May 14, 1940. H. J. CADMAN 2,201,025

GAME APPARATUS

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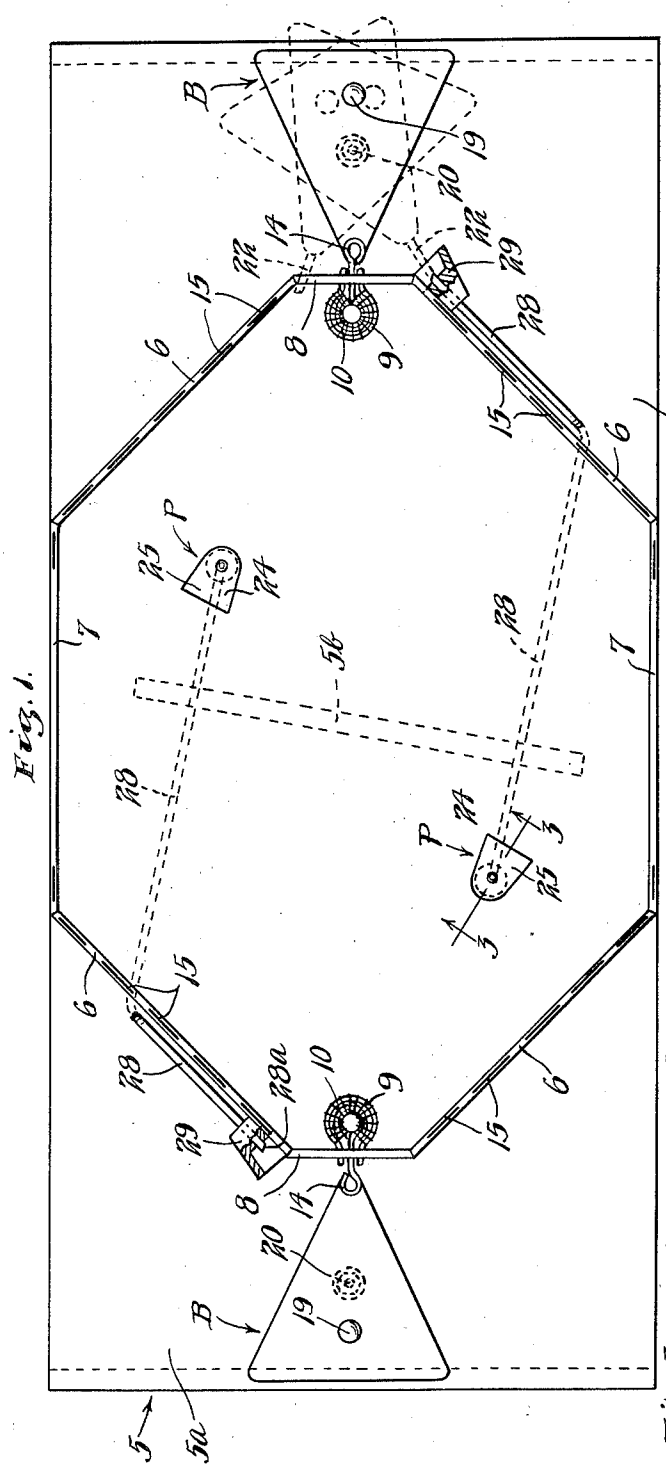

Fig. 1.

