United States Patent [19]

Zimmers et al.

[11] **3,871,655**

[45] **Mar. 18, 1975**

[54] **CONVERTIBLE GAME TABLE ASSEMBLY**

[75] Inventors: **Melvin Zimmers,** Westport; **Gary A. Gerber,** Weston, both of Conn.

[73] Assignee: **Coleco Industries, Inc.,** Hartford, Conn.

[22] Filed: **Aug. 8, 1973**

[21] Appl. No.: **386,599**

[52] **U.S. Cl.** ..... **273/123 R,** 108/150, 273/3 C, 273/5 R, 273/9, 273/12

[51] **Int. Cl.** **A63d 15/04**

[58] **Field of Search** ..... 273/3 R, 3 C, 5 R, 5 A, 273/5 B, 5 G, 6, 8, 9, 11 R, 11 C, 12, 123 R, 136 Z; 108/150, 156; 248/188.7

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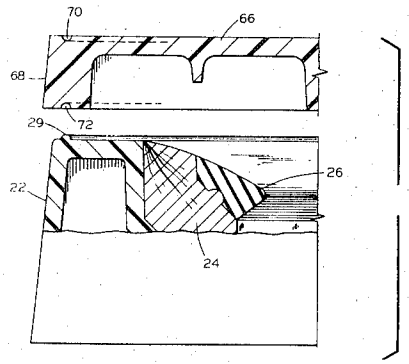
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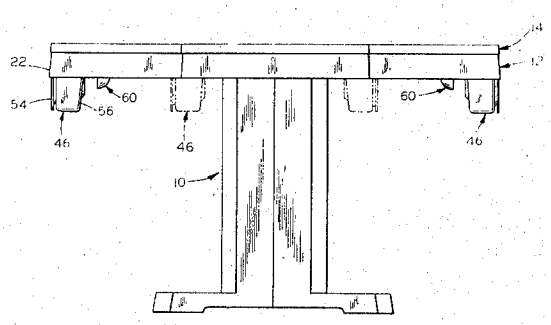
Primary Examiner—Richard C. Pinkham
Assistant Examiner—R. T. Stouffer

[57] **ABSTRACT**

A convertible game table has a first table top member affixed to the base and a second table top member which overlies and is removably seated upon the first table top member. The first and second table top members have interfitting projections and recesses on their adjacent surfaces to prevent substantially inadvertent relative horizontal movement and the second table top member is reversible to provide two usable and differently configured surfaces. The first table top member has a ball receiving aperture extending therethrough adjacent its periphery and a track member on the lower surface thereof which extends inwardly from adjacent the aperture towards the middle thereof. A receptacle is slidably seated in the track member for movement between a first position adjacent the aperture and the table periphery to receive a ball or other object falling through the aperture and a second position spaced substantially inwardly from the periphery of the table so as to avoid interference with the legs of persons seated about the table. Ball directing structure is provided on the bottom of the first table top member adjacent and underlying the aperture to direct a ball falling through the aperture into the receptacle in the first position thereof.

