July 21, 1936. A. L. LOCHMAN ET AL 2,048,014

TABLET ARM FOR FOLDING CHAIRS

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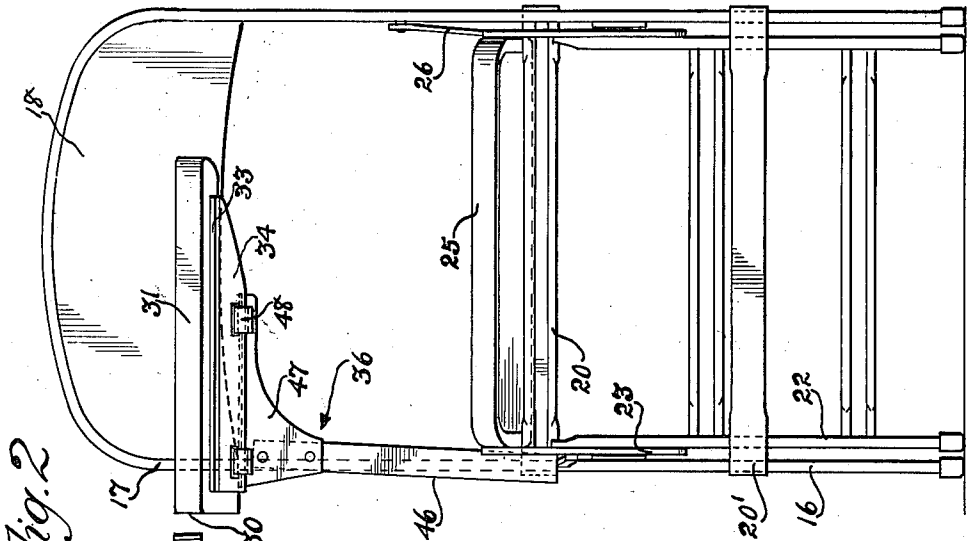


