

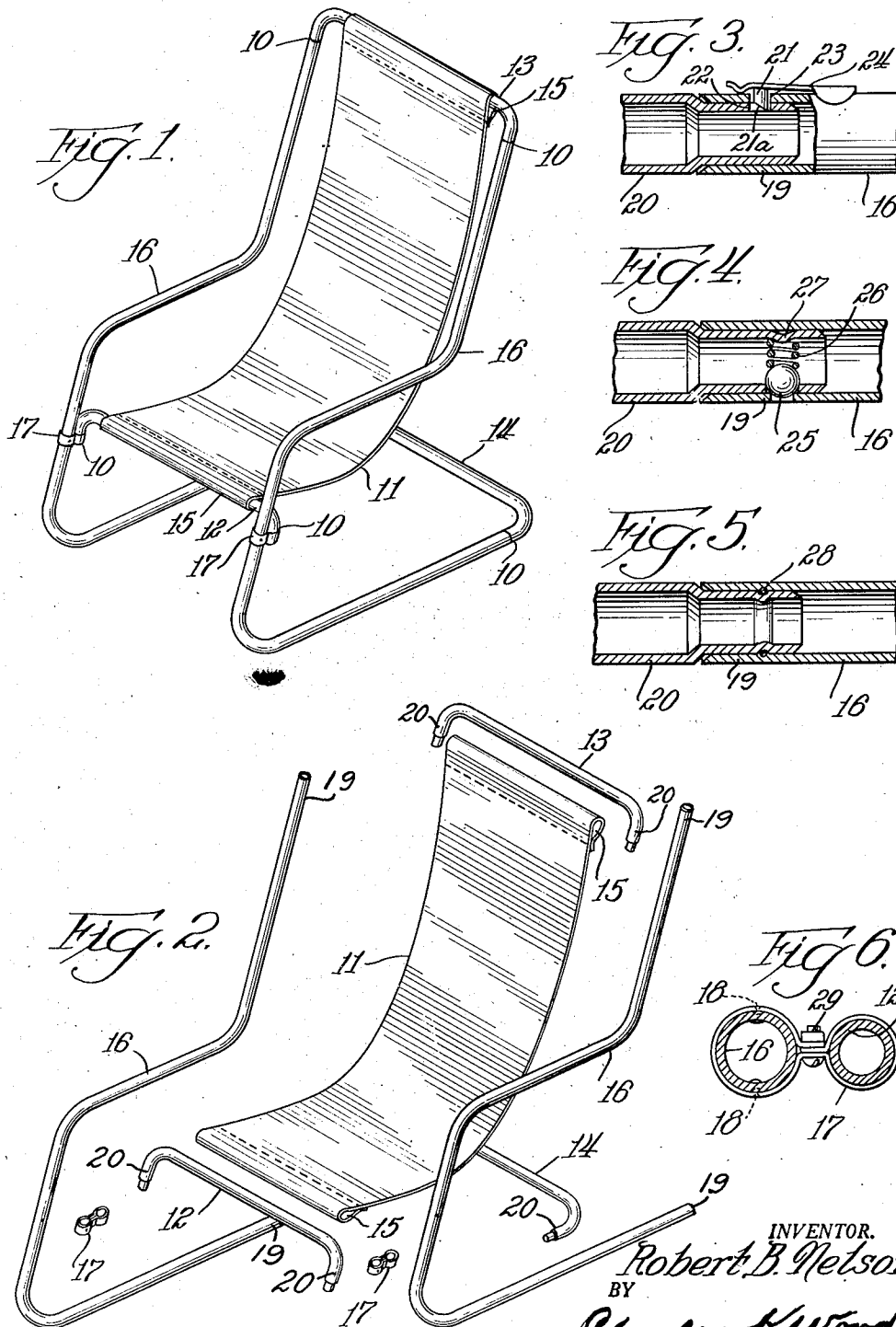
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DEMOUNTABLE LAWN CHAIR

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DEMOUNTABLE LAWN CHAIR

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This invention relates to lawn and porch chairs and will be described as applied to a lawn chair, although it has equal or greater value in smaller chairs.

Lawn chairs are notorious for their general awkwardness and difficulty in moving. They are usually left outside and, hence, are at the mercy of the weather, including rain, wind and dust. The seats are commonly damp and dirty. Many attempts to construct collapsible and portable lawn chairs have been made but generally such chairs have not been satisfactory due to too light and flimsy construction. Further, even when collapsed, such chairs are large and awkward to handle and store. Actually, what is desired is a comfortable lawn chair of sturdy construction having a removable seat, or the like, which can be removed and stored in compact form indoors. The frame of the chair should be collapsed so that it will lie flat on the ground and not be subject to wind damage, or the parts could be collapsed and stored in flat compact arrangement and could be readily reassembled with a minimum of trouble and work.

Many of the same problems relate to the smaller chairs, such as porch chairs. They too should be readily demountable and storable. Further, such porch chairs should be made available for indoor use, that is, a porch chair could be changeable for indoor use, say, for a bridge chair. For this use, the seat should be changeable from a plain outdoor seat to a padded indoor seat. This presupposes that the parts of the chair can be readily reassembled quickly with a minimum of difficulty.

