March 17, 1970 R. J. MEYER 3,501,149

DART GAME ASSEMBLY

Filed Nov. 13, 1967 2 Sheets-Sheet 1

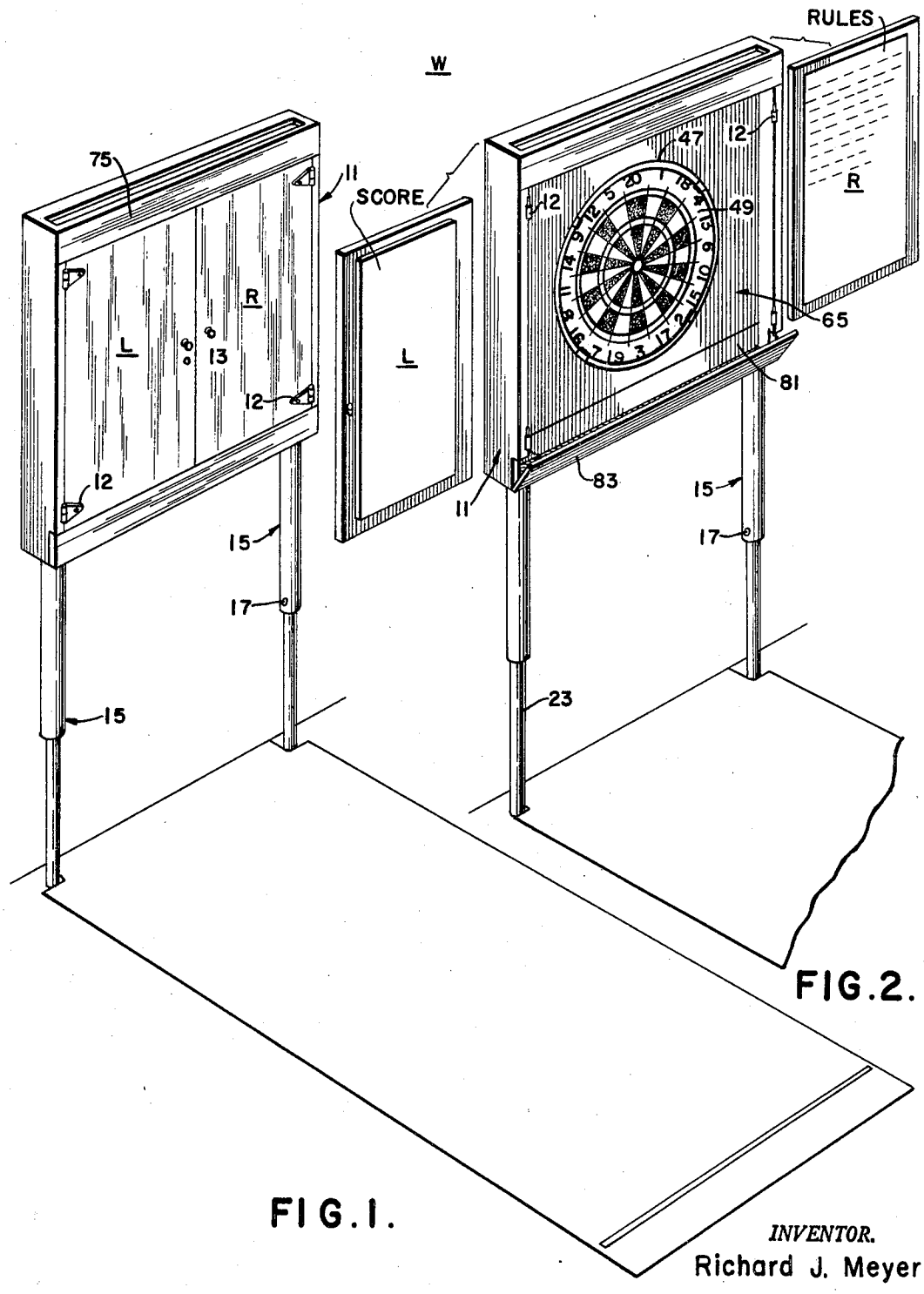


FIG. 1.

FIG. 2.

