Feb. 22, 1949. V. Q. FLINN 2,462,377

MODERNISTIC SPRING METAL FOLDING CHAIR

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Fig. 1.

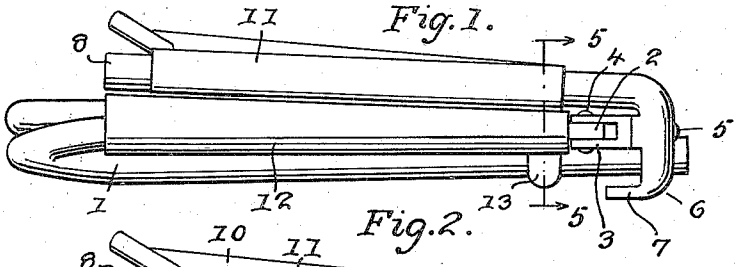
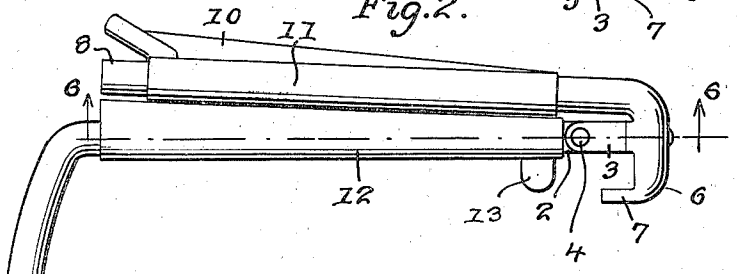


Fig. 2.



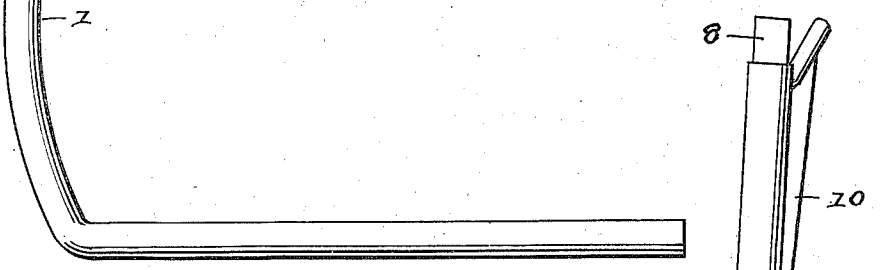
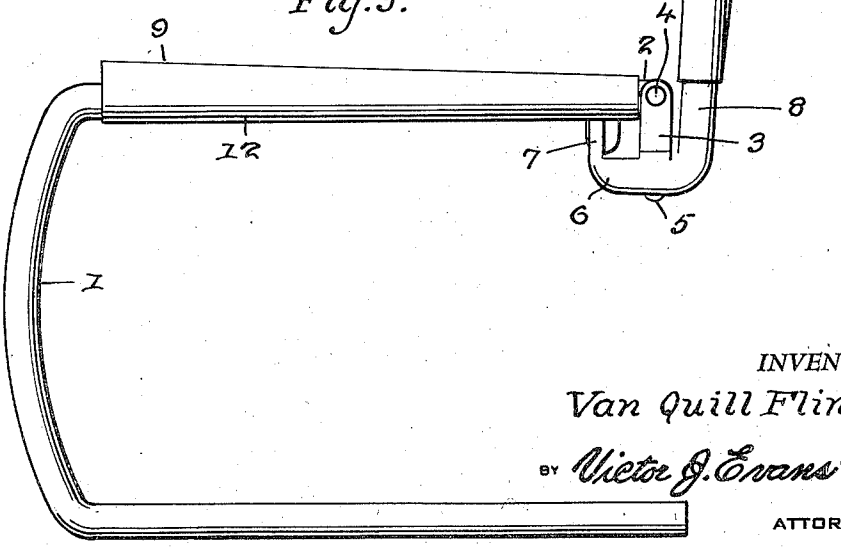


Fig. 3.



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Fig. 4.

