G. HUNZINGER.

Manufacture of Chair-Frames.

No. 211,159. Patented Jan. 7, 1879.

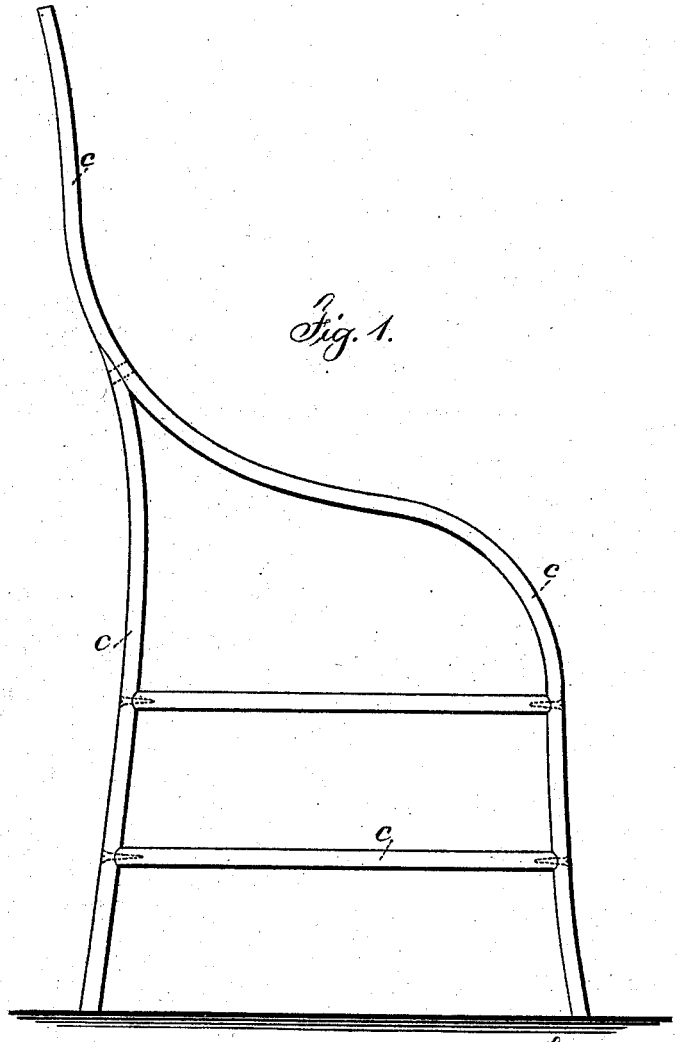


Fig. 1.

Fig. 3.

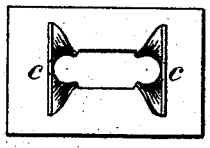
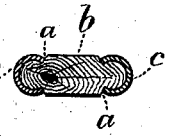


Fig. 2.



Witnesses

Chas. H. Smith

Geo. D. Pinckney

Inventor

George Hunzinger.

per Lemuel W. Serrell

atty.

UNITED STATES PATENT OFFICE.

GEORGE HUNZINGER, OF NEW YORK, N. Y.

IMPROVEMENT IN THE MANUFACTURE OF CHAIR-FRAMES.

Specification forming part of Letters Patent No. **211,159**, dated January 7, 1879; application filed July 5, 1878.

To all whom it may concern:

Be it known that I, GEORGE HUNZINGER, of the city and State of New York, have invented an Improvement in Frames for Chairs, of which the following is a specification:

Car-seats and chairs have been faced upon their surfaces with plates of metal, and metal in various forms has been applied to the surfaces of articles of furniture, and sheet metal has been drawn over the surfaces of metal sash-bars for show-cases, &c.

My invention relates to an improvement in chair-frames, in which the wood is strengthened by metal strips drawn upon the same. I also bend the wood after the metal has been applied to the same.

I plane out the strip of wood of the desired length and sectional shape for the chair-frame, and form grooves in the surfaces near the edges, as at *a a*, Figure 2, and round the edges, so that there are ribs or beads at each edge of the strip, such ribs or beads being each about three-quarters of a circle or ellipse. I provide a draw-plate, with an opening through it of a size to admit the strip *b* of wood endwise, and also ribbons or strips of metal *c c*, which, by the action of the draw-plate, are bent to shape and compressed firmly around the beads or rib as the wooden strip and the ribbons of metal are drawn through the die, the result being a strip of wood with three-quarter metal tubes upon its edges that is very strong, stiff, and light, and adapted to chair-frames, and in which the edges of the metal grasp around the wooden ribs so firmly that they cannot be separated without the parts being ruptured.

The metal bars become ornaments to the wooden chair-frame, as well as strengthening the same.

When this material is to be of a curved form, the strip of wood having the aforesaid metal edges is to be steamed, to soften the wood, and then it is to be bent to the required form in molds, in the manner usual in wood-bending machines. In bending the wood the metal is also bent, and the dies that bend the wood should press upon the edges of the metal strips, to retain them firmly as they clasp the wooden ribs.

If desired, the bent wood with the metal edges may be removed from the mold before it is dry, because the metal keeps the wood in its shape.

In Fig. 1, one side frame of a chair is shown, made partly of straight and partly of curved wood, having metal on the edges, as aforesaid; and Fig. 3 represents the die and the metal strips partially bent.

I claim as my invention—

1. The bent portions of a chair-frame formed of wood, partially incased in sheet metal, the edges of which enter grooves in the wood and are thereby interlocked, and the wood and metal are bent to shape for the parts of the chair-frame, the same forming a new article of manufacture, substantially as set forth.

2. The method herein specified of preparing bent wood, consisting in grooving the wood, drawing over the same sheet metal, so that its edges enter such groove, steaming the wood, and bending the wood and metal to shape simultaneously, substantially as set forth.

Signed by me this 2d day of July, A. D. 1878.

GEO. HUNZINGER.

Witnesses:

GEO. T. PINCKNEY,

CHAS. H. SMITH.