Dec. 5, 1939. T. T. JOHNSON 2,182,761

FOLDING CHAIR

Filed April 16, 1938

Fig. 3.

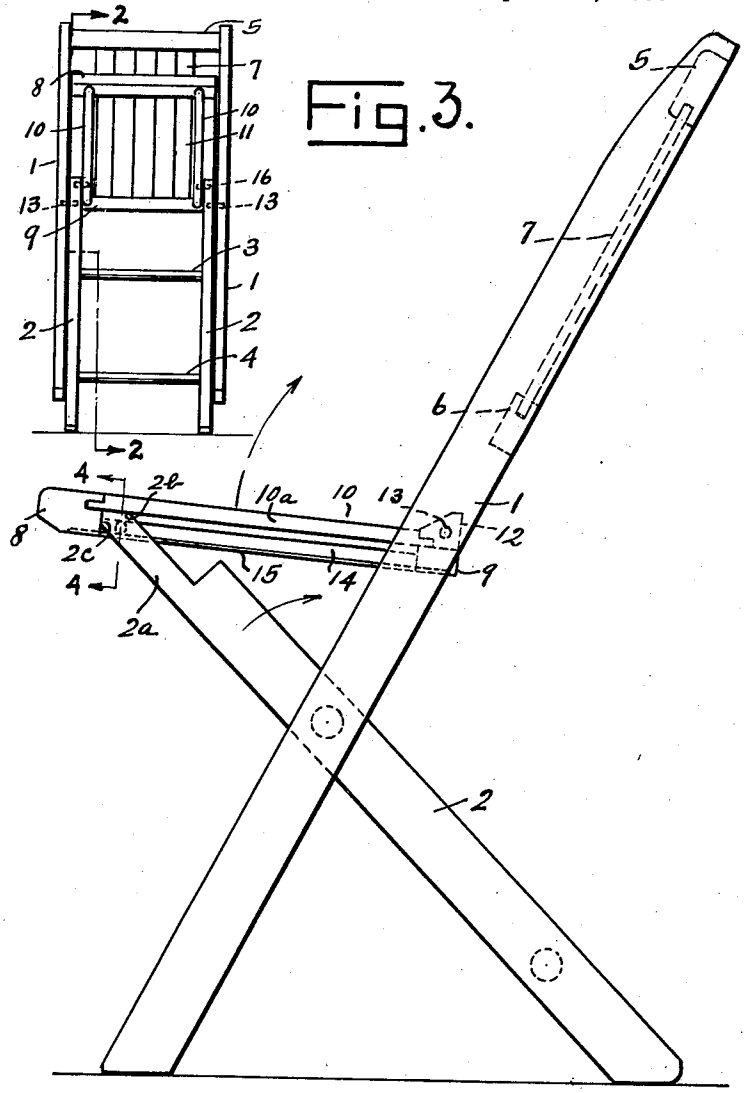

Fig. 1.

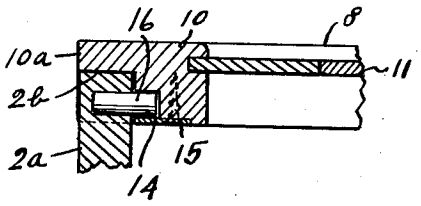

Fig. 4.

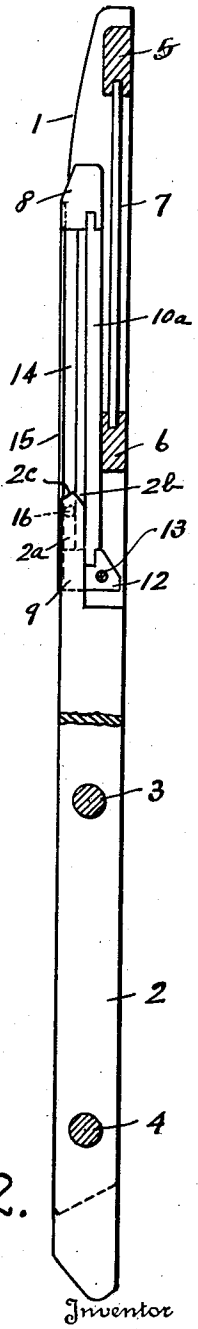

Fig. 2.

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FOLDING CHAIR

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Application April 16, 1938, Serial No. 202,372

2 Claims. (Cl. 155—143)

This invention relates to a folding chair.

An object of the invention is to provide a chair of the character described, which, when not in use, may be collapsed, so as to occupy small space for convenience in shipping or storage; or which may be extended to provide a strong, comfortable and well balanced chair capable of safely withstanding the load to which it may be subjected.

It is another object of the invention to provide a chair which may be collapsed into small space or extended for use and which is composed of few movable parts so that it will be very firm and sturdy.

It is a further object of the invention to provide a chair of the character described which includes a fixed back portion and an associated pivotally mounted seat structure, so related that the seat may be folded into parallel relation with the fixed back and the legs may be collapsed into parallel relation when it is desired to collapse or fold the structure.

It is a further object of the invention to provide a chair of the character described which may be cheaply produced and will still be very strong and durable.

With the above and other objects in view, the invention has particular relation to certain novel features of construction, operation and arrangement of parts, an example of which is given in this specification and illustrated in the accompanying drawing, wherein:

Figure 1 shows a side elevation of the chair, shown in extended position.

