

E. SAVORAL.
Bottoms for Chairs.

No. 157,028.

Patented Nov. 17, 1874.

Fig: 3.

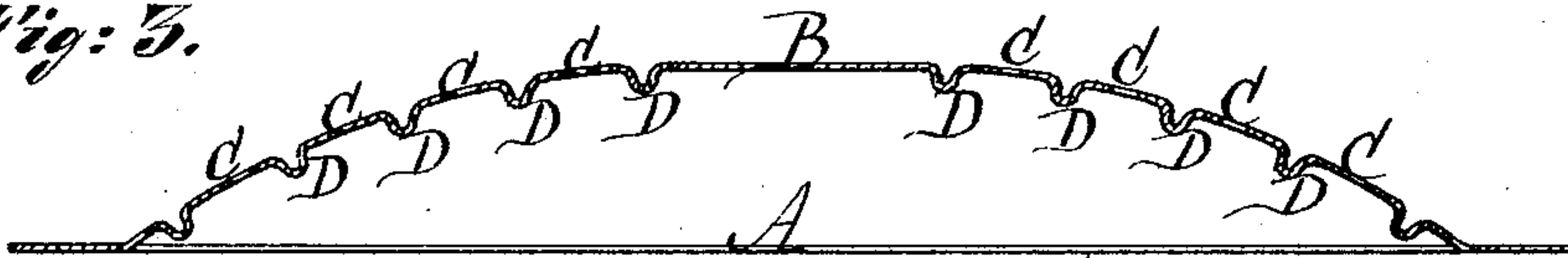


Fig: 2.

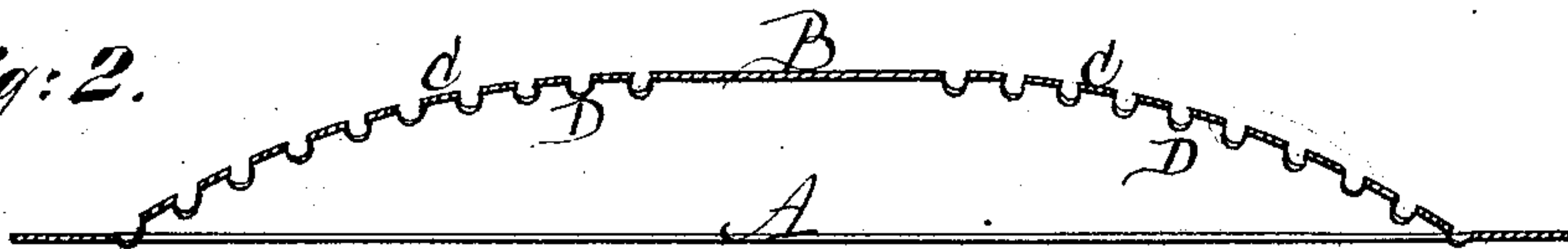
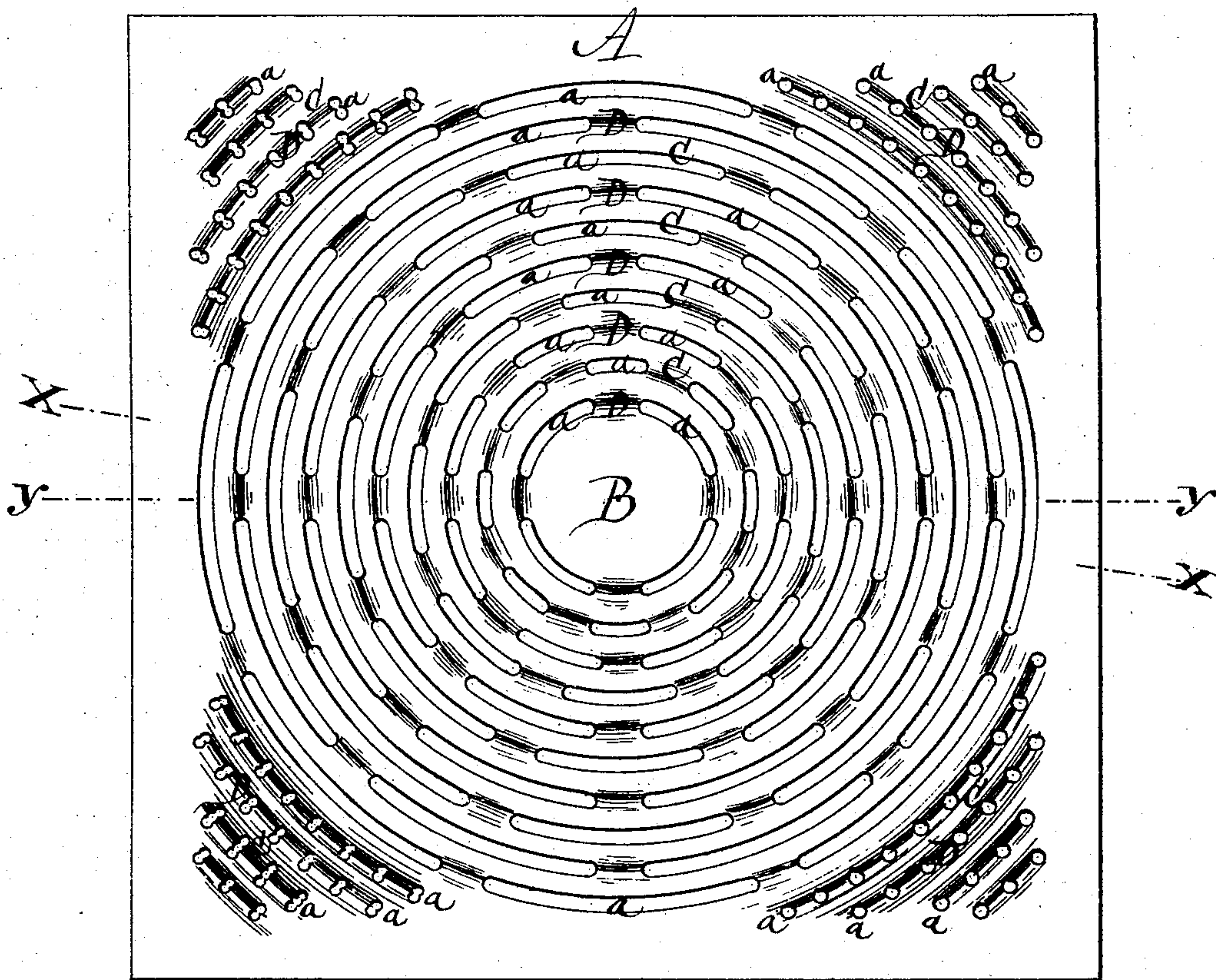


