

Oct. 20, 1936.

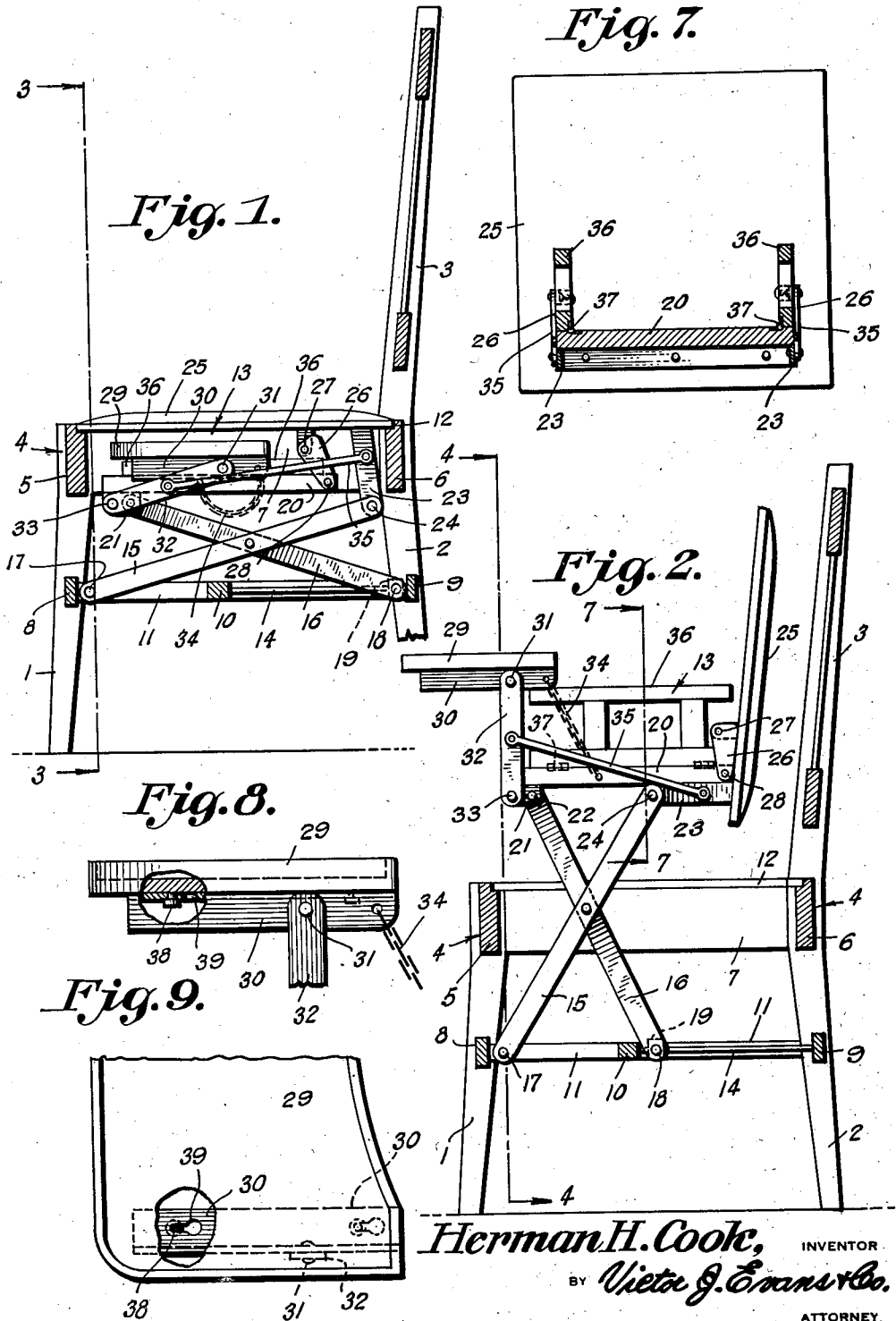
H. H. COOK

2,058,299

COMBINATION CHAIR

Filed June 17, 1935

2 Sheets-Sheet 1



Herman H. Cook, INVENTOR.
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2 Sheets-Sheet 2