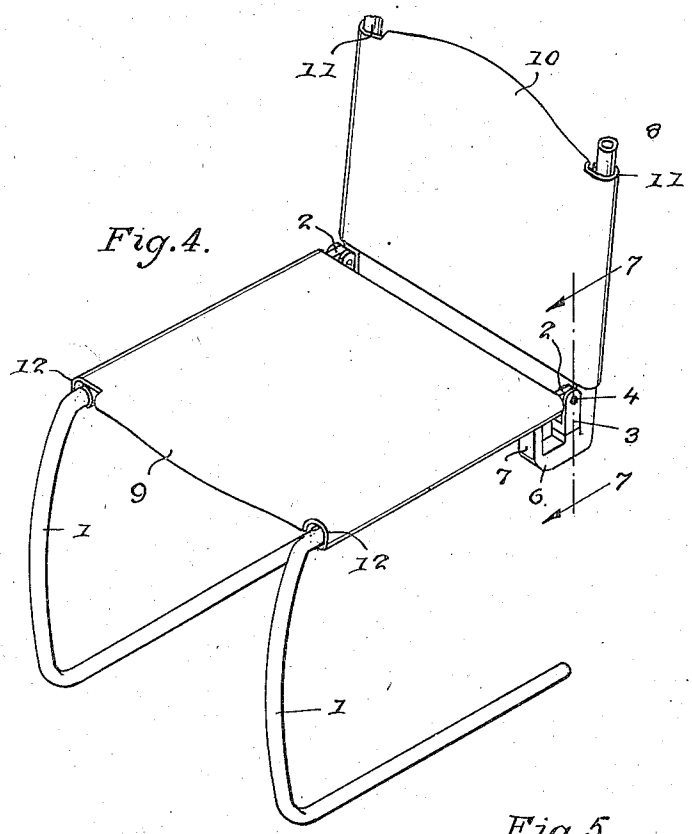


Fig. 5.

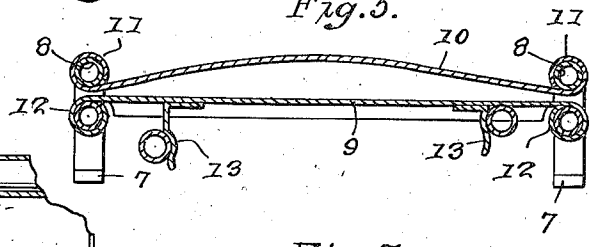


Fig. 6.

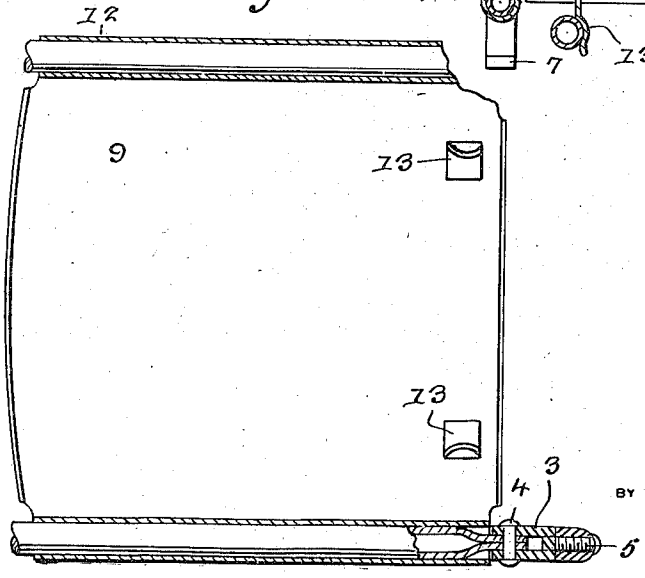
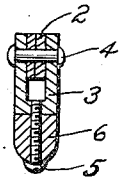


Fig. 7.



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MODERNISTIC SPRING METAL FOLDING CHAIR

Van Quill Flinn, Waynesburg, Ky.

Application October 24, 1946, Serial No. 705,263

4 Claims. (Cl. 155—148)

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This invention relates to chairs, and more particularly to improvements in chairs of the folding and collapsible type.

It is an object of the invention to provide a chair of tubular spring metal frame construction which can be folded into a small and compact unit occupying very little space when not in use.

A further object is to provide a foldable chair which when unfolded has all the advantages, comfort and attractiveness of the usual non-foldable chair of tubular metal frame construction.

A further object is the provision of a chair of tubular metal frame construction which can be quickly and easily folded and unfolded without requiring the manipulation of latches and the like.

