Dec. 30, 1930. E. C. HARTER 1,787,108

SECURING MEANS FOR LAPPED ELEMENTS

Filed Aug. 22, 1929

Fig. 1.

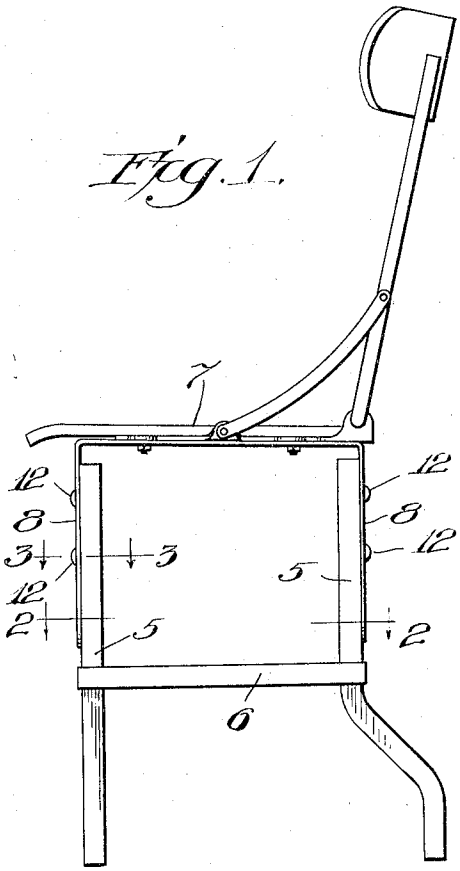


Fig. 2.

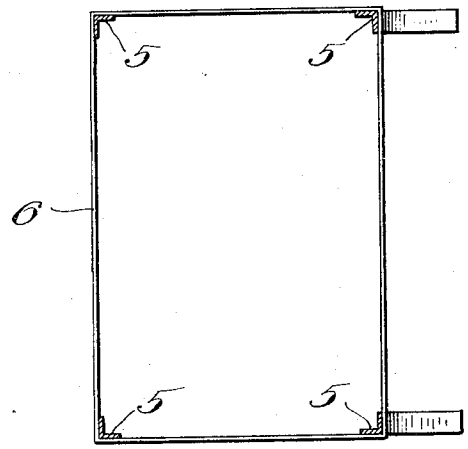


Fig. 4.

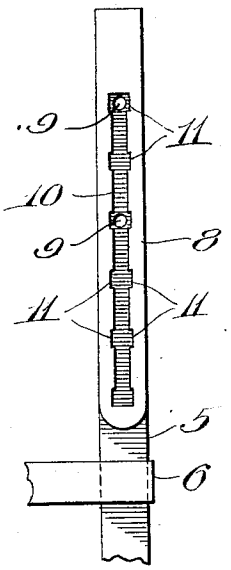
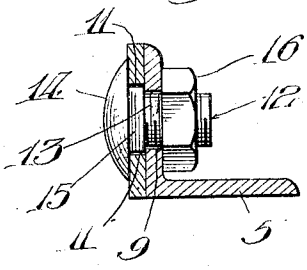


Fig. 3.



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UNITED STATES PATENT OFFICE

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SECURING MEANS FOR LAPPED ELEMENTS

Application filed August 22, 1929. Serial No. 387,619.

My invention relates to means for securing together in different positions of longitudinal adjustment, lapping elements such, as for example, the legs of chairs, or stools, and cooperating members depending from the seats of such structures and by the vertical adjustment of which on said legs the height at which the seat extends may be varied as desired.

My object is to provide novel, simple and economical means for the purpose above stated and by the use of which relative adjustment of the overlapping elements may be readily effected and the same held securely in adjusted position.

Referring to the accompanying drawing in which my invention is illustrated as embodied in a chair, but without intending to limit it to embodiment in such a structure:—

Figure 1 is a view in side elevation of a chair embodying the invention.

Figure 2 is a plan sectional view taken at the line 2—2 on Fig. 1 and viewed in the direction of the arrows.

Figure 3 is an enlarged plan sectional view taken through one of the legs of the chair, the section being taken at the line 3—3 on Fig. 1 and viewed in the direction of the arrow; and

Figure 4, a view in side elevation of the structure at one corner of the chair.

In the arrangement shown the chair comprises four legs 5 grouped in rectangular form with a restraining band 6 surrounding the grouped legs between their upper and lower ends and secured thereto. The chair also comprises a seat portion 7 provided at its corners with depending members 8 adapted to lap, respectively, the upper ends of the legs 5, the legs 5 and the depending members 8 constituting elements to be connected together in relative longitudinal adjusted position to cause the seat portion 7 to extend at the desired height.

Each leg 5 is shown as containing an upper and a lower hole the lower one of which for one of the legs is represented at 9 in Fig. 3 and the depending members 8 each contain a slot extending longitudinally thereof as represented at 10 in Fig. 4. The side walls of the slot 10 contain vertical rows of recesses 11 which open into the slot 10 and are disposed in opposed relation to each other as shown in Fig. 4.

The openings 9 in the legs 5 and the recessed slots 10 in the members 8 are provided to receive devices for securing the legs and members in adjusted position, these devices in the particular construction shown comprising bolts 12 which extend through the openings 9 and the slots 10.

The shanks 13 of the bolts are provided adjacent the heads 14 thereof, with oppositely extending projections 15 of a size to substantially fit into any of the pairs of opposed recesses 11, as shown in Fig. 3 and, with the walls of such recesses, form stop means holding the seat structure 7 against descent.

To adjust the legs 5 and the members 8 relative to each other the nuts 16 of the bolts 12 are unscrewed sufficiently to permit the bolts to be moved lengthwise to a position in which the portions 15 of the bolts are removed from the recesses 11 and the shanks proper 13 of the bolts extend into the slots 10. The legs 5 and members 8 may then, without entirely removing the bolts, be adjusted lengthwise of each other as the bolts may slide, crosswise, along the slots if the adjustment is effected by sliding the legs 5 relative to the members 8, or the members 8 may be slid lengthwise along the bolts if the adjustment is effected by sliding the members 8 relative to the legs. The desired relative adjustment of the legs 5 and members 8 having been effected the bolts 12 are adjusted to enter the portions 15 into opposed ones of the recesses 11 with which they register, and the nuts 16 then tightened.

While I have illustrated and described a particular construction embodying my invention, and have shown it as embodied in a particular kind of structure, I do not wish to be understood as intending to limit it thereto, as the construction shown may be variously modified and altered, and the invention embodied in other kinds of structures, without departing from the spirit of my invention.

What I claim as new, and desire to secure by Letters Patent, is:

In an adjustable chair, in combination, an element to be secured having a hole therethrough, an element in lapped relation with the first mentioned element, the second mentioned element having a slot and lateral enlargements of said slot at spaced locations, said slot and its enlargements extending completely through the second mentioned element, a fastening bolt, said bolt comprising a substantially polygonal portion adapted to engage and substantially completely fill portions of the slot and the adjacent enlargements, a head extending from said substantially polygonal portion and overlapping and contacting the second mentioned element, a shank extending from the substantially polygonal portion at the side thereof opposite to the head, said shank extending through said hole, and a fastening member adjustably disposed on said shank and engageable against the first mentioned element.

EVAN C. HARTER.