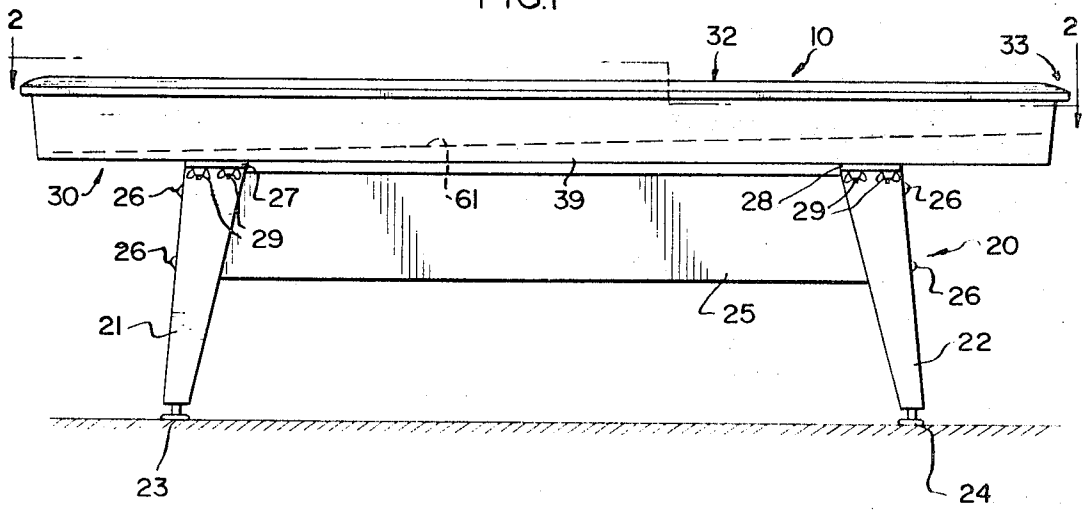
July 15, 1969 M. E. UNTIEDT 3,455,551

CELLULAR BILLIARD TABLE BED WITH BALL RETURN TRACK

Filed April 13, 1966 2 Sheets-Sheet 1

FIG.1



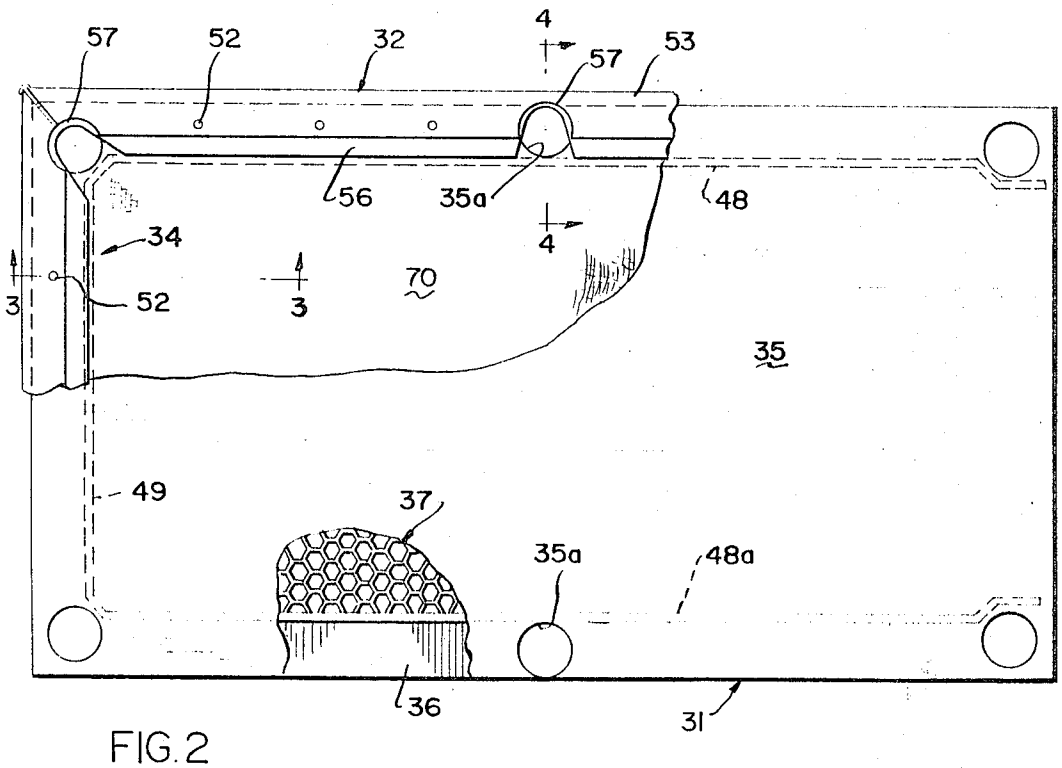


FIG.2

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CELLULAR BILLIARD TABLE BED WITH BALL RETURN TRACK

Filed April 13, 1966 2 Sheets-Sheet 2

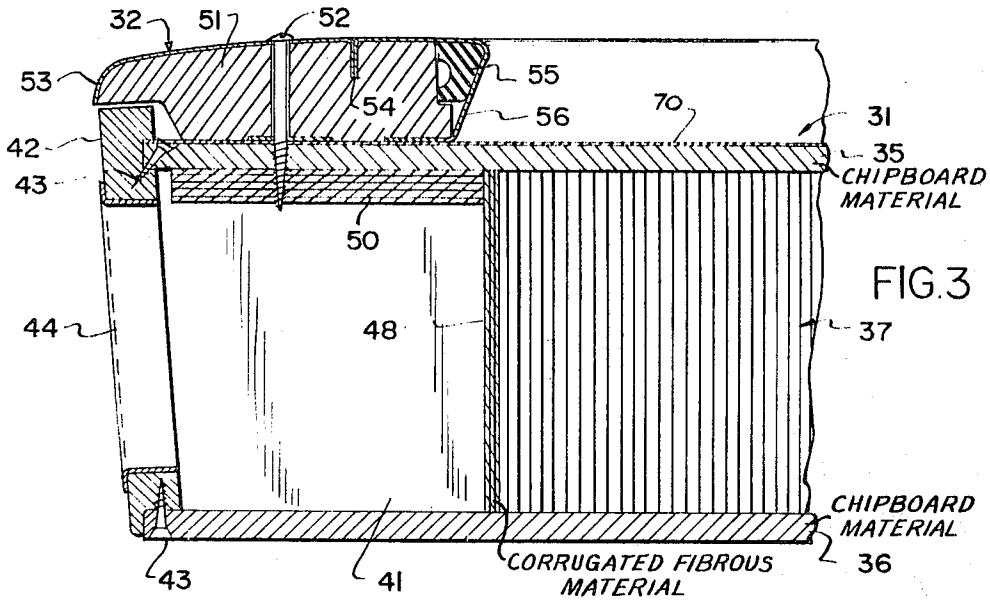


FIG.3

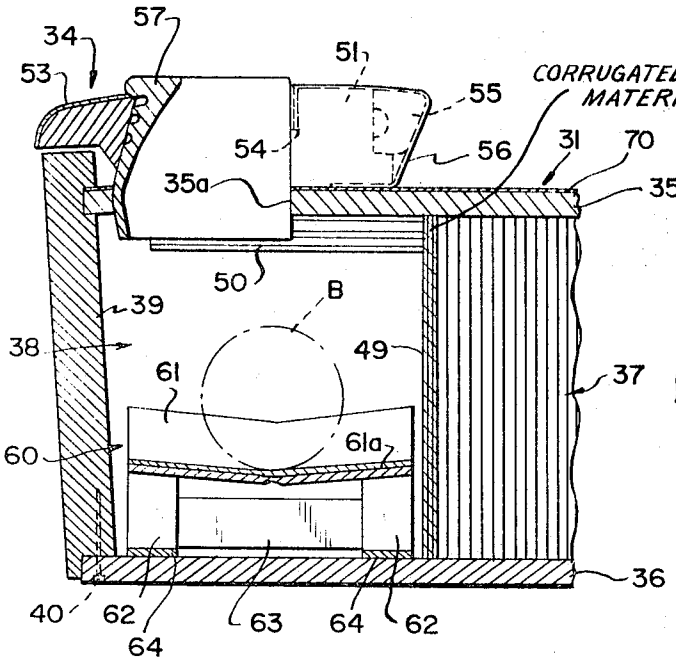


FIG.4

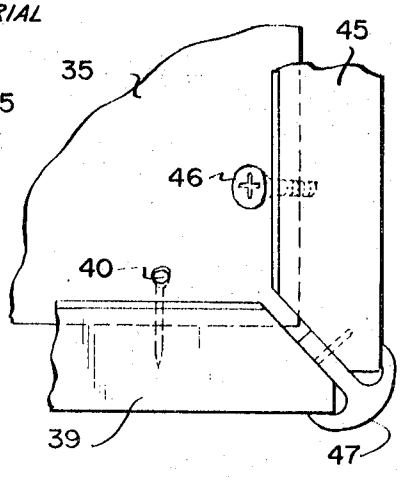


FIG.5

United States Patent Office 3,455,551 Patented July 15, 1969

3,455,551

CELLULAR BILLIARD TABLE BED WITH BALL RETURN TRACK

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Filed Apr. 13, 1966, Ser. No. 542,415
Int. Cl. A63d 15/00
U.S. Cl. 273—6 12 Claims

ABSTRACT OF THE DISCLOSURE

A billiard table which includes upper and lower skins extending outwardly from a core to define a passage therebetween. An inclined, transversely recessed return track is disposed in the passage for conveying billiard balls downwardly to a collection area at one end of the billiard table and openings are disposed in the upper skin for admitting balls into the passage. A wall extends around the core defining the inner side of the passage and an apron wall extends around the outer edges of the upper and lower skins to define the outer side of the passage. An access opening extends through the apron wall into the collection area.

