

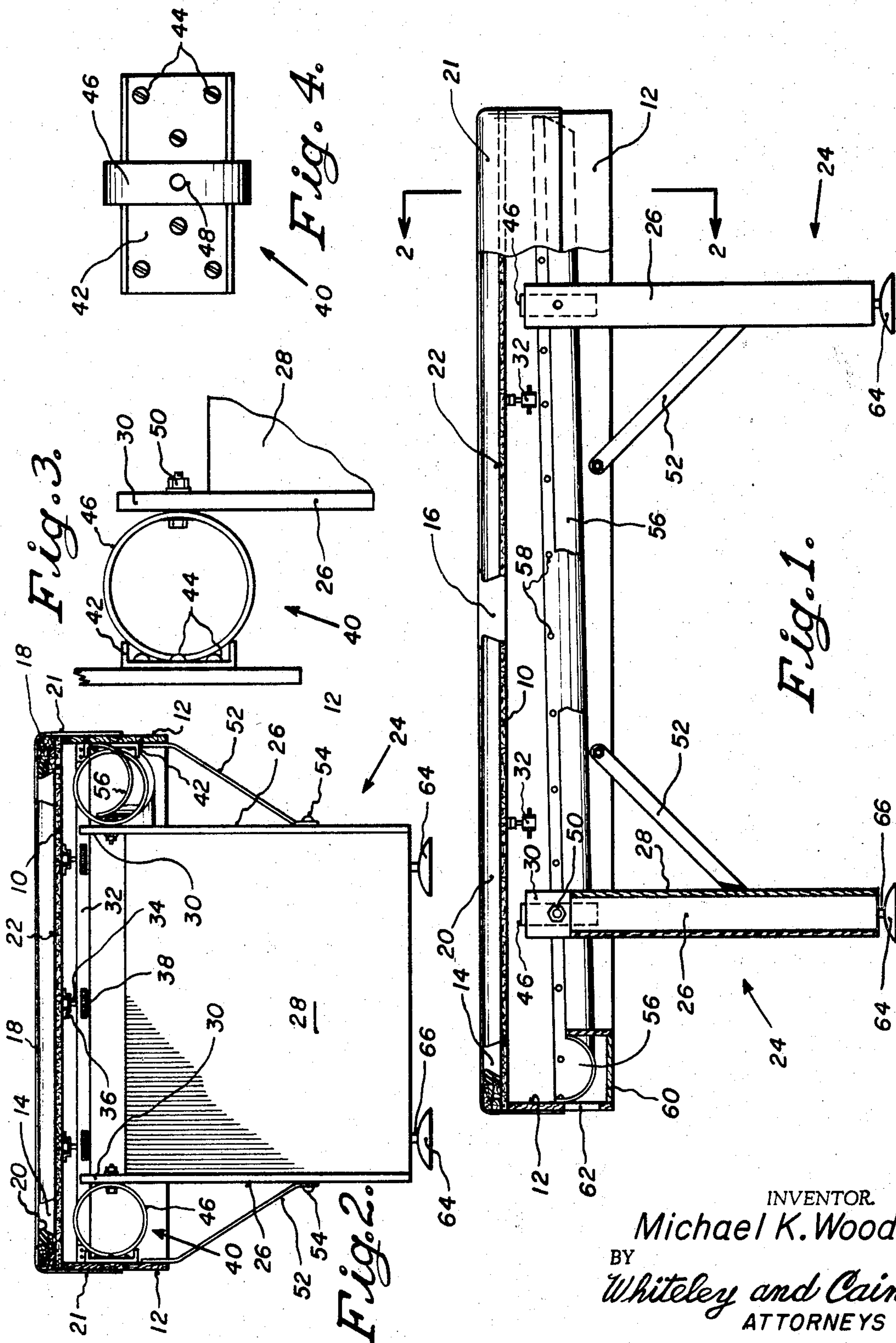
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BILLIARD TABLE WITH BRACING MEANS

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4 Claims

ABSTRACT OF THE DISCLOSURE

A billiard table embodying table top supporting means consisting of a ring-shaped bracing member extending laterally between each of the four leg members and a table sidewall which depends from the table top. The leg members are pivotally connected to the bracing members so that the leg members can be folded; and the bracing members circumscribe ball return tracks.

