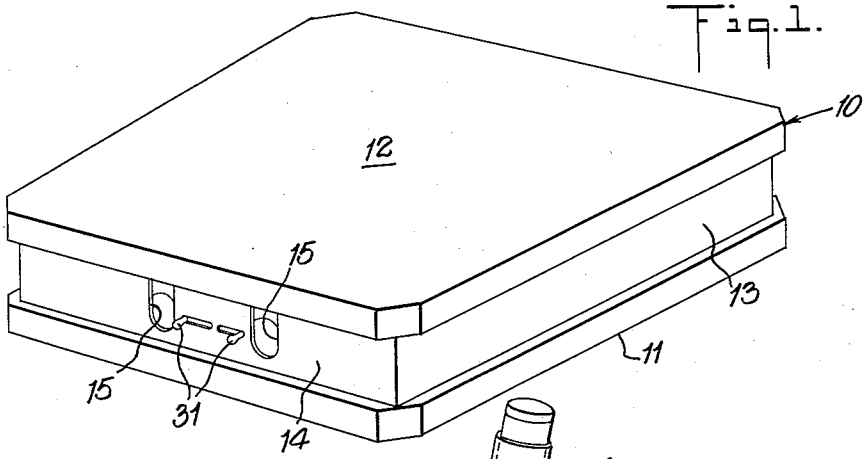
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FOLDING CHAIR

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Fig. 1.



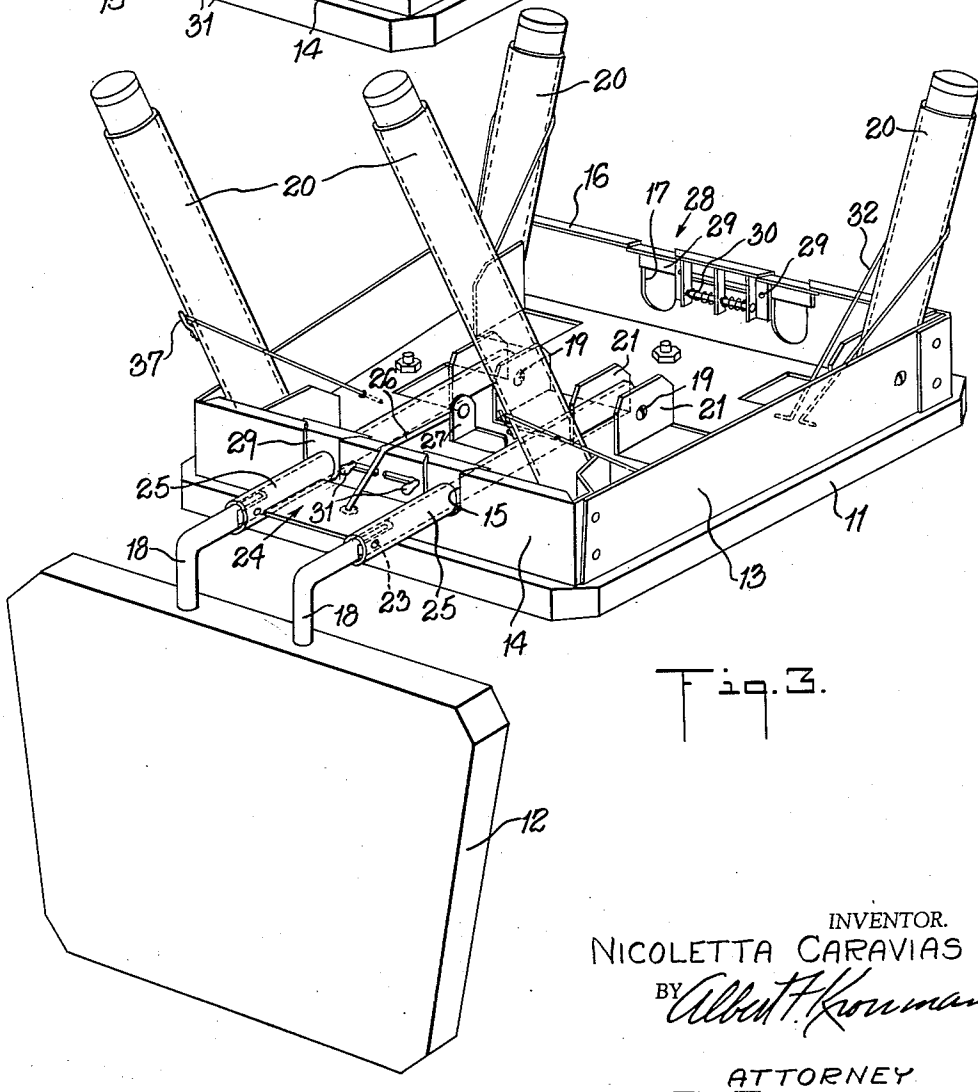


Fig. 3.