21 Claims, 11 Drawing Figures





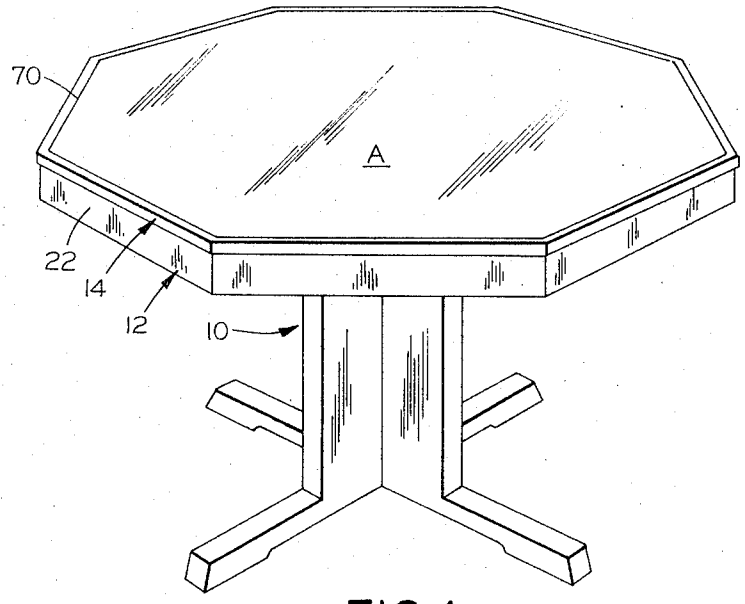


FIG. 1

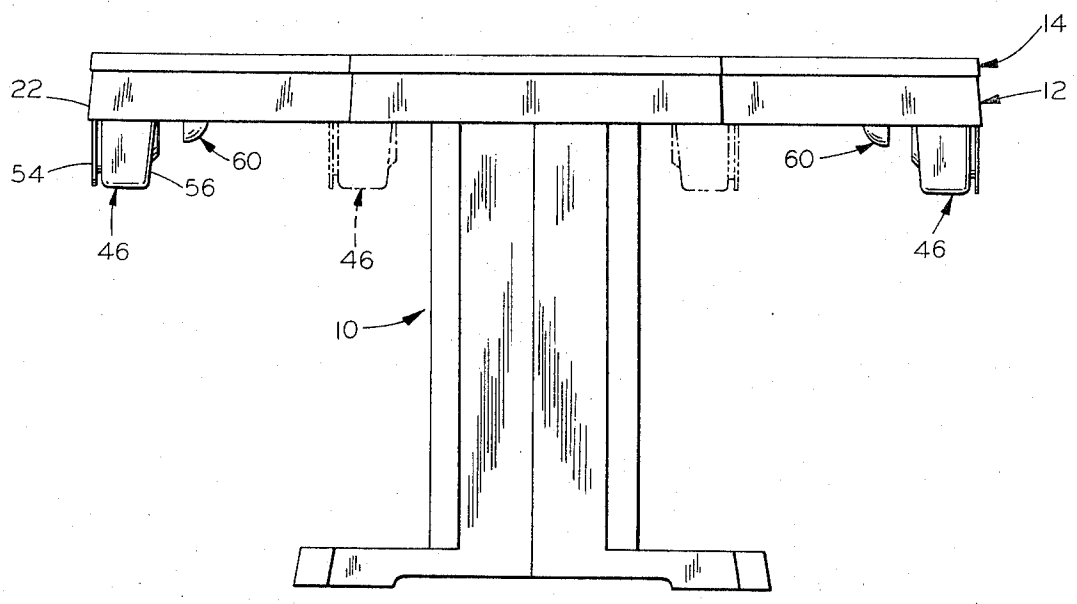


FIG. 2

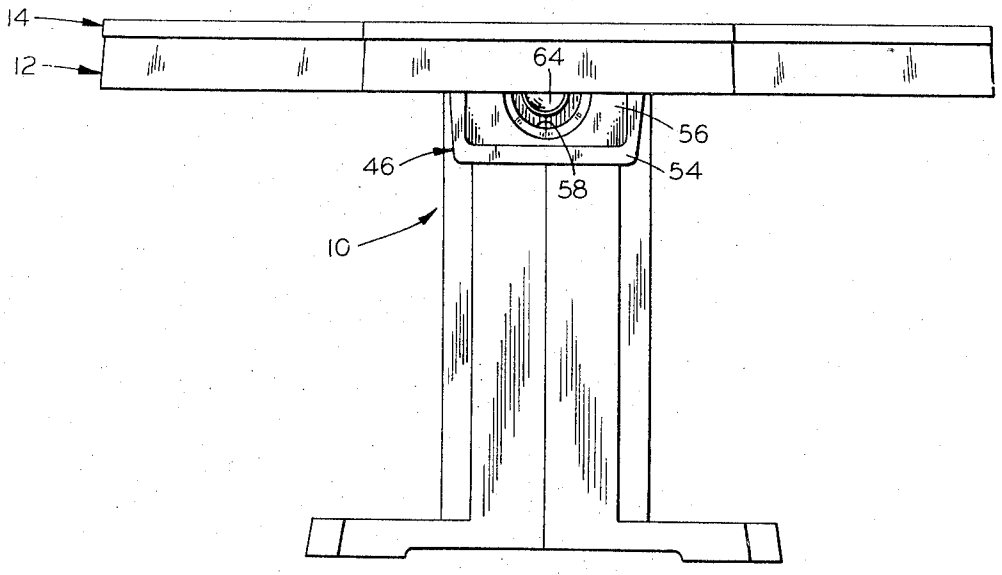


FIG. 3

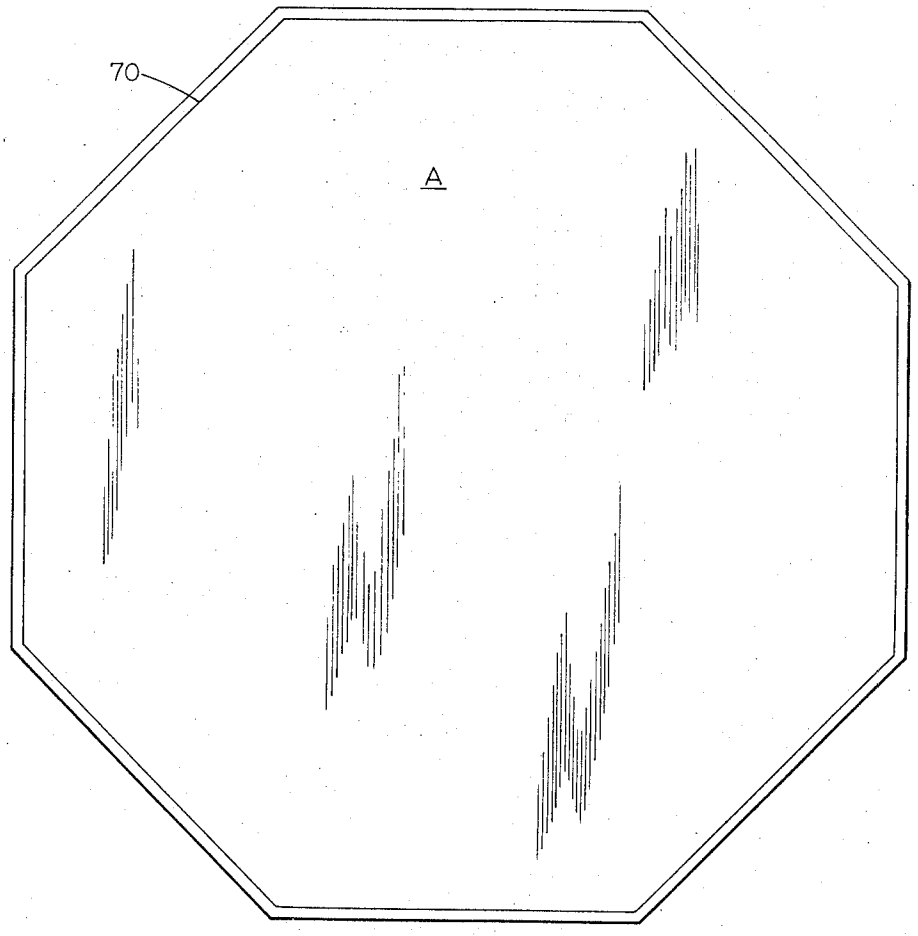


FIG. 4

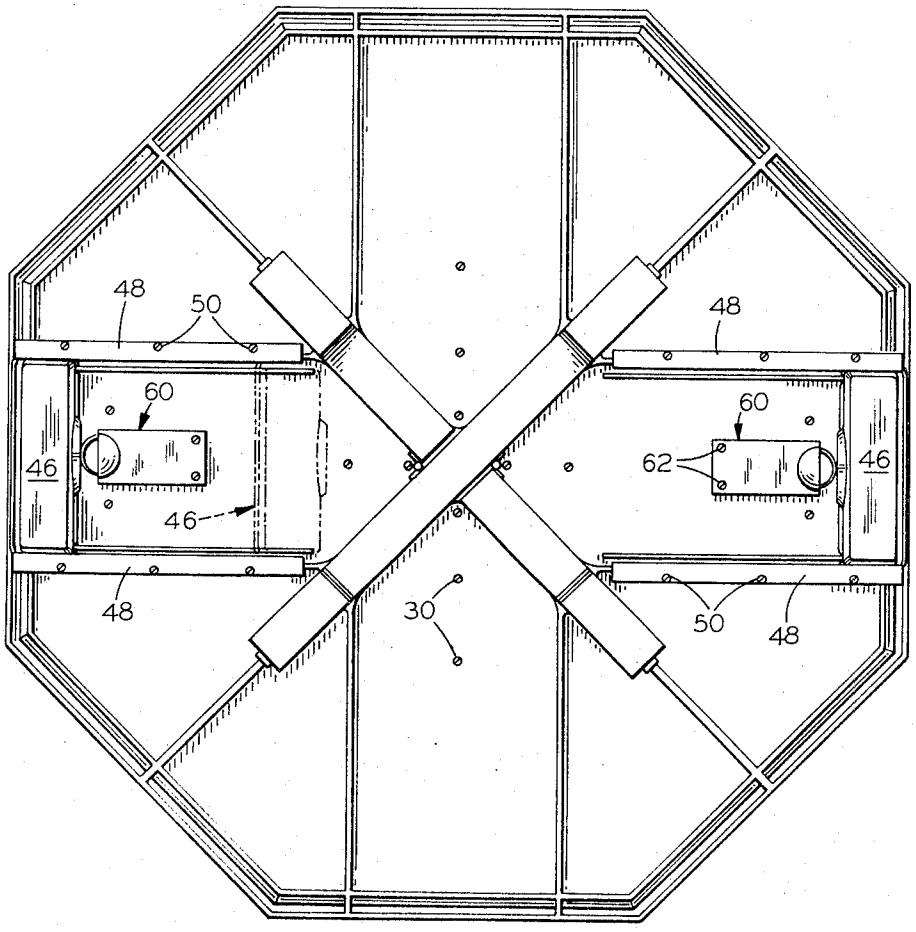


FIG. 5

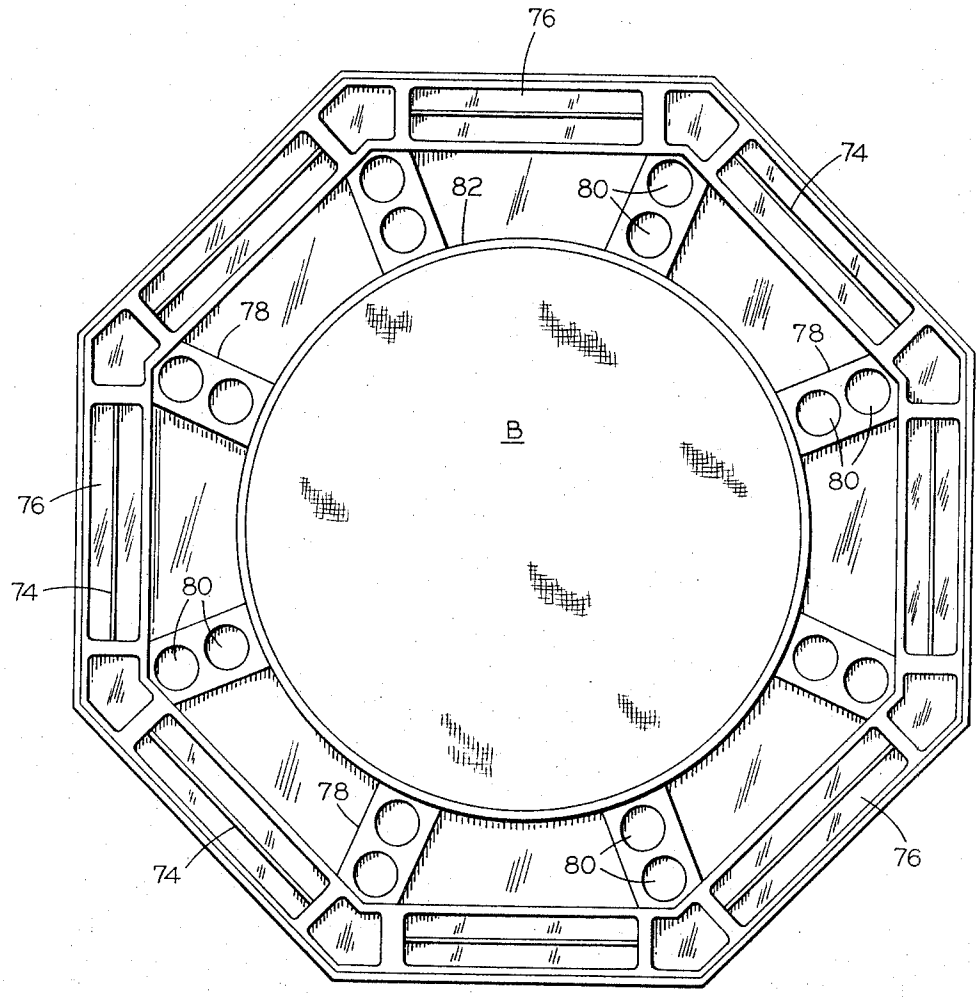


FIG.6

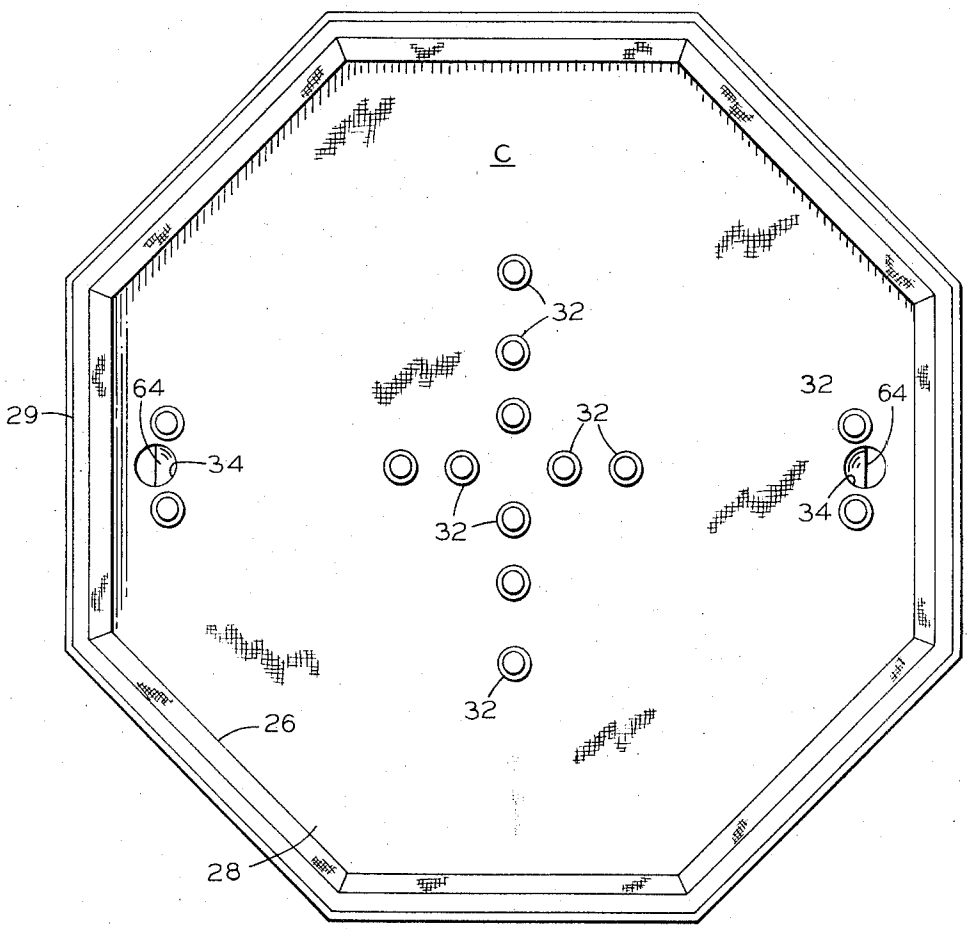


FIG. 7

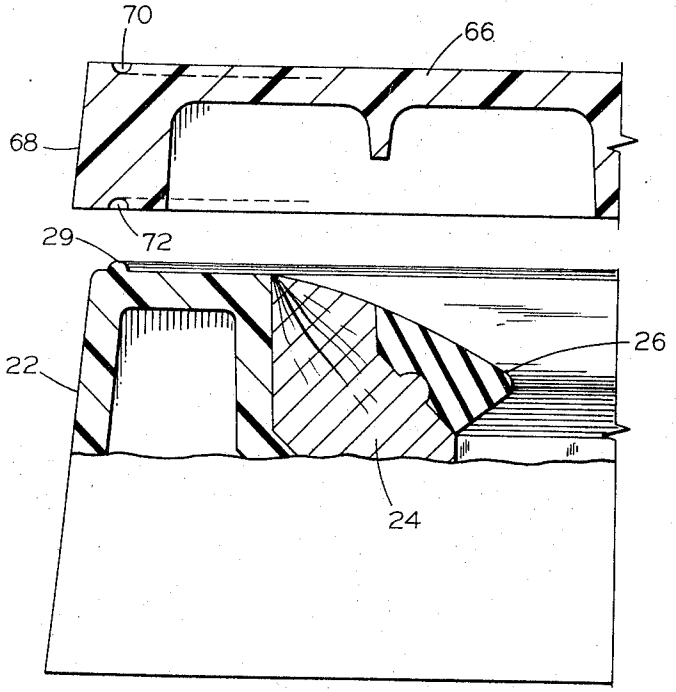

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FIG.8

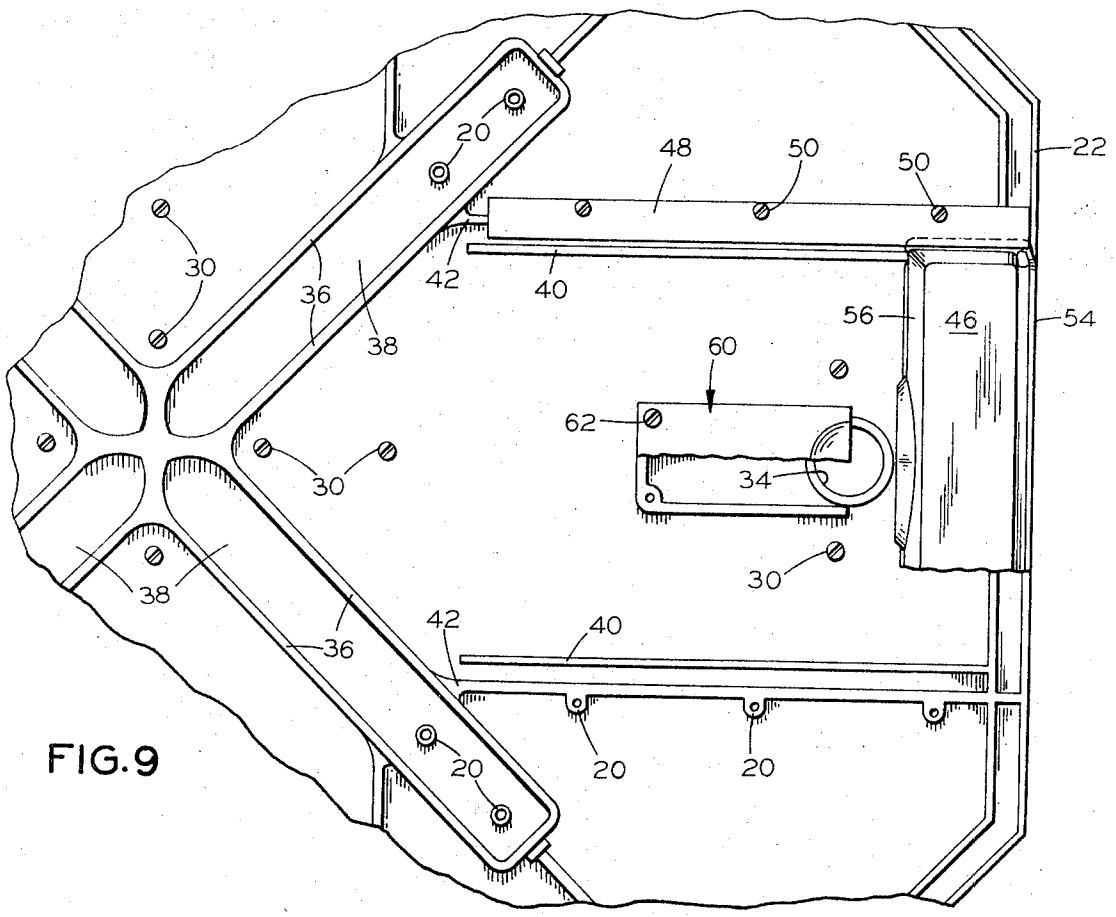

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FIG.9

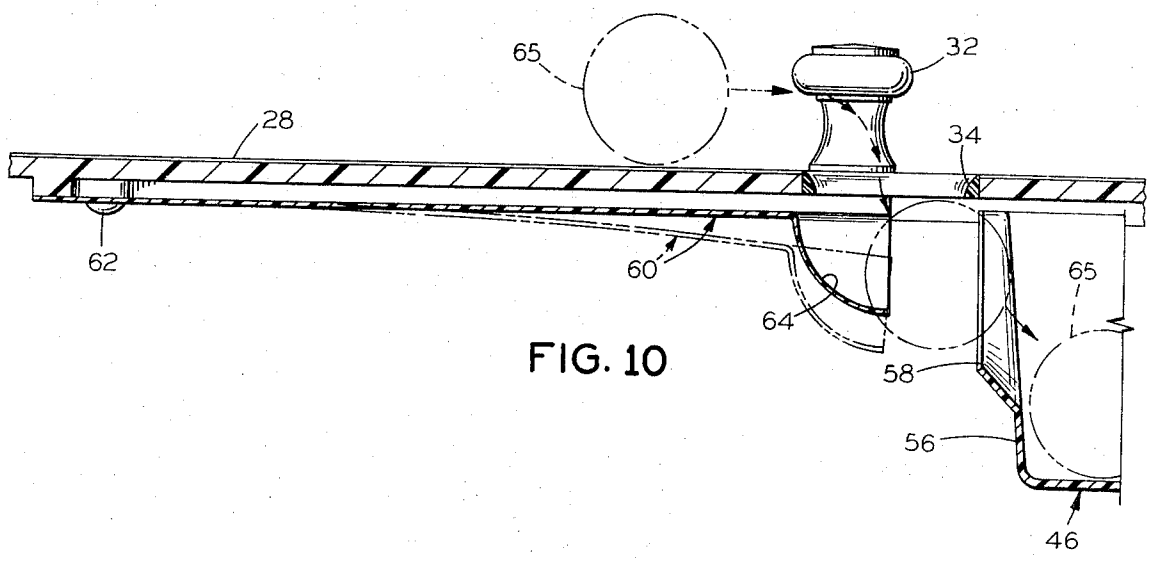

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FIG. 10

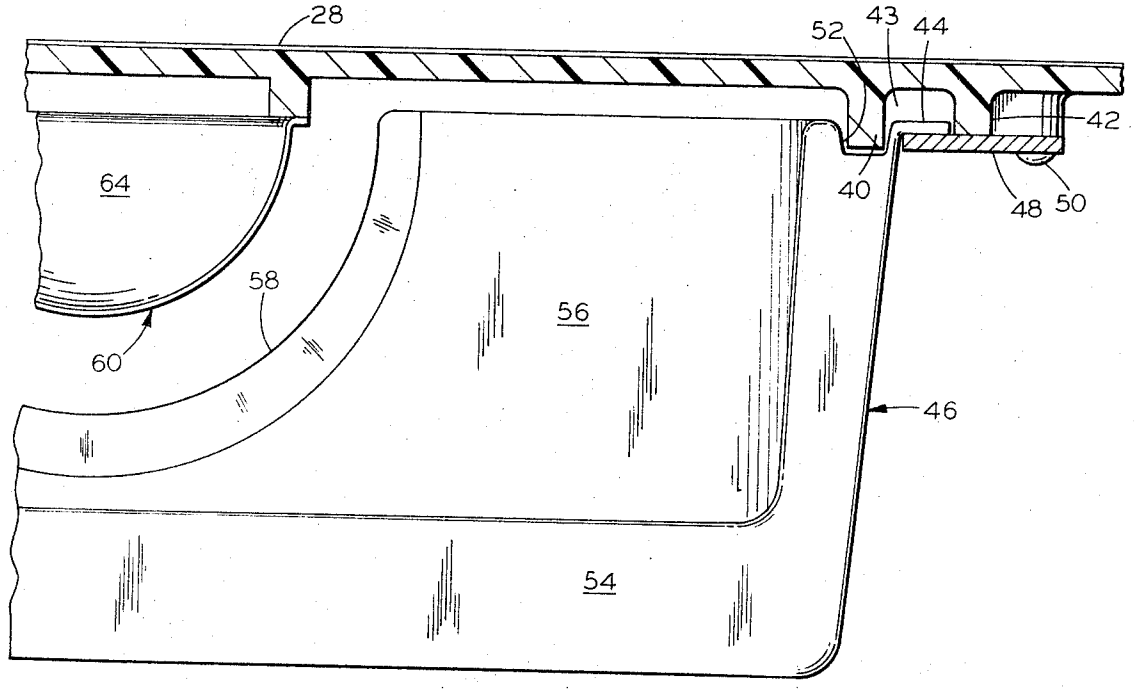

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FIG. 11

CONVERTIBLE GAME TABLE ASSEMBLY

BACKGROUND OF THE INVENTION

