

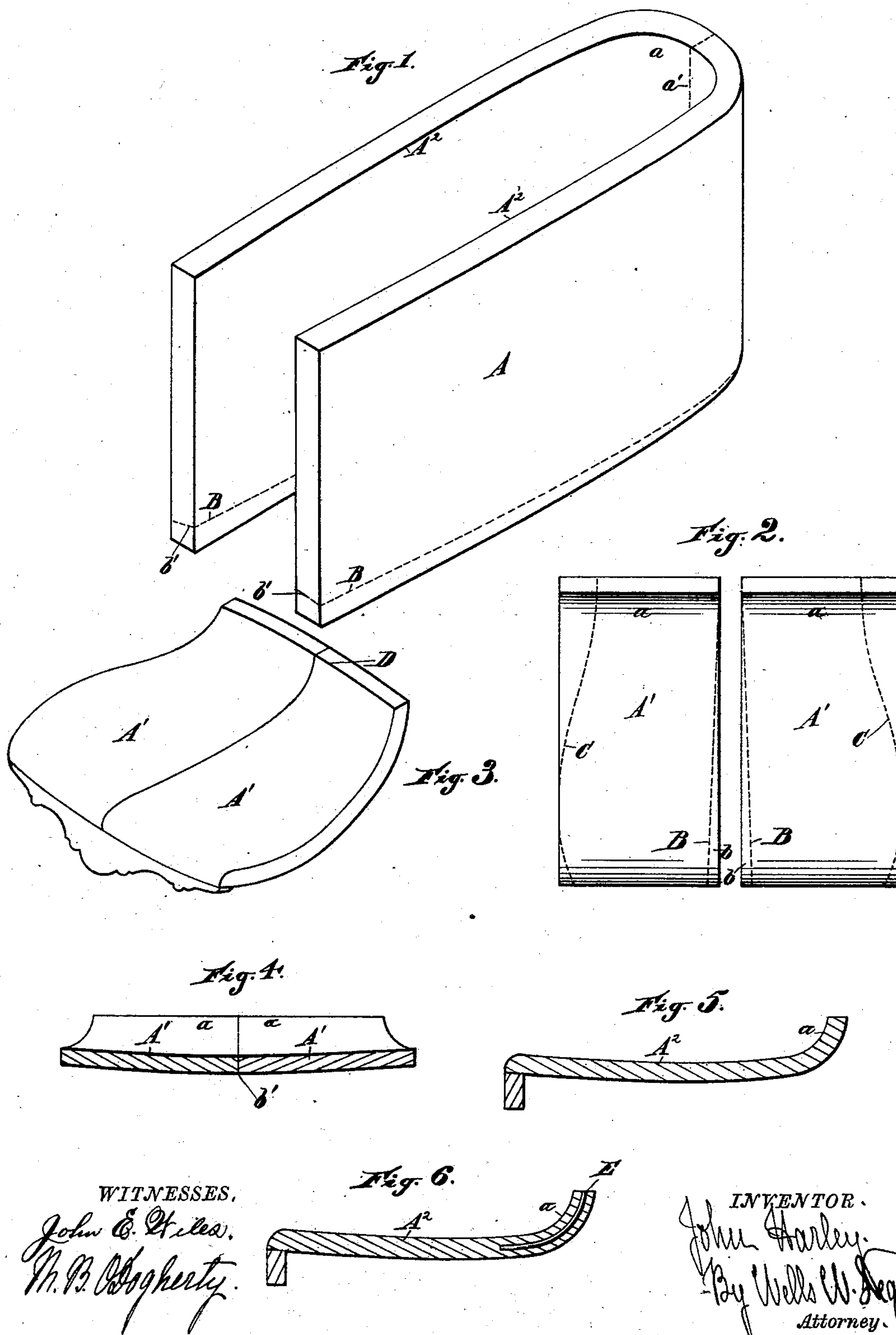
(No Model.)

J. HARLEY.

CHAIR BOTTOM.

No. 393,758.

Patented Dec. 4, 1888.



WITNESSES.

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JOHN HARLEY, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-HALF TO J. F. MURPHY, OF SAME PLACE.

CHAIR-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 393,758, dated December 4, 1888.

Application filed January 9, 1888. Serial No. 260,193. (No model.)

To all whom it may concern:

Be it known that I, JOHN HARLEY, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have
5 invented a certain new and useful Improvement in Chair-Bottoms; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to
10 make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in the manufacture of chair-bottoms, and more
15 particularly to that class of chair-bottoms made of wood and bent or cut to the required shape.

