

I. N. Swasey,

Billiard Table.

No. 110,306.

Patented Dec. 20, 1870.

Fig. 1.

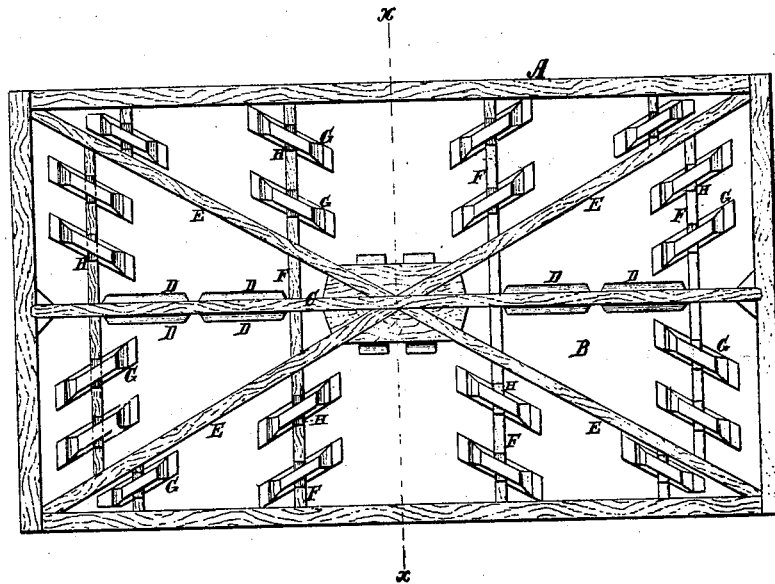
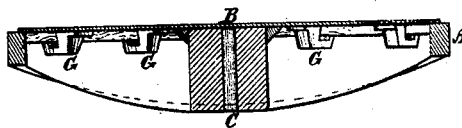


Fig. 2.



Witnesses:

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ISAAC N. SWASEY, OF YONKERS, NEW YORK.

IMPROVEMENT IN BILLIARD-TABLES.

Specification forming part of Letters Patent No. **110,306**, dated December 20, 1870.

To all whom it may concern:

Be it known that I, ISAAC N. SWASEY, of Yonkers, in the county of Westchester and State of New York, have invented a new and useful Improvement in the Construction of Table-Tops; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

The object of this invention is to secure the tops of billiard and other tables and other wood surfaces in such a manner that they shall be prevented from warping, winding, and twisting from atmospheric changes of moisture or temperature or from other causes; and it consists in securing the top, by means of saddles, to the cross-rails or ribs of a beveled frame in such a way that the top, in swelling or shrinking, will carry the saddles slightly along the rails or ribs without disturbing the level of the frame. The top itself being fixed to the saddles only, or to the saddles and (along the line of its grain) to the middle or one edge, or any other part of the frame, and kept in close apposition to the frame by the saddles pressing upon the rails or ribs—with or without wedges, rollers, or other means of closer coaptation—remains unalterably upon the level of the framing, which, being properly constructed, thereby prevents the warping and twisting of the top, as will be hereinafter more fully described.

In the accompanying drawing, Figure 1 represents a view of the under side of the table-top, showing the frame and the mode of securing the top. Fig. 2 is a cross-section of Fig. 1 on the line *x x*.

Similar letters of reference indicate corresponding parts.

A is a border-frame, upon the top of which the top of the table rests. B is the top. C is a central rail, which runs with the grain of the wood of the table-top, to which the top is fastened by the angle-blocks D by gluing or otherwise. E represents diagonal rails, radiating from the center of the table and fitting into the angles of the frame, as seen in the drawing. F represents the cross-rails or ribs,

more or less in number. The rails are all fastened to the frame A, and fastened together by means of angle-blocks or otherwise.

G represents the saddles, which are glued or otherwise made fast to the table-top. Each saddle is recessed on its face side, so as to receive the cross-rail, and they are placed at an angle with the grain of the top and cross-rails, so as to cover more space (or rather more grains of wood) in the width of the top than they would if they were placed parallel with the grain.

The upper edges of all the rails, as well as the upper edge of the frame, are designed to be on a true plane. This being the case, and the top being worked to a uniform thickness and laid upon the frame, will, if kept in position, also be a true plane.

As before stated, the top is attached to the central rail, C, but it is confined nowhere else, so that it is at liberty to shrink and swell from the center each way. The saddles, of course, move with the top, but they slide on the cross-rails or ribs.

To prevent any possible vertical play or tendency in the top to warp or twist, small keys or wedges H may be placed in the recesses on the rails or ribs, and glued to the saddles and covered with black lead to overcome friction. By this means the table-top is kept to the face of the frame and rails, and not allowed to twist or warp, although it may shrink and swell from changes in the atmosphere or other causes.

This improvement is adapted for billiard-table tops, platforms, ball-alleys, or for any purpose where a true surface or bed of wood is required.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The frame A, top B, cross-rails F, and saddles G, combined as described, to prevent warping, winding, and twisting from heat and moisture.

ISAAC N. SWASEY.

Witnesses:

GEO. W. MABEE,
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