Figure 2 shows a cross sectional view taken on the line 2—2 of Figure 3, showing the chair in collapsed position.

Figure 3 shows a rear elevation of the chair, shown in folded position, and

Figure 4 is an enlarged fragmentary sectional view, taken on the line 4—4 of Figure 1.

Referring now more particularly to the drawing wherein like numerals of reference designate the same parts in each of the figures, the numerals 1, 1 designate the side bars of these supporting structure whose lower ends form also the front legs of the chair and whose upper ends provide the back rails.

The rear leg structure comprises the legs 2, 2 which are located adjacent, and on the inner sides of, the respective side bars 1, and which are pivotally connected to said side bars by means of the cross rod 3 which extends through the rear legs 2 and whose ends are journaled in the side bars 1. The lower ends of the rear legs 2 are connected by the cross rod 4.

The back rails are connected by the upper and lower cross bars 5, 6, spaced the required distance apart and between said cross bars there are the vertical slats 7 whose upper and lower ends are mortised into the upper and lower cross bars or otherwise suitably secured thereto.

There is a seat portion comprising the front and rear transverse bars 8 and 9, suitably connected by the side bars 10, 10, the seat structure embodying the series of adjacent slats 11 whose front and rear ends may be mortised into the front and rear cross bars 8 and 9.

At each end the cross bar 9 has the upstanding bracket 12 and said brackets 12 have a pivotal connection with the respective side rails 1, by means of the pivot pins 13, 13, said pivot pins being located above the plane of the cross slats 11 so that when the seat is swung upwardly into collapsed position it will assume a parallel relation with and be located in front of, the back as shown in Figure 2.

The side bars 10 have the overhanging portions 10*a*, as shown in Figures 1 and 4 extending from the front cross bar 8 to the rear cross bar 9 and beneath said overhanging portion, each side bar 10 has a longitudinal groove 14 extending from the front to the rear cross bar and whose lower side is formed by the metal plate 15 which may be fastened in any suitable manner to the corresponding side bar 10. The upper ends of the legs 2 are reduced in width providing the extensions 2*a* as more accurately shown in Figure 1. The free end of each extension 2*a* has the beveled face 2*b* to ride against the underside of the overhanging portion 10*a*, as the parts are moved to extended or collapsed position and also has the beveled end face 2*c* arranged to abut the opposing end of the front cross bar 8, underneath the corresponding overhanging portion 10*a*, as shown in Figure 1 to form a support for the seat when the chair is in extended position.

Each leg extension 2*a* has an inwardly extended pin 16 below the rear end of the face 2*b* and whose inner ends project into the grooves 14 said pins forming runners or guides and which are effective to swing the legs 2 into parallel relation with the side bars 1, when the seat is swung upwardly in the direction indicated by the arrow in Figure 1 to folded position and which swing the legs into supporting position, as shown in Figure 1, when the seat is swung into extended or horizontal position.

The drawing and description disclose what is now considered to be a preferred form of the invention by way of illustration only while the

broad principle of the invention will be defined by the appended claims.

What I claim is:

1. A folding chair comprising a pair of straight side bars whose lower ends form front legs and whose upper ends provide back rails, a rear leg structure comprising side legs which are located adjacent and on the inner sides of said side bars, means for pivotally connecting said side legs to said side bars, a back secured between said back rails, a seat portion comprising front and rear transverse bars and side bars connecting said front and rear bars and a supporting structure supported by said front and rear bars, brackets on and upstanding from said rear transverse bar and pivotally connected to the corresponding side rails above the plane of said supporting structure, the side bars of the seat portion having longitudinal overhanging portions forming tracks whose forward ends terminate at the front cross bar, the side bars of said seat portion having external longitudinal grooves beneath said overhanging portions extending from the rear cross bar forwardly, metal plates fastened underneath the side bars of the seat portion forming the lower sides of said grooves, the upper ends of said rear legs being reduced in width providing extensions whose free ends have beveled faces to ride against said tracks and whose forward ends are shaped to abut the corresponding ends of said front bar when the chair is in extended position and inwardly extended pins on said extensions forming runners or guides which run in said grooves and which are effective to swing the rear legs into parallel relation with the side bars when the seat is swung upwardly into parallel relation with the back.

2. A folding chair comprising a pair of side bars whose lower ends form front legs and whose upper ends provide back rails, a rear leg structure comprising side legs which are located adjacent and on the inner sides of said side bars, means for pivotally connecting said side legs to said side bars, a back secured between said back rails, a seat portion comprising front and rear transverse bars and side bars connecting said front and rear bars and a supporting structure supported by said front and rear bars, brackets on said rear transverse bar and pivotally connected to the corresponding side rails, the side bars of the seat portion having longitudinal overhanging portions forming tracks whose forward ends terminate at the front cross bar, the side bars of said seat portion having external longitudinal grooves beneath said overhanging portions extending from the rear cross bar forwardly, metal plates fastened underneath the side bars of the seat portion forming the lower sides of said grooves, the upper ends of said rear legs being reduced in width providing extensions whose free ends have beveled faces to abut against said tracks and against the corresponding ends of said front bar when the chair is in extended position and inwardly extended pins on said extensions forming runners or guides which run in said grooves and which are effective to swing the rear legs into parallel relation with the side bars when the seat is swung upwardly into parallel relation with the back.

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