

[54] FLUID STREAM GAME APPARATUS

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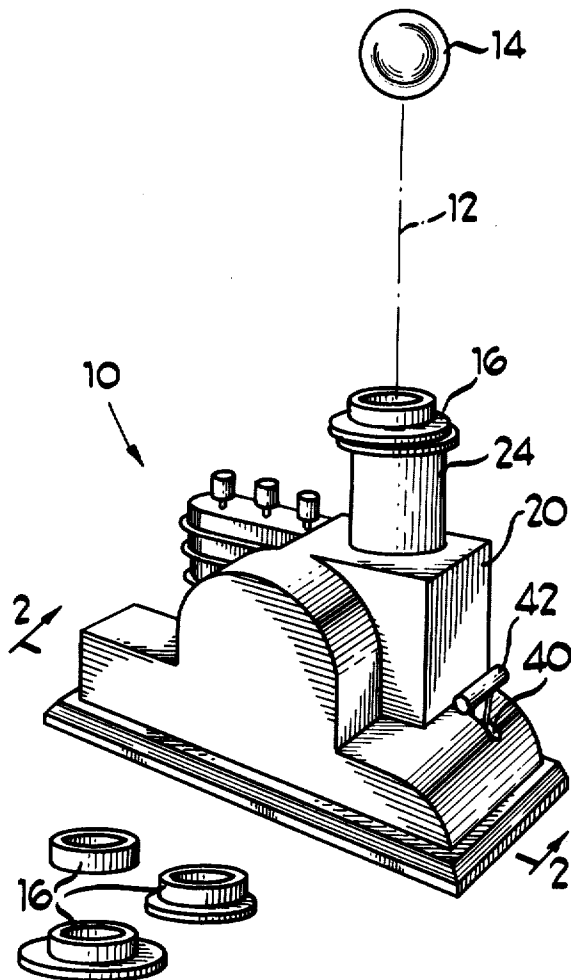
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