Fig. 2

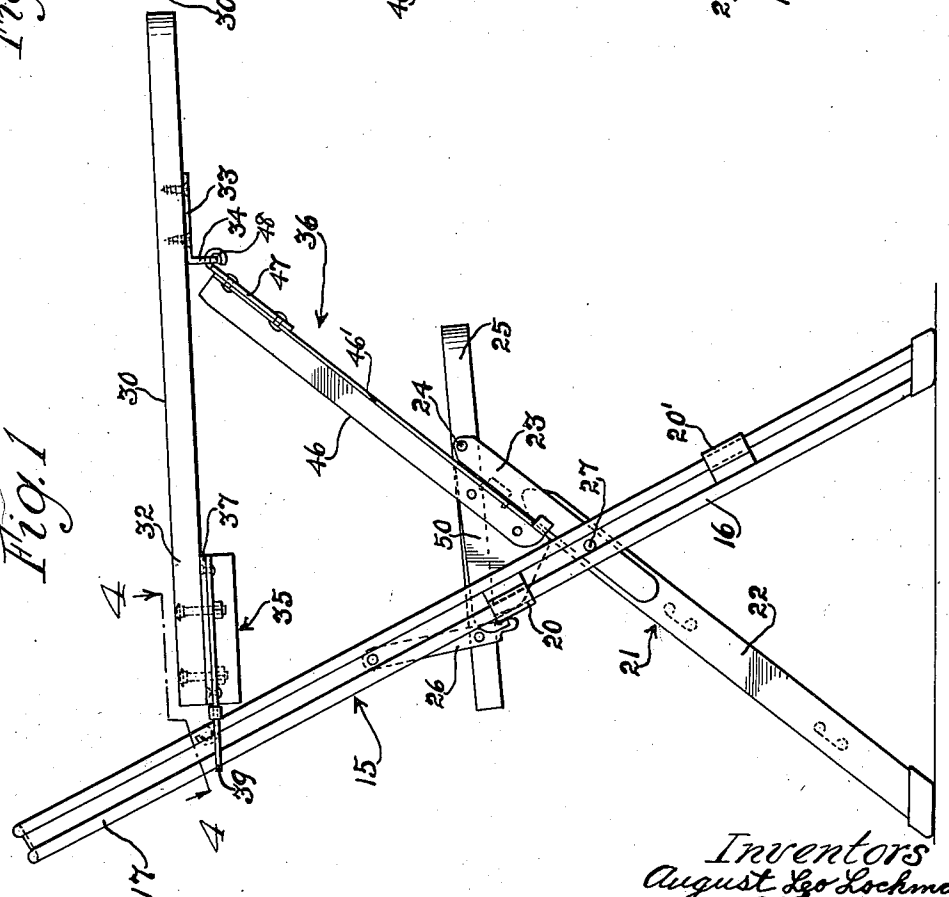


Fig. 1

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Fig. 3

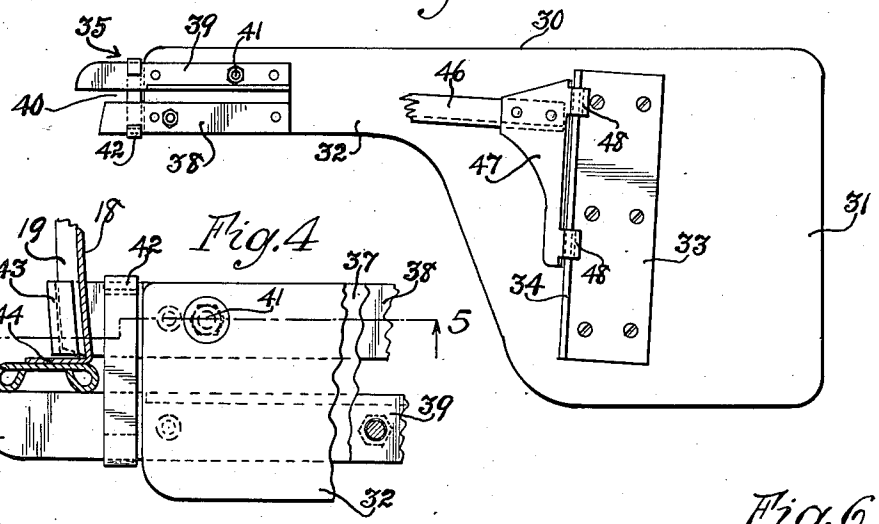


Fig. 4

Fig. 5

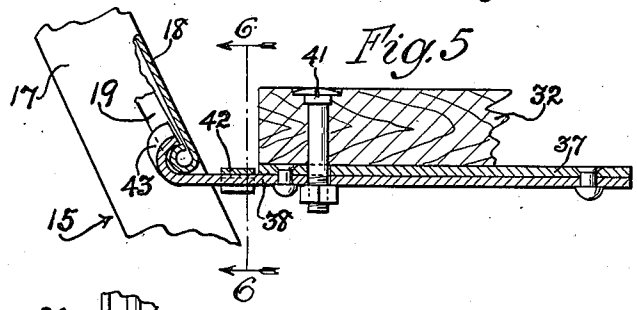


Fig. 6

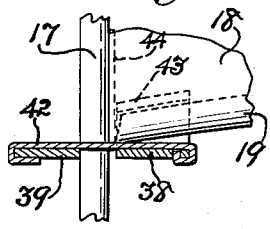


Fig. 9

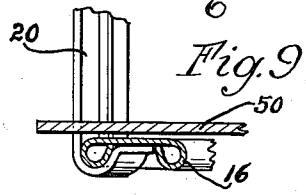
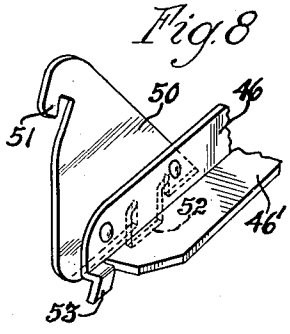