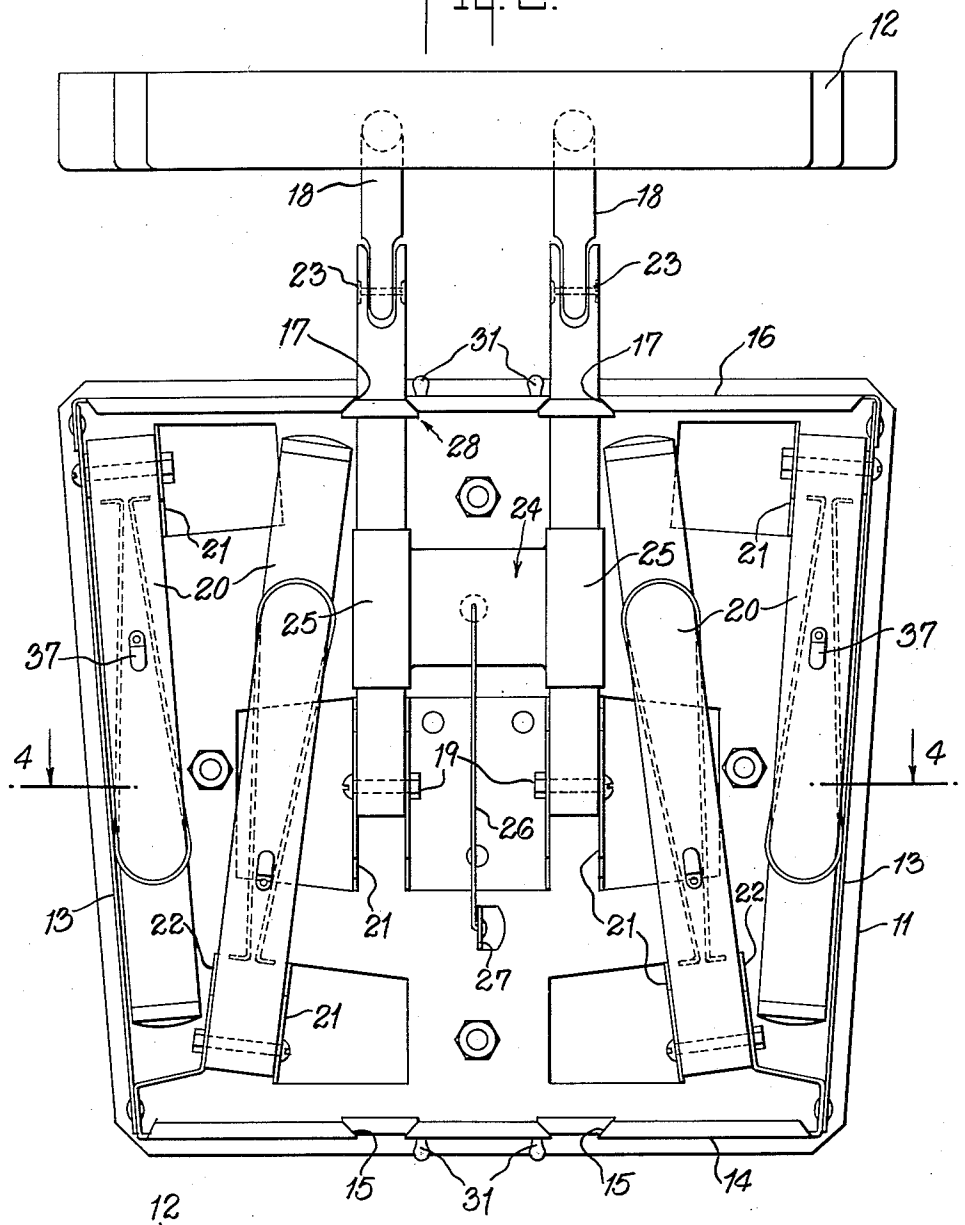
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Dec. 27, 1960 N. CARAVIAS 2,966,204

FOLDING CHAIR

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Fig. 2.



