A. E. HOLMES.

COLLAPSIBLE FURNITURE.

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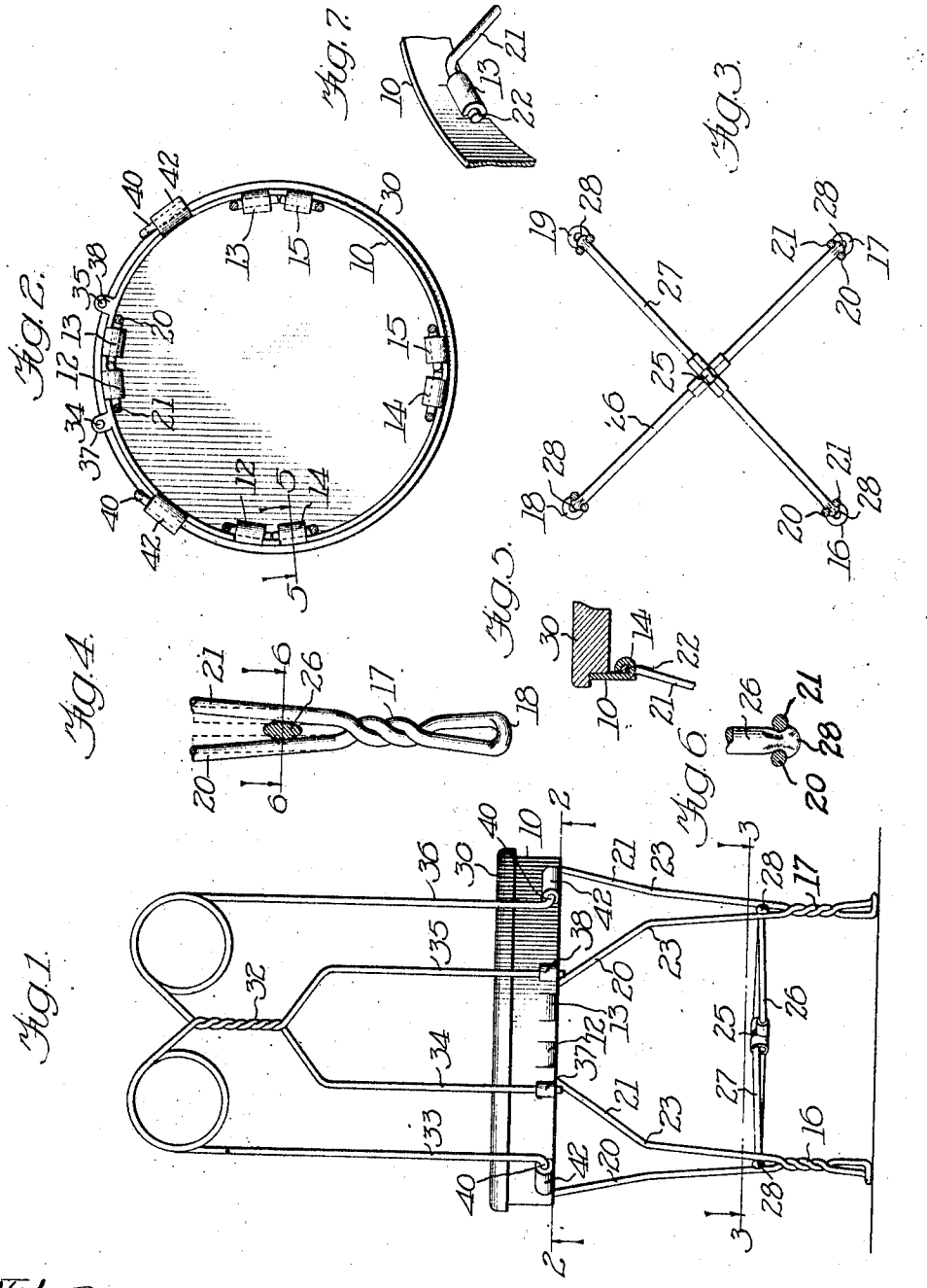
960,015.

Patented May 31, 1910.



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UNITED STATES PATENT OFFICE.

ALFRED E. HOLMES, OF CHICAGO, ILLINOIS.

COLLAPSIBLE FURNITURE.

960,015. Specification of Letters Patent. Patented May 31, 1910.

Application filed December 4, 1909. Serial No. 531,368.

To all whom it may concern:

Be it known that I, ALFRED E. HOLMES, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Collapsible Furniture, of which the following is a specification.

This invention relates to furniture in general but more particularly to chairs made in part of twisted wire, especially designed for use upon lawns and the like.

The object of the invention is to provide a device of this class which can be very easily and cheaply assembled and taken apart for packing and shipment or storage.

The invention consists in a novel means of attaching the legs of the chair to the seat frame and a novel means for locking the legs of the chair both as to said attaching means and with reference to each other.

It also consists in a novel means for detachably attaching the back to the chair.

The invention further consists in details of construction which will be hereafter more fully described and claimed as the specification proceeds.

Referring to the drawings, a chair is shown although the invention may be applied to other articles of furniture.