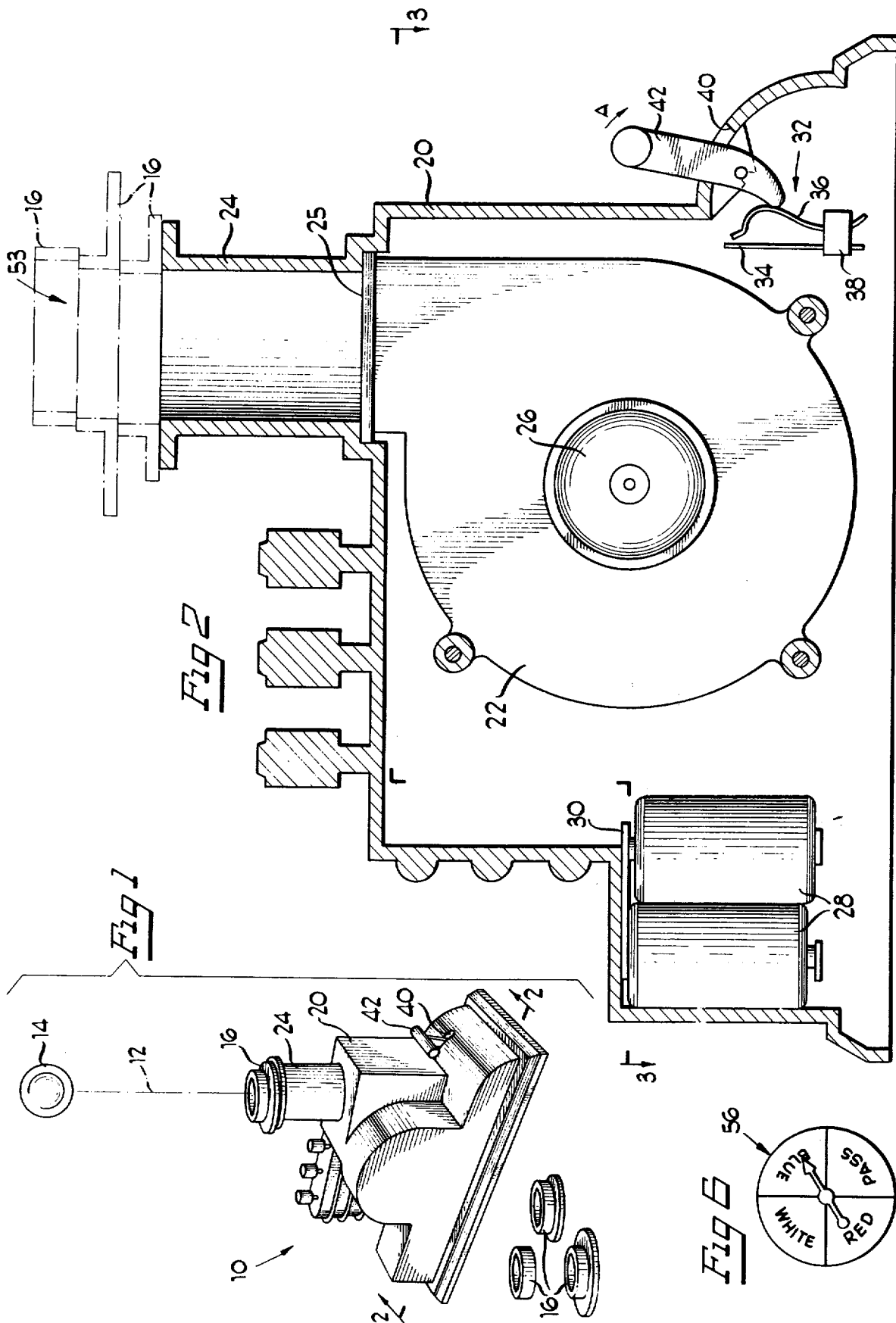
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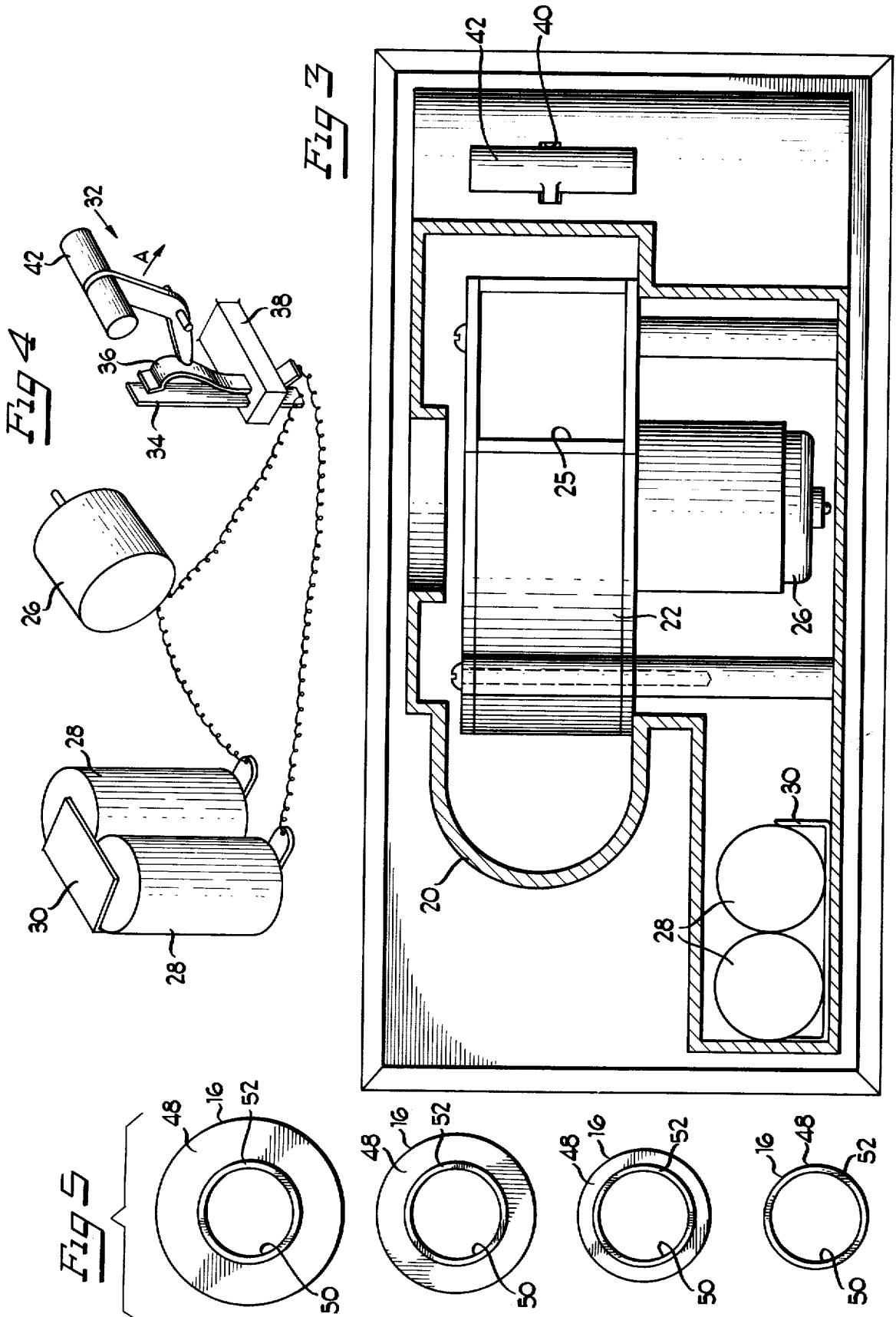
ABSTRACT

