Dec. 27, 1960 W. W. GOOD 2,966,208

CHAIR

Original Filed March 21, 1958 2 Sheets-Sheet 1

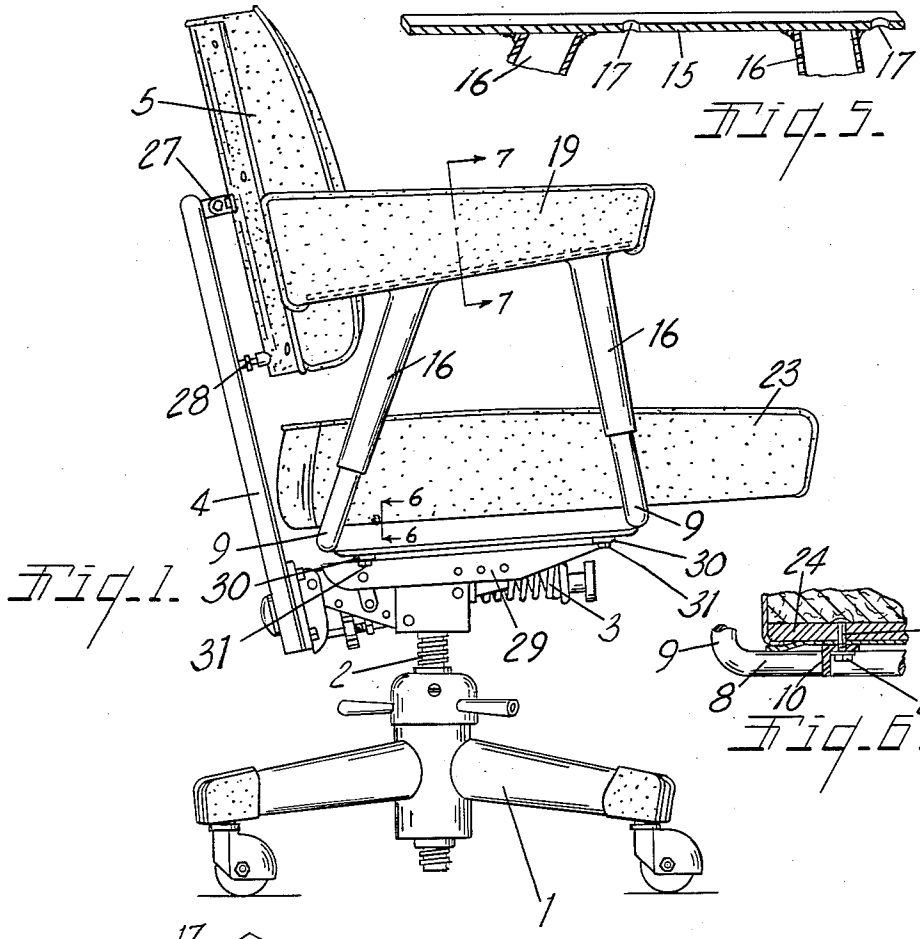


Fig. 1.

Fig. 5.

Fig. 6.

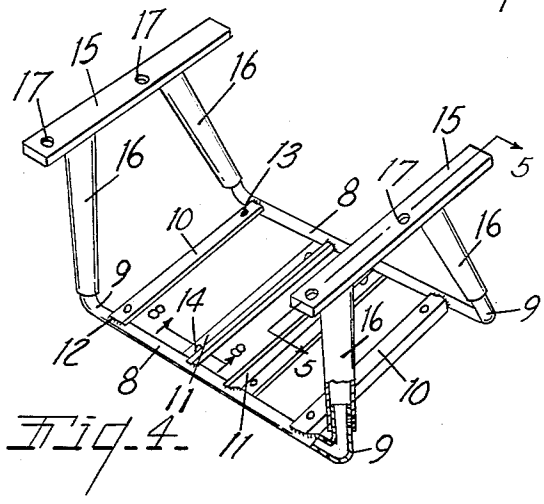


Fig. 4.

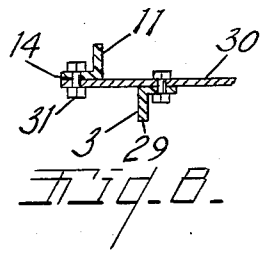


Fig. 8.

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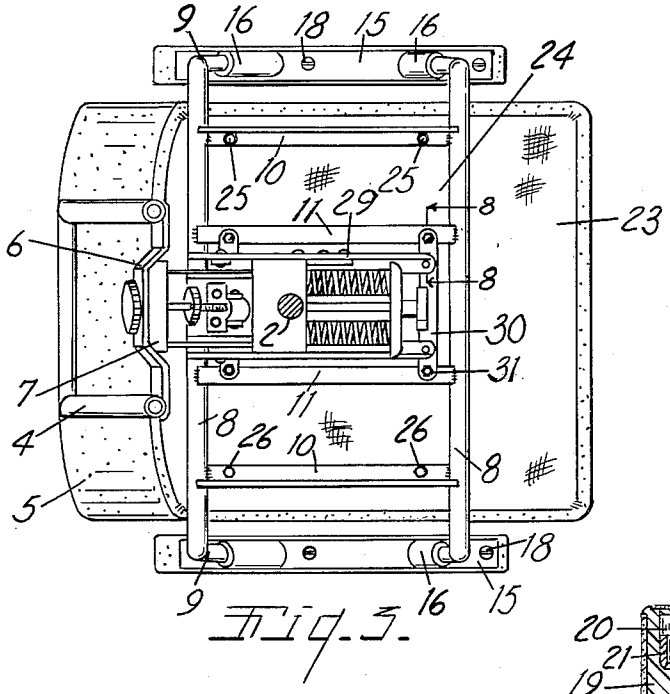