Various game tables have been proposed and offered for sale to meet the desires of people to play various types of games. Such tables have included card tables which include recesses for holding glasses, a felt top portion serving as the playing surface and recesses for retaining chips, cards and other accoutrements of the game being played. Billiard tables, bumper pool tables and like structures are also widely sold and utilized. Moreover, some game tables are configured with squares or other designs in the surface thereof for the playing of chess, backgammon, checkers or the like.

With the increasing desire for the utilization of such game tables to enrich leisure time and the concurrent increasing demand for utilization of space in homes and apartments, there has been an increasing tendency to provide game tables which could serve multiple functions. In some instances, there has been proposed a table top which is reversible wherein both surfaces are configured to permit the playing of games or wherein one surface functions as a dining table. In still other instances, inserts or separate table tops have been utilized to provide multiple use structures. Indicative of such multipurpose game tables are the structures shown and described in the following patents:

Pottin U.S. Pat. No. 175,495
Lee U.S. Pat. No. 1,273,237
Brown U.S. Pat. No. 1,549,441
Davis U.S. Pat. No. 1,001,843
Milu U.S. Pat. No. 3,711,099
Canadian Pat. No. 492,105
French Pat. No. 354,463

The demand for such convertible, multipurpose game tables has continued to increase and heretofore such structures have suffered one or more disadvantages. For example, with structures utilized for playing bumper pool, billiards or the like, it is necessary to provide a receptacle underneath the table for receiving the ball and this receptacle must either be removed and separately stored or it will interfere with utilization of the table for purposes wherein persons are seated thereabout. Examples of some of the efforts to accommodate this particular problem are reflected in the structures shown in the above mentioned Milu U.S. Pat. No. 3,711,099. When a second table top member is employed, it is extremely desirable that the overlying table top be prevented from inadvertent horizontal movement with respect to the underlying table top member by means which will not interfere with the utilization of either surface of the overlying table top member or adversely affect its appearance. Failure to include such a provision can result in injury if the table should fall or strike a person seated thereabout or displeasure if the users of the table must contend with a constantly shifting table top member during the course of their utilization thereof.

It is an object of the present invention to provide a novel convertible game table employing a first table top member and a removable table top member seated thereon wherein the components are each of rugged character and attractive appearance so as to provide a durable and attractive game table assembly.

