

W. M. Smith

Chair Frame.

N^o 98,440.

Patented Dec. 28, 1869.

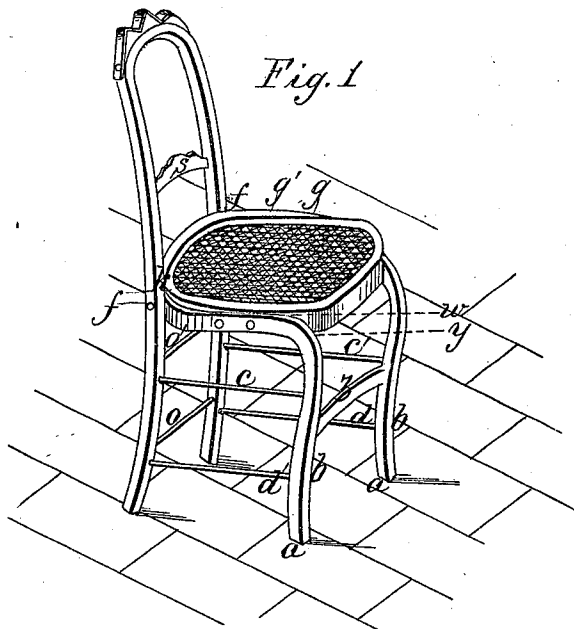


Fig. 3

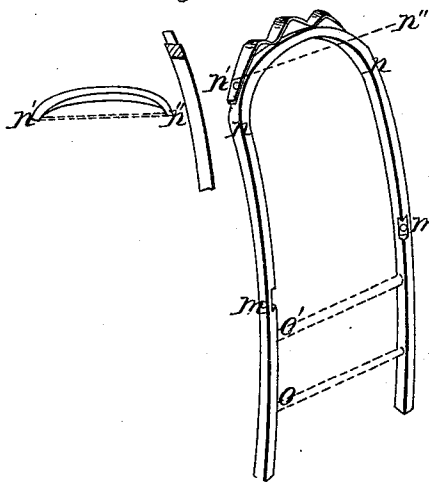


Fig. 2

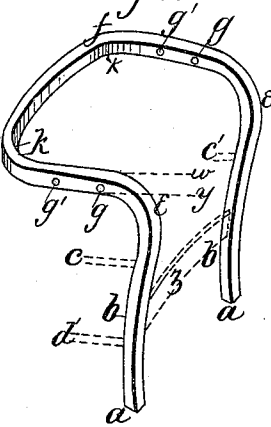


Fig. 4

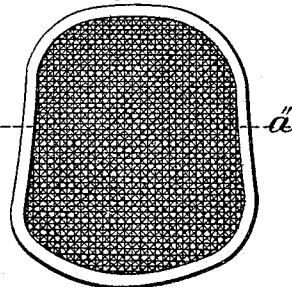
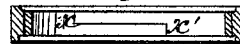


Fig. 5



Witnesses
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United States Patent Office.

WILLIAM M. SMITH, OF COLUMBUS, OHIO.

Letters Patent No. 98,440, dated December 28, 1869.

IMPROVED CHAIR-FRAME.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, WILLIAM M. SMITH, of Columbus, in the county of Franklin, and State of Ohio, have invented a new and useful invention, being an Improved Chair-Frame; and I do hereby declare that the following is a full and exact description thereof, reference being had to the annexed drawings, as forming a part of this specification.

Nature and Objects of the Invention.

My invention relates to the construction of a chair-frame, composed of three parts, each of which is formed from a single piece of material, conformed into the required shape by ordinary and known processes.

The piece constituting the front legs and seat-frame, or support for seat-frame, is constructed with a slight inward curve a short distance above, the part or extremity which rests upon the floor or other supporting-surface, which curve is gradually reduced, and when the position to be occupied by the seat-frame is reached, the material develops an outward curve, and is then bent downward and backward, to an angle of about forty-five degrees to the perpendicular of the part, the extremity whereof meets the supporting-surface. When the piece is bent as last aforesaid, it is continued to one of the posts of the back of the chair, to which it is secured, and is then again bent laterally, at an angle of forty-five degrees or more to that part of the piece beside the seat-frame, and passes in front of the other post of the back of the chair, forming an arch between the two posts. The piece is again curved laterally, and the other side of the frame is completed, and also the other front leg. This piece of material is provided with braces or rounds, pins, and other usual means required to retain it in the desired shape. It will be thus seen that this piece forms the front legs or supports, and the frame to enclose and sustain the chair-seat.

The part enclosing the seat-frame on three sides may itself be used as a seat-frame, by having a bar passing from one side to the other, connecting the opposite sides of the frame, at the same height from the ends of the supports or legs as the back part of the frame is above the surface upon which the chair stands, and at a proper distance from the front of the frame, and then filling the space enclosed between the lateral curve of the frame and the bar, with a seat of cane, wood, or other material.

