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**SOUNDING GAME MAT**

Joney Sam, 1031 Stanyan St., San Francisco, Calif.

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This invention relates to games, and more particularly it relates to a portable game appliance for playing a game of hopscotch.

In the well known game of hopscotch it is necessary to delineate a series of areas arranged in a predetermined pattern on the ground. The game is then played by hopping from one area to the other in accordance with certain known rules. Ordinarily the game requires a flat area on which is a rather well defined pattern of squares or other areas. Heretofore, such patterns were formed by marking the area on the ground or on an existing paved surface. This generally limited the game to being played outdoors. One object of the present invention is to provide a portable hopscotch appliance that can be rolled out onto a flat surface such as a sidewalk or a floor with areas premarked thereon in the desired pattern, thus enabling the game to be played either indoors or outdoors without having to mark or mar the paved surface.

Another object of my invention is to provide a portable hopscotch appliance that will emit a sound when certain of the areas in the hopscotch appliance are touched as the game is played. By introducing this sound producing factor in the hopscotch game many variations of the rules of the games can be made to increase its interest among children. For example, the sound for different cells on the appliance may be varied in tone and correlated with the particular numerical symbol for that particular cell.

Still another object of my invention is to provide a portable hopscotch area delineating appliance having air cells in prearranged areas and in combination with a sound producing means wherein the means is mounted so that it will not be damaged even after the prolonged use of the device.

Another object of the invention is to provide a portable appliance for the playing of hopscotch which is formed of flexible material so that it can be readily rolled or folded into a small bundle for shipping or storage.

Still another object of the invention is to provide an appliance for playing the game of hopscotch which will be durable and efficient in use, while also being easy to manufacture at a relatively low cost.

Other objects and advantages of the invention will be apparent from the following description, reference being had to the accompanying drawings wherein preferred embodiments of the invention are illustrated.

In the drawings:

FIG. 1 is a view in perspective of a sounding hopscotch mat embodying the principles of the invention;

FIG. 2 is a view in elevation and in section taken along the line 2—2 of FIG. 1;

FIG. 3 is a view in perspective of a modified form of sounding hopscotch mat according to the invention;

FIG. 4 is an enlarged fragmentary view in elevation and in section showing a portion of the mat in FIG. 3 with the sound producing means mounted in a corner location.

Referring to the drawings, in FIGS. 1 and 3 are shown two separate embodiments 10 and 11 of my sound producing hopscotch mat as they appear when spread out on a flat level surface such as the ground or floor. Both of the mats 10 and 11 are subdivided into areas 12 of a predetermined size and shape forming thereby a particular hopscotch game pattern. The preferred mat con-

figuration as shown is comprised of ten squares of any convenient size, generally about 18 to 24 inches, that are arranged to form a standard hopscotch pattern. The squares 12 may be clearly delineated by marking lines 13 on the surface of the mats 10 and 11, and in each square, a numeral or some other appropriate symbol is also painted on the upper mat surface to conform with the particular hopscotch game pattern. Other arrangements comprising different hopscotch patterns having areas with various geometric shapes and number sequences could, of course, be used within the scope of the invention.

On each of the mats 10 and 11 all or a preferred number of the subdivided areas 12 or squares are provided with air filled cells 14. Associated in combination with each of the cells 14 is a sound producing device 15 that is actuated when during the course of the hopscotch game a player hops on a cell 14 and depresses it.

Turning now to the embodiments shown in FIGS. 1 and 2, and to the specific structural details thereof, the mat 10 is comprised of a central layer or sheet 16 of material that is cut to the overall desired configuration. The sheet 16 is made of some suitable flexible material such as a plastic or rubber impregnated fabric material. Such well known materials are inexpensive and are also extremely durable when the fabric material is made from a synthetic material such as nylon. The air cells 14 in each of the squares 12 on the mat 10 are formed by an upper layer 17 of a resilient rubber or plastic material. As shown in the embodiment of FIGS. 1 and 2 the layer 17 may be molded as an integral member having a plurality of spaced apart raised portions or blisters 18 separated by co-planar flat areas 19. Each raised portion or blister 18 is resiliently flexible so that it can be readily depressed but will snap back into its preformed shape when pressure is released from it. In each of the squares 12 the interconnecting flat areas 19 around each raised portion 18 of upper resilient layer 17 is firmly attached to the central sheet 16 by some suitable means such as an epoxy plastic cement, or some suitable bonding material. The cells 14 may be formed by individual upper layer members fixed to the central sheet as shown in FIGS. 3 and 4 rather than a continuous upper layer, if preferred, but in either case the cell 14 is tightly sealed to the central layer or sheet 16 around the edges of the cell.

