(No Model.) 2 Sheets—Sheet 1.

L. HEYWOOD & E. L. TAFT.

CHAIR SEAT.

No. 251,229. Patented Dec. 20, 1881.

Fig: 1.

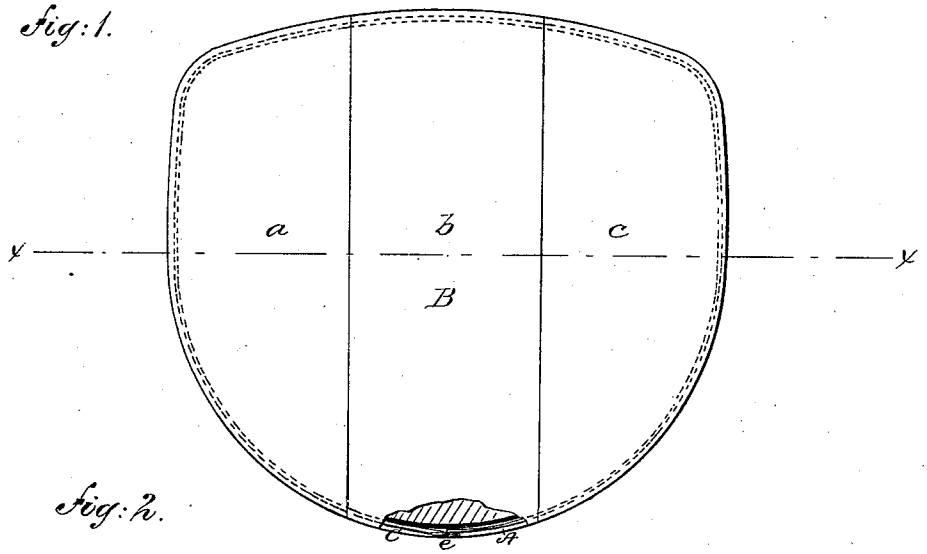


Fig: 2.

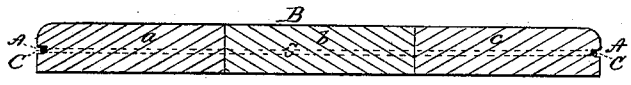


Fig: 3.

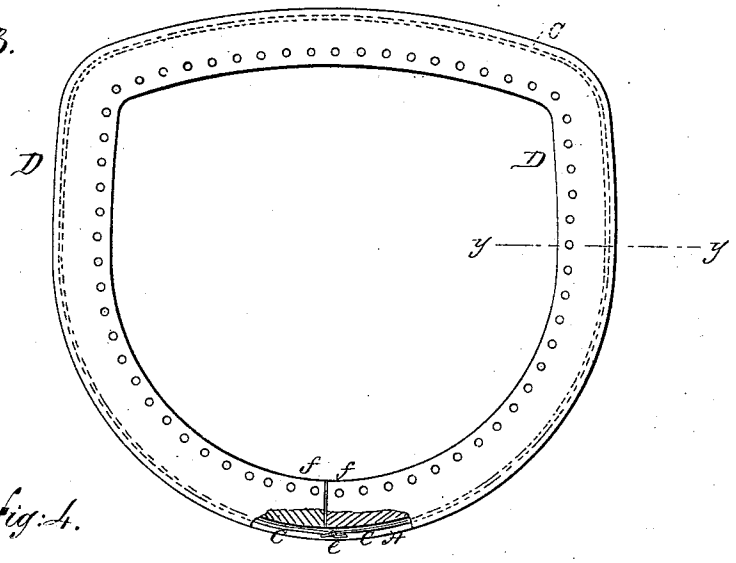
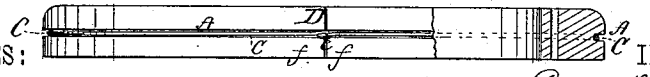


Fig: 4.



