Sept. 2, 1947. P. FLEISCHER 2,426,676

METAL CHAIR STRUCTURE

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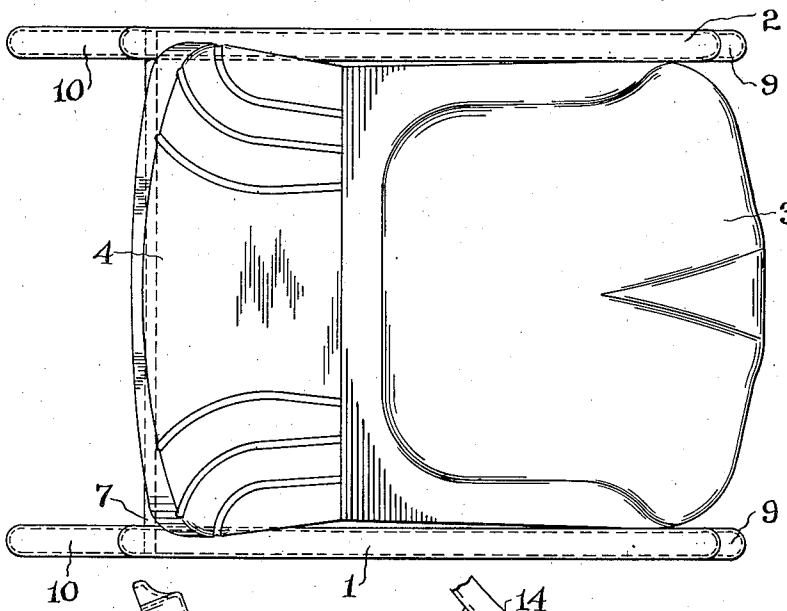


FIG. 1

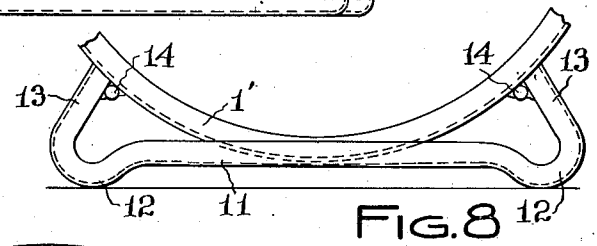


FIG. 8

FIG. 2

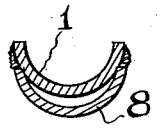


FIG. 3

INVENTOR:
PAUL FLEISCHER
BY William Isler
ATTORNEY.

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METAL CHAIR STRUCTURE

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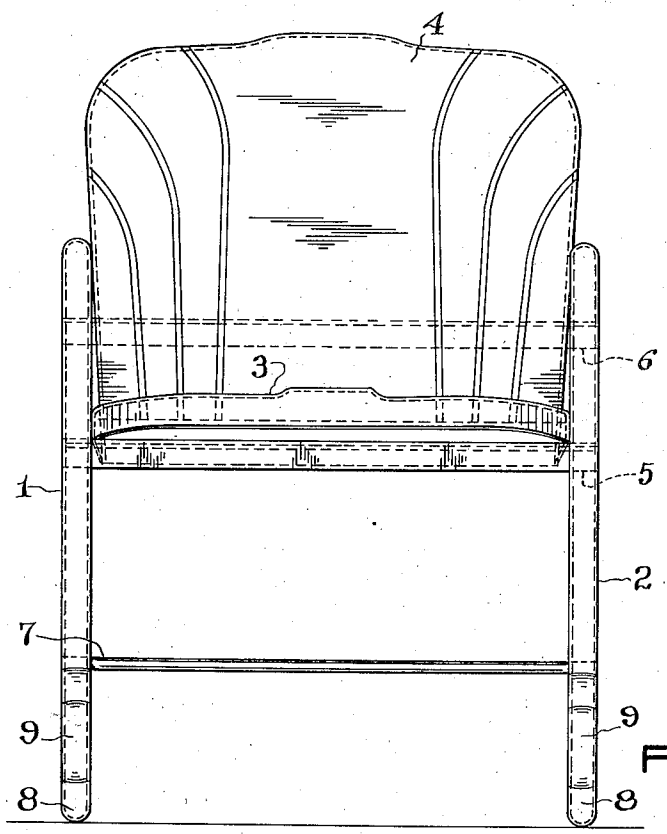