This invention relates to billiard tables, especially of the type intended for home use, and more particularly the invention relates to means for supporting the table top and playing surface of a billiard table.

It is desirable for the leg structure of a billiard table to be spaced inwardly from the edge of the table top in such a manner that the leg structure is not in the way of the players. The legs of the table should be disposed inwardly a sufficient distance to provide room beneath the table for the player's feet. When the legs are disposed inwardly some distance from the edge of the table top this results in a portion of the top overhanging the leg structure, and the exertion of pressure by a player on this overhanging portion of the table top may cause a slight downward curvature of this portion of the table top and playing surface, if the extended portion is not supported at its outer extremity. With time, the overhanging edges of the playing surface may be curved downwardly sufficiently to cause the billiard balls to be distorted out of a straight path by the sloping portion of the table. This undesirable feature may be eliminated by supporting the table top at its outer extremities, but previous billiard tables accomplish this only by positioning the legs of the table at the outer edges of the table top, and this has the undesirable feature of positioning the legs in the way of the player.

In the type of billiard table intended for home use, it is desirable to reduce the bulkiness of the structure by providing legs which are foldable relative to the table top to facilitate shipping and storage. The provision of a foldable leg structure, however, creates a problem of rigidity and strength which must be overcome to provide a billiard table with a suitably steady playing surface. Rigidity and strength may be achieved by the use of heavy materials and an extensive wood or other form of framework, but in the type of billiard tables intended for home use, it is desirable to reduce as much as possible the weight and amount of material being employed in the construction of the table, such as lumber, which in addition to being heavy and costly, is subject to warping, which may cause distortion of the playing surface.

In the type of billiard table used for playing pocket billiards, it is desirable to provide a ball track which extends beneath the pocket openings to collect the billiard balls as they are deposited in the pockets and permit them to roll to a collection point at one end of the table. Where the leg structure of the table is spaced inwardly relative to the outer edge of the table top, the ball track is disposed in the space between the leg structure and the outer edge. It is therefore necessary that any bracing

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means extending between the leg structure and the outer edge in no way blocks the passage of the ball track which must extend along the full length of the table's edges.

It is an object of the present invention to provide a billiard table having a table top which is supported at its outer extremities upon a leg structure which is spaced inwardly from the outer edges of the table.

Another object of the invention is to provide a lightweight structure with a reduction in materials and a corresponding reduction in manufacturing costs, while at the same time maintaining the strength and rigidity of construction necessary to ensure the steadiness required of a billiard table playing surface.

Another object is to provide a billiard table having a leg structure which is foldable relative to the table top to facilitate shipping and storage, while at the same time providing sufficient rigidity to ensure the steadiness of the playing surface when the legs are disposed in their operative position.

A further object is to provide a billiard table embodying a bracing means which extends between a sidewall depending from the outer edge of the table top and the inwardly spaced leg structure, whereby the bracing means circumscribe a ball track disposed beneath the outer edge of the table top in such a manner that the bracing means in no way interferes with the passage of the billiard balls along the ball track.

Other objects and advantages will become apparent from the following detailed description taken in connection with the accompanying drawings, in which:

FIG. 1 is a side elevation with parts broken away to show the interior construction of a billiard table embodying the present invention;

FIG. 2 is a vertical sectional view taken on the line 2—2 of FIG. 1;

FIG. 3 is an enlarged side elevation view of a bracing member embodied in the table illustrated in FIGS. 1 and 2; and

FIG. 4 is an end view of the bracing member illustrated in FIG. 3.