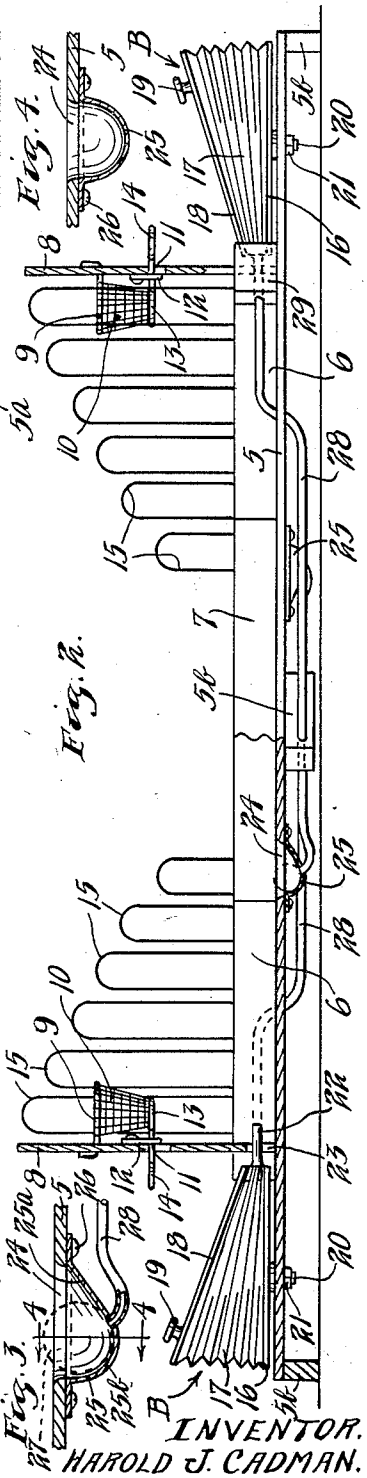

Fig. 2.

Fig. 4.

Fig. 3.

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GAME APPARATUS

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3 Claims. (Cl. 273—85)

My invention relates to game apparatus and particularly to such apparatus in the nature of a game board with which a ball is used.

An object of my invention is to provide game apparatus for indoor use with which a game somewhat along the lines of basketball may be played.

Another object is to provide such apparatus wherein a ball may be propelled over a surface by means of blasts of air.

Still another object is to provide such apparatus wherein blasts of air may be projected in various directions over a playing surface and also with different degrees of force.

Yet another object is to provide such apparatus wherein a ball may by chance arrive in a portion of the apparatus from which the ball may be projected by air pressure in the general direction of an elevated ball receiving basket.

A further object is to provide such apparatus of simple and inexpensive construction.

These and other objects and advantages of the invention will more fully appear from the following description made in connection with the accompanying drawing, wherein like reference characters refer to the same parts throughout the views, and, in which:

Fig. 1 is a top view of game apparatus wherein an embodiment of my invention is incorporated;

Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1 as indicated by the arrows;

Fig. 3 is a sectional detail view taken on the line 3—3 of Fig. 1 as indicated by the arrows; and

Fig. 4 is a vertical sectional view taken on the line 4—4 of Fig. 3, as indicated by the arrows.

Referring to the drawing the illustrated embodiment of my invention includes structure such as a board 5 providing a plane top surface 5a adapted to be disposed in a horizontal plane and used as a playing surface at least in portions thereof. Means is provided for refining a playing surface and this means may consist of a series of upstanding elements 6 and 7 placed as shown in Fig. 1 to constitute a fence encircling a playing area of generally octagon shape.

At respective ends of the octagon shaped playing surface upstanding basket supporting members 8 which may consist of boards are mounted on the playing board 5. The basket supporting members 8 in their lower portions constitute part of the fence which includes elements 6 and 7. Each of the basket supporting members 8 is provided in the upper portion thereof with a basket supporting ring 9 which is similar to standard basketball supporting rings except that the rings 9 are of miniature proportions. Miniature open bottomed baskets 10 are supported from the rings 9.

Means is provided for preventing a ball which falls in one of the baskets 10 from immediately passing through the basket. The basket supporting members 8 are apertured and a lever 11 is extended through the aperture and is pivotally supported by a bracket 12 secured to the basket supporting members 8. The lever 11 carries thereon a flat element 13 disposed immediately below the open lower end of the basket 10 and constituting a closure therefor. The end of the lever 11 projecting outwardly of the basket supporting member 8 is provided with a finger piece 14 by which the lever 11 may be operated. When a ball has been received in a basket 10 and it is desired to eject the ball from the basket the finger piece 14 is pressed downwardly to move the closure 13 upwardly for the purpose of projecting the ball upwardly out of the basket 10.