The objects of my invention are, first, to provide an improved chair-bottom in which
20 the proper shape shall be given to the wood by bending instead of piecing and cutting, as in the ordinary modes of construction; second, to provide an improved chair-bottom formed by first bending a suitable plank into
25 a U shape and then sawing the same transversely at the center of the bent portion and placing the pieces edge to edge and uniting them together in any suitable manner.

The various features of my invention will
30 be fully described in the following specification, and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a plank
35 of wood bent into shape and ready to be cut to form the two halves of the chair-bottom. Fig. 2 is a plan view showing the two portions of the bottom side by side. Fig. 3 is a perspective view of the chair-bottom complete.
40 Fig. 4 is a section on line $x x$ of Fig. 3, and Fig. 5 is a section at right angles thereto. Fig. 6 is a variation in which the wood is bent crosswise of the grain.

A represents the plank from which the two
45 sections A' are formed.

The construction of my improved chair-bottom is as follows: The plank A is bent at
a, as shown in Fig. 1, and then sawed along the dotted line a' , thus dividing it into two
50 equal portions, $A^2 A^2$. The portions A^2 are

now cut along the dotted lines B B (shown in Figs. 1 and 2) and the tapered strips b removed. The adjacent edges of the two portions A' are then brought together and secured in any desired manner. The outer
55 edges are then dressed off to the desired shape, as shown in Fig. 2 by dotted lines C. It will be readily seen that by means of the bend in the wood at a the riser at the back of the chair-bottom is formed integral with the
60 bottom instead of, as in ordinary styles of chairs, being built up of pieces secured to the rear edge of the chair-bottom and then cut out to the required shape. The wood is also bent slightly at A^2 to help to form the depression in the seat. This construction produces
65 a much stronger chair-bottom than where the riser is made by piecing, and the operation of bending is much more quickly and cheaply performed than that of piecing and cutting. 70

It will be seen that by removing the wedge-shaped pieces b the two portions of the riser will, when the adjacent edges of the wood are joined, be brought together at a slight angle, so as to make the back concave from front to
75 rear, as shown at D. I also prefer to cut the edges B B on a slight angle, as shown at b' , Figs. 1 and 4, instead of sawing vertically through the wood, so that when said edges are brought together the two portions $A^2 A^2$
80 will be inclined toward the center, as shown in Fig. 4, so as to form a depression in the bottom, as shown in Fig. 4. Now by passing the chair-bottom thus formed through the sandpapering-machine a smooth even finish
85 may be given to it and the surfaces dressed off so as to give a uniform curve to the riser and to the surface of the bottom. It is seen that by this process very little labor is required to shape up the chair-bottom, as a very
90 small portion of the wood has to be removed in order to give the proper curve to the surfaces. I would have it understood, however, that I do not limit myself to the exact construction shown in the drawings. Thus, in-
95 stead of making the chair-bottom of two pieces cut from a single bent board, A, as explained, a board may be used broad enough that, when severed at the bend, each of its pieces may serve to constitute a complete 100

chair-bottom, the same being suitably shaped and dressed, the riser being formed by the bend *a*; or the board *A* may be of only one-half the length shown in Fig. 1 and with one end bent to form the riser at the back of the seat, and the chair-bottom may be made from it in a single piece, as just explained; or the said piece may be divided and wedge-shaped, or wedge-shaped and beveled strips *b* may be removed therefrom for the purpose desired.

If the wood be bent crosswise of the grain, I may insert dowels *E* at right angles to the grain, as shown in Fig. 6, to prevent the wood splitting during the process of manufacture or in subsequent use.

The invention is specially adapted for the manufacture of what are known as solid wood chair-bottoms, in contradistinction to perforated seats or to veneer seats—that is to say, it refers to that kind of chair-bottoms in which the bottom is bored beneath for the reception of the legs and turned up into a riser at the back and bored or mortised to receive the back or spindles.

Having thus described my invention, what I claim is—

1. A solid chair-bottom adapted to be bored

or mortised for the reception of the legs and back elements, said chair-bottom composed of two or more pieces of wood running in a direction from front to rear, and curved upward at their rear ends to form the riser for the back elements, said pieces of wood joined on beveled faces, whereby, when united, the seat-bottom is dished in a direction from side to side of the chair, substantially as described.

2. A solid chair-bottom adapted to be bored or mortised for the reception of the legs and back elements, composed of two pieces, *A' A'*, placed edge to edge, said pieces being bent at *A²* to form a depression in the seat, and at *a* to form the riser in the rear, and having wedge-strips *b* cut away from their adjacent edges, said united edges extending from front to rear and beveled at the meeting edges, so that when united they will cause the seat to dish from the sides toward the center, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

JOHN HARLEY.

Witnesses:

M. B. O'DOHERTY,
JOHN E. WILES.