A game apparatus including an air blower which produces a fluid stream which is directed generally upwardly so as to support a lightweight ball in the air stream over the air blower. A plurality of manually stackable ring-like playing pieces are provided for stacking on top of the air blower about the air stream. Each playing piece has an opening formed therein so that the openings of a stack of playing pieces define a path of travel for the air therethrough upwardly toward the ball. Each of the playing pieces also has a blocking portion surrounding the opening, the blocking portion being capable of blocking the air stream when interposed between the air blower and the ball as a player attempts to stack the playing pieces. The ball will fall to the ground whenever the air stream is interrupted a sufficient length of time by the blocking portion of a playing piece.

12 Claims, 6 Drawing Figures







FLUID STREAM GAME APPARATUS

BACKGROUND AND SUMMARY OF THE INVENTION

The present invention generally relates to game devices or the like.

It is the principal object of the present invention to provide a new and entertaining skill type game apparatus.

This and other objects of the present invention are accomplished in one form of the invention presently contemplated which includes means for direction a fluid stream generally upwardly, and an object supportable over the fluid directing means by the force of the fluid stream. A plurality of manually stackable playing pieces are provided. Each playing piece has an opening formed therein so that the openings of a stack of playing pieces can define a fluid stream path of travel when the stack is supported on the fluid directing means about the fluid stream. Each of the playing pieces also has a blocking portion surrounding the opening to block the fluid stream from supporting the object when interposed between the fluid directing means and the object when a player attempts to stack the playing pieces by passing the pieces through the fluid stream into stacking position. The object fails to be supported whenever the fluid stream is interrupted a sufficient length of time by a fluid blocking portion of a playing piece.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of the game apparatus of the present invention;

FIG. 2 is a vertical section, on an enlarged scale, taken generally along the line 2—2 of FIG. 1;

FIG. 3 is a vertical section taken generally along the line 3—3 of FIG. 2;

FIG. 4 is a generally schematic perspective view of the drive means employed in the game of the present invention;

FIG. 5 is a plan view of a plurality of playing pieces employed in the game of the present invention; and

FIG. 6 is a plan view of a chance device employed in the game of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Turning to FIG. 1 in greater detail, the game device of the present invention, generally designated 10, produces an upward fluid stream 12. The fluid stream 12 serves to support an object such as a lightweight ball 14 in the air over the apparatus. A plurality of ring-like playing pieces 16 are provided for stacking on top of the game device 10 so as to form a path of travel for the fluid stream between the apparatus and the upwardly supported ball 14. The general object of the game is to stack the playing pieces 16 onto the game device surrounding the fluid stream without interrupting the fluid stream 12 a sufficient length of time to cause the ball to fall.

Turning now to FIGS. 1, 2 and 3 in greater detail, the game device 10 is seen generally to include a housing 20 which mounts an air blower 22 therein. The blower 22 can take various forms such as a vane type rotary fan. The housing 20 is formed as a simulated engine or machine having an exhaust pipe 24 formed over the air

blower opening 25 which serves as the nozzle of the air blower through which the air stream 12 is directed upwardly.