Referring to FIGS. 1 and 2, a table top 10 is supported at its outer extremities on a generally vertical sidewall 12 depending from the perimeter of the table top 10. As shown in FIG. 1, the table top 10 is formed with appropriate end pocket openings 14 and sidepocket openings 16. A peripheral rail 18 is disposed along the upper edge of the playing surface of the table top 10, and is formed with a cushion or bumper portion 20 which extends inwardly toward the center of the playing surface, circumscribing the playing surface, except for the pocket portions thereof. A decorative trim 21 surrounds the joints between the sidewall 12, the table top 10 and the peripheral rail 18. The table top 10 in billiard tables of the type intended for home use is frequently composed of a material such as pressed particle-board, and is covered with a suitable covering material 22, such as felt, which forms the playing surface. Disposed transversely below the table top 10 are leg sections, indicated in FIGS. 1 and 2 by general reference numeral 24. The leg sections 24 consist of two parallel generally vertical leg members 26 which are spaced inwardly from the outer edge of the table top 10, as shown in FIG. 2, and the leg members 26 are interconnected by cross-members, not shown, which are covered by panels 28. An upwardly extending portion 30 of each of the leg members 26 is not covered by the interconnecting panels 28.

Secured at its ends to the generally vertical sidewalls 12 in parallel spaced relationship to the table top 10 are a plurality of leveling bars 32, as illustrated in FIGS. 1 and 2. The leveling bars 32 extend across the width of the table top in intermediately spaced positions. The level-

ing bars 32 embody a multiplicity of vertical bolts 34 extending between the bars 32 and the lower side of the table top 10. The vertical bolts 34 are secured at their upper ends to the lower side of the table top 10 by brackets 36, and the lower portion of the bolts 34 extend transversely through the bars 32, being threaded through thumb nuts 38, which are disposed in slotted portions of the bars 32, in such a manner that the bolts 34 may be selectively raised and lowered by turning the thumb nuts 38.

Referring now to FIGS. 2, 3 and 4, a bracing member, indicated in its entirety by reference numeral 40, is disposed between the generally vertical sidewalls 12 and the extended portion 30 of each of the leg members 26. Each of the bracing members 40 embodies a plate member 42 which is secured by fastening means 44 to the interior surface of the sidewall 12. A channel 46 is secured to the plate member 42 and is formed with an opening 48 opposite the portion which is affixed to the plate member 42. A bolt 50 passes through the opening 48 in the channel 46 and through the leg portion 30 to pivotally interconnect each of the leg sections 24 to the sidewall 12 which depends from the perimeter of the table top 10.

Referring now to FIGS. 1 and 2, diagonal bracing members 52 extend between the sidewalls 12 and each of the leg members 26, being secured to the leg members 26 by fastening means 54, as shown in FIG. 2.

Referring to FIGS. 1 and 2, a semi-circular trough or ball track 56 is disposed between the leg members 26 and the sidewalls 12 beneath the side and end pockets on each side of the table, and extends along the entire length of both sides of the table and across a portion of one end of the table. The ball track 56 is circumscribed by the channel 46 of the bracing members 40, and one upper edge of the ball track 56 is fastened by nails or screws 58 to the interior surface of the sidewall 12. As shown in FIG. 1, the right hand portion of the ball track 56 is in a raised position relative to the horizontal, while the left hand portion is in a lowered position relative to the horizontal. The end portion of the ball track 56, shown at the left side of FIG. 1, is disposed in communication with a collecting trough 60, access to which is provided by an opening 62 in the sidewall 12.

During shipment and storage, the fastening means 54, which affix the diagonal bracing members 52 to the leg members 26, are removed and the leg sections 24 are rotated upwardly on the pivotal connection provided by bolts 50, which extend between the channel 46 and the upper portion 30 of each of the leg members 26. When a table is installed for playing, the leg sections 24 are pivoted downwardly and the bracing members 52 are secured by the fastening means 54 to the generally vertical leg members 26. The table is leveled with respect to the floor upon which it is positioned by adjustable feet 64 adjacent the lower portion of each of the leg members 26. Each of the feet 64 has an upwardly extending threaded portion 66 which is adapted to be received in a threaded portion in the cross-member, not shown, which extends transversely between the leg members 26.

