

(No Model.)

P. B. RAYMOND.

LUMBER DRIER.

No. 338,440.

Patented Mar. 23, 1886.

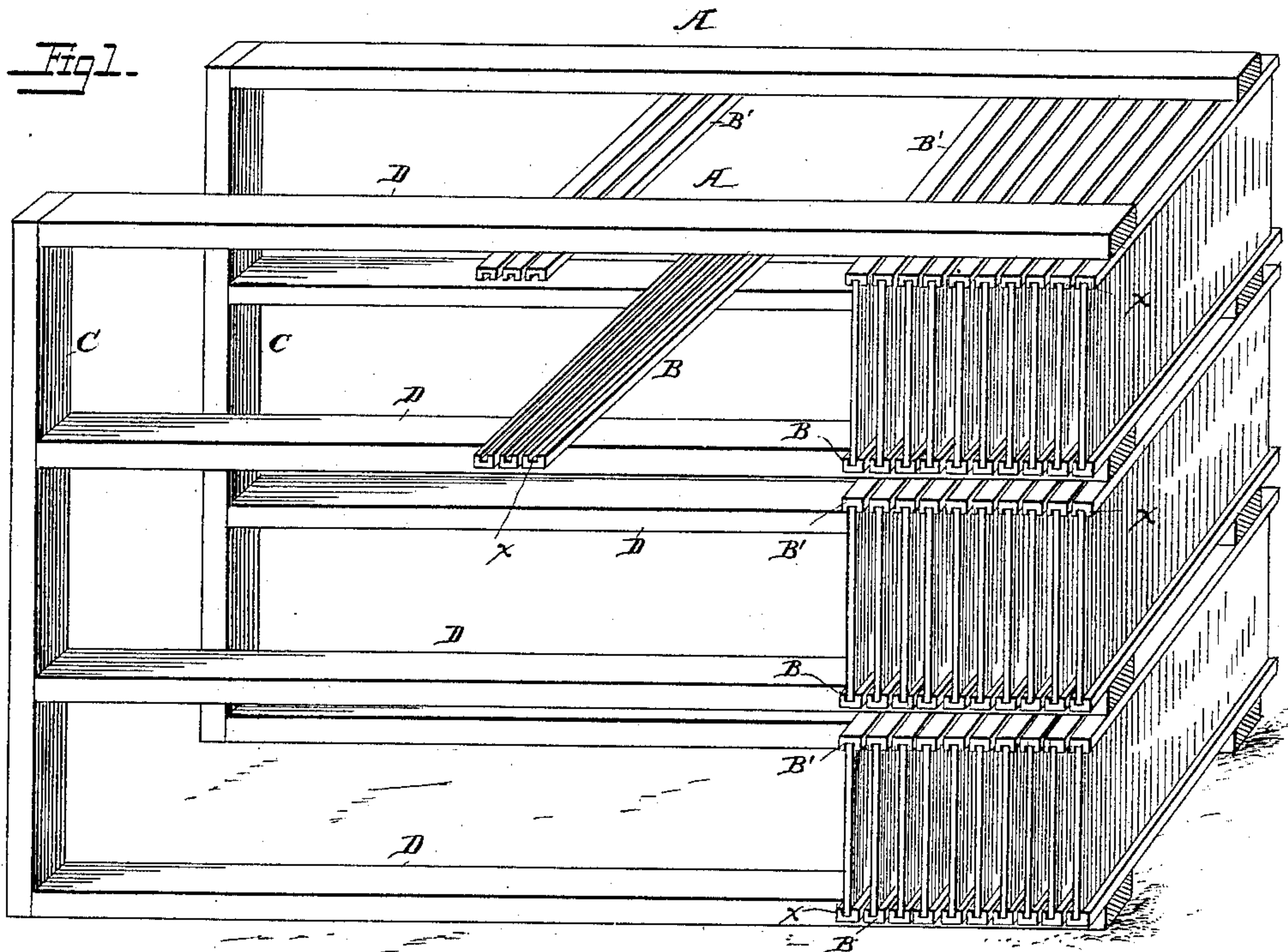
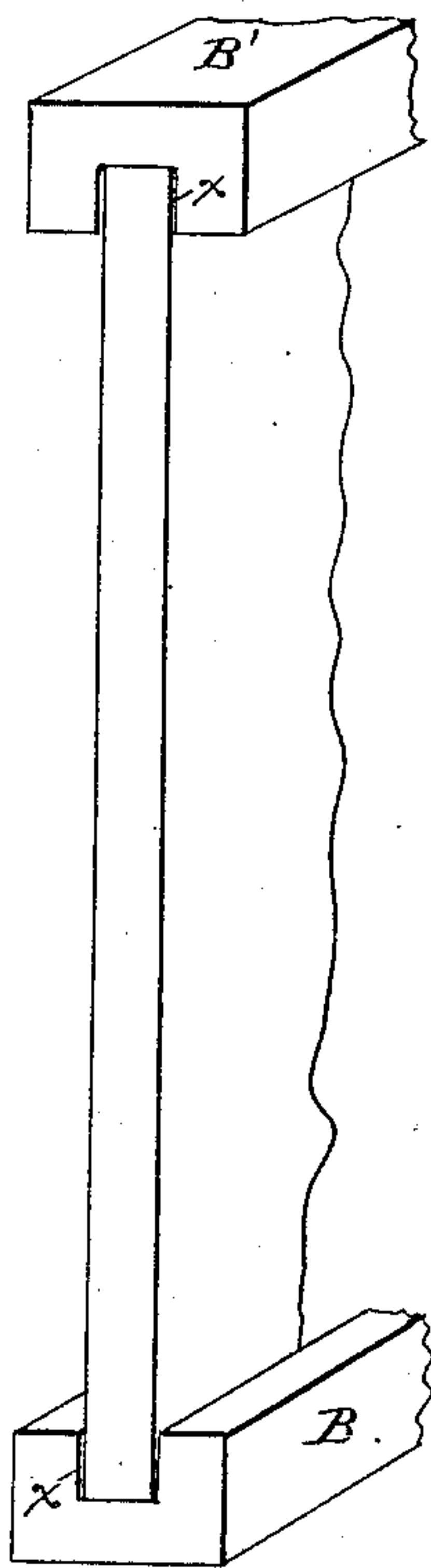


