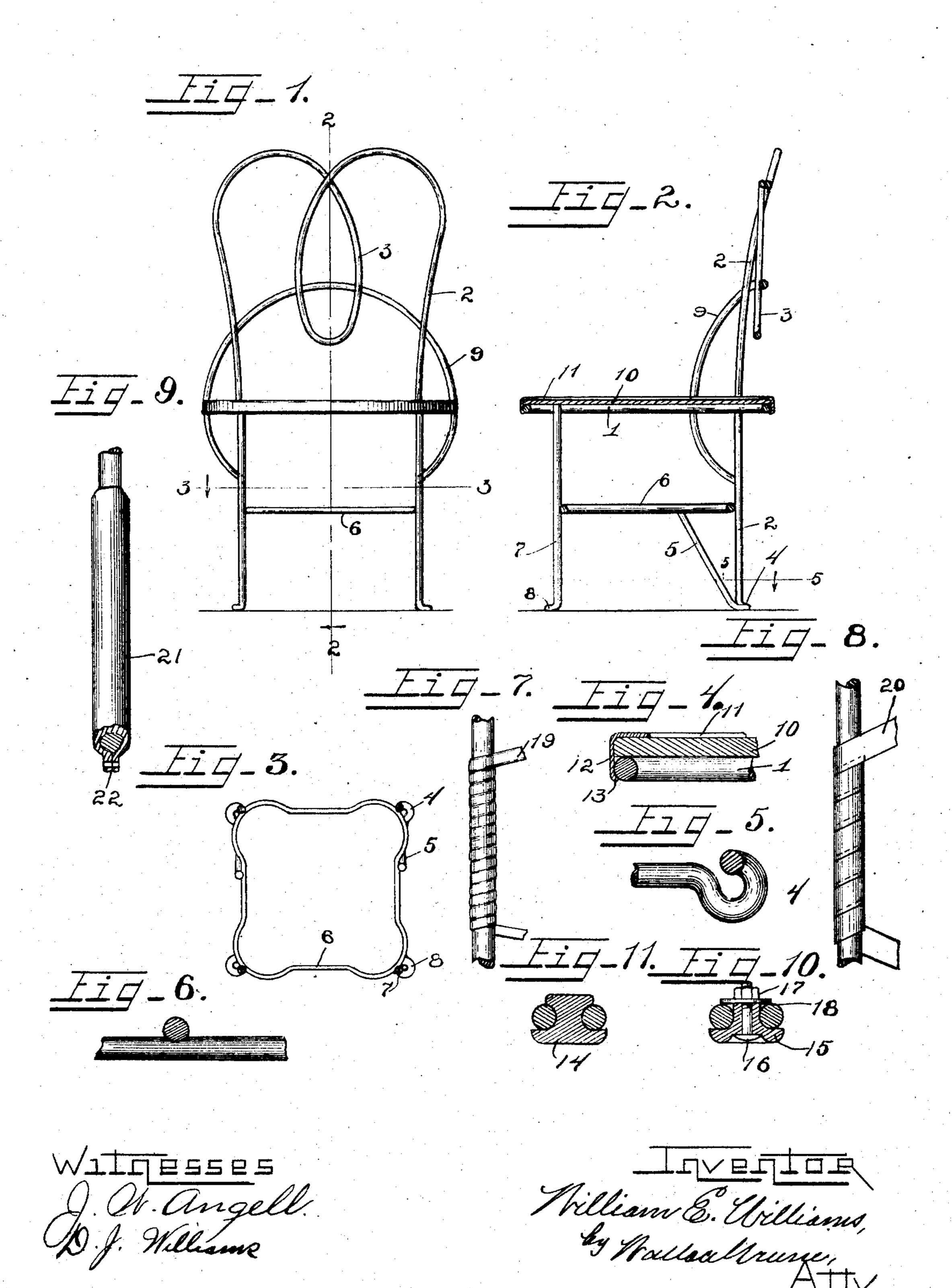
W. E. WILLIAMS. CHAIR. APPLICATION FILED NOV. 4, 1904.



UNITED STATES PATENT OFFICE.

WILLIAM ERASTUS WILLIAMS, OF CHICAGO, ILLINOIS.

CHAIR.

No. 864,347.

Specification of Letters Patent.

Patented Aug. 27, 1907.

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To all whom it may concern:

Be it known that I, William Erastus Williams, a citizen of the United States of America, and a resident of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Chairs, of which the following is a specification.

