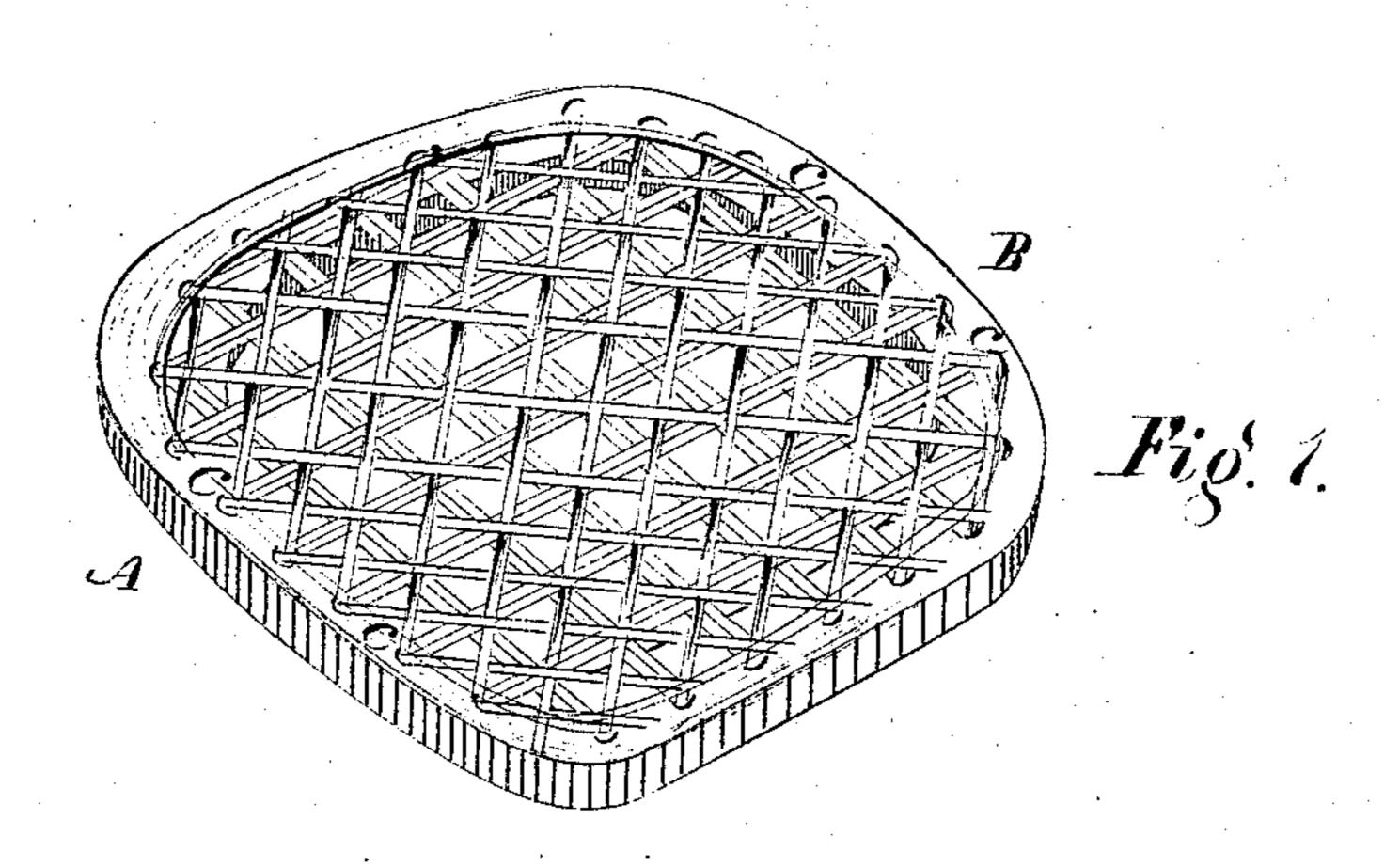
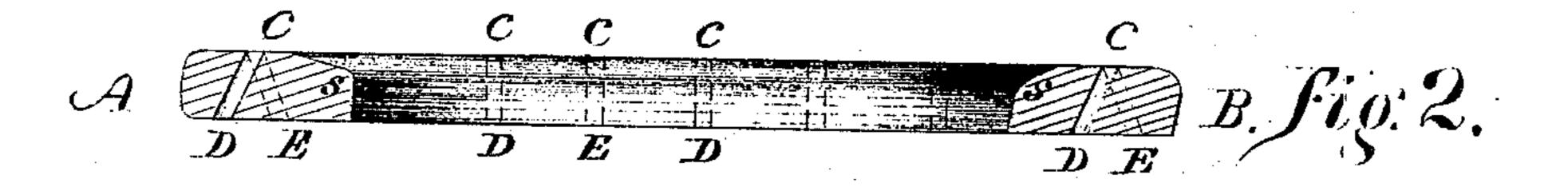
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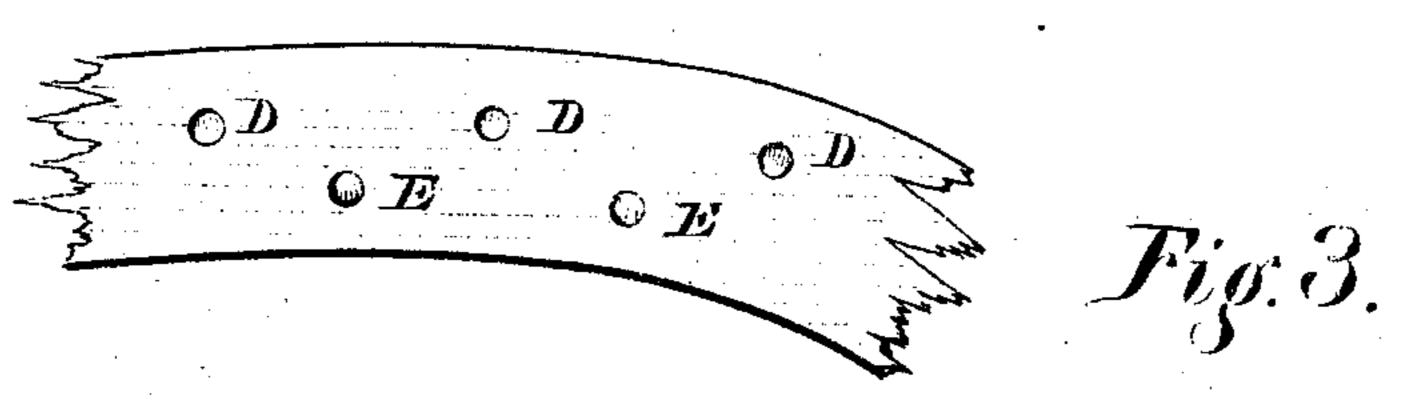
Chair Botton.