FIG. 4

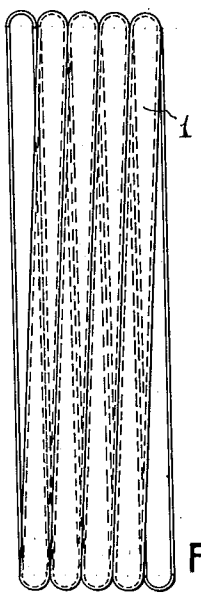


FIG. 5

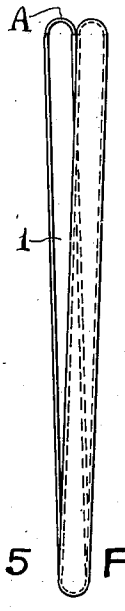


FIG. 6

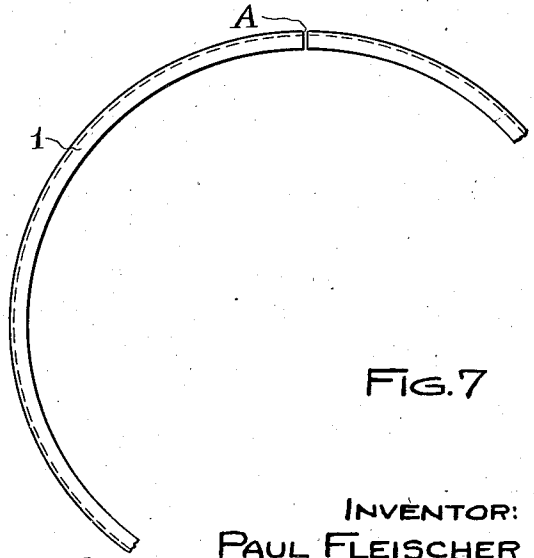


FIG. 7

INVENTOR:
PAUL FLEISCHER
BY William Isler
ATTORNEY.

Patented Sept. 2, 1947 2,426,676

UNITED STATES PATENT OFFICE

2,426,676

METAL CHAIR STRUCTURE

Paul Fleischer, Cleveland Heights, Ohio, assignor to Ultrametl Mfg. Co., Cleveland, Ohio, a corporation of Ohio

Application October 25, 1945, Serial No. 624,363

1 Claim. (Cl. 155—194)

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This invention relates generally to metal furniture, but has reference more particularly to articles of metal furniture, such as rockers, chairs and the like, and to a method of manufacturing such articles.

A primary object of the invention is to provide an article of furniture of the character described, which is of rugged, durable construction, and which is neat and attractive in appearance.

Another object of the invention is to provide an article of furniture of the character described, which is characterized by the use of sides made from metal strip bent or curved into circular form.

A further object of the invention is to provide a metal rocker or chair of novel construction, which can be manufactured and assembled in commercially desirable quantities, at low cost.

A still further object of the invention is to provide a method of manufacturing sides for metal furniture of the character described, which method is economical and utilizes metal strip in a novel manner.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this specification, and in which like numerals are employed to designate like parts throughout the same,

Fig. 1 is a top plan view of a rocker embodying the novel features of the invention;

Fig. 2 is a side elevational view of the rocker;

Fig. 3 is a fragmentary cross-sectional view of the rocker, taken on the line 3—3 of Fig. 2;

Fig. 4 is a front elevational view of the rocker;

Fig. 5 is a side elevational view of a coil or helix of metal strip which is advantageously employed for making the sides of the rocker;

Fig. 6 is a view similar to Fig. 5, but showing a single convolution cut from the coil or helix of Fig. 5 for manufacture into one of the sides of the rocker;

Fig. 7 is a view showing the manner in which the ends of the single convolution of metal strip shown in Fig. 6 are joined or united to form the rocker side, and

Fig. 8 is a fragmentary side elevational view of a chair embodying the novel features of the invention.