The object of my invention is to provide a metal frame chair, preferably of iron or steel, and then finish the chair by painting or plating and by covering the metal with ratan, cloth, paper or leather as desired.

Figure 1—is a front view of the chair with the metal surface exposed. Fig. 2—is a side sectional view on line 2—2 of Fig. 1. Fig. 3 is a horizontal cross-section on line 3—3 of Fig. 1. Fig. 4 is a detail showing the fastening for the seat. Fig. 5—is a cross-section on line 5—5 of Fig. 2. Fig. 6 is a detail showing the general form of the weld used in uniting the parts. Figs. 7—8— and 9 are details showing how the metal members may be covered. Figs. 10— and 11 are details of the rubber tips put on the feet of the chair legs.

In the drawing 1—designates a ring of iron, which forms the seat frame, here shown as being round but it may be any desired shape.

2—designates a rod bent into a loop 3 at the top with its ends extending downward forming the rear legs with loops or eyes 4 for the feet and its ends then bent upward forming the brace 5, which is welded to a stiffening ring 6. The rod 2 is welded to the seat ring 1, where it passes the seat ring and the rod 2 is also welded to the ring 6 as it passes it on the rear leg sections.

The front legs are independent pieces 7 welded to rings 1.6 and provided with loops or ever 8 for the fact

rings 1, 6 and provided with loops or eyes 8 for the feet.

A brace rod 9 extends around the back of the chair and is welded at the four crossing points to the rod 2 and is also welded to the ring 1 and then the ends terminate in welds to the rod 2 at the rear leg sections. Thus the frame of the chair is a rigid one-piece, when welded together. The welds are made by electricity and the joint is shown in Fig. 6—. The parts are placed across each other and the electrodes are applied on each side and the parts pushed together while a heating current is passed through, which makes a neat weld.

The bottom of the chair is here shown as made of a veneer sheet 10 lying on the ring 1 and is held in place 45 by a sheet metal ring 11, having a flange 12 which extends downward over the ring 1 and is held thereon by having its bottom edge 13 bent inward after it is placed in position. Any other suitable bottom, in place of the veneer, may be used.

The loop ends of the legs may be provided with rub- 50 ber tips shown in Figs. 10 and 11, wherein 14 designates a rubber block forced into the eye of the foot, the flanges of the rubber holding the block in by the elasticity of the rubber. In Fig. 10 the rubber 15 is held in place by a bolt 16, nut 17 and washer 18. Instead 55 of the bolt a rivet may be used.

The chair may be used with the surface of the metal parts exposed or may be finished by winding ratan or other suitable woody material around the rods (see Fig. 7 wherein 19 indicates the woody material). The rods 60 may also be finished by being wrapped with cloth, paper or leather (see Fig. 8 wherein 20 indicates the wrapping material which overlaps itself in the winding). The rods may be wrapped with leather or other suitable material, lengthwise of the rods, and the wrapping 65 be sewed down as is shown in Fig. 9. Wherein 21 indicates the wrapping material and 22 the seam. Adhesive material may be used to secure the wrapping to the rods. Instead of solid rods I may use hollow tubes for the frame. Where the ring 11 passes the rods that are 70 welded to the ring 1 in a manner to project into ring 11 the latter is notched out to clear the rods.

In place of ring 6 I may use cross bars that are welded to the parts but I prefer to use the ring which may be of any desired shape. The general design and shape 75 of the back and other parts may be varied to suit the fancy of the designer. The spiral wrapping may also be secured in place by seams sewed together similar to that of Fig. 9 and also by overlap stitching. Instead of the clamping ring 11 being secured to the seat ring by 80 the bended projection 13 it may be secured by bolts, rivets, pins, or by lashings, or by any other suitable means.

What I claim is:—

1. A chair having a metal ring for a seat base and 85 metal legs welded to said ring and a seat bottom secured to said seat ring by a clamping ring of thin metal having its upper and lower margins bent inward over the seat bottom and the seat ring, respectively.

2. A chair having a metal seat ring and a metal stiffen- 90 ing ring below the seat ring, and metal legs welded to both and a brace extending from the lower ring to the rear legs and secured thereto.

Signed at Chicago, this 10 day of Oct., 1907.

WILLIAM ERASTUS WILLIAMS.

Witnesses:

W. A. SHEAHAN,

J. U. ANGELL.