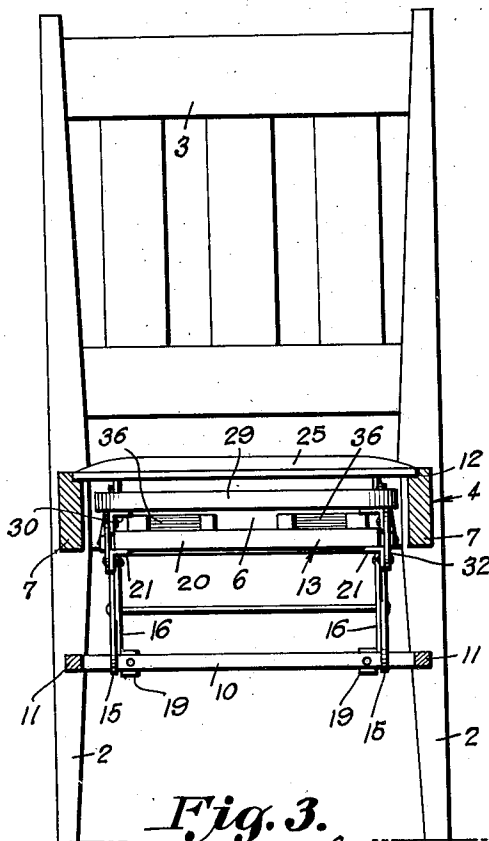


Fig. 3.

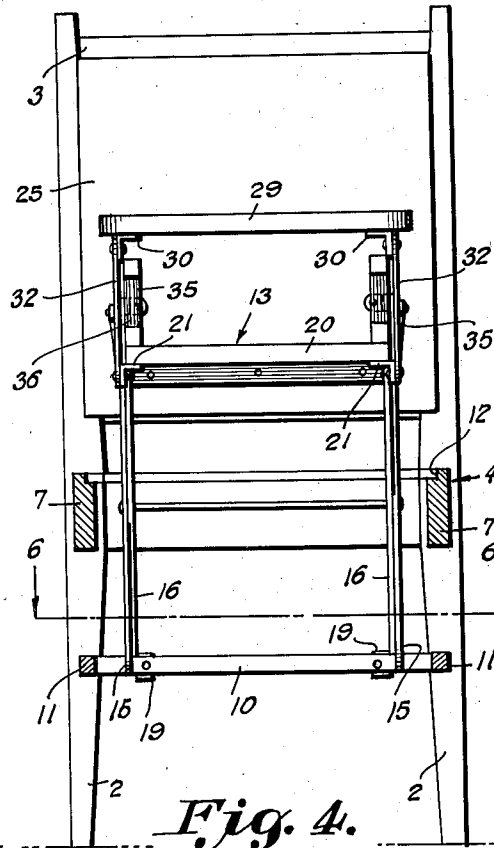


Fig. 4.

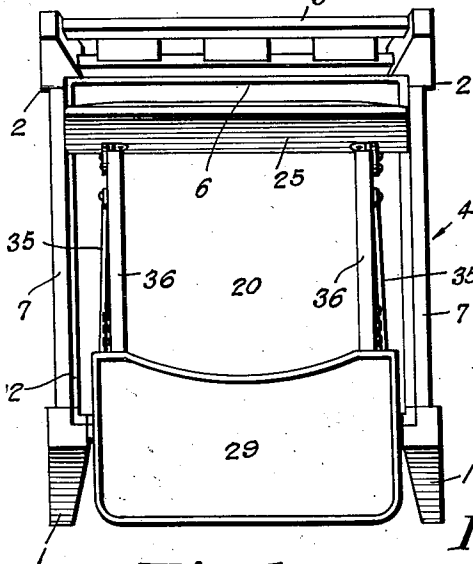


Fig. 5.

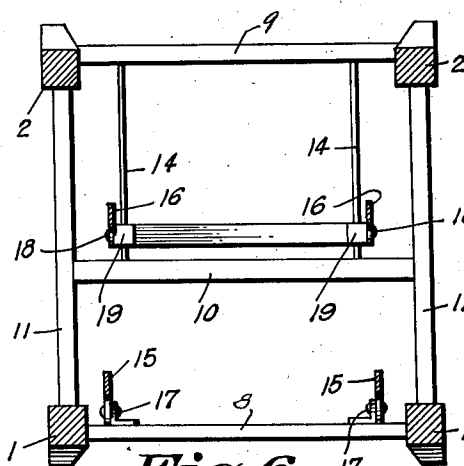


Fig. 6.