Mounted in housing 20 and connected to air blower 22 is means to drive the air blower 22. The drive means, as best shown in FIG. 4, generally includes an air blower motor 26 connected to conventional batteries 28 mounted in a carriage 30 to supply power to the motor 26, and switch means, generally designated 32, for selectively turning the motor 26 on or off.

The switch means 32 includes two flexible spaced apart contacts 34 and 36 embedded in a mounting block 38 mounted inside of housing 20. Block 38 is mounted below and adjacent a slot 40 formed in the housing 20. Pivotaly mounted to the housing 20 and received in slot 40 is a handle 42 having a portion extending outside of the housing for manual manipulation, and a portion extending inside of the housing for engaging contact 36. When the outside portion of handle 42 is pivoted in the direction shown by arrows A, the portion inside of the housing moves contact 36 into touching relationship with contact 34 so that the electric circuit connecting the drive means is closed. To open the circuit and thus shut off the air blower motor 26, the handle 42 is moved in the direction opposite that of arrows A.

Turning now to FIG. 5, the playing pieces 16 are shown in greater detail. All of the playing pieces are generally in a ring-like, doughnut configuration. Each playing piece 16 has a generally flat annular disc-like blocking portion 48 surrounding a central circular opening 50. The openings 50 of all of the playing pieces 16 are substantially the same size.

Formed on the fluid blocking portion 48 and surrounding the opening 50 is an upstanding cylindrical stacking portion 52. Each playing piece 16 is adapted to be stacked on the stacking portion 52 of a lower playing piece. As can be seen in FIG. 2, when a plurality of playing pieces 16 are thus stacked, the openings 50 and stacking portions 52 define an open ended hollow cylinder having an air passageway 53.

The radial widths of the blocking portions 48 of the playing pieces 16 are different for reasons which will become more apparent hereinafter. The playing pieces 16 are colored so that all those playing pieces having the same width blocking portion 48 are colored the same. It should be noted that the width of just the stacking portion 52 can comprise the air blocking portion 48, as shown in the lowermost playing piece shown in FIG. 5.

A chance device 56, in the form of a spinner, also is provided for use in association with the above described game device 10. The spinner 56 has a face which is divided into different pie-shaped sections, each section having a color designation which is written or represented thereon corresponding to each of the different colors of the playing pieces 16. One section of the face of spinner 56 has "pass" indicated or represented thereon.

To play the game, the playing pieces 16 are divided among two or more players. Each player should be given the same amount of each colored playing piece 16. The air blower 22 then is turned on by moving handle 42 in the direction of arrow A shown in FIG. 4. The ball 14 then is balanced in and on the air stream 12 produced by the blower 22 so that it is supported directly over the nozzle or exhaust portion 24 of the housing 20.

The first player then takes his turn by spinning spinner 56. If the spinner points toward a color, that player must attempt to place the playing piece 16 corresponding to that color on top of the nozzle 24. It is to be noted that while a player is thus placing his playing piece as described, the blocking portion 48 thereof will momentarily cut off the air stream 12 that is supporting ball 14 as the playing piece is moved into position surrounding the air stream as shown in FIG. 2. The more hesitant a player is in placing his playing piece on the nozzle, the greater probability that the air stream 12 will be interrupted a sufficient length of time so that the ball 14 will fall to the ground. Likewise, if a playing piece having a large fluid blocking portion (e.g., the top playing piece in FIG. 5) is to be placed on the nozzle 24, the piece must be moved into position faster or else there is a greater chance that the interruption of the air stream 12 would be of longer duration than the placement of a playing piece having a smaller fluid blocking portion 48 (e.g., the bottom playing piece in FIG. 5).

If the spinner 56 points toward a "pass", then that player is not required to place a playing piece 16 on top of the nozzle 24. Also, should the spinner direct that a certain colored playing piece should be placed on the nozzle 24 and that particular player no longer has any playing pieces of that color, that player either may get a free pass or a choice of which playing piece he desires to place on the nozzle 24, depending on the rules of the game.

If a player is successful in placing his playing piece 16 on nozzle 24 without causing the ball 14 to fall to the ground, the next player takes his turn. Instead of placing his playing piece 16 on top of the nozzle 24 directly, the next player places his playing piece on the stacking portion 52 of the previously positioned playing piece. As pointed out before, as the stack of playing pieces gets larger, the openings 50 and stacking portions 52 of the playing pieces form a cylindrical fluid path of travel from nozzle 24 up to the ball 14 supported thereover. As seen in FIG. 2, the passageway 53 through the playing pieces also can be made irregular during the course of play to diminish the consistency of the air flow and thus the greater chance of dropping the ball.

