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J. A. SUMMERLEE ET AL

1,977,702

CHAIR

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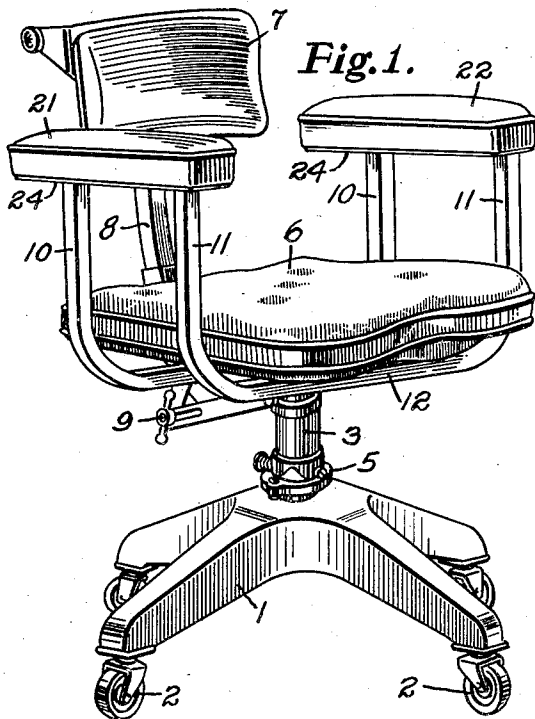


Fig. 1.

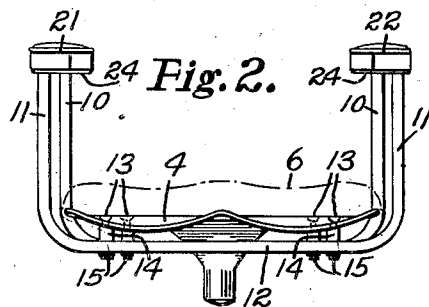


Fig. 2.

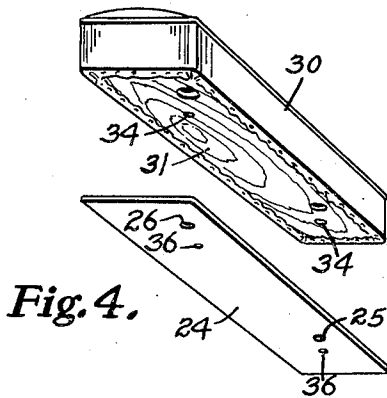


Fig. 4.

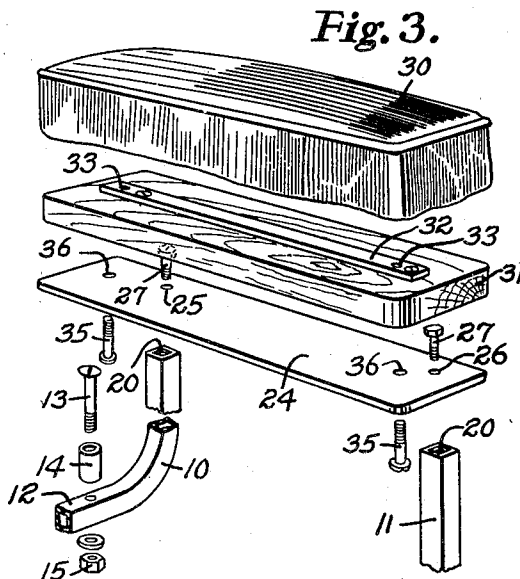


Fig. 3.

INVENTORS
Joseph A. Summerlee
Dwight P. Rowland
Reiter, Hether, Davis, & McCauley
ATTORNEYS

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CHAIR

Joseph A. Summerlee and Dwight P. Rowland,
Detroit, Mich., assignors to Burroughs Adding
Machine Company, Detroit, Mich., a corpora-
tion of Michigan

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5 Claims. (Cl. 155—198)

This invention relates to a chair and it is particularly concerned with a construction that enables an armless chair to be quickly and easily converted into an arm chair without changing the construction of the armless chair, without substituting any parts for those already in the chair, and without reassembling the chair.