These and other objects are attained by the novel construction and arrangement of parts hereinafter described and illustrated by the accompanying drawings, forming a part hereof, and in which:

Fig. 1 is a side view showing a chair embodying the invention in a folded condition.

Fig. 2 is a side elevational view of the chair partially folded.

Fig. 3 is a side elevational view showing the chair unfolded.

Fig. 4 is a perspective view of the chair.

Fig. 5 is a sectional view taken on the line 5—5 of Fig. 1.

Fig. 6 is a sectional view taken on the line 6—6 of Fig. 2.

Fig. 7 is a detail sectional view of the forked member and yoke connection.

Referring to the drawings, the foldable chair is shown to comprise U-shaped supports 1 made of tubular spring metal, the rear end of the upper portion of each support being flattened at 2, and pivotally connected to forked members 3 by pins 4. Each forked member 3 straddles the flattened portion 2 of the support 1 and is attached to a bolt 5 which is threaded into a U-shaped yoke 6 having one of its legs 7 arranged to engage the bottom of a seat 9.

The yoke 6 is formed by flattening the end of a tube 8 which forms one of the supporting members of the back of the chair. The back 10 of the chair is made of sheet metal and has hollow rounded sides through which the supporting tubes 8 pass, the rounded edges 11 of the sheet metal back 10 forming tubes.

Similarly, the sheet metal seat 9 has hollow rounded edges 12 forming tubes through which the supports 1 freely pass with a snug fit.

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When in an unfolded condition as shown in Figs. 3 and 4, the upstanding leg 7 of the yoke 6 engages the underside of the seat 9 and serves as a stop to limit rearward movement of the back 10. It will be seen that this stopping action becomes more effective as pressure is applied to the seat and back, such as when a person is sitting on the chair. The stop, consequently, is positive in action.

To fold the chair, the back supporting members 8 are moved about their pivot pins 4 to a position shown in Fig. 2. The supports 1 are then folded under the seat 9, each support rotating on the threaded bolt 5, which is in alinement with the support 1 when the back 10 is folded over on the seat 9. When folded under the seat 9, the supports 1 are held in position by spring clips 13 on the underside of the seat 9.

The chair is quite easy to fold or unfold, as is apparent from the above description and the illustrations. No latches excepting the clips 13 are required to be manipulated, and when folded the tubular metal chair occupies very little space. The chair of tubular spring metal construction is rigid and as sturdy as any non-foldable chair, and has none of the weaknesses of the usual folding chair. The seat is made of metal.

The above description is to be considered as illustrative and not limitative of the invention of which modifications can be made without departing from the spirit and scope of the invention as set forth in the appended claims.

The invention having been described, what is claimed is:

1. In a folding chair, a pair of rearwardly opening U-shaped supports formed from tubular spring metal, the rear end of the upper leg of each support being flattened, a forked member pivotally connected to the flattened end of each support, a threaded bolt fixed to the member, a yoke threadedly receiving the bolt, a back post connected to the yoke, and a metal seat having hollow rounded edges rotatably receiving the upper legs of the supports.

2. In a folding chair, a pair of rearwardly opening U-shaped supports formed from tubular spring metal, the rear ends of the upper legs of the supports being flattened, a member pivotally connected to the flattened end of each support, a back formed of sheet metal and having hollow rounded edges, metal tubes positioned in the rounded edges, each tube having each lower end flattened and bent to form a U-shaped yoke, a bolt fixed to said pivotally connected member

and threaded in said yoke, and a metal seat having hollow rounded edges to rotatably receive the upper legs of the supports, said yoke having a leg adapted to engage the underside of the seat to limit rearward movement of the back.

3. In a folding chair, a rearwardly opening U-shaped support formed of tubular spring metal, the rear end of the support being flattened, a member pivotally connected to the flattened end of the upper leg, a back having a hollow rounded side edge, a tube positioned in the rounded edge, said tube having a lower flattened end bent to form a yoke, a bolt fixed to the pivotally connected member and threadedly engaging the yoke, and a metal seat having a rounded edge rotatably receiving the upper portion of the support.

4. The structure of claim 3 further characterized by the yoke having means to engage the seat to limit the rearward movement of the back, and the seat having clips on its underside to engage the support when in a folded condition.

VAN QUILL FLINN.

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