The bed assembly of the present invention is particularly adapted for use in a portable light weight billiard table that is intended primarily for home use. The present invention comprises an improvement on the billiard table disclosed and claimed in Le Meiux et al. application Ser. No. 356,499, filed April 1, 1964, now abandoned, assigned to the assignee of the present application and entitled Billiard Table. Reference may be made to this application for details of construction not specifically set forth in the present application.

In the above mentioned patent application, a billiard table construction is disclosed having a light weight laminated bed including an open cellular core secured between upper and lower skins. This construction admirably solves the weight and mobility problems connected with prior art billiard tables, wherein the bed structure was formed with extremely heavy slate. In the billiard table of the above mentioned patent application, and in prior art billiard tables, it has been conventional to provide means for returning balls to a collection area which is separate from the bed assembly, and secured thereto. This added structure increases the cost of the unit, as well as increasing the weight thereof.

Accordingly, the general purpose of the present invention in to provide a bed assembly for a billiard table which obviates the necessity of providing a separate ball return means.

An object of the invention is to provide a bed assembly for a billiard table wherein the ball return means is formed integrally with the bed assembly.

Another object of the invention is to provide a light weight, low cost bed assembly for a billiard table, which has a ball return track formed internally thereof.

A further object of the invention is to provide a light weight laminated bed assembly for a billiard table with a ball return passage around the periphery thereof, and with access openings in the upper laminae communicating with the peripheral passage.

Still another object of the invention is to provide a bed assembly as set forth in the preceding paragraph with an inclined track in at least a portion of the peripheral passage for conveying balls to a collection area.

A still further object of the invention is to provide

a bed assembly for a billiard table as described above with peripheral walls extending substantially entirely around the ball return passage.

These and other objects of the invention will hereinafter become more fully apparent from the following description, taken in connection with the annexed drawings wherein:

FIG. 1 is a side elevational view of a billiard table embodying the principles of the present invention;

FIG. 2 is a plan view of the billiard table illustrated in FIG. 1, with certain portions thereof broken away and illustrating details of construction;

FIG. 3 is an enlarged sectional view taken generally along line 3—3 of FIG. 2;

FIG. 4 is an enlarged sectional view taken generally along line 4—4 of FIG. 2; and

FIG. 5 is a fragmentary plan view of the corner construction of the billiard table, with the side rails removed.

While this invention is susceptible of embodiment in many different forms, there is shown in the drawings and will herein be described in detail a preferred embodiment of the invention with the understanding that the present disclosure is to be considered as an exemplification of the principles of the invention and is not intended to limit the invention to the embodiment illustrated. The scope of the invention will be pointed out in the appended claims.

