March 3, 1931. G. H. HAMILTON 1,795,119

CHAIR BACK

Filed April 7, 1927

Fig. 3.

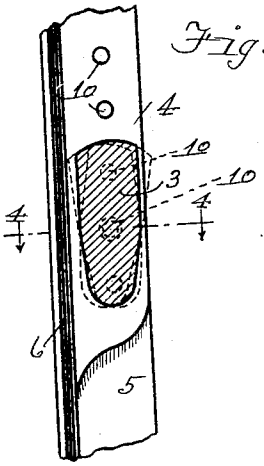
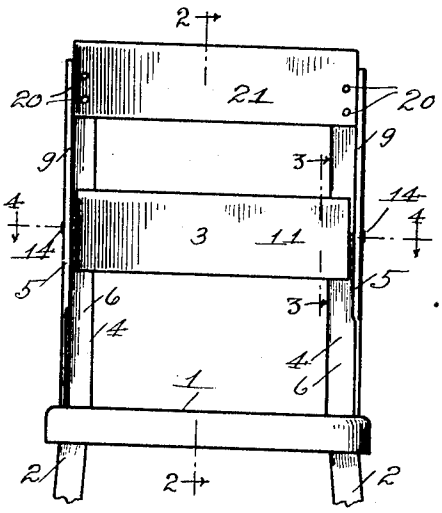


Fig. 1.



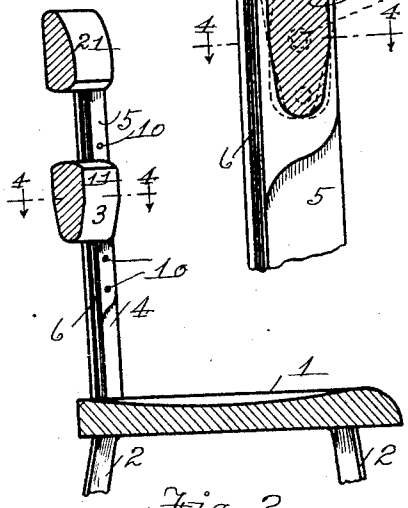
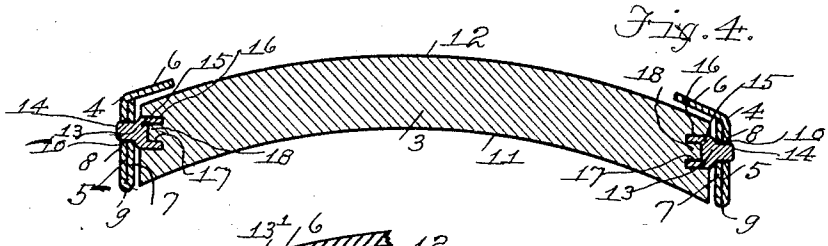


Fig. 2.

Fig. 4.



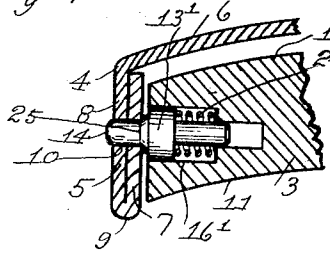


Fig 5.

Witness:
H. C. Spalding

INVENTOR
George H. Hamilton
BY
Cyrus M. Rice
ATTORNEY

Patented Mar. 3, 1931 1,795,119

# UNITED STATES PATENT OFFICE

GEORGE H. HAMILTON, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR TO AMERICAN SEATING COMPANY, OF GRAND RAPIDS, MICHIGAN, A CORPORATION OF NEW JERSEY

## CHAIR BACK

Application filed April 7, 1927. Serial No. 181,681.

The present invention relates to chair backs; and its object is, generally, to provide a chair back having a horizontal back piece freely rockable by the pressure of the back of the occupant; and more particularly, to provide improved means for mounting such a back piece thus rockably.

This and any other and more specific objects hereinafter appearing are attained by, and the invention finds preferable embodiment in, the structure hereinafter particularly described in the body of this specification and illustrated by the accompanying drawings, in which:

Figure 1 is a front view of a chair back;

Figure 2 is a vertical sectional view thereof taken on line 2—2 of Figure 1;

Figure 3 is a vertical sectional view of parts thereof taken on line 3—3 of Figure 1;

Figure 4 is a horizontal sectional view of parts of the same taken on line 4—4 of Figures 1, 2 and 3; and

Figure 5 is a horizontal sectional view of parts of the same taken on the same line but exhibiting a modified construction.

In these drawings, a chair is shown having a seat 1, legs 2, and a back which comprises a back piece 3 and supporting spaced upright members 4 preferably formed of bent sheet metal and having forwardly-rearwardly extending flanges 5 and flanges 6 which are inclined rearwardly-inwardly as particularly well seen in Figures 4 and 5. The flanges 5 are desirably formed in two plies 7 and 8 connected by the bend 9.

Bearings 10 are spaced vertically in these upright members 4, and extend through the two plies 7 and 8 of the flanges 5.

The horizontally disposed back piece 3, having preferably a concave front surface 11 and a convex rear surface 12, is mounted at its ends on the upright members 4 to freely swing or rock about a horizontal axis under the pressure of the back of the occupant of the chair and thus accommodate such back piece to his comfortable sitting posture.

Mounting members 13 are carried by this back piece, are freely rockably inserted into any registering pair of the bearings 10, and preferably have the spindle outer portions 14 turning in said bearings, the inner portions 15 which tightly fit in sockets 16 in the ends of the back piece, and are bored at 17 to receive tightly the tongues 18 of the back piece which are positioned centrally of the sockets 16 and extend outwardly toward their mouths, as shown in Fig. 4.

In assembling the parts, the screws 20 whereby the upper back piece 21 is secured to the upright members 4 may be removed, said members sprung apart, and the spindle portions 14 inserted into the desired registering bearings 10; or a mounting member 13′, seen in Figure 5, may be provided for at least one end of the back piece 3, being longitudinally movable inwardly against the pressure of a spring 24, sufficiently to permit its spindle portion 14 to be inserted into its bearing 10, whereupon said spring urges this mounting member 13′ outwardly in its bearing socket 16′ in the end of the back piece 3, and its shoulder 25 into abutting engagement with the flange 5. This spring thus serves to yieldingly hold this back piece in rocked position and also against endwise movement in either direction.

It will be seen that as the occupant leans backward in the chair, the back piece 3 in its rocking movement is limited by its rear surface 12 adjacent its upper or its lower edge (as the case may be) abutting against the inclined flanges 6.

The invention being intended to be pointed out in the claim, is not to be limited to or by details of construction of any particular embodiment thereof illustrated by the drawings or hereinbefore described.

I claim:

In a chair back: spaced upright members

having horizontal aligned rock bearings; a back piece having in its opposite ends sockets with centrally disposed outwardly extending tongues; mounting members having outer spindle portions freely rockable in the bearings, inner portions tightly inserted into the sockets, and centrally disposed bores tightly receiving the tongues.

In testimony whereof I have hereunto set my hand at Grand Rapids, Michigan this 4th day of April, 1927.

GEORGE H. HAMILTON.