

*H.W. Curtis,*  
*Improved Wooden Mat for Picture Frames.*

No. 120,250.

Patented Oct. 24, 1871.

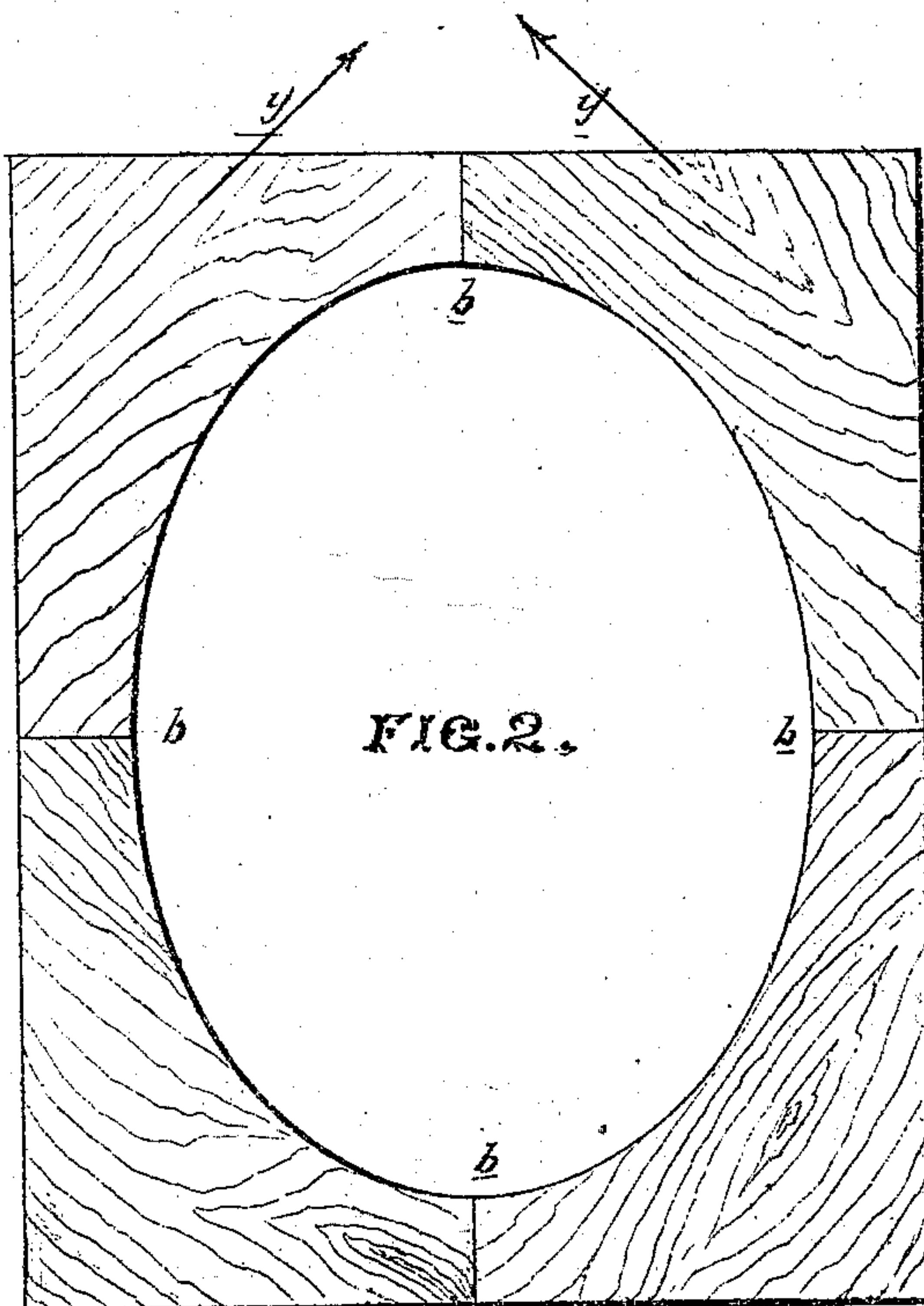
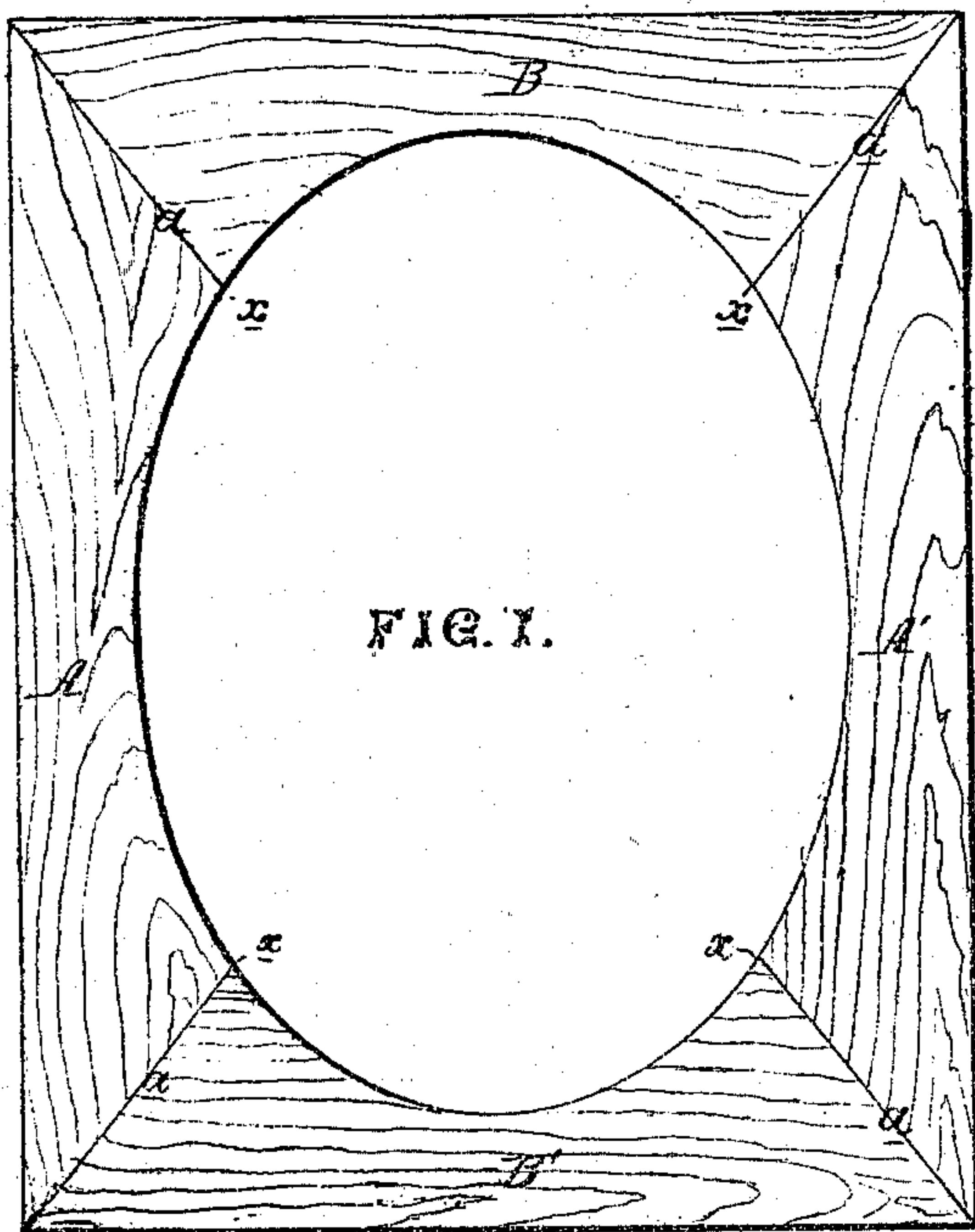
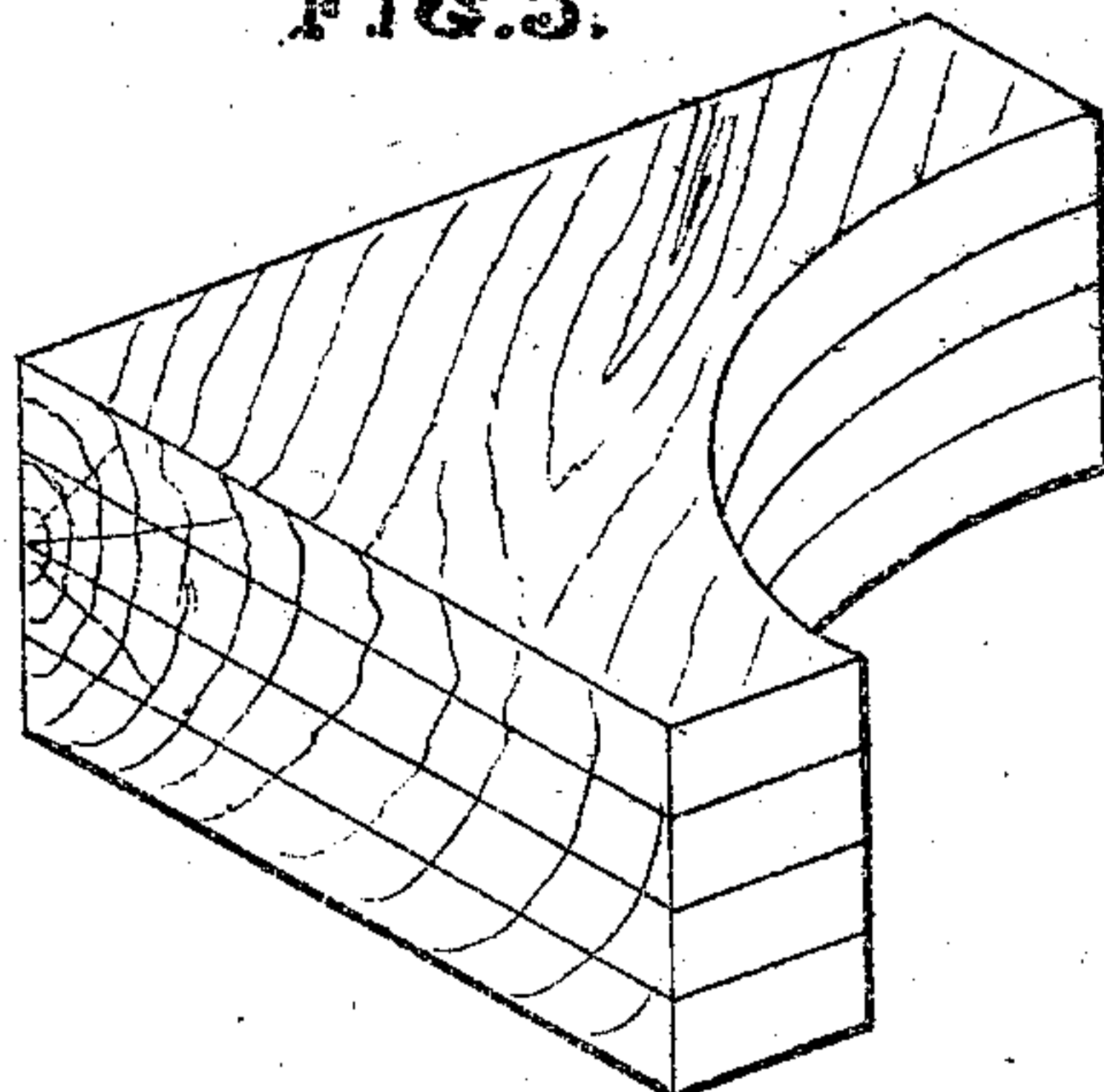