INVENTOR.
Richard J. Meyer
by J. Harold Ryles

March 17, 1970 R. J. MEYER 3,501,149

DART GAME ASSEMBLY

Filed Nov. 13, 1967 2 Sheets-Sheet 2

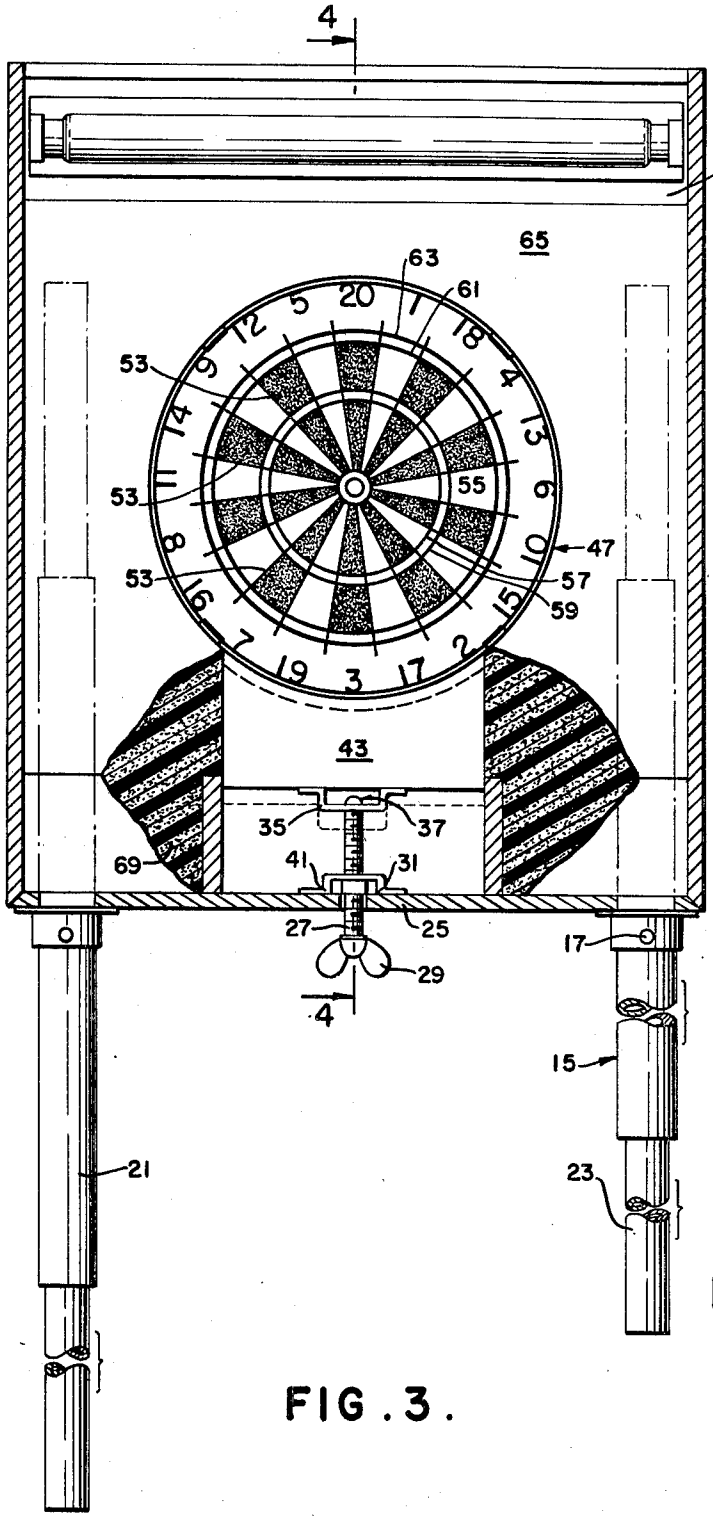


FIG. 3.

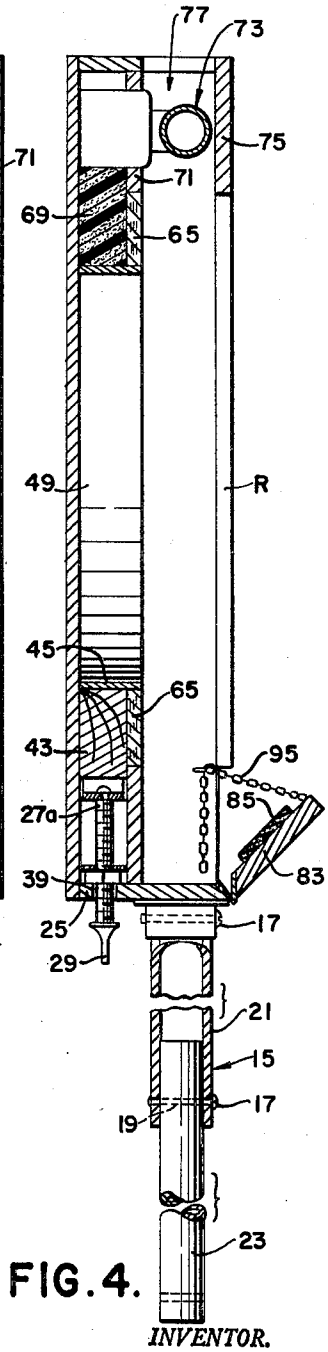


FIG. 4.

