

Aug. 24, 1926.

1,596,909

F. H. WEEKS

CHAIR

Filed Dec. 17, 1924

Fig. 1.

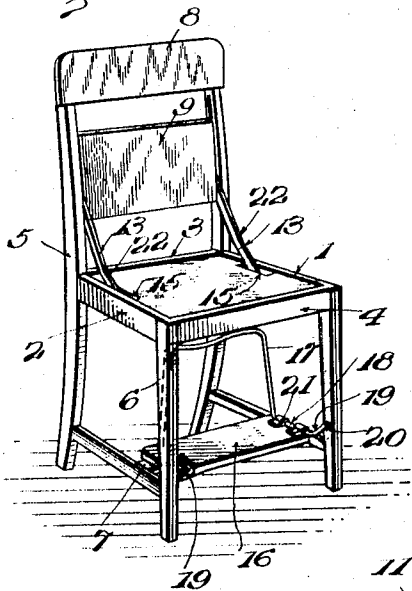


Fig. 2.

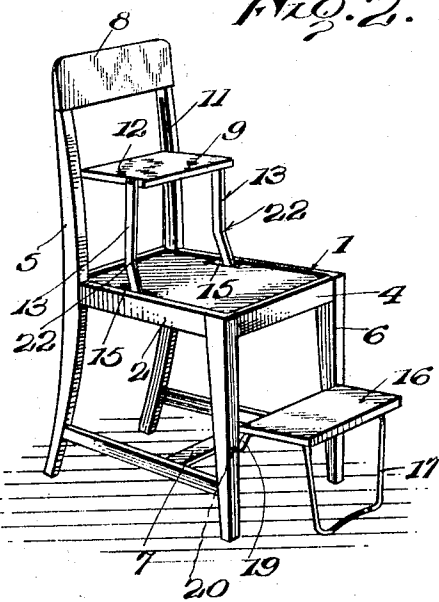


Fig. 5.

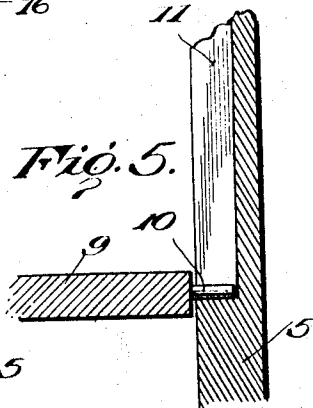


Fig. 3.

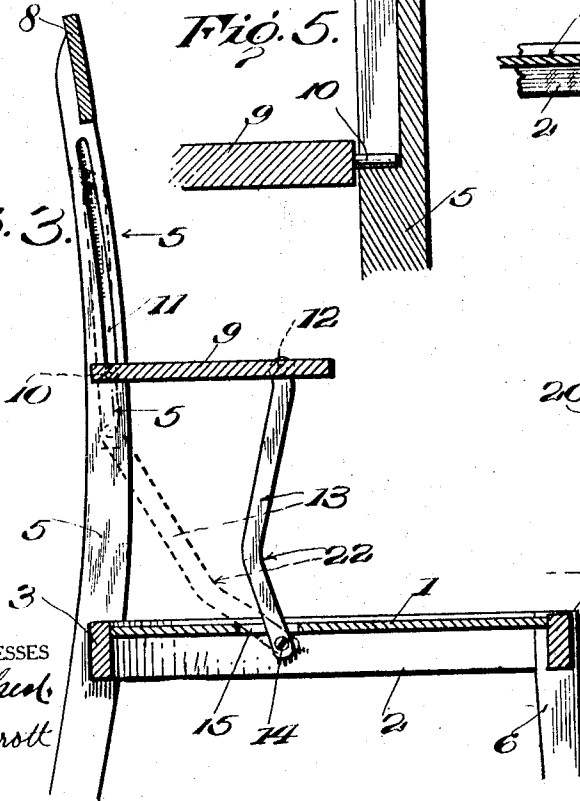
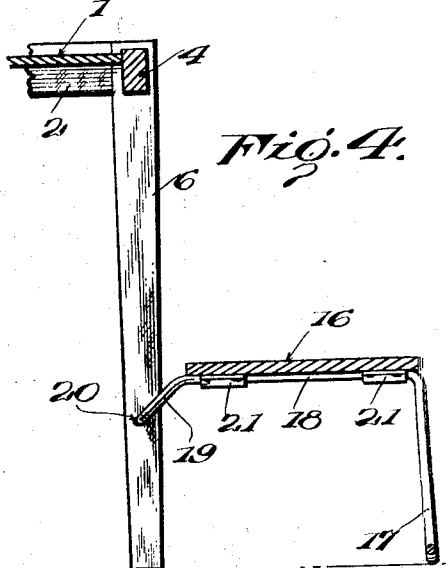


Fig. 4.



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CHAIR.

Application filed December 17, 1924. Serial No. 756,492.

This invention relates to an improvement in chairs, and it consists of the constructions, combinations and arrangements herein described and claimed.

5 An object of the invention is to provide a chair which is capable of being put to a number of uses, the construction being such that it is convertible into a step ladder or a high-chair at will.