FIG. 3.



WITNESSES

*Wm. A. Steel*  
*Thomas McIlwain*

*H.W. Curtis*  
*by his attor.*  
*Howson and Son.*



# UNITED STATES PATENT OFFICE.

HARRISON W. CURTIS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HALE, GOODMAN & CO., OF SAME PLACE.

## IMPROVEMENT IN WOODEN MATS FOR PICTURE-FRAMES.

Specification forming part of Letters Patent No. 120,250, dated October 24, 1871.

*To all whom it may concern:*

Be it known that I, HARRISON W. CURTIS, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented an Improved Wooden Mat for Picture-Frames, of which the following is a specification:

My invention relates to wooden mats having oval or other shaped openings, and arranged for fitting in picture-frames for the display of portraits, &c.; and my improved mat consists of strips or segments cut in respect to the grain of the wood, and united as described hereafter, for the purpose of avoiding the distortions and open joints common to ordinary mats.

Figure 1 is a face view of an ordinary wooden mat for picture-frames; Fig. 2, a view of my improved mat; and Fig. 3, a perspective view, showing the four strips of which my improved mat is composed.

Picture-frames with wooden mats have recently become popular, especially for the display of photographic portraits, and these mats have hitherto been constructed in the manner illustrated in Fig. 1, where A and A' represent the opposite side pieces of the mat, and B and B' the top and bottom pieces, the whole being fitted together at the corners with ordinary tongued-and-grooved miter-joints. The strips of which the mat is composed consist of walnut or other ornamental woods, which are more or less liable to warp, and this tendency is communicated to the mat through the joints to such an extent that it is almost impossible to construct a mat in the manner illustrated in Fig. 1 which will not become twisted. This warping results in the disfiguring of the mat by the opening of the joints at *x x*. In order to avoid this difficulty I construct the mat, as shown in Fig. 2, of four pieces, precisely alike in shape, and make the joints at *b b b b*, by which arrangement I avoid the distortion above alluded to, as well as the disfigurement which the open mitered joints prevent.

It may be remarked that the warping of the ordinary wooden mats may be attributable to the direction of the grain of the wooden strips, the grain running in the direction of the length of the strips, and as the tension generally takes place across the grain, the warping of one strip is communicated to the adjoining strip, and the general twisting of the whole mat and the opening of the joints ensue.

It will be observed that the grain in the strips or segments of my improved mat takes the angular direction shown by the lines *y* in Fig. 2, so that any tendency of any one of the strips to warp is confined to that strip and not communicated to the adjoining strips, the joints being of too limited a character to be the means of such communication; hence, my improved mat remains entire and is free from the distortions common to ordinary mats, and the joints remain perfect. Another advantage of my invention is economy in the manufacture of the mats. This will be understood when it is borne in mind that all the four pieces are precisely alike, and may be cut together by one gig-saw, as seen in Fig. 3, the change of tools required in the formation of ordinary mats being thus avoided.

I claim—

As a new article of manufacture, a rectangular wooden mat having an oval or circular opening, and consisting of four strips or segments cut so that the joints shall be at the top, bottom, and sides of the mat, and joined so that the grain in adjacent sections shall be at different angles, as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

H. W. CURTIS.

Witnesses:

WM. A. STEEL,  
F. B. RICHARDS.

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