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2,058,299

COMBINATION CHAIR

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Application June 17, 1935, Serial No. 27,117

1 Claim. (Cl. 155—132)

My invention relates to improvements in combination chairs, and more particularly to a combination dining room chair and high chair.

The primary object of my invention is to incorporate with a dining room chair an auxiliary high chair unit foldable into a hidden position within the dining room chair and adapted, in part, in its folded position to form the seat of the dining room chair.

Another object is to equip a dining room chair with a folding high chair unit embodying seat and back members, respectively, one folding over the other and means for locking the unit in unfolded position.

Still another object is to equip the folding unit with a tray, movable to folded and unfolded positions, respectively, by corresponding movement of the back member.

To the accomplishment of the above and subordinate objects presently appearing a preferred embodiment of my invention has been illustrated in the accompanying drawings and will now be described in detail in the following and defined in the claim appended hereto.

In said drawings:

Figure 1 is a view in vertical transverse section, parts showing in elevation, of a combination chair constructed in accordance with my invention, the auxiliary unit being shown in folded position.

Fig. 2 is a similar view illustrating the auxiliary unit in unfolded position.

Fig. 3 is a view in vertical section taken on the line 3—3 of Figure 1, looking in the direction indicated by the arrows.

Fig. 4 is a view similar to Figure 3 taken on the line 4—4 of Figure 2 looking in the direction indicated by the arrows.

Fig. 5 is a view in top plan with the auxiliary unit in unfolded position.

Fig. 6 is a view in horizontal section taken on the line 6—6 of Figure 4 looking in the direction of the arrows.

Fig. 7 is a view in vertical transverse section taken on the line 7—7 of Figure 2 looking in the direction of the arrows.

Fig. 8 is a fragmentary view in end elevation of the tray of the auxiliary unit and,

Fig. 9 is a fragmentary view in top plan of said tray.

In its illustrated embodiment, my invention comprises a main chair frame, of the usual dining type, comprising front and rear legs 1 and 2, a back 3, a seat frame 4 comprising a front bar 5, a rear bar 6, and side bars 7. The legs 1 are

braced by front, rear, and intermediate rungs 8, 9, and 10, respectively, and side rungs 11. The seat frame 4 is chamfered around its inner top edge to form a counter-sunk ledge 12 for a purpose presently seen.

An auxiliary high chair unit 13 is incorporated with the above chair frame as follows: Mounted upon the front rung 8 and upon a pair of parallel guide rods 14 extending between the intermediate and rear rungs 10 and 9, are opposed pairs of upstanding lazy tong bars 15 and 16 in each instance.

One bar 15 of each pair is pivoted at its lower end, as at 17 to the front rung 8. The lower ends of the other bars 16 are pivotally connected, as at 18, to blocks 19 slidable on the guide rods 14 so that said bars may be swung down in the seat frame 4 below the same, or swung to extend their upper ends through and above said frame.

A seat 20, for the auxiliary unit, is swingably mounted adjacent its front edge on the upper ends of the bars 16 of each pair by angle brackets 21 suitably secured to said seat member and pivoted to said bars as at 22. Extending from the upper ends of the other bars 15 of said pairs is a pair of short arms 23 pivoted at their inner ends to said arms 15, as at 24, and having secured to their outer ends, in substantially right angle relation thereto, a back member 25 for the auxiliary unit. The back member 25, for a purpose presently seen, is of a size and edge contour to fit against the ledge 12. A pair of links 26 pivoted, as at 27, to the front face of said back member 25 and similarly connected, as at 28, to the side edges of said seat member suspend the rear edge of the seat member from the back member. The angular relation of the short arms 23 and back member 25, and the link connections 26 between the latter and the seat member are such that in the unfolded position of the auxiliary unit the short arms 23 are parallel with the seat member 20 and engage the bottom thereof, the pivot 24 being to one side of a dead center relation of said arms 23 and bars 15. By this arrangement unfolding movement of the back member 25 is limited and the lazy tong arms 15 and 16 are locked against movement. At the same time this relation of the short arms 23, back 25 and seat 20 permits the back member 25 to be swung forwardly from its unfolded position, over the seat member 20 such folding movement thereof folding the arms 15 and 16 down below the seat frame 4 and thereby lowering the folded back member

25 so that it may be positioned on the ledge 12 to form a seat on the main chair frame.