INVENTOR.
Richard J. Meyer
by J. Harold Byers

United States Patent Office 3,501,149 Patented Mar. 17, 1970

3,501,149

DART GAME ASSEMBLY

Richard J. Meyer, 4731 Massachusetts Ave. NW., Washington, D.C. 20016

Filed Nov. 13, 1967, Ser. No. 682,058
Int. Cl. A63b 67/00
U.S. Cl. 273—102 3 Claims

ABSTRACT OF THE DISCLOSURE

A dart game in the form of a cabinet comprising a circular target board, mounted so it can be rotated from time to time to present a fresh surface. A friction element bearing against the rim of the circular target by which the rotatable circular target piece can be fixed at any desired angle of rotation. Darts, which when thrown would not land and stick to the target board as intended may be caught by a horizontally swinging protective door suitably positioned in the cabinet.

In England and other countries abroad, the game of darts commands a prestige and popularity comparable to that of a professional sport. The relative perfunctory reception of the sport in the United States involves factors that can be discerned in the relative quality of equipment, and in the lack of organizations interested in setting up standards and rules governing the game. One factor contributing to comparative lack of appreciation and interest here seems to consist in simple lack of knowledge of the game and its refinements. Nor can it be overlooked that the potential hazards occasioned by a desultory throwing of darts around the room, is viewed without favor by householders and others who are concerned with maintaining the finish of their walls, chairs and furnishings. Obviously, if precautions are taken to prevent damage from playing of dart games, a step will have been taken in overcoming the assumption that the game is suitable only for pubs and rough wood floors.

It is an object of the present invention to dispose of certain drawbacks that have slowed progress of popularity of dart games.

It is a concurrent object to provide means for avoiding damage to walls, floors and furnishings from dart activities.

It is also an object to provide means for compactly and neatly storing the playing equipment between periods of use.

Further objects concern the specific problem of mounting the target, adjusting same as needed during the progress of games.

In addition it is an object to provide a convenient means for locating the target with respect to standard height and distance of target from player.

The invention, in its more specific aspects, comprises a cabinet preferably of attractive design and finish, for use in homes, recreation rooms, clubs and bars, compact in size, storable in a small space, adapted to store all or most of the equipment for the game during intervals when not in use. When it is desired to use the game, the cabinet is unfolded, the telescoping legs extended, a mat, if desired laid on the floor, and the doors of the cabinet removed and used for keeping score, and posting rules. A circular target centrally located with respect to the cabinet and surrounding shield means is mounted so as to be rotatably shifted. Upon release of a pressure exerting friction block operated by a set screw, the target board may be loosened and turned to bring fresh areas thereof into line of maximum impact, whereby the useful life of the board may be prolonged. Following rotation of the target board, by a few, for example 20 to 60 degrees or more, a friction block is reset to bear upon the circumferential, i.e., cylindrical rim, whereby the target board is again fixed in place. It will be understood that the numerals on the face of the target are separate from the target board and are not correspondingly rotated but are maintained in a prescribed position. It will also be understood that the cage or web of segment and numeral dividers may consist of wires outlining score areas of the target, and that the web may be constructed so as to be a component part of the number arrangement which form an outer circle corresponding to score areas.

Arranged surrounding the target board is an outwardly extending shield adapted to receive darts that fail to directly strike the target. This shield has the function of protecting the walls behind the target from damage by inaccurately thrown darts. This shield member may be made in one, two or more layers of material tough enough to resist undue penetration by dart points. It may consist typically of a backing of a foamed plastic and a facing layer of cork. Many other materials will serve a like purpose for constructing of the shield member.

Whereas the foregoing summarizes the structure, uses, and advantages of the present invention, for purposes of rendering same and means of practice of the same further understandable, a preferred embodiment will now be described, reference being had to the accompanying drawings.

FIG. 1 is a perspective view of a cabinet constructed in accordance with the present invention.

FIG. 2 is a view of aforesaid cabinet, in perspective, and shows the doors after having been opened, separated and removed from the cabinet.