It is also an object to provide such a game table in which means are included for locking the two table top members against inadvertent horizontal relative sliding movement.

Another object is to provide such a game table in which there is included a ball collecting receptacle mounted on the bottom of the first table member for facile movement between a first position underlying an aperture in the first table top member and a second position disposed inwardly therefrom so as to avoid interference with the legs of persons seated about the table.

A further object is to provide such a game table utilizing components which may be fabricated relatively economically and assembled to provide a highly durable, relatively rigid structure.

SUMMARY OF THE INVENTION

It has now been found that the foregoing and related objects can be readily attained in a convertible game table which includes a base and a first table top member having at least one aperture extending downwardly therethrough adjacent the periphery thereof and track means on the lower surface thereof adjacent the aperture and extending from adjacent the aperture towards the middle of the first table top member. Receptacle means is slidably seated in the track means for movement between a first position adjacent the aperture and the periphery of the table top member and a second position spaced substantially inwardly from the periphery thereof.

In the first position, the receptacle means will receive an object falling through the aperture and in its second position it will avoid interference with the legs of persons seated about the table. Means is provided for mounting the first table top member on the base and a second table top member overlies and is removably seated upon the first table top member. The first and second table top members have interfitting means on their adjacent surfaces to prevent substantially inadvertent relative horizontal movement.

In its preferred aspect, the second table top member has a subtantially planar surface suitable as a dining table and a configured surface. It is reversible to expose either of the surfaces for utilization on the table and each of the said surfaces includes interfitting means for cooperation with the interfitting means of the first table top member. In one highly desirable aspect, the first table top member is configured and provided with game elements for playing bumper pool and the second table top member has its configurated surface configured and provided with elements for use as a card table; the second table top member is removable from the first table top member in its entirety for utilization of the game table in the playing of bumper pool.

The preferred structures include ball directing means affixed to the bottom surface of the first table top member and extending beneath the aperture therein, and the receptacle means is provided with an aperture therein cooperating with the ball directing means in the first position thereof to receive a ball falling through the apertures onto the ball directing means which directs the ball towards the aperture in the receptacle means. In the first position, the receptacle means is desirably located in a position spaced outwardly towards the periphery of the table top member from the aperture, and the ball directing means directs the ball outwardly towards the periphery and into the receptacle means. Desirably, the ball directing means comprises a resiliently deflectable member mounted on the lower

surface of the first table top member to permit deflection of an end thereof disposed below the aperture in response to a ball or other object falling therethrough and impinging thereon. Conveniently, this is an elongated member extending inwardly from the aperture and mounted to the table top member adjacent its inner end to permit pivoting of the outer end, and the outer end is desirably configured to provide a recess of generally spherical cross section disposed beneath the aperture.

In accordance with conventional bumper pool table construction, the first table top member has a pair of diametrically spaced apertures and a pair of track means cooperating therewith and a receptacle means is slidably seated on each of the track means.

The interfitting means to lock the two table top members against inadvertent relative horizontal movement most desirably comprises projections and recesses on the adjacent surfaces with the projection desirably comprising a projecting rib on one of the surfaces extending substantially about the periphery of the table top member and cooperatively configured recesses in the other of the adjacent surfaces extending substantially about the periphery of that table top member. In its most desirably aspect, the rib is located on the upper surface of the first table top member and each of the surfaces of the second table top member is provided with a cooperating recess.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a perspective view of a convertible game table embodying the present invention;

FIG. **2** is a side elevational view thereof to a slightly enlarged scale with the ball receiving boxes shown in full line in the outward or operative position thereof and in phantom line in the inward or storage position thereof;

FIG. **3** is an end elevational view thereof with the ball box in the outward position;

FIG. **4** is a plan view thereof;

FIG. **5** is a bottom view thereof and showing the ball boxes in full line in the outer or operative position thereof and showing in phantom line the left end ball box in the storage position thereof;

FIG. **6** is a plan view of the convertible game table with the removable table top member reversed from the position shown in FIGS. **1–5**;

FIG. **7** is a plan view of the game table with the removable table top member removed therefrom;

FIG. **8** is a fragmentary elevational view of a peripheral portion of the table partially in section so as to illustrate the details of construction and to a greatly enlarged scale;

FIG. **9** is a fragmentary bottom view to a greatly enlarged scale with parts thereof broken away and with the base removed to illustrate underlying construction;

FIG. **10** is a fragmentary sectional view to an enlarged scale of the game table as used in the playing of bumper pool with a ball shown in phantom line in several positions thereof and with the ball directing means shwon in full line in the "at rest" position thereof and in phantom line in the deflected position thereof; and

FIG. **11** is a fragmentary sectional view to an enlarged scale of the game table adjacent the periphery the reof and looking towards a ball box.

DETAILED DESCRIPTION OF THE ILLUSTRATED EMBODIMENTS

Turning first to FIGS. **1** and **2**, the game table of the present invention is generally comprised of a base or leg assembly generally designated by the numeral **10**, a first table top member generally designated by the numeral **12** and a second removable table top member generally designated by the numeral **14**. As seen in FIGS. **4** and **6**, the second table top member **14** has a substantially smooth or planar surface suitable as a dining table and designated by the letter A and a card table surface on the reverse side thereof designated by the letter B. The first table top member **12** is configured and constructed to provide a bumper pool table surface designated by the letter C.

Turning now in detail to the first table top member **12**, this is integrally molded from synthetic resin so as to provide a generally planar surface portion **16** on the upper surface thereof and ribs **18** and bosses **20** on the lower surface thereof with an upstanding generally inverted U-shaped peripheral flange **22** extending thereabout. As seen in FIG. **8**, the inner leg of the U-shaped flange **22** has a sloping portion so as to cooperate with the outer configuration of the wooden rail insert **24** which in turn has mounted thereon the rubber bumper **26**. A padding or surface material **28** of felt or the like is secured to the upper surface portion **16** to provide the playing surface. Extending about the upper periphery of the flange **22** is an upstanding rib **29** for a purpose to be described in detail hereinafter.

Fasteners **30** secure the bumper members **32** against the upper surface of the table top member **12** in a configuration conventional for the playing of bumper pool. Two diametrically spaced apertures **34** are provided adjacent the periphery of the table top member **12** and extend therethrough.

Turning now to FIG. **9**, the table top member **12** is molded with a series of ribs **36** forming a series of four elongated recesses **38** oriented in an X-shape and into which recesses **38** is placed the upper end of the base **10** which also has an X-shaped cross section. Fasteners (not shown) seated in the bosses **20** are used to secure the upper end of the base **10** within the recesses **38**.