At the front of the seat member 20 is a tray 29 removably secured, by means presently described, to a pair of tray supporting arms 30 the latter swingably mounted, as at 31, upon a pair of links 32 pivoted, as at 33, to the before mentioned brackets 21 for swinging movement on the latter. The arrangement of the links 32, and the tray 29, is such that the said links may be swung inwardly of the unit 13, to swing the tray 29 down over the seat 20, or, to vertical positions in front of said seat member 20. A pair of chains 34 having their opposite ends similarly connected to the tray supporting arms 30 and to the seat member 20 provide for swinging the tray 29 into a horizontal position when the links 32 are moved to vertical positions. The links 32 are swung by means of rods 35 pivotally connected thereto and to the short arms 23 so that when the back member 25 is swung downwardly and forwardly said links 32 will be swung from vertical positions inwardly of the unit to position the tray 29 and arms 30 over the seat 20 and, conversely, when said back member 25 is reversely swung said links 32 will be moved to vertical positions and said tray 29 under the pull of the chains 34 will be moved into a horizontal position. At the opposite side edges of the seat member 20 are side arm frames 36 hinged to said seat as at 37 to fold down over said seat member.

The sequence of operations in folding the auxiliary unit is as follows. The side arm frames 36 are first folded inwardly down over the seat member 20. The back member 25 is then swung forwardly and downwardly. Such operation of the back member through the previously described connection of the short arms 23 to the arms 15 folds the arms 15 and 16 down into the chair frame 4, said arms pivoting at 17 and sliding on the guide rods 14 as will be clear. Coincidentally the links 32, through the described rods 35 connecting them to the short arms 23 will be swung by the latter inwardly of the seat to the position shown in Figure 1 thereby locating the tray 29 over the side arm frames 36 and under said back member 25. The relation of the parts is such that the back member 25 reaches a substantially horizontal position coincidentally with its movement substantially flush with the ledge 12 so that it may be located on said ledge to form the seat for the main chair frame. Obviously since the remaining parts of the unit 13 are beneath the back member 25 said parts will be substantially hidden from view beneath said member

and the seat frame 4. By grasping one edge of the back member 25, in the folded position of the unit 13, and lifting said member upwardly the various parts of said unit may be unfolded, as will be clear without further description.

The tray 29 is preferably removably secured to the tray supporting arms 30 by means of headed studs 38 on the bottom thereof and bayonet slots 39 in said arms 30.

The described combination chair is easily operable to either folded or unfolded position by virtue of the lazy tong arms 15 and 16 and the described connection of the back member 25 thereto. Either operation may be effected by merely manipulating the back member 25 and the side arm members 36 the folding and unfolding of the tray being automatic as will be manifest. It may be manufactured at a relatively low cost, is durable in construction, convenient, and provides for concealing the major portion of the auxiliary unit in the folded position of the latter.

The foregoing constitutes a detailed description of a preferred embodiment of my invention but it is to be understood that the right is herein reserved to modifications in the described construction and arrangement of parts falling within the scope of the claim appended hereto.

What I claim is:

A combination chair including a main chair frame having seat supporting bars, an auxiliary folding chair unit comprising seat and back members respectively, lazy tong bars supporting said members on said frame and operating to elevate and lower the members, links pivotally connecting said back member to said seat member and permitting the back member to lie horizontally on said supporting bars when said lazy tong bars are lowered, a pair of said lazy tong bars being pivotally connected to said seat member to elevate the seat member when the lazy tong bars are raised, a pair of arms pivoted to the other pair of lazy tong bars and fixed to said back member to raise the back member to vertical position when the lazy tong bars are raised, said pair of arms being adapted to engage the seat member to limit swinging movement of said back member from horizontal position to vertical position and to lock the lazy tong bars against collapse when the lazy tong bars are raised, a tray, links pivotally connecting the tray to the seat member, a chain between the tray and the seat, and links pivotally connecting the last named links to said pair of arms for swinging the tray into and out of operative position.

HERMAN H. COOK.