The piece forming the back and rear legs of the chair-frame has a slight curve, from its extremities or feet, inward, until it reaches the part of the piece aforesaid which encloses the rear of the seat-frame. It thence curves in a reverse direction. At the desired height, the piece is curved laterally and downward, so as to form the arch of the back of the chair-

frame, which arch is formed with a slight lateral concavity. This piece is provided with the proper rounds, pins, and other means to secure it to the piece first above mentioned, and in the proper shape.

The seat-frame is composed of one piece of material, bent into the desired form. The ends are lapped and secured together by usual means. This frame is filled with woven cane, cloth, or other desired material, and is supported by that portion of the piece first above mentioned, which encloses it on three sides, and to which it is fastened by ordinary attachments.

My invention can be used either with or without rounds or stretchers, when the material is properly prepared.

Description of the Accompanying Drawings.

Figure 1 is a perspective view of the invention.

Figure 2 is that part of the frame forming the front legs and enclosing the seat-frame.

Figure 3 is that part of the frame forming the rear legs and back of the chair-frame.

Figure 4 is the seat and seat-frame.

Figure 5 is a section of fig. 4, through the line *a' a''*.

General Description.

I take a strip or bar of wood, (ash, oak, and hickory preferred,) or metal, of sufficient length and strength; and if wood be employed, a strip having a grain running parallel to its surface is first properly steamed, and then conformed to the desired shape. If metal be used, it should be ductile or malleable.

The pieces, figs. 2, 3, and 4, are thus described:

Fig. 2 is composed of one piece of material. Above the end or foot *a*, there is a slight inward curve to the point *b*, where a round, *d*, serves to secure the front leg to the rear leg of the frame. From the point *b*, the piece curves gradually outward to the point *e*, where it again curves downward and backward to the point *f*, where it is attached to the piece, fig. 3, by a pin or other known means, at *g g'*. The piece is secured to the seat-frame, fig. 4, by pins or ordinary attachments. From the point *f*, the piece is bent into an arch, the end opposite the point *f* passing in front of the post of the chair-back, fig. 3, to the point *k*, and is there attached to said post by ordinary means. It then is bent similarly to the opposite side.

The rounds *d c d' c'* serve to attach the legs or supports of fig. 2 to the corresponding parts of fig. 3.

The round *z* attaches the legs or supports of fig. 2 to each other.

The front of fig. 2 is slightly elevated above the rear, as shown by the dotted lines *w y*.

Fig. 3 is composed of one piece of material, which is formed into the desired shape, by the means aforesaid, and has a gradual curve forward from the foot

or extremity to the point *m*, where it is attached to that portion of fig. 2 enclosing the rear of the seat-frame, fig. 4. Thence it curves backward, until it reaches the point *n*, where it is bent into the arch of the upper part of the chair-back, which arch has a slight concavity in front, as shown by the dotted lines *n' n''*. The opposite side is similarly formed to that described.

Rounds, at *o o'*, serve to connect the opposite legs of fig. 3, which are attached to the supports of fig. 2 by the rounds *c d c' d'*.

The slat *s* connects the opposite parts of fig. 3, which, in conjunction with the slat *s*, form the back of the chair-frame.

Fig. 4 is composed of one piece of material, bent, by ordinary processes, into the desired shape, and is filled with a seat of any proper material. This frame is secured to the interior of the laterally-curved portion of fig. 2, by pins or other attachments, at *g g'*. The ends of this frame overlap each other at the points *x x'*, and are fastened together by suitable means.

The periphery of this frame should conform to the interior of the laterally-curved portion of fig. 2. The frame is so placed that the rear portion is somewhat lower than the front.

The chair-frame is thus formed from the foregoing parts:

First take the part, fig. 2, and expand the supports thereof sufficiently to adjust the round *z*. Place the rounds *c d c' d'* in the apertures provided. The rounds *o* and *o'* and the slat *s* are then similarly adjusted in the part, fig. 3. The parts, fig. 2 and fig. 3, are then joined in the usual manner, and are fastened to each other, by pins or other suitable means, at the points *f* and *f'*. The seat-frame, fig. 4, provided with a seat, is then placed in the space between the horizontal part of the part, fig. 2, so that its upper edge is on the same level with the adjacent part of fig. 2, and is there properly secured.

Claims.

I claim, as my invention—

1. The part, fig. 2, as shown and described, when constructed and used in the manner and for the purpose specified.

2. The combination of the parts as shown in figs. 2, 3, and 4, constructed and used in the manner specified.

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Witnesses:

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