As best seen in FIGS. **9** and **11**, the bottom surface of the table top member **12** has two pairs of parallel spaced ribs **40, 42** spaced thereon to opposite sides of the apertures **34** with a series of bosses **20** being formed along the outer ribs **42**. Seated in the channels **43** formed between the ribs **40,42** are horizontally extending flanges **44** on the sidewalls of the ball box generally designated by the numeral **46**. The flanges **44** are trapped in the channels **43** by the elongated guide members **48** which are secured by the fasteners **50** seated in the bosses **20** and which project partially across the channels **43** so as to trap the flanges **44** therein. To serve as a guide surface, the upper end of the sidewall of the ball box **46** is provided with a horizontally extending reecess **52** which seats the inner rib **40**.

The ball box **46** has substantially open outer or front wall **54** to permit facile withdrawal of the balls dropping therein and its rear wall **56** is provided with a relatively large aperture **58** which aligns with cooperating aperture **34** through the table top member **12** as seen in FIGS. **9** and **10**.

An elongated ball directing means generally designated by the numeral **60** extends inwardly of the table top member **12** from a point below the aperture **34** and is secured at its inner end to the bottom surface of the table top member **12** by means of fasteners **62** seated in cooperating bosses **20.** At its outer or free end, the ball directing member **60** is configured to provide a recess **64** of generally spherical cross section underlying the aperture **34** and aligned with the aperture **58** of the ball box **46.** As best seen in FIG. **10,** the ball directing member **60** will deflect as a ball **65** drops through the aperture **34** into the recess **64** and is directed into the aperture **58** of the ball box **46.**

When the table is not being used for the playing of bumper pool, the ball boxes **46** may be slid inwardly in the tracks provided by the guide members **48** while beng guided in their movement by the projection of the ribs **40** into the channels **52.** The storage positions of the ball boxes **46** is indicated in phantom line in FIGS. **2** and **5.**

Turning now to the construction of the second table top member **14,** it is conveniently molded from synthetic plastic material so as to provide the many contours thereof conveniently and econmically and so as to provide the desired surface characteristics for the two surfaces A and B. As best seen in FIG. **8,** it includes a central portion **66** and a peripheral flange **68** which has circumferential recesses **70, 72** formed in the upper and lower surfaces thereof to cooperate with the rib **29** on the first table top member **12** to interfit therewith. As a result, inadvertent relative horizontal movement may be substantially eliminated to preclude injury and shifting during usage with either of the surfaces A or B exposed.

The surface A is adapted to serve as a dining table and is substantially smooth and planar; it is desirably molded with wood grain characteristics to simulate fine furniture. The surface B is molded with a series of ribs **74** to provide pockets or recesses **76** about the periphery of the table, ribs **78** extending inwardly therefrom and defining apertures **80** for seating glasses and the like, and a generally circular rib **82** defining the card playing surface which has felt padding **28** secured thereto.

In the use of the table of the present invention for the playing of bumper pool or another game of the ball receiving pocket type, the second table top member **14** is physically removed from the first table top member **12** by lifting so as to disengage the rib **29** from the appropriate recess **70** or **72.** The ball boxes **46** are moved outwardly from their storage position adjacent the base **10** by sliding them along the guide members **48** to their position adjacent the base **10** by sliding them along the guide members **48** to their position outwardly of the apertures **34** as shown in full line in FIGS. **5** and **10.** During the play of the game, the ball **65** drops downwardly through the aperture **34** and into the spherical recess **64** of the ball directing member **60** which is then deflected downwardly thereby and which absorbs some of the energy of the ball. As the ball directing member **60** defects, the ball **65** rolls outwardly of the recess **64** into the aperture **58** in the rear wall **56** of the ball box **46** from which it may be retrieved by the players through the relatively open front wall **54** in order to return it to play.

When it is desired to use the game table for another purpose, the balls **65** may be stored in the ball boxes **46** which are then slid inwardly on the guide members **48** to the storage position shown in phantom line FIG. **2.** The second table top member **14** is then seated upon the first table top member by orienting the appropriate recesses **70, 72** in alignment with the rib **29** so that they will interfit and thus secure the second table top member **14** against inadvertent relative movement.

As will be readily appreciated, the game table of the illustrated embodiment is highly versatile and rugged and economical in construction. Both table top members lend themselves to fabrication by molding of synthetic plastic materials although they may be milled or machined from plastic or other materials of construction such as wood, as well as from plastic sheet stock. The ball boxes and ball directing members are conveniently thermoformed or molded from sythetic plastic material and the track guide members are also conveniently provided by sythetic plastic material. To provide a highly rugged and durable assembly, the base is preferably constructed of relatively thick wood members which will enhance the stability of the assembly by locating the greatest weight below the table top members. If so desired, veneers of wood or other materials may be adhered to the exposed surfaces of the table top members although innovations in plastic molding technology permit the molding of the various elements with highly desirably surface finished and appearance.

In the illustrated embodiment, the first table top member is shown as a bumper pool table; it will be appreciated that it could be configured and provided with elements for playing any one of a variety of games in which a ball may drop through an aperture in a table surface into ball collecting means. Among such other games are pocket pool, billiards, etc. Similarly, the removable table top member has been illustrated as having a dining table surface and a card playing surface; it will be appreciated that other surfaces could be employed such as a surface configured and market to permit playing chess, backgammon or the like.

Thus it can be seen that the present invention provides a novel convertible game table which employs a fixed table top member and a removable table top member seated thereon in a rugged and attractive assembly. The game table incorporates means for locking the two table top members together against inadvertent horizontal relative sliding movement and the ball collecting receptacles mounted on the bottom of the first table top member may be readily moved from a position adjacent the periphery thereof to a secure position disposed inwardly therefrom so as to avoid interference with the legs of persons seated about the table.

Having thus described the invention, we claim:

1. In a convertible game table, the combination comprising:

a. a base;

b. a first table top member having a periphery and a central portion, said table top member also having at least one aperture extending downwardly therethrough adjacent the periphery thereof and track means on the lower surface thereof adjacent said aperture and extending from adjacent said aperture towards the middle of said first table top member and terminating at a point adjacent the central portion of said table top member;

c. receptacle means slidably seated in said track means for movement between a first position adjacent said aperture and the periphery of said table

top member to receive an object falling through said aperture and a second position wherein the outermost edge of the receptacle means is spaced substantially inwardly from said aperture and the periphery of said first table top member and is adjacent the central portion of said table top member to avoid interference with the legs of persons seated about said table;

d. means mounting said first table top member on said base; and

e. a second table top member overlying and removably seated upon said first table top member, said first and second table top members both having interfitting means on their adjacent surfaces to prevent substantially inadvertent relative horizontal movement therebetween, said second table top member having both of its surfaces adapted for use and reversible for support with either one of said surfaces exposed for use upon the convertible game table.