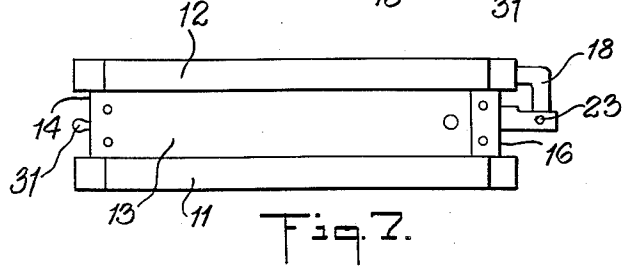


Fig. 7.

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Fig. 4

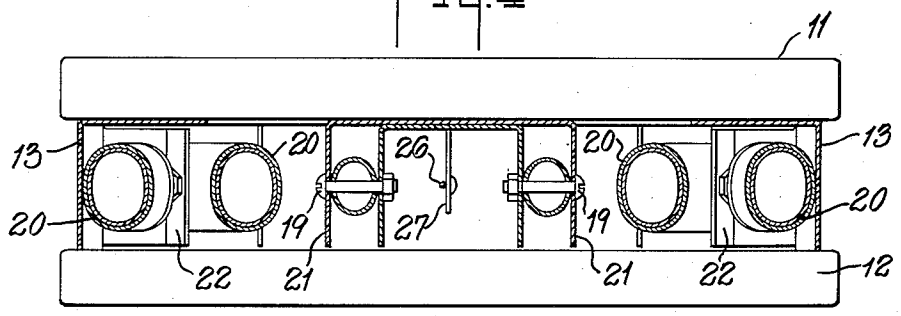


Fig. 6.

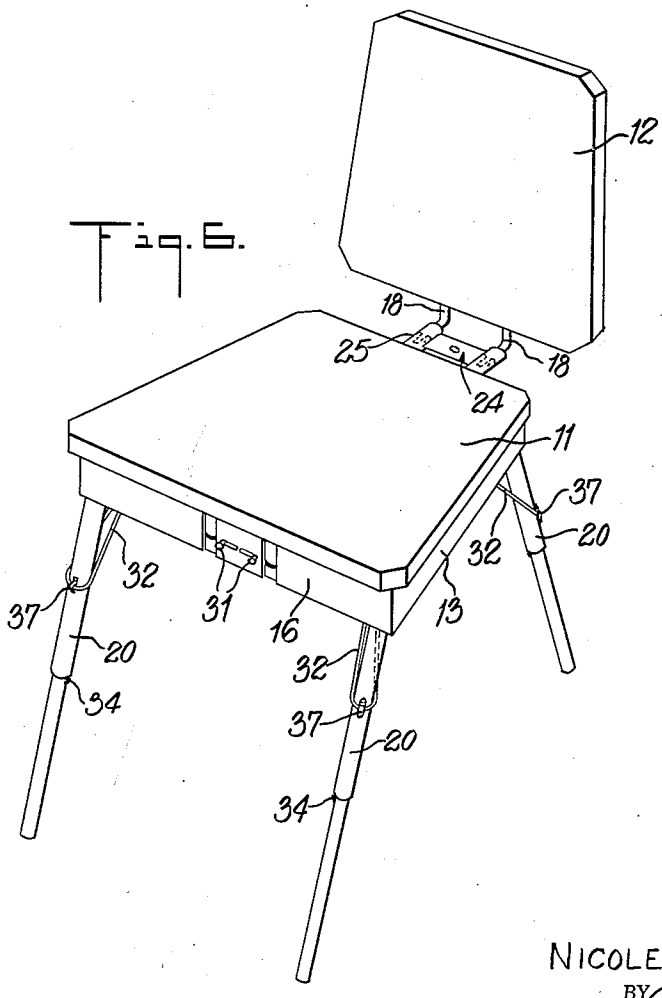
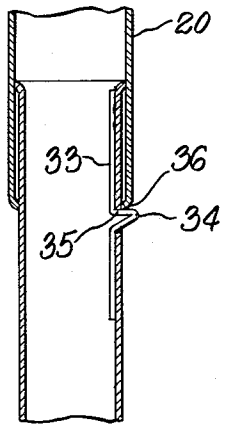


Fig. 5.