WITNESSES:

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INVENTORS:

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(No Model.) 2 Sheets—Sheet 2.

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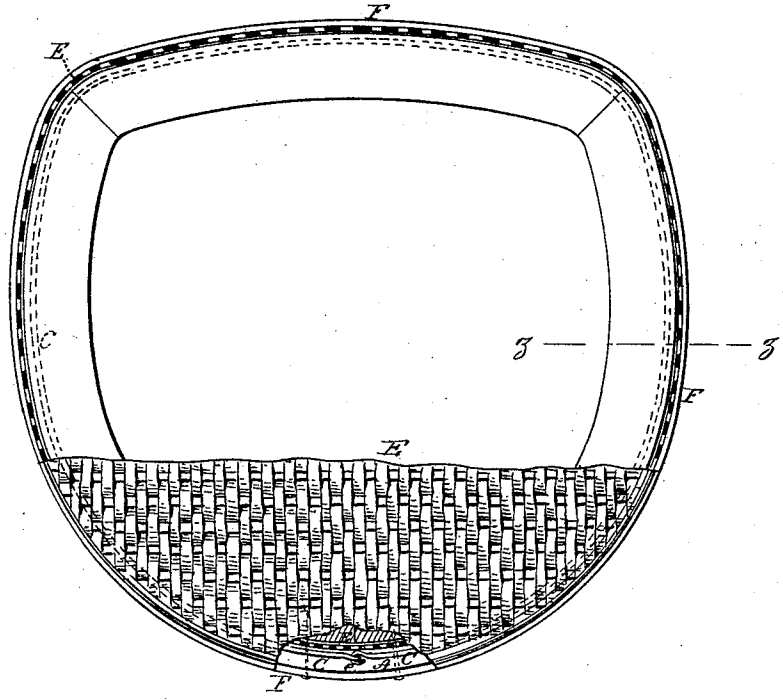
Fig: 5.



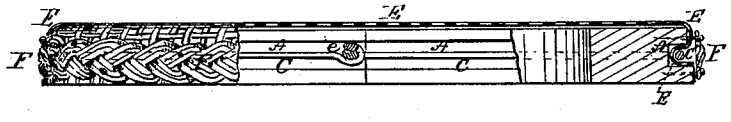


Fig: 6.

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UNITED STATES PATENT OFFICE.

LEVI HEYWOOD AND EDWARD L. TAFT, OF GARDNER, MASSACHUSETTS, ASSIGNORS TO SAID LEVI HEYWOOD, SETH HEYWOOD, HENRY HEYWOOD, GEORGE HEYWOOD, ALVIN M. GREENWOOD, CHARLES HEYWOOD, AND AMOS MORRILL, OF SAME PLACE.

CHAIR-SEAT.

SPECIFICATION forming part of Letters Patent No. 251,229, dated December 20, 1881.

Application filed February 28, 1881. (No model.)

To all whom it may concern:

Be it known that we, LEVI HEYWOOD and EDWARD L. TAFT, of Gardner, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Chair-Seats; and we hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification.

This invention is in the nature of an improvement in chair-seats; and the invention consists in a chair-seat with a continuous groove around its rim containing a wire hoop to bind the several parts of the frame or seat together.

In the accompanying sheets of drawings, Figure 1 represents a plan or top view, partly in section, of a solid wooden seat with our invention applied thereto; Fig. 2, a cross-section of same through line *x x*, Fig. 1; Fig. 3, a plan or top view, partly in section, of a bent chair-seat frame provided with our invention; Fig. 4, a rear view of same, partly in section, through line *y y*, Fig. 3; Fig. 5, a plan or top view of chair-seat frame, partly in section, with frame and fabric held together and in place by a hoop and covered by ornamental edging; Fig. 6, a rear view of same, partly in section, through line *z z*, Fig. 5.

Similar letters of reference indicate like parts in the several figures.