One of the objects of this invention is to provide a portable chair which can easily be demounted or disassembled for compact storage and shipment.

Another object of the invention is to provide a chair in which many of the parts are identical and interchangeable for ready reassembly.

Another object of the invention is to provide a chair utilizing a fabric seat which can be readily removed for cleaning, substitution or replacement.

A further object of this invention is to provide a chair which can be easily manufactured due to the small number of parts.

Other objects and benefits will appear in connection with the following description and accompanying drawings in which:

Fig. 1 is a perspective view of a demountable lawn chair embodying the principles of my invention;

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Fig. 2 is an exploded perspective showing the parts of the assembly;

Figs. 3, 4 and 5 are longitudinal sections through the joined portions of the chair showing three modifications thereof; and

Fig. 6 is a detail plan view of the bracket for the front cross members.

The chair illustrated in Fig. 1 is generally of the type used for lawns, porches, and sun decks. It is constructed of metal tubing and is sturdy yet light and flexible to a degree. The chair is of so called modern design and appearance. It incorporates only the fundamental elements necessary to its function.

In Fig. 1, the numeral 10 designates the several points at which the side members 16 of the chair are jointed for demounting or disassembly with respect to cross members or strips 12, 13 and 14. The member 12 which has downwardly directed ends fitting in vertical socket forming parts of brackets 17 forms the forward support for the chair seat. The members 12, 13 and 14 are all similar and may be interchanged. The seat portion 11 is of fabric, usually a sufficiently heavy canvas material, and is suspended from the front cross member 12, and the upper cross member 13. At the points of suspension, the fabric member 11 is provided with sleeves 15 formed by stitching across the folded ends of the fabric. The remaining portions of the chair are the lower cross member 14 and the side members 16 including the brackets 17.

Fig. 2 more clearly illustrates the various parts of the assembly and the points at which they are assembled. In practice I prefer to permanently fix the brackets 17 to the side members 16 by a punched indentation as at 18 of Fig. 6. The bracket 17 is therefore always in proper position to receive the mating portion of the front cross member 12.

It will be seen that there are but two kinds of metal members which make up the assembly of the chair. The side members 16 are identical and interchangeable and the cross members 12, 13 and 14 are likewise identical and interchangeable. In assembling the various parts of the chair, no regard need be given to selecting any particular side or cross member and the process of assembly is therefore facilitated. This factor also lends itself to the manufacturing process, to the replacement of lost or damaged members, and to the mass storage and reassembly of such chairs.

When demounted for storage, the parts of the

chair will occupy only one plane. No portions of the members project from that plane and they are therefore capable of compact storage.

Figs. 3, 4 and 5 illustrate various means by which the parts of the chair are joined. In general, all joints are comprised of telescoping male and female portions and means are provided to hold the parts in telescoped position. As will be seen in Fig. 2, the side members 16 carry the female portions 19 and the cross members 12, 13 and 14, the male portions 20 of the joint. The joint illustrated in Fig. 3 is secured by a pin 21 which engages registered bores 22 and 23 of the members 19 and 20. The pin 21 is fastened to a spring clip 24 and the latter is suitably secured to side member 16 by riveting or spot welding. The tapered end 21a of pin 21 permits the sliding assembly of the male and female ends 19 and 20 of the adjacent chair members into locked relation. Raising clip 24 withdraws pin 21 for the separation of the joined chair members. In Fig. 4, a ball check 25 is employed in much the same manner as the pin 21 of Fig. 3. Ball check 25 is held in locking position in the member 20 by the spring 26 which rests in the indented portion 27 of the member 20. The means employed in Fig. 5 is a brass friction ring 28 carried by the member 20. The friction of this ring as it bears on the inner surface of the sleeve 19 is sufficient to hold the parts in firm engagement.

In Fig. 6, the details of construction of the bracket member 17 are shown. It is formed of a single metal stamping, the ends of which are fastened by welding, riveting, or by bolting them together as shown at 29. One portion of the bracket 17 engages and is permanently fixed to the side member 16. The remaining portion provides the sleeve 20 to form a joint with front cross member 12.

Having thus described my invention, I now claim as new:

1. In a demountable chair, a pair of spaced side members having ground engaging portions terminating in front upright portions, said upright portions terminating in rearwardly extending arm portions, said arm portions terminating in upwardly extending back portions, a rear cross member having terminal arms extending sub-

stantially at right angles to the main portion of said cross member, said terminal arms being in removable telescopic relation with the ends of said ground engaging portions and serving to maintain said ground engaging portions in spaced relation and against spreading movements, an upper cross member having terminal arms at substantially right angles in removable telescopic relation with the upper ends of said back portions and serving to tie the same against spreading movements and means including similar cross member mounted upon said front upright portions.

2. In a demountable chair, a pair of side members having ground engaging portions, front upright portions terminating in rearwardly extending arm portions, said arm portions terminating in upwardly extending back portions, cross members having terminal arms extending at substantially right angles in removable telescopic relation with the ends of said side members for maintaining the same in spaced relation and against spreading-apart movements, means including a similar terminal armed cross member for tying said front upright portions together and a flexible member secured to the last mentioned cross member and the upper cross member.

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