Referring now to the drawings, the billiard table is indicated in its entirety by reference numeral **10** in FIG. 1, and includes a bed assembly **30** mounted on and supported by a leg assembly **20**. Leg assembly **20** includes a pair of transversely extending legs **21** and **22** at opposite ends of the table, and legs **21** and **22** are provided with respective pairs of adjustable feet **23** and **24** at opposite sides thereof for leveling of the table. Leg assembly **20** further includes a center brace or support **25** which is secured to the legs **21** and **22** by suitable fasteners **26**. Flanges **27** and **28** at the upper ends of legs **21** and **22**, respectively, are secured to the under surface of the bed assembly **30** by fasteners **29**. Legs **21** and **22** are generally of open channel shaped configuration, and provided a light weight, yet sturdy support for the bed assembly **30**.

The bed assembly **30** includes a generally rectangularly shaped bed sub-assembly **31**; longitudinally extending side rail sub-assemblies **32** at opposite sides of the bed sub-assembly **31**; a transversely extending head end rail sub-assembly **33** at the right hand end of the bed sub-assembly **31**, as viewed in FIG. 1; and a foot end rail sub-assembly **34** extending transversely of the bed sub-assembly **31** at the left-hand end thereof, as viewed in FIG. 1.

Sub-assembly **31** includes a three-ply laminated bed including vertically spaced, rectangularly shaped upper and lower skins **35** and **36**, with an open honeycomb core structure **37** adhesively or otherwise suitably secured therebetween. Layers **35** and **36** may be formed of various suitable materials, such as commercially available ⅜" chipboard wherein small wood chips (⅛" to 3/16") or sawdust are compressed into a suitable binder. Layer **37** may be formed of corrugated fiber board or cardboard in the nature of the cardboard that is commonly used for cartons of many types.

As can be best seen in FIGS. 2 and 4, skins **35** and **36** extend laterally outwardly of the core **37** to define longitudinally exetending ball return passages **38** at opposite sides of the table. Side aprons **39** are fixed to the outer edges of skins **35** and **36** by nails **40**, and by gluing their

interengaging surfaces. The inner surfaces of aprons **39** provide an outer side wall for ball return passages **38**. In a similar manner, as can be best seen in FIG. 3, the skins **35** and **36** extend outwardly from the core structure **37** at the foot end of the table to define a ball collection area **41**. A foot end apron **42** extends transversely across the table and is secured to the skins **35** and **36** by gluing their interengaging surfaces and by screws **43**. An access opening **44** is provided in apron **42** into the ball collection area **41**. An apron **45** is secured to the head end of the table by gluing and screws **46**, and is generally identical with apron **42** except that an access opening is not provided. Corner trim **47** is provided between the side and end aprons, as is best seen in FIG. 5.

Means are provided for retaining the core structure **37** in an expanded condition, and for providing an inner wall for the ball return passage **38** and ball collection area **41**; and in the illustrated embodiment, this means comprises a U-shaped member (FIG. 2) including legs **48** and **48***a* extending along the sides of core **36** to head end apron **45**, and a bight portion **49** extending along the foot end of core **37**. This member is preferably a single layer of triple-ply corrugated fiber board, which is wax treated to form a mositure barrier with apron **45**. Plywood backing members **50** are mounted outwardly of the U-shaped member flush against the upper surface of the overhanging portion of skin **35** to receive the means for securing the side rail and end rail sub-assemblies to the bed sub-assembly.

Side and end rails **32–34** each include a rail member **51** secured to the bed sub-assembly **31** by screws **52** which pass through a molding strip or cover **53** on the outer portions of the rails, through upper skin **35**, and through backing member **50**. The innermost end of molding **53** is received in a recess or notch **54** in the rail **51**. Resilient cushion members **55** are provided around the inner periphery of rail members **51**, and a rail cloth **56** is positioned around the cushion members **55** with the outer end thereof positioned in the recess **54**. Each rail member **51** is provided with suitable openings in which pocket pads **57** are secured as by nailing. Upper skin **35** is provided with a plurality of openings **35***a*, therein, in registry with the openings in the rail members **51** and communicating with the ball return passage **38**.

Track means **60** is provided in the ball return passages **38** at opposite sides of the table for conveying balls entering the passages through the table pockets to the ball collection area **41**. Track means **60** includes an inclined ball return track **61** positioned in passage **38** at each side of the core **37** and sloped downwardly from a high end adjacent the head end of the table to a low end at the foot end of the table. Track members **61** are slightly dish-shaped, as best seen in FIG. 4, to positively retain billiard balls therein, and each track member **61** is preferably formed of hard wood with a cotton cloth or felt **61***a* thereover to reduce the noise of balls falling onto the track. Upright supporting members **62** are provided at opposite sides of each track member **61**, and it will be understood that members **62** progressively decrease in height from the head end of the table to the foot end of the table. Transverse spacers **63** are secured between uprights **62**, and each upright **62** is preferably seated upon a felt strip **64** to cushion the track assembly **60**. The access opening **44** is centrally located transversely of the table, and extends a major portion of the table width but not across the ends of tracks **61**. Thus, balls rolling down the tracks **61** are positively directed into the collection area **41**, and are readily manually accessible through opening **44**.

