

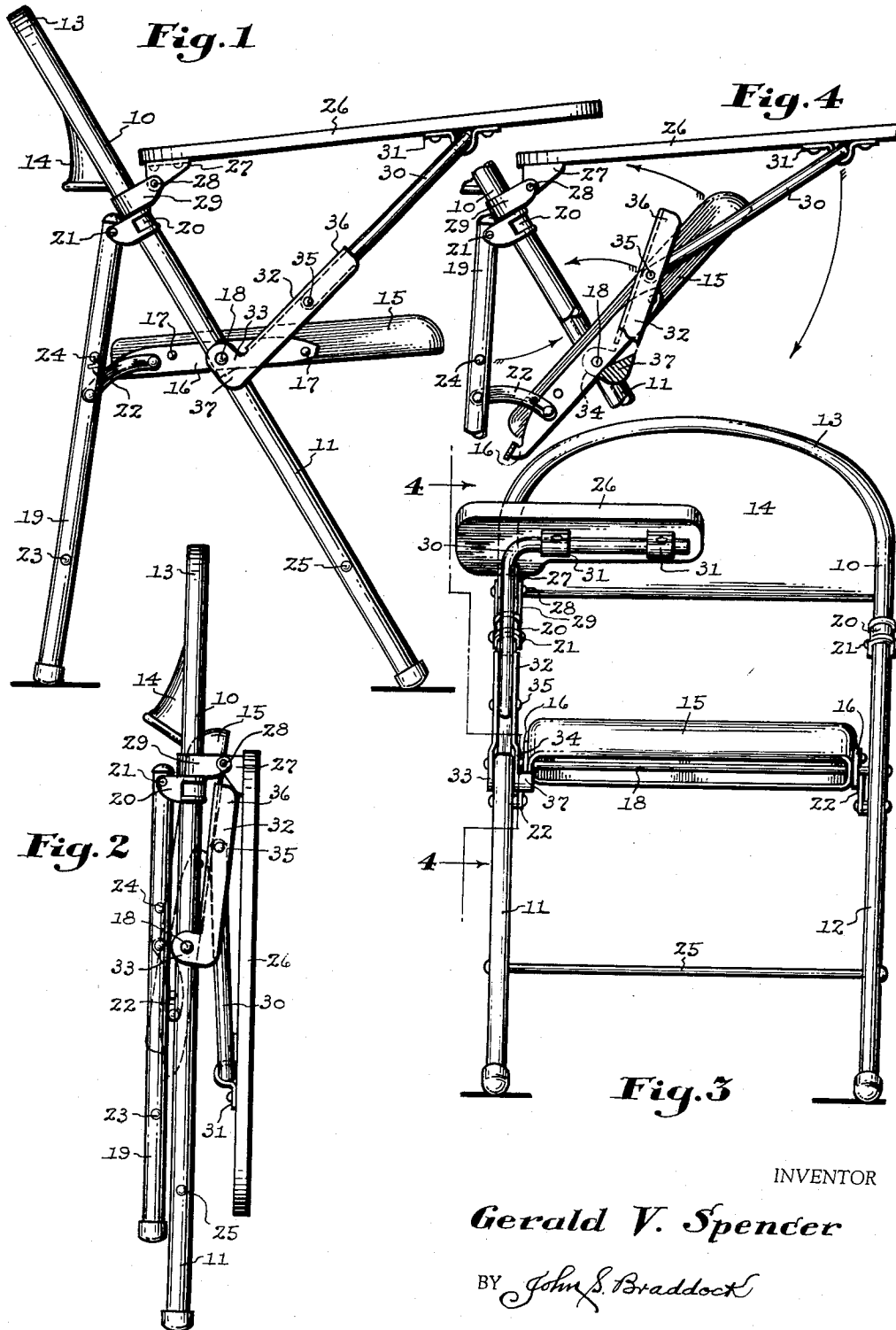
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FOLDABLE TABLET ARM CHAIR

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FOLDABLE TABLET ARM CHAIR

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6 Claims. (Cl. 155—125)

The present invention relates to folding chairs and more particularly to a folding chair having a tablet arm.

The primary objects of the invention are to provide a tablet arm chair which is foldable into a compact unit for storage when not in use; to provide such a chair in which the tablet arm is automatically folded when the chair is folded by lifting the front edge of the chair seat; and in general to provide such a foldable tablet arm chair which is sturdy in construction, reasonably economical in manufacture and attractive in appearance.

An illustrative embodiment of the invention is shown in the accompanying drawing, wherein:

Figure 1 is a side elevational view of the new chair in its unfolded position of use;

Figure 2 is a side elevational view of the chair in its collapsed or folded position for storage;

Figure 3 is a front elevational view of the chair in its unfolded position of use; and

Figure 4 is a fragmentary view, partly in side elevation and partly in section taken on line 4—4 of Figure 3, of parts of the chair in positions intermediate their extreme folded and extreme unfolded positions.

Referring now in detail to this drawing the chair there shown has an inverted U-shaped tubular metal front frame 10 providing spaced front legs 11, 12 connected at their upper ends by a bight 13 which serves as a support for a back rest 14. A chair seat 15 is here shown in the form of an inverted metal pan to the opposite sides of which are secured seat arms 16 by means of rivets 17. The seat 15 is pivotally mounted on an upper tie-rod 18 which extends between the front legs 10, 11, so that the seat is mounted for folding movement to a raised position between the front chair legs as seen in Figure 2 and for unfolding movement to a lowered, substantially horizontal use position as seen in Figures 1 and 3.