Heretofore, the general practice has been to build armless chairs according to designs developed especially for chairs of this type. Chairs with arms were and are built according to other designs developed especially for arm chairs. If a man possessing an armless chair should happen to want one with arms, he must buy a new chair.

The present invention comprehends a broad economy in the art in that a construction has been provided that will enable an armless chair to be quickly converted into an arm chair by the addition of a few simple parts and without changing the construction of the chair.

The broad object of the invention is to provide an improved chair.

A more particular object is to provide an improved chair construction that will enable an armless chair to be quickly converted into an arm chair.

A further object is to provide an extremely simple metal chair construction that will enable an armless metal chair to be quickly converted into an arm chair by simply attaching a side arm structure to the base of the chair.

Other objects and advantages of the invention will appear from the following specification and drawing.

An embodiment of the invention is shown in the accompanying drawing in which:

Figure 1 is a perspective view of a chair embodying the invention.

Fig. 2 is a detail front elevation of the seat and side arm structure.

Fig. 3 is a separated perspective of one of the side arm cushions and portions of the side arms showing how the parts are connected together.

Fig. 4 is another separated perspective showing the side arm cushion construction assembled.

The base, standard, seat and back rest of the chair are of the general construction shown in Racz Patent 1,756,210 with certain improvements that have since been made.

This chair comprises a metal base 1 provided with casters 2. A standard 3 is carried by said base and said standard supports a seat 4 made of a metal plate as shown in Fig. 2. A suitable

swivel connection 5 is provided to enable the chair seat to turn relative to the base. A seat cushion 6 is fastened to the seat as shown in Fig. 1 and in dot and dash lines in Fig. 2.

A back rest 7 is carried by a standard 8 attached to the seat 4. This back rest standard has a suitable adjustment 9 for altering the position of the back rest.

The parts thus far described comprise an extremely simple, durable, metal armless chair that is made and sold as such and which serves most satisfactorily in locations where side arms are not necessary.

If a customer owning one of these chairs desires a chair with side arms, or, if it is desired to furnish side arm chairs from the factory, all that it is necessary to do to convert this armless chair into a side arm chair is to attach a side arm structure to it. This can be done by the simple addition of the side arm structure without changing the structure of the main body of the chair or substituting any parts for those already comprising the armless chair.

This side arm structure comprises a pair of U-shaped tubular members 10 and 11 with the bases 12 of the members extending under the chair seat. The arms of the U-shaped members extend upwardly at the sides of the seat 4 and are preferably spaced a short distance therefrom so as to give the chair ample width. The front U-shaped member 11 preferably has its arms spaced apart a little farther than the rear so as to give a little more space at the front of the chair than at the rear.

These U-shaped members are detachably attached to the underside of the chair by means of bolts 13 (Figs. 2 and 3) which extend through the metal chair seat 4 and through suitable sleeves 14, and through openings in the bases of the U-shaped members, nuts 15 being provided to tighten the bolts in place. The U-shaped members 10 and 11 may be quickly placed in position and bolted onto the seat base without doing anything other than removing the seat cushion and putting the bolts through the holes in the seat 4, which holes have already been provided. The seat cushion 6 is then replaced in position.

Welded in the top ends of the tubular members 10 and 11 are threaded nuts 20 (Fig. 3) and detachably attached to the ends of the arms 10 and 11 are the side arm cushions 21 and 22.

These side arm cushions are attached to the tubular members as follows:

A metal plate 24 is provided having openings 25 and 26 in it for the reception of bolts 27 which

pass loosely through the openings and are threaded into the nuts 20 in the ends of the tubular arms. It is to be observed that the holes 25 and 26 are at one side of the longitudinal center line of the plate 24 and that they are also spaced unequally from the ends of the plate so that the plate may be placed in a variety of positions to alter the positions of the side cushions. Four different adjustments are possible. For example, one of the plates may be fixed in the position illustrated in Fig. 3, or the plate may be turned over sidewise and fixed in a different position, or the plate may be turned end for end from its position shown in Fig. 3, or, after being turned over sideways, it may be also turned end for end which gives a fourth position.