Fig. 8



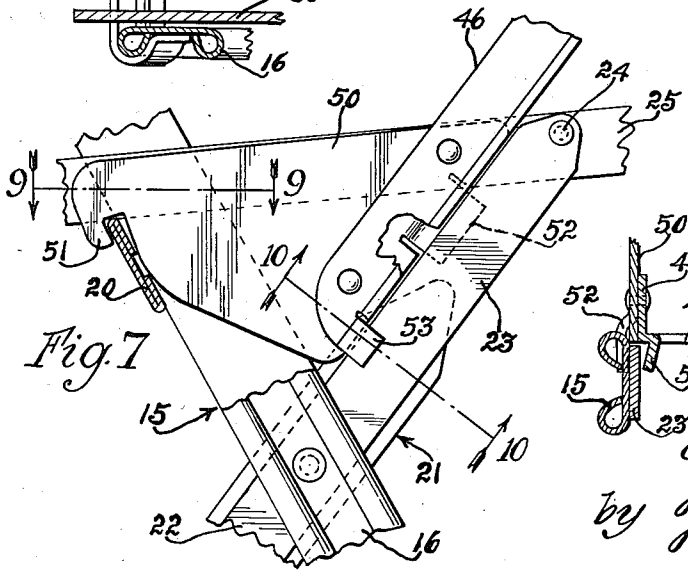


Fig. 7

Fig. 10

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UNITED STATES PATENT OFFICE

2,048,014

TABLET ARM FOR FOLDING CHAIRS

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Application August 22, 1935, Serial No. 37,366

11 Claims. (Cl. 155—125)

This invention relates to improvements in a tablet arm for folding chair.

One of the main objects of this invention is to provide a tablet arm or combination tablet and arm rest which can be very easily applied to an armless chair, especially a metal folding chair of the type illustrated herein, so that such a chair can easily be converted from its ordinary use as a seat to that of a combined seat and table, and make it especially adapted for use in lecture rooms, lunch rooms, at parties, and the like; and which tablet arm also can be very easily removed from the chair.

Another object is to provide a tablet arm construction which can be very easily attached to such a folding chair, as by merely sliding or setting it in position thereon; and will then be securely held connected to the chair, even if the chair upsets; and which likewise can be just as easily and quickly removed from the chair, by merely withdrawing it therefrom.

These and various other objects and advantages will become apparent from the following description, taken in connection with the accompanying drawings, in which the invention is illustrated in its preferred form of construction, it being understood that various other arrangements and forms of construction may be resorted to for carrying out the objects and purposes of this invention.

In the drawings:

Fig. 1 is a side elevational view of a folding chair illustrating this invention attached thereto.

Fig. 2 is a front elevational view of the chair and invention.

Fig. 3 is an inverted plan view of the improved tablet arm.

Fig. 4 is an enlarged fragmentary view, taken on line 4—4 of Fig. 1.

Fig. 5 is a sectional detail view, taken on line 5—5 of Fig. 4.

Fig. 6 is a sectional detail view, taken on line 6—6 of Fig. 5.

Fig. 7 is an elevational detail view of the lower means for attaching and supporting the tablet arm on the chair.

Fig. 8 is a perspective view of said attaching means.

Figs. 9 and 10 are sectional views, taken on lines 9—9 and 10—10 of Fig. 7, in the direction of the arrows shown thereon.

The drawings illustrate this invention in its preferred form of construction, which is particularly adpted for use on, and is shown in connection with, a metal folding chair which comprises a main frame 15 including a yoke-shaped bar member, the lower part of which provides the two front legs 16, and the upper part of which provides a bight portion or a connecting part 17 for the legs. A metal panel 18 is secured in said upper connecting part, providing the backrest of the chair and having a lower edge flange 19 for reinforcement. Cross-bars 20 and 20' hold the legs 16 rigidly connected.

The short frame 21 is mounted between the main frame and includes the rear legs 22 which have metal straps or bars 23 arising from the upper ends, said bars being pivoted at 24 to the forward side parts of the seat 25. The rear side parts of the seat are swingably connected to the main frame 15 by a pair of links 26, and the rear seat part rests on said cross-bar 20 on frame 15. A pivot element 27, as for example a rivet, extends at each side of the chair through the two adjoining legs 16 and 22, to provide for the folding of the chair.