No. 104.2017.

Fatented Suite 14. 1870.







Witnefses: Sen Suderson

Inventor. Charles m. Roch

Anited States Patent Office.

CHARLES M. ROHR, OF PORTLAND, OREGON.

Letters Patent No. 104,207, dated June 14, 1870.

IMPROVEMENT IN THE CONSTRUCTION OF CANE-SEAT CHAIRS.

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

I, CHARLES M. ROHR, of Portland, in the county of Multnomah, in the State of Oregon, have invented an Improved Cane-bottom Chair, of which the following is a specification.

Object of the Invention.

It is generally known that cane-bottom chairs are very liable to breakage and damage originating in a careless construction or faulty timber used for the frame in which the holes are pierced. Frequently these "checks" and splits are unobserved by the mechanic, and frequently they "check" or split after the holes are bored, especially if the holes are bored with dull tools and the wood be soft.

Another feature of the improved bottom is the manner of preventing the breakage of the cane over

the inside edge of the frame.

The inventor knows that some chairs are beveled or chamfered on the upper inside corners, but the peculiar shape he makes them is not known or used. Such beveled chairs do not prevent the breakage they are designed to in any considerable degree, for it is found that they break on the edges of the chamfers almost as readily as on the plain corners, as the cane bends on one point constantly. By the method the inventor uses, a new point is brought to bear as the weight is shifted.

Every chair after a little use is soon "baggy" and admits of the peculiar curve of the inventor, which he gives to the upper inside bearing of the chair-frame. If the "bag" is close to one edge by reason of the weight being concentrated at that point, then the rounder part of the curve (lower) takes the weight, while, on the opposite side, the flatter part bears the weight, and so, no matter how the weight may be shifted, the roundest part of the frame is next the weight. If the weight be next the middle, then it is distributed about the frame equally.

In relation to the holes in which the cane is inserted, the inventor uses the following plan for making the

frame free from any liability to split through the line of holes:

He bores in in such a way that they form a "zigzag" on the bottom and a line on the top, looking as other chairs. This is done in the following way:

The bit in the boring-machine inclines from the horizon about sixty degrees and the half of the holes are bored with the point of the bit pointing inwardly and half of them with the bit pointing outwardly; they then have the appearance shown in the section, on a line on the upper part of the chair and zigzag on the under side. This arrangement of the holes is for this purpose. When the cane is woven in the usual pattern it will go across the grain of the wood, and, as it were, tie the wood together; even though the wood were split, the weight of the sitter would bind the split together instead of tending to split it more.

The usual way of boring these holes in a uniform manner in straight lines or curves vertically through the wood is a source of considerable mischief in the way of this splitting, and this, with the breakage of the cane, soon renders these very pleasant chairs unfit for use. The inventor's chair wears well, and, in great measure, overcomes these difficulties, appearing to an

unscrutinizing eye similar to other chairs.

Drawing.

Figure 1 is a perspective view of a chair-bottom; A the front and B the back.

Figure 2 is a section from A to B, showing the angularly-pierced holes C D and C E; also shows the curve of the upper inside edges of the chair-frame, which is a flattened double elliptic, the lower elliptic having the smaller radius; also, the curve CS.

Figure 3 shows the bottom or under side of the chair-frame or "bottom" and the zigzag appearance of the holes C D and C E.

Claim.

What I claim as my improvement in the construction of chairs is—

The double elliptic curve C S and the angularlypierced holes C D and C E, arranged as herein described for the purpose specified.

CHARLES M. ROHR.

Witnesses:

LIN ANDERSON, WM. A. DOBY.