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2,966,204

FOLDING CHAIR

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2 Claims. (Cl. 155—139)

This invention relates to chairs and more particularly to foldable chairs which can be collapsed into small, easily carried units.

Presently known collapsible chairs are so constructed that they occupy a substantial amount of space when collapsed or are unsatisfactory from the stand-point of securely supporting the user and maintaining their stability over substantial periods of use.

Accordingly, it is an object of the present invention to make a foldable chair which will lend itself to being collapsed into a minimum space.

Another object of the present invention is to provide a foldable chair which will open into a full-size structure.

Still another object of the present invention is to provide a foldable chair structure which will lock into a firm load supporting article of furniture and operate efficiently over a prolonged period of use.

An object of the present invention is to provide a light, easily carried foldable chair structure.

A still further object of the present invention is to provide a foldable chair structure which may be opened or closed with a minimum amount of difficulty.

A feature of the present invention is its swingable back supporting structure by means of which the back is caused to overlie the bottom of the seat portion of the chair.

Another feature of the present invention is its self-locking back supporting structure.

Still another feature of the present invention is its unitary seat and leg supporting structure.

A further feature of the present invention is its locking means for holding the back support in either the open or closed position.

Figure 1 is a view in perspective of a complete embodiment of the present invention in the folded position.

Figure 2 is a bottom plan view of the chair showing the back in the first position for openings and the legs still folded within the seat member.

Figure 3 is a view in perspective showing the chair in a partially opened condition, with certain hidden parts indicated in dashed lines, and the back completely open.

Figure 4 is a cross-sectional view taken on line 4—4 in Figure 2, looking in the direction of the arrows.

Figure 5 is a fragmentary detailed view showing the locking means for the telescoping leg structure of the chair.

Figure 6 is a view in perspective showing the chair in the completely open position ready for use.

Figure 7 is a view in side elevation of the chair in its folded position.

Referring to the drawings, and specifically to Figure 1, 10 indicates an entirely folded chair structure having a seat member 11 on one side thereof and the back 12 on the opposite side of the folded structure. The seat 11 is supported by a frame formed of side members 13, a back frame 14 and a front frame 16. Openings 15 are provided in the back frame member 14 for a hereinafter more fully described purpose. The front of the frame member 16 is shown in Figures 2 and 3 and is similarly provided with openings 17.

As shown in Figures 2 and 3, and 7, the back members 12 of the chair is supported by arms 18 which are pivotally secured to the under side of the seat 11 by screws 19 or some other suitable fastening device and extends beyond the seat 11. When the arms 18 are swung through 180° the seat back 11 will be at the position hereinafter referred to as the open position and will expose the leg members 20 which are carried within the frame of the chair as shown in Figure 2. The leg members 20 are pivotally secured at one end to the seat 11 of the chair 10. The seat is preferably made from a single foil of metal, such as aluminum, sheet iron or the like, and gears 21 may be struck from the metal of the seat to act as brackets for pivotally securing the legs 20 and the back supporting arms 18. In addition to the ears 21, the rear legs of the chair are supported by small brackets 22 secured to the side 13 of the frame member. The front legs of the chair are supported between the ears 21 and the side frame members 13.

The arms 18 which support the back of the chair 12 are made in two pivotally joined sections as indicated at 23. The arms 18 are jointed at 23 to enable the back 12 to be brought around the bottom of the seat member and overlie it as shown in Figures 1 and 7.

In order to keep the jointed construction 23 in a locked position when the chair is in use, there is provided a plate 24 having a tubular sleeve 25 attached to each side thereof. The tubular sleeves 25 surround the arms 18 and are slidable with respect thereto. The plate 24 is swingably anchored to the seat 11 by means of a rod 26. A small bracket 27 is struck from or secured to the underside of the seat 11 at a point spaced from the geometric center of the said seat. The rod 26 is coupled to the bracket 27 so that as the arms 18 are swung about their pivot points 19, the plate member will be swung from the position shown in Figure 3 to that of Fig. 2 in which the tubular members do not overlie the jointed portion of the arms 18. When the sleeves 25 overlie the jointed portion of the arms 18, the arms are prevented from rotation and are locked in their back supporting position. When the sleeves are slid away from the jointed portion of the arms as in closing the chair, the back is free to pivot about its jointed arm connections at 23 to the position shown in Figures 1 and 7.