Should a player be unsuccessful in placing his playing piece on the stack and thus causing the ball to fall to the ground, that player can be penalized. One penalty could be that that player must take all the playing pieces then stacked on nozzle 24, and the first player to get rid of all of his playing pieces 16 is the winner. Player elimination by causing the ball to fall also could be the scheme of play.

The foregoing detailed description has been given for clearness of understanding only and no unnecessary limitations should be understood therefrom as some modifications will be obvious to those skilled in the art.

I claim:

1. A game apparatus comprising:

fluid directing means for directing a fluid stream generally upwardly;

an object which is supportable over said fluid directing means by the counteracting forces of gravity and of said fluid stream; and

a plurality of manually stackable playing pieces each having an opening formed therein, the openings of a stack of playing pieces defining a fluid stream path of travel when properly positioned on said fluid directing means, each of said playing pieces

having a fluid blocking portion surrounding said opening which blocks the fluid stream from supporting said object when interposed between said fluid directing means and said object whereby said object fails to be supported whenever the fluid stream is interrupted a sufficient length of time by interposition of the fluid blocking portion of a playing piece.

2. The game apparatus of claim 1 wherein said fluid directing means includes a nozzle upon which said playing pieces are stackable.

3. The game apparatus of claim 1 wherein said fluid directing means is an air blower.

4. The game apparatus of claim 1 wherein each playing piece is generally ring-shaped having a generally annular fluid blocking portion surrounding a generally central opening.

5. The game apparatus of claim 4 wherein each playing piece has an upstanding cylindrically shaped stacking portion formed on the fluid blocking portion and surrounding said opening so that the stacking portions of a plurality of stacked playing pieces form a hollow cylinder.

6. The game apparatus of claim 1 wherein the fluid blocking portions of certain playing pieces are of different widths so that the fluid stream will be blocked for different time periods when they are moved into stacked position on said fluid directing means.

7. The game apparatus of claim 6 including a chance device to determine which playing piece a particular player must stack on said fluid directing means.

8. The game apparatus of claim 1 wherein said object is a generally lightweight spherical ball.

9. A game apparatus comprising:

a housing having an air blower mounted therein and a nozzle formed thereon for directing an air stream generally upwardly from the air blower;

a lightweight spherical ball which is supportable over the nozzle by the force of the air stream; and

a plurality of manually stackable playing pieces each having a generally flat ring-shaped annular fluid blocking portion, the annular width of the fluid blocking portions of certain playing pieces being of different widths, a generally centrally located opening defined by the interior periphery of said fluid blocking portion through which the air stream can pass when the playing pieces are properly stacked on top of said nozzle, an upstanding cylindrically-shaped stacking portion formed on the fluid blocking portion and surrounding said openings so that the stacking portions of the plurality of stacked playing pieces form a hollow cylinder and define an air stream path of travel when said stack of playing pieces is supported on the nozzle, whereby said ball is caused to fall whenever the fluid blocking portion of a playing piece is interposed a sufficient length of time between the nozzle and the ball thereby interrupting the fluid stream when the playing pieces are moved to stacking position.

10. The game apparatus of claim 9 including a chance device to determine which annularly dimensioned playing piece a particular player must stack on the nozzle.

11. The game apparatus of claim 9 wherein said playing pieces each include an upstanding cylindrically shaped stacking portion formed on the fluid blocking

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portion and surrounding said openings so that the stacking portions of the plurality of stacked playing pieces form a hollow cylinder and define an air stream path of travel when said stack of playing pieces is supported on the nozzle.

12. A game apparatus comprising: a housing having means thereon for directing a forced stream of air in a generally upward direction, an object supportable in said stream of air by the counteracting forces of gravity and the forced air stream, and a plurality of different

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size playing pieces movable through said stream of air beneath said object, each playing piece having an opening formed therein defining a fluid stream path of travel therethrough capable of supporting said object and a fluid blocking portion about at least part of said opening for temporarily interrupting said forced air stream in an attempt to transversely move the fluid blocking portion of a playing piece through the forced air stream without causing the object to fall.

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