10 Other objects and advantages will appear in the following specification, reference being had to the accompanying drawing, in which

Figure 1 is a perspective view of the improved chair, illustrating the position that it normally assumes.

Figure 2 is a perspective view illustrating the chair converted into a step ladder.

Figure 3 is a sectional view of the upper part of the chair it being useable in this position as a high chair.

Figure 4 is a detail sectional view of the lower part of the chair illustrating the foot rest.

25 Figure 5 is a detail sectional view taken substantially on the line 5—5 of Figure 3.

In carrying out the invention use is made of a number of parts found in the familiar household chair. For example, the seat 1 is supported by the side, back and front rails, 2, 3 and 4 respectively, these in turn being supported by the back supports 5 and legs 6. The back supports are long and constitute a pair of legs according to custom. The legs are strengthened by an arrangement of braces including the center brace 7. The back supports carry a pair of back boards 8 and 9, and it is the latter of these which constitute one of the elements of the invention.

40 The back board 9, which may well be termed the intermediate back board, has trunnions 10 (Fig. 5) which are slidable in slots 11 on the inside of the back supports 5. These trunnions project from the sides of the intermediate board 9 near one edge, and at the same side near the opposite edge the board has pivotal mountings 12 at which the metal legs 13 are attached. The opposite ends of these legs are pivoted at 14 (Fig. 3) to the insides of the side rails 2, the seat 1 being slotted at 15 to permit passage of the legs.

It will be observed that the metallic plates 13 have offsets 22. These offsets are for

the purpose of abutting the rear ends of the slots 15 when the intermediate back board 19 is moved into position between the back supports 5. The engagement of the offsets 22 with the rear ends of the slots provides an abutment which prevents the lower edge of the board 9 from swinging loosely or from swinging backward out of the support 5 when a person rests in the chair.

60 A step 16 has mounting between the front legs 6 of the chair. A bar of iron, suitably bent, provides both the pivot for this step and also the support which holds the step in the extended position shown in Figure 2. The bar spoken of is bent to provide a U-support 17. It is then bent to produce a pair of parallel portions 18 (Fig. 4) further bent to provide angled portions 19, finally terminating in lateral lugs 20 which occupy holes in the sides of the legs 6 and thereby provide the pivotal mounting spoken of. The parallel portions 18 are held in place beneath the step 16 by suitable clips 21 or other appropriate fastening means.

The operation and use of the chair is now readily understood. It is plainly seen in Figure 1 that when the intermediate board 9 is moved in place between the back supports 5 and the step 16 is turned over beneath the chair seat that an appearance very much on the order of the ordinary chair is presented.

Should the occasion arise to use the device as a high chair the lower edge of the back-board 9 is pulled up and forward whereupon the metal legs 13 swing on their various pivots and the trunnions 10 slide down in the slots 11 until the limit of movement is reached. A child may be seated on the platform or board 9, the seat 1 of the chair being used as a foot rest.

Upon desiring to use the device as a temporary step ladder the board 9 is pulled up and forward as already described and the step 16 is swung around on its pivots until the U-support 17 rests on the floor. The parts 16, 1 and 12 now constitute the steps of a ladder.

It may be found desirable to merely employ the step 16 as a foot rest for a person seated in the chair. It is only necessary to then swing the step 16 around until the U-support 17 meets the floor. The center

brace 7 limits the inward movement of the step 16 when revolved upon its pivots, into the inoperative position.

There are several items of construction which must be taken into consideration as being of considerable importance in a device of this kind. It is to be noted in Figures 1, 2 and 3 that the back supports 5 curve rearwardly quite decidedly but not sufficiently to be objectionable. The perpendicular position of the trunnions 10 falls well within the point where the back supports rest on the floor. This being so in respect to the trunnions, it is obvious that the center of gravity of a person standing on the platform 12 will fall well within the place of contact upon the floor of the back supports, thereby obviating the possibility of the step ladder from tipping over backward. It is important that this be prevented.

Another special feature resides in the arrangement of the bottom step 16. Any weight placed upon the step is applied directly to the floor through the U-support 17 and the lugs 20 which are attached to the chair legs 6. The chair structure is therefore spared any strains which would be imposed thereon if the bottom step were supported solely upon the chair.

While the construction and arrangement of the improved chair is that of a generally preferred form, obviously modifications and

changes may be made without departing from the spirit of the invention or the scope of the appended claims.

I claim:—

1. A chair including side rails, and a seat having parallel slots, back supports having slots, a back board having trunnions movable in the latter slots, and metal legs pivoted at the extremities to the back board and side rails respectively, said legs extending through the seat slots for the latter purpose and having offsets to rest against one end of the slots and thereby limit the movement of the back board when moved in place between the back supports.

2. A chair including side rails, and a seat having parallel slots, back supports having slots, a back board having side trunnions near one edge, said trunnions being movable in the latter slots, a pair of legs, means by which the legs are pivoted at one end to the sides of the back board near the edge opposite to said trunnions, means by which the opposite ends of the legs are pivoted to the side rails, said legs extending through the seat slots for the purpose of effecting said pivoting, and offsets formed in the legs to rest against certain ends of the slots when said board is folded back within the back supports, thereby preventing said last-mentioned edge from swinging backward.

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