Referring more particularly to Figs. 1 to 7 inclusive of the drawings, it will be seen that a rocker constructed in accordance with the invention comprises spaced circular sides 1 and 2, of semi-circular or arcuate cross-section, the upper

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portions of which form or provide arm rests for the occupant of the rocker.

The rocker further includes a slightly inclined seat 3, preferably formed of a sheet metal stamping, and an inclined back or back rest 4, likewise formed from a sheet metal stamping, and having its lower edge rigidly secured in any desired manner to the rear edge of the seat 3. The seat 3 and back 4 extend completely across the space between the sides 1 and 2, and are supported respectively by or upon angles or angle strips 5 and 6, which extend between and are rigidly secured to the sides 1 and 2. These angles also function to rigidly maintain the sides 1 and 2 in properly spaced relation and in vertical planes, but for this purpose, a rod 7 may also be provided, which extends between and interconnects the sides 1 and 2, at the lower rear portion thereof, and is preferably welded to the latter.

Under some conditions, where the sides 1 and 2 are made of sufficiently large diameter, the lower portions of such sides can function as the rocker elements which make rolling contact with the floor, but ordinarily, I prefer to provide separate rocker elements, which have extended arcuate central portions 8, of considerably greater radius than the radius of the sides 1 and 2, and rebent or inturned end portions 9 and 10, the ends of which are preferably welded to the sides 1 and 2, as best shown in Fig. 2. The extended arcuate portions of the rocker elements provide a desired length of rolling contact of the rocker with the floor, and avoid tipping of the rocker forwardly or rearwardly at the extremities of the rocking movement.

The rocker elements are preferably made from strip metal of semi-circular or arcuate cross-section, similar to that from which the sides 1 and 2 are made, and this permits the sides to nest into the arcuate central portions 8 of the rocker elements, as shown in Fig. 3. The rocker elements may be spot welded to the sides 1 and 2 at the point of nesting, if so desired.

The sides 1 and 2 can advantageously be made from single convolutions of a coil or helix of strip metal of the desired cross-section, such as shown in Fig. 5. Such a coil or helix can be manufactured in long lengths from ordinary flat strip on an ordinary strip forming machine, the forming rolls of which can be set in such a manner that formed strip of the desired cross-section emerges from the machine in the form of a helix. Single convolutions of the strip can then be cut from the helix, as shown in Fig. 6, and the ends of such convolution may then be welded to each other,

as at A (Fig. 7) to form a completed side for the rocker. The welded joint may be disposed within the arcuate central portion 8 of the rocker elements (Fig. 2), thereby concealing such joint from view, and improving the appearance of the rocker as a whole.

By manufacturing the rocker sides in the manner which has been described, the cost of manufacture can be reduced to a fraction of the cost of metal furniture of this type, and, at the same time, furniture of improved appearance and design is automatically produced.

In Fig. 8, I have shown the lower portion of a chair, which, in other respects, is similar in construction, design and appearance to the rocker which has been described. In this case, a strip of metal of semi-circular or arcuate cross-section, similar to that from which the side 1 is formed, is bent to provide a horizontally disposed central portion 11, in which the side 1 is nested, downturned arcuate portions 12 forming legs for the chair, and end portions 13, the ends of which are welded to the side 1. Rods 14, similar to the rod 7, may also be provided, which interconnect the sides of the chair, the front rod providing a foot rest.

It is to be understood that the forms of my invention, herewith shown and described, are to be taken as preferred examples of the same, and that various changes in the shape, size and arrangement of parts may be resorted to, without departing from the spirit of my invention, or the scope of the subjoined claim.

Having thus described my invention, I claim:

A chair comprising spaced side members each formed from a metal strip of arcuate cross-section having its ends secured together to form an annulus, supporting members each formed of a metal strip of arcuate cross-section, said side members being each nested in the channel of a supporting member, the secured ends of each side member lying within a channel of a supporting member to conceal the joint between the ends of said side member and means securing said side members together.

PAUL FLEISCHER.

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