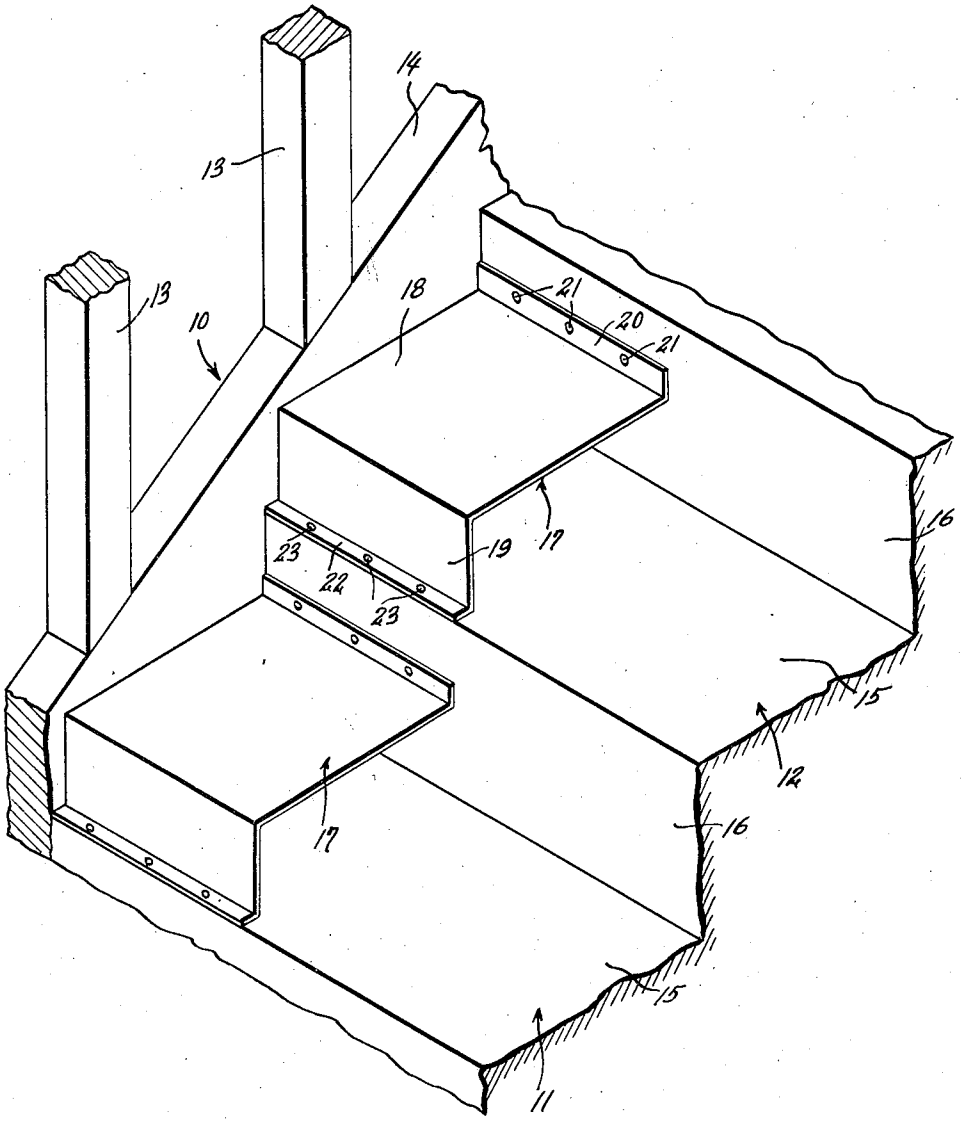
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AUXILIARY STAIR TREAD

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AUXILIARY STAIR TREAD

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4 Claims. (Cl. 20—10)

This invention relates to stairs.

The object of this invention is to provide an auxiliary stair tread construction adapted to be applied to the conventional stairs in any stairway whereby to decrease the height of the rise in the stairs so as to render the use of the stairway by elderly people, invalids or children much easier and with a less amount of expenditure of effort and strength than hitherto required. It is well known that the normal rise of the stairs in a stairway is sometimes too great for elderly people, invalids and children. To obviate this difficulty the above contemplated auxiliary stair construction is characterized by a metallic stair having a rise substantially one-half that of the conventional stair rise and a tread of the same width as the conventional stair width each metallic stair being provided with securing means at the end edges thereof. As many such metallic auxiliary stairs are utilized in a stairway at one side thereof as there are steps in the stairway.