From the above, it is believed clear that the billiard table of the present invention provides a light weight, economical, and durable table which fully achieves each of the objects of the invention. The overhanging portions of skins **35** and **36** provide ball return passages which are integral with and internal of the bed assembly. The track assembly **60** will consistently deliver balls to the ball collection area **41** in a quiet and efficient manner. It should be understood, of course, that the foregoing disclosure relates to only a preferred embodiment of the invention, and that numerous modifications or alternations made therein without departing from the spirit and the scope of the invention, as set forth in the appended claims.

In the illustrated embodiment, the height of the cellular core **37** may be on the order of five inches so as to provide sufficient height for the balls and a suitable grade on the tracks **61**. The top surface of the upper skin **35** provides a playing area when suitably covered by conventional felt material **70** and such surface preferably is flat within .0010 inch per inch. In the preferred embodiment shown, the skins **35** and **36** are chipboard and the honeycomb core is of corrugated fiber board having 4" vertical cells and a compressive strength on the order of 60# per linear foot.

I claim:

1. A bed assembly for a billiard table comprising: upper and lower skins enclosing a cellular core therebetween, said upper and lower skins extending outwardly of said core and defining a passage therebetween; means in said passage defining a return track for conveying billiard balls to a collection area; and said upper skin including means defining at least one opening therein communicating with said passage for admitting balls into said passage.

2. A bed assembly as defined in claim **1** wherein said track is inclined downwardly toward said collection area.

3. A bed assembly as defined in claim **2** wherein said collection area is at one end of said bed.

4. A bed assembly as defined in claim **2** wherein a layer of cushioning material is provided on said track.

5. A bed assembly as defined in claim **2** wherein said track has an uninterrupted bottom wall which is slightly recessed at the center thereof.

6. A bed assembly as defined in claim **1** wherein an apron wall etends around the outer edges of said upper and lower skins and defines an outer side of said passage.

7. A bed assembly as defined in claim **6** wherein an access opening into said collection area is provided in said apron wall.

8. A bed assembly as defined in claim **7** wherein a sealing wall is spaced inwardly of said apron wall and secured to at least a portion of said core to define a moisture barrier and an inner side of said passage.

9. A bed assembly as defined in claim **8** wherein said core is generally rectangularly shaped in plan, and said sealing wall is generally U-shaped in plan and secured to three sides of said core, the closed end of said U-shaped further wall being disposed adjacent the ball collection area.

10. A billiard table comprising: support means; and a bed assembly carried by said support means including, a laminated bed having generally rectangular upper and lower skins enclosing a generally rectangular core therebetween, the upper surface of said upper skin being substantially horizontally disposed for providing a playing surface, said core being formed by a skeletal vertical wall means defining a plurality of vertical cells, a generally U-shaped wall positioned around three sides of said core and secured to each of said skins, said skins being planar and extending outwardly of said U-shaped member at the sides and bight portion thereof to define a passage outwardly of said U-shape member and between said skins, a plurality of openings in the outwardly extending portions of said upper skin communicating with said passage for admitting balls into said passage, an apron wall secured to said skins around the periphery thereof to close the open end of said U-shaped member and to define an outer wall for said passage, the closed end of said U-shaped member and the apron wall portion adjacent thereto cooperating to define a ball collection area, an access opening in the apron wall end portion ad-

jacent the closed end of said U-shaped member, said opening being positioned generally centrally of said apron wall end portion and providing surface means at opposite sides thereof facing the passage portions extending along the sides of said U-shaped member, and a ball return track in each of said aforementioned passage portions inclined downwardly toward said collection area for conveying balls to said area.

11. A billiard table as defined in claim **10** wherein said core wall means is formed of a corrugated fibrous material.

12. A billiard table as defined in claim **10** wherein said skins are formed of a chipboard material.

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U.S. Cl. X.R.

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