Fig. 3.

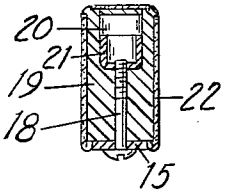


Fig. 7.

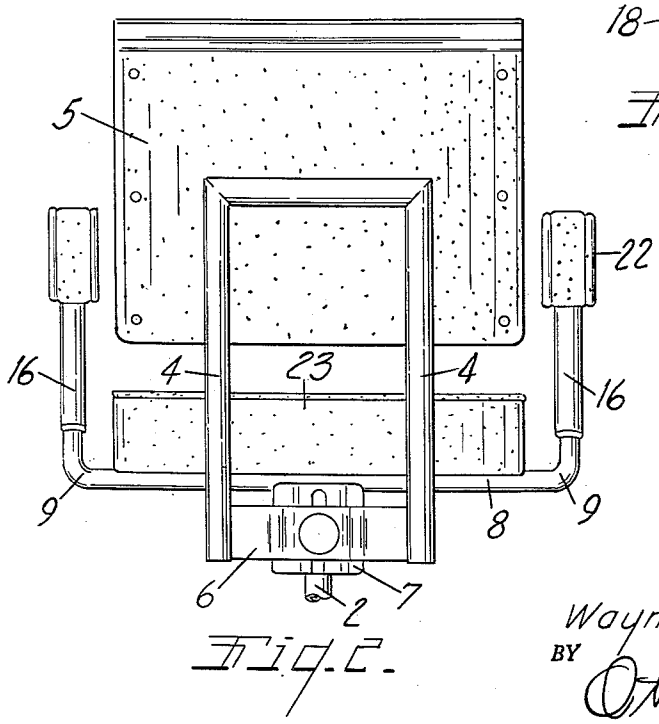


Fig. 6.

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2,966,208

CHAIR

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Original application Mar. 21, 1958, Ser. No. 723,012, now Patent No. 2,935,121, dated May 3, 1960. Divided and this application Aug. 3, 1959, Ser. No. 831,095

2 Claims. (Cl. 155—191)

This invention relates to chairs commonly designated as office types. The main objects of this invention are,

First, to provide a chair assembly including a frame unit on which the seat, back, and arm units can be readily mounted and removed for replacement should occasion require.

Second, to provide such a frame unit which permits substantial variation in design, upholstery and the like, of the seat, back, and arms mounted thereon.

Third, to provide a chair having these several advantages in which the parts may be packaged and shipped in the knock down and readily assembled.

Fourth, to provide a chair structure having these advantages in which the parts may be economically produced.

Objects relating to details and economies of the invention will appear from the description to follow. The invention is defined and pointed out in the claims.

A preferred embodiment of the invention is illustrated in the accompanying drawing, in which:

Fig. 1 is a side elevational view of a swivel chair embodying my invention.

Fig. 2 is a fragmentary rear elevational view thereof.

Fig. 3 is an inverted view of the chair seat, back and arms assembly with the supporting post in cross-section.

Fig. 4 is a perspective view of the seat and arm supporting frame.

Fig. 5 is an enlarged fragmentary view in section on a line corresponding to line 5—5 of Fig. 4.

Fig. 6 is an enlarged fragmentary section on a line corresponding to line 6—6 of Fig. 1.

Fig. 7 is a fragmentary view in section on a line corresponding to line 7—7 of Fig. 1.

Fig. 8 is a fragmentary sectional view on a line corresponding to line 8—8 of Figs. 3 and 4.

This application is a division of my application for Letters Patent filed March 21, 1958, Serial No. 723,012 Patent No. 2,935,121, issued May 3, 1960. As the base or pedestal unit, designated generally by the numeral 1, is the subject matter of that application, the structural details thereof are not illustrated or described in this application, but it will be understood that the base is adapted to adjustably support the post 2.