Other objects and advantages of the invention will become apparent as the description thereof given hereunder proceeds with reference to the accompanying drawing, the single figure showing in perspective a portion of a stairway with the auxiliary stairs applied thereto.

Referring in detail to the drawing, 10 denotes a portion of a stairway showing stairs or steps 11 and 12, and a balustrade 13 provided on the staircase 14. The stairs 11 and 12 have a conventional tread 15, and a conventional rise 16.

The auxiliary stair 17 is preferably made of sheet metal of a guage having sufficient strength for the purpose intended and is shaped to provide a tread portion 18 and a riser portion 19 which is given a height substantially one-half that of the riser 16 of the stairway, the width of the tread portion 18 being substantially equal to the width of the tread 15. At the rear edge of the tread portion 18, the same is provided with a short vertical flange 20 provided with a plurality of holes for the reception of the screws 21 for fastening the tread portion 18 to the riser 16 of the stairway. In a like manner the riser portion 19 is provided with a horizontally extending short flange 22 similarly provided with a plurality of openings for the reception of the screws 23 for fastening the riser portion 19 to the edge of the tread 15 of the stairway, as shown. As indicated above, one such auxiliary stair 17 is applied to each stair in a stairway.

It will be noted that the auxiliary stairs 17 are of a width which is considerably less than the width of the stairway being preferably not greater than one-fourth the width of the stairway.

In attaching the auxiliary stairs 17 to the stairs of the stairway they are preferably placed adjacent the staircase 14 on the balustrade side thereof. This will enable the person using the auxiliary stairs 17 to have the benefit of holding on to the balustrade.

In the use of the auxiliary stairs 17, it will be apparent that with the right foot of the person placed on the tread 15 of the stair 11, the left foot will be placed next on the tread portion 18 (going up the stairs), then the right foot will be placed on the tread 15 of the stair 12, followed by the left foot being placed on the tread portion 18 of the auxiliary stair on the tread 15, and so on. In this manner, the person walking up the stairs will have to raise his feet only one-half the distance of the conventional rise 16 of the stairs 11, 12.

Changes in the details of construction and arrangement of parts may readily be made by those skilled in the art without departing from the spirit of the invention as defined by the appended claims:

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In combination with a conventional stairway including a plurality of stairs, an auxiliary stair for each of said stairs, each auxiliary stair formed of a single sheet of sheet metal and comprising a tread portion of substantially the same width as said stairs, and a riser portion of a height substantially one-half that of the risers of said stairs, attaching flanges formed at the free end edges of said tread and riser portions adapted for rigid attachment respectively to said tread and riser of each stair, said auxiliary stairs being arranged at one side of said stairway, and each of said auxiliaryy stairs being of a length constituting a fractional part of the width of said stairway so as not to interfere with the normal use thereof.

2. In combination, a stairway, an auxiliary stair for attachment to a stair in said stairway formed of a single sheet of sheet metal and comprising a tread portion and a riser portion of a height substantially less than that of the risers of the stairs in said stairway and arranged at right angles to each other, the rear end of said tread portion being formed to provide a short vertical flange and the lower end of said riser portion being formed to provide a short horizontal flange, a row of openings in each flange, said flanges being adapted to engage respectively

both the riser and tread of a stair, and fastening means inserted through said flange openings for rigidly securing said auxiliary stair in place, said auxiliary stairs being arranged at one side of said stairway, and each of said auxiliary stairs being of a length constituting a fractional part of the width of said stairway so as not to interfere with the normal use thereof.

3. In combination, a stairway, an auxiliary stair for attachment to a stair in said stairway comprising a tread portion and a riser portion of a height substantially less than that of the risers of the stairs in said stairway and formed of sheet metal and provided with means formed from the stock by which said auxiliary stair is firmly secured in place in the stairway, said auxiliary stairs being arranged at one side of said stairway, and each of said auxiliary stairs being of a length constituting a fractional part of the width of said stairway so as not to interfere with the normal use thereof.

4. In combination, a stairway having a staircase, an auxiliary stair comprising a tread and riser portion of a height substantially less than that of the risers of the stairs in said stairway and formed of sheet metal and positioned on a stair in said stairway and adjacent to said staircase and of a length substantially less than the width of said stair and arranged at one side of said stairway so as not to interfere with the normal use thereof, and means for firmly securing said auxiliary stair in place.

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