Fig: 1.



Witnesses:

Henry Eichling
Jos. Haynes

Edward Savoral
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UNITED STATES PATENT OFFICE.

EDVARD SAVORAL, OF NEW YORK, N. Y.

IMPROVEMENT IN BOTTOMS FOR CHAIRS.

Specification forming part of Letters Patent No. **157,028**, dated November 17, 1874; application filed March 26, 1874.

To all whom it may concern:

Be it known that I, EDVARD SAVORAL, of New York, in the county and State of New York, have invented an Improvement in the Bottoms and other parts of Chairs and other seats, of which the following is a specification:

My invention relates to certain improvements, whereby a simple, cheap, and durable elastic metallic seat is obtained. The invention consists in a bottom, back, or other part of a chair or other seat, composed of a series of rings or bands of circular or approximate form, connected laterally, at suitable intervals, by flexible arched braces or binders.

In the accompanying drawing, Figure 1 is a top view of my invention. Figs. 2 and 3 are vertical sections, the former through the line *xx*, and the latter through the line *yy*, of Fig. 1.

This structure for chair and other seats may be made of sheet metal, preferably of a single piece, although, if desired, it may be made of more than one. The drawing represents it as made of a single piece of sheet metal, A, having concentric circular intermitted openings *a a* cut in it to form a solid central portion, B, of suitable dimensions, surrounded by concentric rings or bands C, connected laterally, at suitable intervals, by braces, which form the intermissions of the circular openings *a a*.

These braces are made of arched form in their cross-section, as shown in Figs. 1 and 2, to give the proper degree of elasticity to the seat, and allow it to rise and fall without buckling or crushing, the arching of the braces allowing them to bend with sufficient facility.

When made in this form it is stamped out at one or more operations by means of suitable dies, and the concavo-convex form is imparted during the process of stamping.

Instead of being concentric circles, or parts thereof, as shown, the rings or bands C may be of convolute form, or of any other form approximating to that of a circle.

When made of several pieces, the arched connecting-braces D may be attached in any suitable manner, and the arches may extend upward or downward, according to whether the seat is to be upholstered or not.

What I claim as new, and desire to secure by Letters Patent, is—

A chair-seat having the concentric intermitted openings *a*, circular or approximately formed rings or bands C, and flexible arched braces or binders D, the whole being constructed substantially as herein shown and described.

EDVARD SAVORAL.

Witnesses:

MICHAEL RYAN,
BENJAMIN W. HOFFMAN.