FIG. 3 is an elevational view in section of the cabinet assembly shown in FIGS. 1 and 2.

FIG. 4 is a view on section of the assembly taken along the line 4—4 of FIG. 3.

It will be readily understood by those skilled in the art that the structure illustrated is subject to modifications. Some of these will be pointed out in the course of the following discussion.

The cabinet assembly **11** as a whole may be seen in perspective in FIGS. 1 and 2. It will be seen that the assembly has the general shape of a shallow box of rectangular outline closable by two doors L and R. Knobs **13** are provided for grasping in order to open or shut the doors. It will be understood that the doors may be secured in closed position by suitable catch, or by lock means of various types which may be provided by cabinetmaker.

The cabinet assembly **11** is adapted to be placed back to wall W of a room. It is supported by legs **15** which normally bring it to a substantially fixed height from the floor. This height however may be adjusted if necessary by suitable adjusting means. Prescribed height is five feet eight inches from floor to center of target. The leg extension fixing and adjustment means **17** may consist of one or more bolt members passing through registering holes in telescoping leg part **21** and extending leg part **23**. As will be understood, same may consist of set screw means known to the art.

It will be appreciated that the cabinet may be supported by two legs as shown and/or that wall fastening means may supplement the support by the legs; and that also the cabinet may be mounted on three or more legs; in which case its stability would be firmer but also the additional leg would necessarily constitute a certain hazard to players and other moving occupants inasmuch as it would project somewhat awkwardly into the room. Illustration of suitable wall attachment devices are omitted inasmuch as various means adaptable to the purpose are well known to the art.

On conclusion of any game the legs may be retracted telescopically into the cabinet, the doors L and R folded

into closed position and locked if desirable; whereupon the cabinet may be conveniently carried or transported.

The lower part of the cabinet comprises a panel **25** through which legs **15** pass. The panel **25**, like the remainder of the exterior parts of the cabinet may be constructed of wood or other suitable structural material. Substantially at the middle of the panel **25** as seen in FIG. 3 there is a threaded setscrew **27** terminating in a butterfly portion **29** at the lower end and having an annular groove **37** at the other. Fitting the annular groove is a U-shaped bracket having an opening of a size in which the grooved neck of the setscrew **27** can rotate freely but from which preferably the setscrew cannot be readily withdrawn due to the small diameter of the neck with respect to the major diameter of the shank of the set screw.

An internally threaded nut portion engagingly receives the threaded shank portion of screw **27**, said nut portion being fixedly retained in place by bracket **41**, the latter being in the form of an angular inverted U, said bracket **41** being fastened, as by wood screws, to the inner face of panel **25**.

Upper bracket **35** is attached to a supporting block **43**. Manifestly, when screw **27** is turned clockwise, block **43** is raised; and conversely, lowered. Pressure exerted upwardly on block **43** will cause the concave arcuate face **45** of block **43** to exert upward pressure on the circumferential band **47** of target board **49** (FIGS. 2 and 4).

Screw **27** thus serves to tighten, or alternately to loosen, target board **49** in any selected position. While a game is in progress the target board ordinarily will be clamped in place by block **43**. On the other hand, when any part of the target board becomes particularly pitted, scarred or worn by continued usage, it may be desirable to shift the target board into a new position, or even remove same for insertion of a new target board. Then by loosening set screw **27**, the clamping pressure of block **43** may be relieved and the board **49** rotated by hand so that segment **14** for example can be rotated into the position of segment **13**. It will, of course, be understood that the target cage **51** will not be correspondingly rotated.

Cage **51** comprises a web of radial arms which extend from inner circle **55**, outward through rings **57**, **59** and **61**, and to and beyond ring **63**, the totality constituting a cage of generally spider-web appearance. The cage with its component elements is preferably made of stiff metal wire, and corresponds to standard design. Same is not claimed as a novel feature of the present invention and need not be described in further detail to those skilled in the art. It may simply be noted that the target board member **49** can rotate independently of the score numbers which in the usual practice are maintained in the standard position during playing of the game.

In the specific embodiment illustrated, the face of the board, adapted to receive the thrown darts, comprises the target board **49** and a shield portion **65**. The latter consists in a laminated structure comprising an outer face **67** and a backing layer **69**. This shield member which is adapted to receive the impact of darts that do not strike the target, surrounds the target and extends over the area outside the target area. Basically the composite may be formed from an outer facing **67** of cork and an inner backing **69** of porous or cellular foamed plastic such as polyurethane (FIG. 4); or of other materials as may be desired. It may well be (note items **43** and **65**, FIG. 4) that the composite shield part cannot, due to the structure of the whole, be extended over all portions of the parts to be shielded in which case either the face or backing portion may be for a certain extent discontinuous (FIGS. 4, 43 and 71).