Fig 2.



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# UNITED STATES PATENT OFFICE.

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## LUMBER-DRIER.

SPECIFICATION forming part of Letters Patent No. 338,440, dated March 23, 1886.

Application filed February 9, 1886. Serial No. 191,344. (No model.)

*To all whom it may concern:*

Be it known that I, PERLEY B. RAYMOND, a citizen of the United States, and a resident of Indianapolis, Marion county, Indiana, have  
5 invented a new and useful Improvement in Veneer and Lumber Driers, of which the following is a specification.

My invention relates to means for drying  
10 lumber or veneers, and has for its object to accomplish this result in a cheap, simple, and effective manner, and to prevent the bending, warping, and splitting of the sheets, and especially to prevent the ends from checking in the process of drying, as is the case in the  
15 ordinary methods, where the ends are directly exposed to the heat, which absorbs the moisture therefrom more rapidly than from the center of the sheet or board, causing unequal shrinkage resulting in checking and warping  
20 of the ends; and my invention consists in supporting the sheets with the grain in a vertical position between guides, permitting the sheets to shrink longitudinally while subjecting them to the action of currents of air, as  
25 fully set forth hereinafter, and as illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view illustrating the construction of an improved rack devised for the purpose of carrying out my invention;  
30 Fig. 2, an enlarged perspective view, in part section, of a pair of the guides supporting the veneer.

A A represent suitable supports for grooved  
35 guide-pieces B B', the said supports being ribs, bars, or strips of any suitable character sustained in position in any suitable manner. As shown, the supports are the longitudinal bars of frames D, consisting of the said supports and uprights C. Two of the frames D  
40 D are arranged parallel to each other, and the guides B B' are secured in pairs parallel to and with their grooved faces opposite to each other, as shown in the drawings. The veneer or lumber is introduced between the guides,  
45 as shown in the drawings, being set on end—that is, with the grain running vertically—and while thus retained is subjected to the action of currents of air, preferably heated, passed

through the chamber containing the rack. It will be seen that both the upper and lower  
50 edges of the veneers fit within the grooves *xx* of the pair of dies, whereby the sheet is prevented from warping or twisting. At the same time it is held so loosely that it can move freely as it shrinks, thereby preventing it  
55 from being split or broken, as occurs when it is tightly confined along the edges. It will also be seen that as the lumber or veneer is arranged with its grain in a vertical position it will not shrink away from the upper support, as would otherwise occur, while it will  
60 resist that tendency to buckle and bend and fall out of place which is apt to result with thin veneers from their own weight resting upon their lower edges with the grain running  
65 longitudinal.

The guide-strips B B' may be of metal, or of wood or other material.

The supports A A' may be vertically adjustable, so as to bring the strips nearer to or  
70 farther from each other, to receive lumber or veneers of different dimensions, or the guides may be secured upon their supports so as to be vertically adjustable.

Without limiting myself to the precise construction and arrangement of parts shown, I  
75 claim—

1. The combination, in a rack for drying lumber or veneers, of pairs of cross-bars provided with oppositely-arranged grooves placed  
80 parallel to each other, substantially as described, and adapted to receive between them the sheets to be dried, as and for the purpose set forth.

2. A rack for drying lumber or veneers, 85 provided with grooved guides B B', arranged in pairs parallel to each other in a horizontal position, and with their grooved faces toward each other, substantially as set forth.

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

PERLEY B. RAYMOND.

Witnesses:

AUSTIN B. PRATHER,  
LESLIE C. FERREN.