Our improved tablet arm 30, as disclosed in this application, is especially arranged and adapted so that it may be quickly and conveniently attached to the above described folding chair for use therewith, and can likewise readily be removed therefrom. This tablet arm comprises a main tablet portion 31 for supporting a book, a plate, or the like, and is placed well inwardly laterally and made sufficiently large, so that an article may be placed thereon almost centrally in front of the person seated on the chair; and a narrow arm portion 32 extends rearward therefrom, adapted to support the arm of the person. Said tablet arm is preferably made of wood, or may be made of other suitable material, and has a reinforcing member, preferably an angle iron 33 including a depending flange 34, mounted crosswise under the nether face of the main portion 31.

The tablet arm is provided with means 35 for supporting it at the rear end, thru arm 32, on the upper part of the main frame 15; and with means 36 for supporting it at the forward end, thru tablet portion 31, on the pivotally connected parts of one of the pairs of legs. Both of said supporting means are arranged and constructed so that they can readily be set in place on or connected with the chair frame, in order to be held securely in position thereon and also to be conveniently and quickly removable therefrom.

The rear supporting means 35 of this tablet arm comprises an attaching member, which is herein shown in the form of a plate 37 and two straps or members 38 and 39 provided thereon in spaced relation, so arranged that their outer ends extend rearwardly beyond arm rest 32 and provide a space 40 therebetween adapted to receive the portion 17 of frame 15 therein, said supporting means 35 being secured under arm rest 32 by bolts 41 or the like. A metal band or strap 42 is preferably mounted over said members 38 and 39, adjacent to the rear end of arm rest 32, to abut against frame means 17 and provide a limit

for the rearward movement of the tablet arm on the chair frame. The inner strap 38 is preferably provided with an upturned or curved lip 43 which is adapted to be hooked or engaged around flange 19 on backrest 18, by lifting the front part of tablet arm 30 slightly upwards; thereby supporting said end of the tablet arm and preventing it from moving forwardly from the backrest, while in its level or operative position. Strap 39 bears against the outer side of frame means 17, while strap 38 and its hook 43 bear against the inner side of end flange 44 whereby backrest 18 is secured on frame means 17, as indicated in Fig. 4.

The forward supporting means 36 of the tablet arm comprises a supporting arm or bar 46, which preferably consists of an angle iron including a lower flange 46', having an attaching member 47 secured to its upper end which is provided with a pair of hooks 48 engaging in suitable openings provided in flange 34 of plate 33, so that arm 46 is swingably and foldably mounted under the tablet arm. A substantially triangular plate 50 is secured on the lower end of supporting arm 46, its rear part being adapted to bear against the front of cross-bar 20, and it is provided with a rear hook 51 to engage over and behind said cross-bar, as best shown in Fig. 7, thus holding arm 46 and plate 50 against forward and rearward movement on the chair. A lip 52 on the forward end of plate 50 engages against the inner side of bar 23 on leg 22, while a depending finger or hook 53 on the lower end of arm 46 engages against the outer side of bar 23, as best shown in Figs. 7 and 10, thus holding arm 46 and plate 50 against lateral movement on the chair. Said plate and arm fit snugly between bars 20 and 23 and between frame means 15 and seat 25, as illustrated in the drawings.

With this construction and arrangement as disclosed above, the tablet arm is readily and conveniently attachable to the chair, by tilting the forward end upwardly and sliding straps 33 and 39 onto frame bar 17, so that the bar rests in the space 40 therebetween, while hook 43 engages around flange 19 on the backrest 18; in the meantime, plate 50 is slid in position between bars 20 and 23 and between frame 15 and seat 25, bringing lugs 51, 52 and 53 in holding position, whereby the tablet arm is brought into its substantially level and proper position for use, as indicated in the drawings. It is thus firmly held in position on the chair and will not separate therefrom even if the chair is upset; and at the same time, it can be quickly and conveniently removed from the chair by drawing and swinging the front part of the tablet arm upwardly, thereby raising plate 50 along with it and then dropping or unhooking the hook 43 from flange 19 on the backrest. This tablet arm is thus conveniently attachable to and detachable from this type of chair, by a mere push or a pull and a slight tilting movement of the device, so that the chair can be quickly and easily converted from a plain armless chair to a chair with tablet arm thereon, and again converted into a plain chair.

