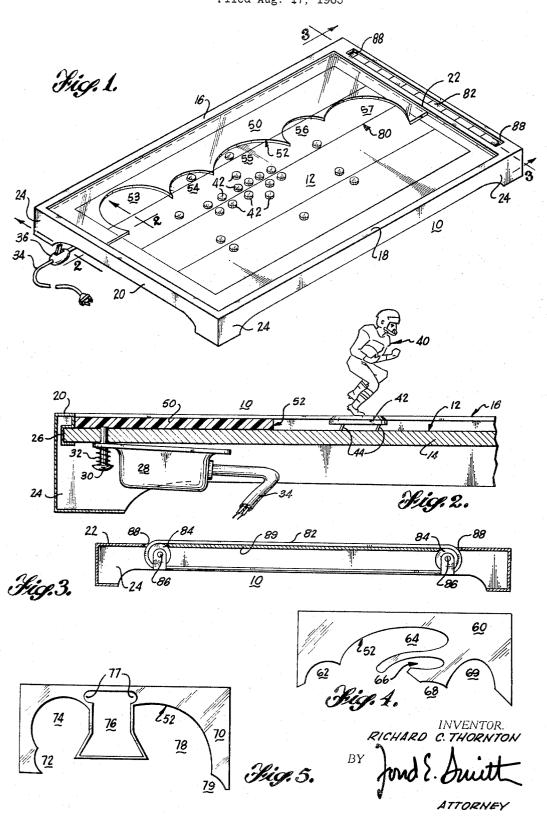
VIBRATING GAME BOARD HAVING PLAYER GUIDE MEANS Filed Aug. 17, 1965



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3,400,931 VIBRATING GAME BOARD HAVING PLAYER GUIDE MEANS Richard C. Thornton, Woodinville, Wash. (702 19th St. NW., Washington, D.C. 20006) Filed Aug. 17, 1965, Ser. No. 480,275 1 Claim. (Cl. 273—94)

ABSTRACT OF THE DISCLOSURE

On a vibratory surface a simulated football playing field is presented to receive a plurality of players divided into two teams. Vibration of the playing surface produces random movement of the players. Edged means, disposed over portions of the playing surface are contacted by the 15 moving players and tend to guide them into patterns simulating plays of a football game.

This invention relates to a game-board apparatus and, 20 more particularly, has reference to a game-board template to be placed upon a marginal portion of a playing area of a vibratory game-board over which flexibly supported playing pieces move under the effect of vibration.

A typical application of this invention is shown with 25 relation to a simulated football game in which the "players," i.e. playing pieces, are first arranged in a lineup under non-vibratory conditions and then caused to move upon application of the vibratory action to the playing surface in what are commonly called "plays."

An object of this invention is to provide a template or pattern piece for varying such plays into pass plays, line bucks, end plays, and the like depending upon the

choice of the game player.

Still another object of the invention is to provide a 35 game-board template which is so designed as to be contacted by vibratorily moved playing pieces to shape or direct their travel out of or into the playing area without the playing pieces being overturned or inadvertently taken out of play.

A still further object of the invention is to provide a game apparatus which is simple and easy to construct and which may include interchangeable parts suitable for varying the guiding effect upon the playing pieces in accordance with the desires and wishes of a person playing 45 the game, and which may be constructed inexpensively and economically.

Having in mind the foregoing and other objects which will become more apparent during the course of this specification, references made to the specification which fol- 50 lows in view of the accompanying drawings in which is illustrated the preferred embodiment of the invention.

In the drawings:

FIGURE 1 is a perspective view of the playing area of game apparatus as adapted to be played in accord- 55 ance with this invention;

FIGURE 2 is a fragmentary, vertical, sectional view taken on line 2-2 of FIGURE 1;

FIGURE 3 is a vertical sectional view across an end of the playing board taken on lines 3-3 of FIGURE 1; 60

FIGURES 4 and 5 are planned views illustrating alternative forms that the edges of the template may assume.

Referring particularly to FIGURE 1, a playing board designated as a whole by the numeral 10 may comprise 65 a playing surface 12 provided by an edge-supported planar relatively thin panel 14 which may be either metal, or thin plastic sheet material, or a reintegrated fiber sheet of the type known as "Masonite". As shown, the playing board 10 has a marginal frame comprising sides 16 and 18 and ends 20 and 22 all of which are joined in rectangular form at the respective corners. Legs 24 may be

provided to support the same from a table or the like. As shown, the sides 16 and 18 and ends 20 and 22 preferably have channels 26 on their inner surfaces which receive and embrace the edges of panel 14.

FIGURE 2 shows a vibratory device 28, flexibly sesured to the underside of panel 14 by a rivet or bolt 30 and spring 32. Electric current is supplied to the vibratory element 28 by cord 34 and the flow of current is controlled by switch 36. Ordinarily the vibratory device 28 is operable on 110-115 v. current. Upon the application of current, a vibrator within device 28 imparts a high frequency vibratory motion to the panel 14.