2. The convertible game table of claim **1** wherein said surfaces of said second table top member comprise a substantially planar surface sutiable as a dining table and a configured surface, each of said surfaces having said interfitting means for cooperation with the interfitting means of said first table top member to avoid inadvertent relative horizontal movement.

3. The convertible game table of claim **2** wherein said first table top member is configured and provided with game elements for playing bumper pool and wherein said second table top member has its configured surface configured and provided with elements for use as a card table, said second table top member being removable from said first table top member for utilization of the game table in the playing of bumper pool.

4. The convertible game table claim **1** wherein said first table top member has affixed to the bottom surface thereof adjacent said aperture ball directing means extending beneath said aperture, said receptacle means having an aperture therein cooperating with said ball directing means in said first position thereof to receive a ball falling through said aperture onto said ball directing means and directed theretowards by said ball directing means.

5. The convertible game table of claim **4** wherein said receptacle means is located in a position spaced outwardly from said ball directing means towards the periphery of said table top member from said aperture in said first position thereof and wherein said ball directing means directs the ball outwardly towares the periphery and into said receptacle means.

6. The convertible game table of claim **4** wherein said ball directing means comprises a resiliently deflectable member mounted on the lower surface of said first table top member to permit deflection of an end thereof disposed below said aperture in repsonse to an object falling therethrough and impinging thereon.

7. The convertible game table of claim **6** wherein said ball directing means comprises an eleongated member extending inwardly from said aperture and mounted to said table top member adjacent the inner end thereof to permit pivoting of the outer end, said outer end being spaced from said receptacle means and configured to provide a recess of generally spherical cross section disposed beneath said aperture.

8. The convertible game table of claim **1** wherein said first table top member has a pair of diametrically spaced apertures and a pair of track means and wherein one of said receptacle means is slidably seated on each of said track means.

9. The convertible game table of claim **1** wherein said interfitting means comprise projections and recesses on the adjacent surfaces.

10. The convertible game table of claim **9** wherein said projections and recesses comprise a projecting rib on one of the adjacent surfaces extending substantially about the periphery of the table top member and cooperatively configured recesses in the other of the surfaces extending substantially about the periphery of that table top member.

11. The convertible game table of claim **10** wherein the rib is located on the upper surface of said first table top member and each of the surfaces of said second table top member is provided with a cooperating recess.

12. The convertible game table of claim **1** wherein the lower surface of said first table top member is provided with a downwardly opening recess of generally "X" configuration and wherein said base is of generally "X" cross section and its upper end seats within said recess.

13. The convertible game table of claim **1** wherein said first table top member is of molded synthetic plastic construction and is provided with molded bosses and ribs on the lower surface thereof in part seating said base, said mounting means cooperating with said molded bosses and ribs to effect secure engagement of said base and said first table top member.

14. In a convertible game table, the combination comprising:

a. a base;

b. a first table top member having a periphery and a central portion, said table top member also having at least one aperture extending downwardly therethrough adjacent the periphery thereof and track means on the lower surface thereof adjacent said aperture and extending from adjacent said aperture towards the middle of said first table top member and terminating at a point adjacent the central portion of said table top member;

c. receptacle means slidably seated in said track means for movement between a first position adjacent said aperture and the periphery of said table top member to receive an object falling through said aperture and a second position wherein the outermost edge of said receptacle means is spaced substantially inwardly from said aperture and the periphery of said first table top member and is adjacent the central portion of said table top member to avoid interference with the legs of persons seated about said table;

d. means mounting said first table top member on said base; and

e. a second table top member overlying and removably seated upon said first table top member.

15. The convertible game table of claim **14** wherein said first table top member has affixed to the bottom surface thereof adjacent said aperture ball directing means extending beneath said aperture, said receptacle means having an aperture therein cooperating with said ball directing means in said first position thereof to receive a ball falling through said aperture onto said ball directing means and directed theretowards by said ball directing means.

16. The convertible game table of claim 15 wherein said receptacle means is located in a position spaced outwardly from said ball directing means towards the periphery of said table top member from said aperture in said first position thereof and wherein said ball directing means directs the ball outwardly towards the periphery and into said receptacle means.

17. The convertible game table of claim 14 wherein said ball directing means comprises a resiliently deflectable member mounted on the lower surface of said first table top member to permit deflection of an end thereof disposed below said aperture in response to an object falling therethrough and impinging thereon.

18. The convertible game table of claim 17 wherein said ball directing means comprises an eleongated member extending inwardly from said aperture and mounted to said table top member adjacent the inner end thereof to permit pivoting of the outer end, said outer end being spaced from said receptacle means and configured to provide a recess of generally spherical cross section disposed beneath said aperture.

19. In a convertible game table, the combination comprising:

a. a base;

b. a first table top member having a periphery and a central portion, said table top member also having at least one aperture extending downwardly therethrough adjacent the periphery thereof;

c. receptacle means movably seated on the lower surface of said frist table top member for movement between a first position adjacent said aperture and the periphery of said table top member to receive an object falling through said aperture and a second position spaced substantially inwardly from the periphery of said first table top member and adjacent the central portion of said table top member to avoid interference with the legs of persons seated about said table;

d. means mounting said first table top member on said base; and

e. a second table top member overlying and removably seated upon said first table top member, said first and second table top members both having interfitting means extending about the periphery of their adjacent surfaces said interfitting means of one of said table top members, when positioned so as to be in use, engaging and interfitting with the interfitting means of the other of said table top members to prevent substantially inadvertent relative horizontal movement therebetween said second table top member having both of its surfaces adapted for use and reversible for support with either one of said second table top to surfaces exposed for use upon the convertible game table, one of said second table top surfaces being a substantially planar surface suitable as a dining table and the other of said second table top surfaces being a configured surface for game use, said second table top member being provided with said interfitting means on both of said surfaces thereof.

20. The convertible game table of claim 19 wherein said interfitting means comprise projections and recess on the adjacent surfaces.

21. The convertible game table of claim 20 wherein said projection is a rib on the upper surface of said first table top member and each of the surfaces of said second table top member is provided with a cooperating recess.

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