We claim:

1. The combination with a chair including upper frame means and a pair of pivotally connected legs at each of the two opposite sides thereof, of a tablet arm comprising means at its rear end engaging said frame means and also means provided on the frame means, thereby holding said end securely in position, and supporting means pivotally connected to said tablet arm and having means thereon which bears on means on the upper portion of one pair of said pairs of legs, being easily mounted by lowering it in position thereon, said tablet arm being readily attached to the chair by a swinging movement of said arm to mount its rear end in position and then a downward movement of the front end of said arm to mount said bearing means in position.

2. The combination, with a chair including a frame having a backrest member with lower flange means thereon, also a pair of pivotally connected legs associated with each side of said frame, of a tablet arm having spaced means at its rear end to engage the two opposite sides of a frame bar and including means engaging said flange means to secure the arm in position thereon, and supporting means depending from the forward part of said tablet arm and having means at its lower end bearing upon means on the upper part of one of said pair of legs and upon means on said frame bar, adapted to be mounted by dropping in position thereon, said tablet arm being readily attached to the chair by a swinging movement of said arm to engage the end means on the frame bar and flange means, then lowering the front end of the tablet arm downwardly and seating the lower mounting means on the legs.

3. The combination, with a folding chair including a yoke-shaped frame bar, the lower part of which provides the front legs and the upper part has backrest means thereon, also a pair of rear legs pivotally connected to the front legs and a seat pivotally mounted between the legs, of a tablet arm comprising spaced means at the rear embracing the two opposite sides of a frame bar and engaging means provided on said backrest, thus being readily mountable thereon with a slight tilting movement, and a supporting bar depending from the tablet arm and having means seated between the side of the seat and means on the adjoining pair of legs, above the pivotal connection of the legs, whereby said tablet arm is readily mountable on said chair by a short sliding and tilting movement thereof, and is likewise readily removable therefrom.

4. The combination, with a folding chair including a yoke-shaped frame bar, the lower part of which provides the front legs and the bight portion has a backrest member mounted therein, also a pair of rear legs pivotally connected to the front legs and a seat pivotally mounted between the legs, of a tablet arm comprising forked means at the rear end engaging the two opposite sides of the frame bar and also means on the backrest, adapted to be mounted thereon with a slight tilting and swinging motion, a supporting member pivotally mounted under the tablet arm and including a member at its lower end adjacent one side of the seat and the adjoining pair of legs, fitting closely in position on the legs above their pivotal connection, and means on said member claspingly engaging means on said two adjoining legs to hold the member securely in position, whereby said tablet arm is readily mountable on said chair and readily removable therefrom.

5. A tablet arm for a folding chair including a pair of side frame bars having a backrest member at the upper ends also a pivotally connected leg associated with each of said side frame bars, below said member, said tablet arm comprising means at its rear end including a pair of spaced elements, one of which engages the outer side of a frame bar and the other engages the inner side of

said bar and also engages means provided on the lower part of the backrest to support said end and to prevent movement thereof on the bar, a supporting member swingably connected to said arm, and means on said supporting member adapted to be retained on means on the upper portion of one pivotally connected leg and on a frame bar, so as to be readily mounted thereon by merely pressing it downward into position.

6. A tablet arm for a folding chair including frame bars having a backrest member at the upper ends also a pivotally connected leg associated with each of said frame bars, said tablet arm comprising means at its rear end including two spaced elements adapted to receive a frame bar therebetween, and having hook means thereon which is hooked onto means on the lower part of the backrest, whereby said elements are readily mounted in position on the frame and backrest means by a swinging motion of the tablet arm, a supporting member swingably connected to said arm, and means on said supporting member adapted to hold onto means on the upper portion of one of the legs and on a frame bar above their pivotal connection, the means on the supporting member being readily mounted thereon by merely pressing it downward into position.