A series of wires 15 are bent in U-shape and at their free ends are mounted on the fence elements 6 and 7 as shown in Figs. 1 and 2 to form an upstanding back stop adjoining each of the basket supporting members 8.

Pneumatic means is provided for propelling a ball such as the type of ball used in table tennis over the playing surface of the board 5a within the space defined by the previously described fence. A pair of bellows units B are mounted at the ends of the board 5 beyond the basket supporting members 8 for swinging movement in a horizontal plane. Each bellows includes a bottom plate 16 connected by an accordion pleated flexible bellows element 17 to a top plate 18 on which is mounted an operating knob 19. The bottom plate 16 carries a downwardly projecting stud 20 which extends downwardly through a suitable aperture in the board 5. A collar 21 is secured on the stud 20 on the under side of the board 5. Each bellows unit B is also provided with an air projecting nozzle 22 through which air from the bellows is delivered. The lower portion of each of the basket supporting members 8 is provided with a horizontally extending slot 23 through which the bellows nozzle 22 projects toward the area within the previously described fence. It should be apparent that each of the bellows units B may be swung by means of the knob 19 for directing a jet of air in various directions across the playing area for the purpose of propelling a ball along the playing surface. The knob 19 may also be used for the purpose of operating the bellows to product a blast of air

from the air nozzle 22 of the bellows unit. Fig. 1 shows one of the bellows units B in full lines in one position thereof and in dotted lines in two other positions thereof. With a single ball disposed on the playing surface and two players operating the respective bellows units B, it will be seen that a game may be played where the ball is blown in various directions along the playing surface within the fence.

Means is provided whereby a ball on the playing surface may drop into a receiver therefor and be projected toward one of the baskets 10 by means of air pressure conveyed to the receiver from one of the bellows units B. For this purpose a pair of pockets P are formed in the board 5 to constitute depressions wherein a ball may fall if the course of the ball leads the same to one of the depressions. The depressions are formed by providing apertures 24 in the board 5 in suitable locations as indicated in Figs. 1 and 2. Cups 25 underlying the apertures 24 are secured to the lower side of the board 5 in registration with the apertures 24 by suitable means such as the screws 26. Each of the cups 25 is shaped to have a gently sloping side 25*a* and another side 25*b* sloped for guiding a ball upwardly in the general direction of a corresponding one of the baskets 9. The cups 25 are of rounded shape in the lowermost portion thereof to approximately conform to the periphery of a ball to be used with my game apparatus. In each of Figs. 1, 2 and 3 of the drawing a ball 27 is shown in dotted lines in the depression formed as above described. The cups 25 may be formed of suitable material such as die-stamped sheet metal or molded plastic.

Means is provided for projecting a ball such as the ball 27 out of either of the depressions responsive to application of air under pressure. Each of the cups 25 is provided with an air conduit 28 opening into the lower portion of the cup through a suitable aperture therein at such a point, as shown in Fig. 3, that air delivered through the conduit 28 will project the ball 27 upwardly along the sloping side 25*b* of the cup 25. The cup 25 is so positioned that a ball so projected will follow a trajectory in a vertical plane extending through the cup 25 and a corresponding one of the baskets 10. The force with which the air is applied will determine the height and curvature of the trajectory and will also determine whether or not the ball will fall in the basket or follow a path either too high or too low relative to the basket.