The rear legs 19 of the chair are also of tubular metal and are pivotally connected to the front legs 11, 12 by means of metal straps 20 secured to the front legs, to which straps the rear legs are pivotally connected at 21. The rear legs 19 are operatively connected to the rearward part of the chair seat 15 for folding movement therewith by means of connecting levers 22 pivoted to the rear legs below the seat level and to opposite sides of the seat. The rear legs 19 are connected by a lower strut 23 and an upper strut 24, said upper strut 24 additionally serving as a stop against which abut the rear ends of the seat arms 16 to limit the unfolding movement of the chair. The lower portions of the front legs are also desirably connected by means of a strut 25. The chair as described up to this point is of more or less conventional form.

The writing arm or so-called "tablet arm" 26 of the chair has a bracket 27 at its rearward end pivotally connected at 28 to a metal strap 29 secured to the right front leg 11 above the strap 20 thereon and thus well above the seat level. An L-shaped metal rod or supporting bar 30 has its shorter leg pivotally connected to the tablet arm 26 at the latter's forward underside by means of a pair of metal straps 31, and the longer leg of the supporting bar

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depends from the tablet arm in a rearwardly-downwardly direction when the chair is unfolded as seen in Figure 1.

A supporting link 32 is here shown as of downwardly opening channel bar form having at its rearward end upwardly flanged ears 33, 34 which embrace the front leg 11 therebetween and through which pass the tie-bar 18. The supporting link 32 is thus pivotally connected to the front leg 11 at the approximate seat level and by the same pivot which connects the seat 15 to the front leg 11. The link 32 extends forwardly-upwardly from said pivotal connection at 18 and is pivotally connected at 35 near its upper forward end to the lower rearward end of the supporting bar 30 which extends into the channel of the link 32. The link 32 has an extension 36 on its forward upper end, beyond the pivot 35, which extension 36 is adapted to contact the bar 30 to limit the unfolding movement of the tablet arm to its substantially horizontal use position shown, in which position the link 32 and bar 30 are in substantial alignment thus forming a firm support for the tablet arm 26.

The inner ear 34 on the lower rearward end of link 32 is provided with an inwardly extending lug 37, the form of which is best illustrated in Figures 3 and 4. When the chair is in its unfolded or use position a portion of the seat 15 which is forwardly of the seat's pivotal connection to the front leg 11 rests on the forward upper part of lug 37. When it is desired to fold the chair, the forward part of the seat is moved manually rearwardly-upwardly. During the initial phase of this movement the seat is disengaged from the lug 37. However, when the seat reaches an angle of about 20 degrees a portion thereof which is rearwardly of the seat's pivotal connection to the front leg 11 engages the upper rearward part of lug 37. Further raising movement of the seat 15 swings link 32 in a rearwardly-upwardly direction (see Figure 4) by reason of the seat's bearing against lug 37, and the link 32 in turn draws the lower rearward end of bar 30 rearwardly and upwardly. This articulated movement of link 32 and bar 30 results in rearward-downward movement of tablet arm 26 from its position seen in Figure 1, through its position seen in Figure 4, and finally to its extreme folded position seen in Figure 2. The tablet arm 26 is thus automatically folded with the other parts of the chair upon lifting movement manually applied to the front of the seat 15.

When the chair is unfolded by manually lowering the seat 15, a portion of the seat forwardly of its pivotal connection at 18 to the front leg 11 again engages the upper forward part of lug 37 thus automatically swinging link 32, bar 30 and the tablet arm 26 from their folded positions seen in Figure 2 to their unfolded use positions seen in Figure 1. This unfolding movement of the tablet arm is limited by contact of the extension 36 on the upper forward end of link 32 with bar 30, and the tablet arm 26 is thus sturdily supported in its substantially horizontal use position in which the link 32 and bar 30 are in substantial alignment.

While but one specific embodiment of the invention has been herein shown and described, it will be understood that numerous details thereof may be altered or omitted without departing from the spirit of the invention as the same is defined by the following claims.

I claim:

1. In a folding chair of the type having a front frame providing spaced front legs for the chair, a chair seat pivotally mounted at its opposite sides on said front legs for folding movement to a raised position between said legs and for unfolding movement to a lowered substantially horizontal use position, and rear legs for the chair pivotally connected to the front legs above the seat level and operatively connected to the rear of the seat for folding movement therewith to positions closely adjacent said

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front legs and for unfolding movement with the seat to rearwardly extended use positions, the combination of a tablet arm pivotally connected to one of the front legs above the seat level, a supporting bar having one end thereof pivotally connected to the tablet arm at the latter's forward underside, a supporting link pivotally connected to said front leg at the approximate seat level and extending forwardly-upwardly from said pivotal connection, said supporting link being pivotally connected near its upper forward end to the other end of said supporting bar, said link and said bar together forming a support for the tablet arm in a substantially horizontal use position in the unfolded position of the chair.

2. A structure according to claim 1 characterized by having means operatively associating said link with the seat whereby folding movement of the seat effects articulated movement of the link and the bar, said link being swung rearwardly and upwardly and said bar being consequently swung downwardly until the tablet arm rests closely adjacent said front leg in the folded position of the chair.

3. A structure according to claim 2 characterized by having a lug on the lower rearward end of the link adapted to be engaged by a portion of the seat which is rearwardly of the seat's pivotal connection to the front leg for effect-

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ing such articulated movement of the link and the bar and such consequent lowering movement of the tablet arm to its folded position.

4. A structure according to claim 3 characterized by having the lug on the lower rearward end of the link so formed as to be engaged by a portion of the seat which is forwardly of the seat's pivotal connection to the front leg in the extreme unfolded position of the chair.

5. A structure according to claim 1 characterized by having an extension on the upper forward end of the link adapted to contact the bar to limit the unfolding movement of the tablet arm to its substantially horizontal use position in which the link and the bar are in substantial alignment.

6. A structure according to claim 1 characterized by having the supporting link pivotally connected to the front leg by the same pivot which connects the seat to said front leg.

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