In billiard tables of the type intended for home use, the table top is frequently composed of a lightweight material such as particle-board, which is subject to some distortion. Distortion in the playing surface is corrected by adjustment of the thumb nuts 38 of the leveling bars 32.

It is common in the game of billiards for a player to lean or sit on the outer edges of the billiard table, and in lightweight tables of the type intended for home use, this is likely to cause an undesirable distortion or bowing of the playing surface, if the outer edge of the table is not properly supported. In the present invention, the table top is not supported directly upon the inwardly spaced legs, and therefore the top of the legs do not form a fulcrum point upon which the table top may be bowed when pressure is applied to the overhanging portion of the top. The pressure of a player leaning or sitting on the

outer edge of the table is transmitted through the bracing members 40 to the leg members, which thus remain independent of the interior portion of the table top.

A primary advantage of a billiard table embodying the present invention is a reduction in weight and materials used, without a corresponding reduction in strength and rigidity. In the type of billiard table in which the table top is composed of lightweight material, it is necessary to support this material at its outer edge, and yet it is necessary also to space the legs of the table inwardly from the outer edge. The present invention provides a table having legs which are spaced inwardly from the outer edge of the table top, and yet adequate support is provided for the portion of the table top which overhangs the leg structure. The supporting connection between the leg structure and the table top permits a ball track or a ball return to be disposed therebetween, and moreover provides a leg structure which is pivotally affixed relative to the table top to facilitate shipping and storage.

It should be understood that the present disclosure and drawings are to be considered as an exemplification of the principles of the invention, and that it is not intended that the invention be limited to the embodiment illustrated, but rather be limited only by the appended claims.

I claim:

1. In a billiard table embodying a horizontal table top having an inwardly directed cushion around the periphery thereof, a sidewall connected to and depending from adjacent the perimeter of said table top, a plurality of leg members independent of said table top and disposed within the perimeter of said sidewall in inwardly spaced relationship thereto, and means connecting said table top to said leg members comprising bracing means extending laterally between each of said leg members and an adjacent portion of said sidewall to act as the sole support for the table top, whereby said table top is supported adjacent its outer extremities upon said leg members in such a manner as to prevent distortions of said table top when stress is placed on said table top beyond the lateral limits of any of said leg members.

2. The structure claimed in claim 1, in which one end of each of said bracing means is pivotally secured to one of said leg members and the other end of said bracing means is rigidly affixed to an adjacent portion of said sidewall to permit said leg members to be folded from a transverse position relative to said table top to a parallel position relative thereto.

3. In a billiard table embodying a horizontal table top formed with appropriate pocket openings, a sidewall connected to and depending from adjacent the perimeter of said table top, a plurality of leg members independent of said table top and disposed within the perimeter of said sidewall in inwardly spaced relationship thereto, means connecting said table top to said leg members comprising bracing means extending laterally between each of said leg members and an adjacent portion of said sidewall, each of said bracing means comprising a channel-shaped member, a ball track disposed below said pocket openings between said sidewall and said leg members, and said ball tracking being circumscribed by said channel-shaped members.

4. In a billiard table embodying a horizontal table top formed with appropriate pocket openings, a sidewall connected to and depending from adjacent the perimeter of said table top, a plurality of leg members independent of said table top and disposed within the perimeter of said sidewall in inwardly spaced relationship thereto, means connecting said table top to said leg members comprising bracing means extending laterally between each of said leg members and an adjacent portion of said sidewall, a ball track disposed below said pocket openings between said sidewall and said leg members, each of said bracing means being formed with a ring-shaped member affixed on its exterior surface to a member which is secured to said sidewall and said ring-shaped member being

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rotatably secured to one of said leg members at a point
opposite said member which is secured to said sidewall,
and said ball track extending through said ring-shaped
member of each of said bracing means

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