Means is provided whereby air may be supplied to the respective conduits 28 from respective ones of the bellows units B. As shown in Fig. 2, the conduits 28 run from the cups 25 beneath the board 5 for some distance and then extend upwardly through suitable apertures in the board 5 to points adjacent the respective bellows units B. The ends of the conduits 28 adjoining the bellows units B are anchored in suitable apertured blocks 29 so that the open ends of the conduits 28 are positioned for alignment therewith of the corresponding bellows nozzle 22 when the bellows units are swung sufficiently far to one side. To effect proper connection between the bellows nozzles 22 and the open ends of the conduits 28 and secure reasonably good sealing therebetween, the bellows nozzle 22 is cut at its outer end at an angle and the open end 28*a* of each conduit 28 is cut at a corresponding angle. It will be seen that when a bellows unit B is swung sufficiently far to the proper side the skewed end of the nozzle 22 thereof will abut the skewed open end of a corresponding one of the conduits 28 so that the interiors of the nozzle 22 and the conduit 28 will be in communication. With the bellows unit B so positioned downward pressure on the knob 19 will cause air to be delivered from the bellows unit into the conduit 28 for projecting a ball 27 out of a corresponding one of the pockets P toward a corresponding one of the baskets 10. As previously mentioned the degree of pressure applied will determine whether the ball will follow a trajectory such that the ball will land in the basket 10.

In playing a game with the above described apparatus two players operate the respective ones of the bellows units B. The players will operate their bellows units to move the ball about the playing surface and with the intent of causing the ball to fall into the one of the pockets P from which the ball can be projected toward the opponent's basket 10. If one of the players succeeds in causing the ball to fall in such pocket he may then swing his bellows unit B into communication with the corresponding conduit 28 and apply pressure to the bellows in an attempt to land the ball in his opponent's basket 10.

To space the board 5 above a table top or any other surface upon which the board may be placed slats 5*b* are secured to the lower side of the board 5.

It is apparent that I have invented a novel form of game apparatus adapted for use in playing a particularly interesting game involving an exercise of skill.

It will, of course, be understood that various changes may be made in the form, details, arrangement and proportions of the various parts without departing from the scope of my invention.

What is claimed is:

1. Game apparatus for use of a ball therewith including, a member affording a normally horizontally disposed plane playing surface, baskets for receiving a ball supported from said member above respective ends of said surface, air-projecting nozzles mounted on said member at respective ends of said surface for swinging movement in a horizontal plane to project respective air jets across said surface in various directions for propulsion of a ball disposed on said surface, manually controllable means for delivering air to said nozzles, said member having a pair of ball receiving depressions therein within the boundary of said surface each having a side sloped to guide a ball out of said depression toward a respective one of said baskets, and a pair of air conduits each having an end thereof opening into the bottom of a respective one of said depressions for delivery of air to propel a ball up said sloped side, the remaining ends of said conduits being situated and arranged for convenient connection thereof to said respective nozzles to receive air therefrom.

2. Game apparatus for use of a ball therewith including, a member topped by a plane playing surface normally horizontally disposed, baskets for receiving a ball supported from said member above respective ends of said surface, air projecting nozzles mounted on said member at respective ends of said surface for swinging movement in a horizontal plane to project respective air jets across said surface in various directions for propulsion of a ball disposed on said surface, manually controllable means for delivering air to said nozzles, said member having a pair of ball-receiving depressions therein within the boundary of said sur-

face each having a side sloped to guide a ball out of said depression toward a respective one of said baskets, and a pair of air conduits each having an end thereof opening into the bottom of a respective one of said depressions for delivery of air to propel a ball up said sloped side, the remaining ends of said conduits being so situated that said nozzles may be aligned with said respective remaining ends for delivering air thereinto.

3. Game apparatus for use of a ball therewith including, a flat board adapted to be disposed in a horizontal plane, upstanding means carried by said board to define and encircle a playing area thereon, baskets for receiving a ball supported above said board at respective ends of said area, air projecting nozzles mounted on respective end portions of said board for swinging movement in a horizontal plane to enable directing of air jets from said nozzles across said area in various directions, said upstanding means having openings therein situated to accommodate said jets, a pair of depressions in said board for receiving a ball, said depressions each having one side thereof sloped to direct a ball toward a respective one of the baskets and each having a port in the lower portion thereof for admission of air to propel a ball up said slope, a pair of ducts leading from said ports to points where said respective nozzles may be swung into alignment therewith to deliver air thereinto, and manually controllable means for delivering air to said nozzles.

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