Figure 1 is a rear view of a chair constructed in accordance with this invention in its preferred form. Fig. 2 is a bottom view of the chair frame proper showing in detail the means of securing the legs thereto, taken on the line 2—2, Fig. 1. Fig. 3 is a plan view taken on the line 3—3 of Fig. 1, showing the spreader or locking device securing the legs of the chair in position. Fig. 4 is a detail view of the lower portion of one of the legs. Fig. 5 is a detail sectional view on the line 5—5, Fig. 2. Fig. 6 is a detail plan view on the line 6—6 of Fig. 4. Fig. 7 is a perspective detail view of the parts shown in Fig. 5.

In the construction of the chair illustrating this invention in its preferred form a seat frame in the form of a circular ring 10 is provided, made of any suitable metal. Around the lower edge of this seat frame are a plurality of pairs of sockets 12, 13, 14 and 15 preferably for convenience and cheapness made by being bent up from the metal of the frame 10, as shown in detail in Figs. 5 and 7. There being in the particular case here illustrated four pairs of sockets, four legs are provided for the chair, numbered, for convenience, 16, 17, 18 and 19. Each one of these four legs is Y shaped, as shown, the two branches 20 and 21 terminating in outwardly extending pins 22 entering the particular sockets in the seat frame to which the particular chair leg belongs. As the pins 22 upon the ends of the opposite Y arms 20 and 21 face in opposite directions it will readily be seen that anything which serves to spread the arms of the Y apart tends to force these pins into the particular sockets, in which the particular leg belongs, thereby tending to decrease the removability of the legs and to prevent the accidental removal of them. Four legs 16, 17, 18 and 19 having thus been provided and the ends of the Y of said legs having been thus inserted in their respective sockets 12, 13, 14 and 15 a locking or spreading member 25 is provided consisting of crossed bars 26 and 27 connected at their center in any suitable means, as shown in Fig. 3. The outer ends of these arms 26 and 27 are slightly notched, as shown in Fig. 6 so that when the spreader is placed in the position shown in Figs. 3, 4 or 6, with the arms inserted respectively in the Y shaped openings between the arms 20 and 21 of each leg the spreader 25 is moved downwardly to the position shown in Fig. 1, in which position these arms 26 and 27 spread the arms 20 and 21 of the legs of the chair apart, thereby locking the pin and socket connections of the legs to the frame of the chair and at the same time rigidly securing the four legs of the chair in proper usable position. It will be noticed that the lower portions of Y members 20 and 21 below the angular points 23 are quite close together so that the spreading action begins to take place as soon as the spreader arms pass below these points 23.

When the parts are assembled, as shown in Fig. 1, the locking or spreading member 25 secures the legs of the chair from movement in any direction with reference to the seat of the chair and prevents accidental inward movement of the arms 20 and 21, whereby said legs of the chair are locked in contact with the seat. In addition to the foregoing, the legs of the chair being Y shaped any weight upon the seat 30 placed in the seat frame 10 tends to spread the

arms 20 and 21 of any particular leg of the chair and thus further lock the seat frame and chair legs together.

The parts thus far described may be used as a piano stool or the like, as desired, but for convenience it is preferable to provide a back 32, preferably made of twisted wire, as shown, and having four downwardly extending rods 33, 34, 35 and 36. This back 32 is detachably secured to the seat frame 10 by virtue of the fact that the rods 34 and 35 are inserted vertically in sockets 37 and 38 which run vertically of the seat and the ends of the rods 30 and 36 are provided with horizontally extending pins 40 which enter horizontally extending sockets 42. As a result of this construction in which two of the sockets of the chair-back are horizontal and two vertical the back is held both from lateral and vertical displacement without the aid of clamps, nuts, screws, or riveting or indenting or otherwise configurating the rods of the back. Said four rods 33, 34, 35, and 36 are all resilient and are secured together, which tends to hold the pins in position in their sockets, and yet permits the horizontal pins to be sprung into place or retracted.

In assembling the chair and its back the rods 34 and 35 are first by vertical motion inserted in their sockets 37 and 38 and then the pins 40 are sprung into the horizontal sockets 42. The vertical sockets 37 and 38 prevent the pin 40 from rotating in the sockets 42, the pins 40 in sockets 42 prevent the vertical rods 34 and 35 from being pulled out of sockets 37 and 38, whereby the back of the chair is detachably secured in position. In addition to the foregoing, the rods 33 and 36 are so bent and are of such spring material that they do not tend to draw the pins 40 out of the sockets 42. The seat 30 may be secured in the seat frame 10 by any suitable means.

The claim is:—

In a chair of the class described, a seat frame comprising an annular band of metal, a pair of vertical sockets spaced apart and lying on opposite sides of the central portion of the back of the band, a pair of horizontal sockets spaced around the band toward the front thereof and equidistant from the respective vertical sockets, and a back comprising a pair of rods twisted together, one end of each of said rods being straight and fitted within a respective vertical socket and the other end having a right angled extremity fitted in one of the horizontal sockets.

In witness whereof, I have hereunto subscribed my name in the presence of two witnesses.

ALFRED E. HOLMES.

Witnesses:

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