A source of illumination may be mounted in the top of the cabinet as may best be seen in FIGS. 3 and 4. This illumination may be provided by a fluorescent bulb **73** surrounded by a shade portion **75**. The top and bottom of the light mounting are open **77** for ventilation and light radiation purposes.

As stated above, the doors L and R are removable from the cabinet (best shown in FIG. 2) for which purpose hinges **12** (FIGS. 1 and 2) are specifically designed. Construction of such hinges are well known to those skilled in the art, being of the type that can be disassembled at will, and reassembled in order to close the cabinet.

The lower part of the cabinet is provided preferably with a compartment **71** built into the structure. The compartment serves a double function: to catch stray darts; and to store same with chalk, erasers, dart sharpening means, and the like. Panel **83** may be swung open to selected position by chain means **95**. In FIG. 4, the panel door **83** is held open at an angle of approximately forty-five degrees. Manifestly the door may be swung to a full ninety degrees from vertical if desired, i.e., to the horizontal, or any desired degree. Stray darts thrown at the board but not striking true into the surface will be caught by the panel. To minimize damage to darts and to panel, the latter may be covered by a layer **85** of cork, plastic, rubber, etc.

Doors L and R, being removable, are adapted to be hung on the room wall to one side, being thus useful for recording of scores, etc. As an example a blackboard or like marking board, may be attached to the inner surface of one or each of doors, or same may be used for posting rules, etc.

By the term "cabinet" reference is had to a container, but also in accordance with the description herein the term applies optionally to the appurtenances such as supporting legs, removable doors, floor mat, removable target, in that the "cabinet" is operative for functions not confined to ordinary containment or storage.

By "assembly" is meant a cooperative combination of elements.

By "darts" is meant the familiar game type composed of body, point and vanes or feathers, carrying the mass, target penetrating portion, and guiding means in flight of the dart respectively.

By "shield portion" or "shield" is meant that part of the assembly that is concerned with protective function mainly consisting essentially of a board or laminate structure not covering the target.

By "target board" is meant that portion of the assembly which constitutes the scoring part and is exposed to the skill of the player and that initially marks and denotes his score points.

By "centrically" is meant toward the center, in reference to the force exerted.

By "circular target board" is meant precisely a board to be struck by darts circular in shape but actually having some thickness and thus being a thin section of a cylinder.

It will be understood that the foregoing description and drawings are for purposes of illustration only and should not be construed as limiting, the scope of the invention being as set forth in the following claims.

I claim:

1. An assembly for playing a professional or standard game of darts, said assembly comprising,

(a) a cabinet having a rear wall and outwardly extending top, bottom, and side walls,

(b) a target-surrounding, outwardly extending shield board received in the cabinet, the shield board having a circular opening therein,

(c) a removable circular target board, slightly smaller in diameter than the opening, mounted in the opening in the shield board,

(d) a friction block element having an arcuate surface,

(e) means slideably mounting the friction block element to the shield board with the arcuate surface of the friction block element constituting a portion of the surface of the circular opening in the shield board,

(f) and means for gradually adjusting the force of said friction block element against the periphery of the target board,

(g) said circular target board being optionally rotatable in said opening and fixed therein by pressure of said friction block element.

2. An assembly according to claim 1 wherein said means for adjusting the degree of pressure exerted against the rim of said target is a screw threaded member.

3. An assembly according to claim 1 wherein the bottom of the cabinet has a panel pivotally mounted thereto so that the panel, normally vertical, may be swung out to a position other than vertical.

References Cited

UNITED STATES PATENTS

2,060,405	11/1936	Widmeir	273—102
2,076,357	4/1937	Tempest	273—102

2,633,360	3/1953	Fleigle	273—102
2,788,211	4/1957	Ivanoff	272—17 X
3,300,216	1/1967	Haecker	273—102
3,309,091	3/1967	Haecker	273—102

FOREIGN PATENTS

26,680	1911	Great Britain.
481,943	3/1938	Great Britain.
503,045	3/1939	Great Britain.
508,153	6/1939	Great Britain.
587,980	5/1947	Great Britain.

RICHARD C. PINKHAM, Primary Examiner

M. R. PAGE, Assistant Examiner