In constructing the frames for chair-seats they are, as is well known, bent to the required form by force, and generally when this bending takes place the fiber will splinter from the outer surface of the frame at a tangent to its curves, requiring the frequent dressing over of the frames and gluing down of these raised splinters before the frame can be used, and in constructing solid wooden seats for chairs it has heretofore been necessary to tongue and groove the several sections that form the seat together, and it is of common occurrence that when these solid wooden seats are bored for the reception of the legs, back-posts, &c., of the chair, the seat will be cracked and rendered useless.

To avoid these difficulties in the manufacture of both the chair-seat frames and the solid wooden seats, we form around the rim of the frame or seat, as the case may be, a continuous groove, A, within which, in the case of the solid wooden seat B, is placed a wire hoop, C, tightly drawn by suitable machinery around the seat and within the groove, the ends of the hoop being securely fastened together, as at *e*. In this way the several pieces of wood, *a*, *b*, and *c*, which form the solid seat B, need to be only glued on their edges, and not tongued or grooved, as heretofore, or doweled, to make a perfectly substantial seat, the wire hoop C, by its binding force, being sufficient to hold these several pieces without further aid, excepting the glue before named. The wire hoop C, when in this way applied to wooden seats, is also useful in preventing the seat from splitting when it is bored for the legs, back-posts, spindles, &c., the hoop, binding the wood tightly together, effecting this result, and preventing much loss which now occurs from the above reasons.

In the frame D of a seat which is intended to be covered by a woven or other fabric to make the seat-bottom, the groove A is formed around the rim of the seat, in the same manner as it is formed around the rim of the wooden seat B, and when this hoop is in place within the groove and tightly drawn around the frame and its ends united, as at *e*, the fibers of the wood, which commonly start out from the surface of the rim at a tangent to its curves, are to a great extent firmly bound to the frame and prevented from starting out, so that the gluing down of these fibers or splinters and the dressing off of the rim of the frame after it is bent are avoided. The frame in this way, bound by the wire hoop C, can be bored and caned as an ordinary seat-frame, and, besides, the binding force of the hoop is sufficient to hold the ends *f* of the frame closely together; or, if the frame be made of several pieces, it will hold these several pieces so tightly in contact that doweling or keying together the ends or pieces that compose the frame is rendered unnecessary. A still further advantage is derived from this binding-hoop in the case of a

seat-frame—that is, the entire upper surface and rim of the frame may be covered with a woven fabric, E, and the groove and hoop answer the additional purpose of securing this fabric to the frame of the seat. For that purpose the fabric E is placed over the seat-frame until it covers the entire upper surface, and the groove A formed in its rim. The hoop C is then tightly drawn around that part of the fabric which covers the groove, forcing the fabric into the groove, and there confining it by the binding force of the hoop after its ends are joined together. When the fabric of the seat-bottom is in this way secured to the seat-frame an ornamental edging, F, of suitable width, is tacked around the rim of the frame, so that the wire hoop C and the groove A, within which it is placed, are hidden from sight, giving a finished appearance to the seat.

The groove A in the rim of the seat-frame or seat not only enables the binding-hoop to lie flush within it, but it also, as is obvious, by supporting the hoop at all points, stiffens the hoop to such an extent that a comparatively small wire may be used for the hoop, and yet be sufficient to bind the several parts of the seat or its frame together equally as well as would a hoop made of larger and stronger material.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In combination with a chair-seat provided with a groove, A, in its edge, the binding-hoop C, extended around the edge of the seat in said groove, and tightened up around the seat to securely bind and retain the parts of the seat in position, substantially as shown.

2. In combination with a chair-seat provided with a groove, A, in its edge, the binding-hoop C, extended around the edge of the seat in said groove, and tightened up around the seat to securely bind and retain the parts of the seat in position, and a binding or edging, F, fastened to the edge of the seat, over the groove, to cover and conceal the groove and hoop, as shown.

LEVI HEYWOOD.
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Witnesses:
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