The details of the means for adjustably and springably supporting the back, designated generally by the numeral 5, are not described as they form no part of this invention other than their supported relation to other parts of the invention. It should be understood, however, that the supporting posts or uprights 4 for the back 5 are swingably and springably supported by this unit, and the cross piece 6 thereof is mounted for vertical adjustment on the bracket 7, constituting a part of the unit 3. The combined seat, back and arm supporting frame of my invention is illustrated in Fig. 4 and comprises front and rear base members 8 disposed transversely of the chair, being desirably formed of tubing and disposed in laterally spaced relation. These base members 8 have upwardly projecting upwardly converging end portions 9. The base

members 8 are rigidly connected by the outer pair of cross pieces 10 disposed adjacent the upturned ends thereof and the intermediate cross pieces 11 disposed in laterally spaced relation to each other and to the members 10. The cross pieces 11 are of upwardly facing angle section and the cross pieces 10 are of downwardly facing angle section, the members 10 facing inwardly and downwardly, and the members 11 facing upwardly and outwardly as is illustrated. The ends of these cross pieces are disposed in abutting relation to the members 8 and fixedly secured thereto as by welding as indicated at 12. The cross pieces 10 have holes 13 in their horizontal arms spaced longitudinally thereof, while the cross pieces 11 have holes 14 in their horizontal arms spaced longitudinally thereof. The functioning relation of these to other parts will appear later.

The arm supporting bars 15 are provided with downwardly projecting downwardly diverging tubular uprights 16 the lower ends of which are aligned with and telescopingly engage the upturned ends 9 of the base members 8 and are fixedly secured thereto. The bars 15 are desirably of flat cross section as is illustrated and provided with longitudinally spaced holes 17 which receive the attaching screws 18 securing the arm members 19 thereto, see Fig. 7.

The arm members 19, in the embodiment illustrated, are provided with upwardly facing recesses 20 receiving the cupped nuts 21 into which the screws 18 are threaded to clampingly secure the arm members to their supports 15. The arm members 19 are preferably of wood and provided with a covering 22 to match the upholstery. These arm members are formed as units and are effectively attached to and supported on the arm members 15 of the frame by the screwbolts 18. In practice, the nut elements 21 are secured in the recesses so that the attachment and detachment can be effected merely by screwing or unscrewing the bolts 18 which, it will be noted, are provided with screw type heads.

The seat 23 is formed as a unit suitably upholstered and is provided with a base portion 24 which is secured upon the supporting frame by means of the bolts conventionally illustrated at 25, projecting downwardly therefrom through the openings 13 in the cross pieces 10 and secured thereto by means of nuts 26. This permits the seat 23 being formed as a unit and with the desired upholstery and secured as a unit to the frame, see Fig. 6. The back 5 may also be formed as a unit and it is supportedly mounted on the uprights 4 desirably being pivoted thereto at 27 and provided with an adjustable stop 28 disposed below the pivot and adapted to receive thrust on the back, while permitting tilting of the back on its supporting pivot 27. The stop 28 is preferably an adjustable stop. That feature, however, forms no part of this invention.

The assembly described is mounted upon the post 2 which is provided with a head or mounting portion designated generally by the numeral 29. The mounting portion 29 including the springable back support 3 is removably connected to the combined seat, back and arm frame by connecting bars 30 secured to the intermediate bars 11 by bolts 31 engaged through the previously described holes 14.

An important advantage of the structure described is that the several parts constituting the chair may be produced as units and if desired may be shipped or stored in disassembled relation and readily assembled for display or delivery. The structure also provides a wide variation in upholstery, both in the matter of materials or colors, and degrees of resilience and the like.

I have illustrated and described my invention in a practical commercial embodiment thereof. I have not

attempted to illustrate or describe various modifications or adaptations as it is believed that this disclosure will enable those skilled in the art to embody or adapt my invention as may be desired.

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

1. A chair including a unitary seat, back and arm supporting frame comprising spaced parallel front and rear base members disposed transversely of the chair and having upwardly projecting laterally spaced arm supports on the ends thereof, laterally spaced outer and intermediate crosspieces fixedly secured to said front and rear base members and having longitudinally spaced openings therein, arm supporting bars disposed upon and fixedly secured to the upper ends of said arm supports and having longitudinally spaced fastener receiving openings therein, arms disposed and said arms supporting bars and releasably secured thereto by fastener elements engaged in said openings therein, a seat including a base member superimposed upon said base members between said arm supports and secured to said outer base crosspieces by fastener elements engaged in said openings therein, and a back supporting means disposed below and releasably secured to said intermediate crosspieces of said supporting frame by fasteners engaged with said openings therein.

2. A chair including a unitary seat, back and arm supporting frame comprising spaced parallel front and rear base members disposed transversely of the chair and having upwardly projecting laterally spaced arm supports on the ends thereof, outer and intermediate crosspieces fixedly secured to said front and rear base members, arm supporting bars disposed upon and fixedly secured to the upper ends of said arm supports, a seat including a base member superimposed upon said base members between said arm uprights and secured to said outer base crosspieces, arms disposed on said supporting bars and releasably secured thereto, and a back supporting means disposed below and releasably secured to said intermediate crosspieces of said supporting frame.

References Cited in the file of this patent

UNITED STATES PATENTS

1,977,702	Summerlee	Oct. 23, 1934
2,745,117	Sands	May 15, 1956
2,806,515	Burst	Sept. 17, 1957