7. A tablet arm for a folding chair which includes frame bars having a backrest at the upper parts while the lower parts provide the front legs, a pair of rear legs pivotally connected to the front legs, also a seat pivoted to said legs, said tablet arm comprising a relatively large main supporting portion having a narrow rearwardly extending arm rest thereon, spaced means extending rearwardly from the arm rest to engage the two opposite sides of a frame bar, means on the spaced means to engage in rear of a lower part of the backrest, so as to support and hold the arm rest in position thereon, a supporting bar swingably connected to the tablet arm and depending therefrom, and means on the lower end of said bar adapted to bear on means on the upper portion of one of a pair of legs and on a frame bar above their pivotal connection, the means on the supporting bar being readily mounted thereon by merely pressing it downward into position, whereby the tablet arm is held securely on the chair and its main portion extends chiefly in front of the seat.

8. A tablet arm for a folding chair which includes a frame whereof the lower part provides the front legs and the upper part supports a backrest, a pair of rear legs pivotally mounted between said front legs, also a seat pivotally mounted between said pairs of legs, said tablet arm comprising spaced means extending from its rear end for receiving a frame bar therebetween, adapted to be mounted thereon with a slight rearward and tilting motion to engage means on the lower part of the backrest, a supporting bar and means for swingably connecting its upper end with the front part of the tablet arm, means on the lower end of said bar being shaped to fit snugly between the side of the seat and the upper portions of the two adjoining legs, and cooperating means on said lower means and on the two leg portions held claspingly together, adapted to be readily mounted by pressing said lower means downwardly onto said leg portions, and arranged to hold said lower means and bar securely in position.

9. A tablet arm for a folding chair which includes a frame whereof the lower part provides the front legs and the upper part supports a backrest, a pair of rear legs pivotally mounted between said front legs, also a seat pivotally mounted between said pairs of legs, said tablet arm comprising spaced means extending from its rear end adapted to receive a frame bar therebetween, being adapted to be mounted thereon with a rearward and swinging motion, a supporting bar and means for swingably connecting its upper end with the front part of the tablet arm, means on the lower end of said bar being shaped to fit snugly against the upper portions of two adjacent legs, and means on said lower means to grasp one upper leg portion and to hook upon laterally extending means on the other leg portion, so as to hold the supporting bar firmly against movement in a horizontal plane but enable mounting it in position by merely pressing it downwardly

10. A tablet arm for a folding chair including a frame whereof the lower part provides the front legs and the upper part supports a backrest having a lower reinforcing flange, a pair of rear legs pivotally mounted between said front legs, also a seat pivotally mounted between said pairs of legs, said tablet arm comprising a front supporting portion and an arm rest extending rearwardly thereon, means on said arm rest including a pair of spaced elements extending rearwardly therefrom engaging the opposite sides of a frame bar, hook means on one element to engage behind the lower flange on the backrest so as to hold the arms firmly thereon against forward and vertical movement, a supporting bar and means for swingably mounting it under the forward part of the arm, means on the lower end of said bar including a plate adapted to fit closely between a side of the seat and the upper portions of an adjoining pair of legs, hook means on said plate and bar for embracing the upper part of one leg therebetween, and hook means at the rear of the plate to engage means on the other leg, thereby firmly holding said plate and bar in position

11. A tablet arm for a folding chair which contains a main frame including an upper frame having side bars and the front legs extending downward therefrom, a pair of rear legs pivotally mounted between said front legs, also a seat pivotally mounted between said pairs of legs, said tablet arm comprising a main front portion and an arm rest on the rear thereof, spaced means extending rearwardly from the arm rest adapted to grasp a side bar therebetween and to be mounted thereon with a slight tilting of the arm and rearward motion, means associated with said spaced means engaging the upper frame to support the end of the arm rest thereon, a supporting member and means swingably mounting it under said main portion of the tablet arm, means on the lower end of said member shaped to fit snugly between a side of the seat and the upper portions of the adjacent legs above their pivotal connection, spaced means associated with said lower means adapted to engage one of said leg portions therebetween, and means on said lower means adapted to grasp means provided on the other leg portion, so as to mount the lower means readily and hold it firmly in position by pressing it downwardly, whereby the tablet arm is easily and quickly mountable on the chair by a slight swinging and descending movement of the former on the latter.

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