The above adjustments are more particularly useful in factory assembling, but four adjustments are readily available for the chair user also. Assume the assembly of Fig. 3 to be the No. 1 adjustment. This gives a chair with the arm rests relatively close together and well back so that the chair can be moved up close to a desk. The No. 2 adjustment can be obtained by simply taking out screws 35 and bolts 27 and substituting one cushion unit for the other. This gives a chair with the arm rests relatively far apart and well to the rear for close approach to a desk. No. 3 adjustment can be obtained from the No. 2 position by simply turning the cushion units and their plates 24 around end for end after the bolts 27 have been removed. This gives a chair with arm rests which are relatively close together and well forward. The user's arms are thus supported farther forward, but the chair cannot be moved up as close to a desk as in the case of the first two adjustments. No. 4 adjustment can be had from No. 3 by removing bolts 27 and changing the arm rest units one for the other. This gives a chair with the arm rests relatively widely separated and well forward. It is to be understood that the adjustments need not be made in the order described but that any adjustment desired can be made from any other.

Each side arm cushion 30 comprises a rectangular cushion box containing padding and covered with a suitable covering material such as impregnated fabric or leather. The bottom of the cushion box comprises a board 31 having a metal strip 32 fixed to it. This strip has threaded holes 33 in it and the board 31 has holes 34 in it through which screws 35 may loosely pass. The plate 24 is provided with openings 36 through which the screws 35 may loosely pass. The screws 35 are pushed upwardly through the holes 36 and 34 and then threaded into the openings 33 in the metal strip 32 to detachably attach the cushion to the plate 24. This enables the cushion to be quickly attached and detached and likewise allows the plate 24 to be attached and detached, the latter being capable of being placed in different positions to vary the positions of the cushion as the customer may desire. It will be observed from Fig. 4 that holes are provided in the board 31 to register with the heads of bolts 27.

It will be clear that, with this construction, an armless chair can be quickly converted into a side arm chair by the mere addition of a very simple side arm structure. It is not necessary to alter the construction of the armless chair or to substitute any parts for those already in it.

The U-shaped members are merely attached to the base of the chair and the side arm cushions placed on them. If, later on, it should be desired to dispense with the arms, they can be quickly removed and the customer again has an armless chair without its having been marred or changed in any way by reason of its having been converted into an arm chair.

It is to be understood that the construction shown is for purposes of illustration only and that variations may be made therein without departing from the spirit and scope of the invention as defined by the appending claims.

We claim:

1. A side arm structure adapted to be secured to the seat of a chair, said side arm structure comprising U-shaped members adapted to be detachably attached to the seat of a chair with the arms of the U-shaped members extending upwardly at the sides of the seat, and side arm cushions detachably attached to the upstanding ends of said arms.

2. A chair having a seat, fixed side arm supports on each side of said seat, side arms for said supports, and separable connecting means between said side arms and said supports having fixed points of connection between said side arms and said supports arranged so that, by detaching said side arms and changing the relative relation of said fixed points of connection, the distance between said side arms and their position longitudinally with respect to the seat may be varied.

3. A side arm structure adapted to be attached to the seat of a chair, said side arm structure comprising U-shaped hollow arms extending across the seat of the chair and upwardly from the sides of the seat of the chair, threaded nuts in the ends of said arms, a plate detachably attached to the ends of said arms by means of bolts extending through said plate and into the threaded nuts in the ends of said arms, and side arm cushions detachably attached to said plate by means of screws extending through said plate.

4. A chair having a seat, fixed side arm supports on each side of said seat, side arms for said supports, and separable connecting means between said side arms and said supports having fixed points of connection to said side arms which are on one side of the longitudinal center line of said arms and closer to one end than the other so that, by detaching said side arms and changing the relative relation of the fixed points of connection, the distance between said arms and their position longitudinally relative with respect to said seat may be varied.

5. A side arm structure adapted to be secured to the seat of a chair, said side arm structure comprising a pair of U-shaped members adapted to be secured to the seat of the chair with the members extending under and across the seat of said chair and the arms thereof extending upwardly at the sides of said seat, threaded nuts in the ends of said arms, a plate detachably attached to the ends of said arms by means of bolts extending through said plate and into said nuts, arm cushions supported by said plate, and means detachably securing said arm cushions to said plate.

JOSEPH A. SUMMERLEE.
DWIGHT P. ROWLAND.