When the arms 18 are swung into the position shown in Figures 2 and 3, it is necessary that they be locked in place to prevent them from swinging about the pivot point 19 at the end of the said arms 18. The openings 17 in the back 14 of the frame are adapted to receive the arms 18 therein. Locking means generally indicated at 28 are provided adjacent the openings 17 to hold the arms 18 therein. The locking means 28 may comprise slidable plates 29 which can be pulled away from the openings 17 to admit the arms 18 into the said openings and thereafter slid back across the openings 17 to lock the arms therein. Spring means, generally indicated at 30, may be provided to prevent accidental opening of the locking means 29 while the chair is in use. In addition, small buttons 31 are provided on the outside of the frame member so that the user of the chair may manipulate the sliding plates 29 for the passage of the arms 18. With the back of the chair in the locked open position the legs 20 may next be unfolded from within the seat portion of the chair. The legs are swung about their pivots until they are brought into the extended position shown in Figures 1 and 6. Brace members 32 which are freely secured at their inner ends to the seat portion of the chair may be

provided to add support to the extended leg members. The brace members **32** are securely held by clips **37** or some other fastening means carried by the legs **20**.

It will be apparent from the showing of Figures 3 and 6 that the legs **20** are telescopically formed so that they may be elongated or extended or extended in order to achieve conventional chair height. Locking means are provided between leg sections as shown in Figure 5. The locking means consist of a flat spring member **33** having a detent **34** thereon which detent extends through an opening **35** in the leg member **20** to engage the outer edge **36** of the portion of the leg within which it slides. When it is desired to collapse the leg the user merely forces the detent **34** inwardly against the tension of the springs **33** until it clears the outer edge **36** of the leg portion **20** thereby enabling the leg section to be slipped within the receiving portion thereof.

When it is desired to fold the chair, the leg members **20** are telescopically closed as hereinabove described. The locking structure **23** for the arms **18** is opened and the back supporting arms swung about the pivot screws **19** until the plate **24** and its rod **26** pull the sleeves **25** away from the jointed portion **23** of the arms **18**. With the legs folded within the frame member as shown in Figure 2, the back can then be swung around the seat portion of the chair until the arms **18** reach the openings **17** on the front member **16** of the frame. A locking means **28** identical in construction to that shown and described on the rear of the seat is provided on the front frame member **16**. The locking means **28** is opened to receive the arms **18** of the back support and thereafter lock it within the openings **17** on the front frame member. The chair will then have the appearance illustrated in Figures 1 and 7 and may be carried about with ease or stored away in a minimum amount of space. The interior of the chair will present a box like structure within which small articles may be carried.

It will be seen from the foregoing that there has been provided a foldable chair structure capable of easy folding and unfolding which will provide rigid support for the user thereof.

The extended jointed portion of the arms **18** when open holds the chair back away from the seat **11** and permits the seat area to be reduced in size without discomfort or loss of support for the user thereof.

Having thus fully described the invention, what is claimed as new and desired to be secured by Letters Patent of the United States, is:

1. A foldable chair comprising, a seat member, a frame underlying and attached to the seat member, front, back and side portions on said frame, legs pivotally secured within the frame beneath the seat, a swingable arm pivotally secured at one end beneath the seat, and extending therebeyond consisting of spaced elongated members, a jointed portion spaced from the free end of said arm members, means including a tubular sleeve around each elongated member, a plate interconnecting said sleeves and a rod secured at one end to the plate and at its other end to the seat member to lock the jointed portion in extended relationship with the rest of the arm, a back member secured at the outer end of said arm and lock means to hold the arm against the frame.

2. A foldable chair comprising, a seat member, a frame underlying and attached to the seat member, legs pivotally secured within the frame beneath the seat, a swingable arm pivotally secured at one end beneath the seat and extending therebeyond consisting of spaced elongated members, a jointed portion spaced from the free end of said arm members, means to lock the jointed portion in extended relationship with the rest of the arm, a back member secured at the outer end of said arm and lock means consisting of plates carried by the front and back frame portions to hold the arm against the frame.

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