A playing piece 40 may be a molded plastic replica, for example, of a football player modeled in charging, running or throwing postures. The player is mounted upon a base 42 from the under-surface of which protrudes flexible supports 44 which may be thin strips of sheet material formed of paper stock, synthetic plastics, or thin metal or the like. It is preferable that the strips 44 be quite flexible to respond to vibrations of board 12. They rest upon the upper surface of the board 14 when the latter is vibrated and a vibratory or jiggling action is applied to the base 42. The result is that the player 40 is caused to move more or less at random over the playing surface.

The playing area 12 is preferably divided into graduated lines and may represent a portion or all of a footfall field. I have elected to illustrate the playing area 12 as embracing approximately 20 yards of a conventional 100 yard long football field since under normal circumstances, this is sufficient to embrace the majority of the plays occurring during a game.

In FIGURES 1, 4 and 5 are illustrated three forms of game-board templates-50, 60 and 70 respectively. These templates have been found to be suitable for playing football games with a reasonably accurate simulation of the normal type of plays that would occur in a real game. The templates 50, 60 and 70 may be described as player guide means. They are preferably formed of thin sheet material which may be synthetic plastic, metal, cardboard, or paper stock. Desirably, they are proportioned to fit between the end walls 20, 22 and to lie against a side wall as, for example, wall 16. Or obviously they may be designed to lie against an end wall and a side wall in one of the corners of the playing board. Each of the several forms of templates includes an edge 52 that faces the adjacent playing area and is so shaped and curved as to partially bound an action area for players on the playing surface.

In template 50 it will be noted that the edge 52 has a series of scallops 53, 54, 55, 56 and 57 which seriatim bound five different action areas. The shape of the edge 52 on template 60 varies in that action areas are bounded by scallops 62, 64, 66, 68 and 69. This series of scalloped or arcuately embraced areas provides a different pattern of action area for the players on the playing surface. Referring to FIGURE 5, the template 70 also has a series of arcuate scallops 72, 74, 78 and 79 but includes a framed area 76 which is closed to the remainder of the playing area to contain certain players. Portions as shown in FIGURE 5 of the area 76 are likewise curved as at 77 to cause a player to be turned and redirected in a diverting action within the action area 76.

The function of the template occurs under the effect of vibratory action applied to the playing board by element 28. For the purpose of illustrating the game function, in FIGURE 1 a number of players 40 have been disposed on the board in what might be considered a typical line-up. Let us assume that line 80 represents the line of scrimmage from which point play begins. The players on the near side of line comprise one team which may be called the defensive team. The players on the far side of line 80 in FIGURE 1 may be considered the

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offensive team. Persons playing the game select the arrangement of players in accordance with their judgment of the defensive play.

When the two teams are arranged on the field as the persons playing the game desire and judge best, vibratory action of number 28 is started and the play begins. With particular reference to the offensive players, it will be understood that vibration will cause some of them to move forward, others to move randomly to the side, and still others will move to the rear. Those players, the base of which come in contact with the edge 52 will be diverted and directed within their respective action areas depending on the shape of the portion of the template with which contact is made.

Where the template has a scalloped appearance as in FIGURE 1, the players are generally directed laterally by being turned to one side or the other of the point of contact. Or they may tend to follow the curve of the template until they come to one of the pointed junctures between the scalloped portions of the template whereupon, largely depending on chance, they move out into the playing field or continue to follow into the next embraced portion of the action area. In the case of the area 76 of template 70 which is a template particularly designed for a pass play, any players within the area 76 would necessarily be trapped or confined much in the manner of a passer and his pursuers in a real football game.

In FIGURES 1 and 3 is shown an endless tape 82 which passes around rollers 84, suitably mounted in the frame of the game-board 10 on pins 86. The rollers 84 are disposed in openings 88 in the end 22 of the board. Tape 82 lies upon the upper surface 89 between openings 88, 88 as shown in FIGURE 3. The tape 82 is graduated to simulate yard divisions and is numbered five, ten, fifteen etc. Tape 82 is used to keep track of the advance or retraction of the play much in the manner in which the linesmen similarly records such playing action.

It will be obvious to those skilled in the art that changes and alterations may be effected in the application of this invention to varying game circumstances. Therefore the 40 specifics of the foregoing disclosure are intended to be illustrative only and all such variations, alterations and modifications as may occur to those skilled in the art

that fall within the scope and spirit of the sub-joined claims are intended to be covered by this application having due regard to the appropriate doctrine of equivalence.

Having thus described the invention, what is claimed is:

1. Game apparatus, comprising:

horizontally, planar diaphragm means forming a miniature, simulated football playing surface having a playing area delineated within its boundaries;

means associated with said diaphragm means to impart vibration thereto;

a plurality of vibratorily movable players disposed on said playing surface and constituting an offensive team and a defensive team;

player guide means superposed on said playing surface and having an edge shaped to bound partially an action area within the playing area, to limit freedom of movement of the players, said shaped edge being normal to the playing surface for contact by players thereon moving under the effect of vibration to direct and divert player movement within the action area; and

said player guide means comprising a thin sheet disposed on said diaphragm and having a plurality of concave scallop portions, each partially bounding an action area, said plural scallop portions being serially arranged in general alignment behind the offensive team initiating a play and in opposition to an opened field behind the defensive team, there being a pointed projection between the adjacent pairs of scallop portions.

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