On the mat 10 the central mat layer 16 is provided with a plurality of air holes 20, each of which is preferably centrally located in a square having a cell 14 fixed thereto. Above each hole 20 with the surrounding cell 14 is mounted one of the sound producing devices 15, which can be any suitable type of air-actuated whistle such as the type commonly used in various types of toys. Generally each whistle 15 comprises upper and lower curved disc members 22 that are attached together at their edges and which have centrally located aligned ports 23 that produce a whistling sound when air is forced through them. A whistle 15 is bonded to the central sheet 16 within each air cell 14 so that its ports 23 are in line with an air hole 20.

Below the central layer or sheet 16 I may attach a lower layer 24 of a more resilient material such as a thin layer of sponge rubber. This resilient material 24 which has holes 25 aligned with the holes 20 of the central layer 16, serves to cushion the force of stepping on each of the air cells 14 while also allowing the air to escape readily from the cell through the sound producing device 15 and the openings 20. Also, when the pressure on the air cell 14 is released, the resiliency of the lower layer 24 raises the central sheet 16 slightly and makes it easier for air to pass back through the bottom of the mat 10 into the cell.

In the modified mat 11 shown in FIGS. 3 and 4, the same hopscotch pattern is utilized with the mat 11 subdivided into squares 26 and marked in the preferred manner. However, in this embodiment I provided a different form of sound producing means 27 and here they are attached near the periphery of each of the sound producing squares 27 of the mat 11. As shown in FIG. 4, the basic construction of the mat 11 is essentially similar to the mat 10 in that it has a central mat layer 28 and a plurality of air cells 29 that are located within all or any desired number of squares 26. Here, the air cells 29 are provided by upper mat layer members 30 of resilient rubber or rubber like material each having a raised blister portion 31 surrounded by a peripheral flange 32 that is bonded in the aforementioned manner to the central layer 28. Each of the sound producing devices 27 has a cylindrical shape with an axial passage providing a two way flow of air that produces a whistling noise when the air is forced out of a cell 29. The whistle 27 may be provided with a reed 33 for producing sound of any desired pitch when air is forced through it.

When playing a game of hopscotch with my invention the participants follow the usual hopscotch rules. With the mat conveniently spread out on the ground surface or a floor each participant proceeds to hop from one square to the next according to the usual procedure. However, in stepping on a square 12 or 26 the raised portions or blisters 18 or 31 are compressed and air is forced from the air cell 14 or 29 through the sound producing devices 14 or 27. When pressure is released from the air cell, the resiliency of the upper layer causes the cell to snap back to its normal shape thereby causing air to flow back into the cell.

In constructing a hopscotch mat according to the invention, I may add an additional element of enjoyment to the participants by varying the tone or pitch of the sound produced in each of the squares. For example, I may use different sized reeds as 33 in the sound producing devices 27 shown in FIG. 4.

By producing a sound as a child hops from one square to another, the game of hopscotch is enlivened to a considerable degree and the variations in sound produced correlated with the numbers inscribed on each of the squares provides a means for greatly expanding the enjoyment of the game. My hopscotch mats, though durable and of ample size may be folded into a relatively small package for shipment or storage and yet can be easily spread out on any flat surface to solve the problem of providing a suitably marked playing area.

To those skilled in the art to which this invention relates, many changes in construction and widely differing embodiments and applications of the invention may suggest themselves without departing from the spirit and scope of the invention. The disclosures and the description herein are purely illustrative and are not intended to be in any sense limiting.

I claim:

1. A portable, foldable sound producing mat for playing the game of hopscotch comprising in combination, a flexible sheet of air tight material, means attached to the upper surface of said flexible sheet forming a plurality of resilient air filled cells spaced apart in a predeter-

mined pattern thereon, air passage openings in said flexible sheet and located generally centrally within said air cells, a sound producing whistle means mounted on said sheet at each of said openings within a said air cell, whereby the pressure applied to a cell during the playing of a game on said mat forces air from the cell through its associated sound producing means.

2. The device of claim 1 including a lower layer of resilient material bonded to said flexible sheet and having openings aligned with said air passage openings in said sheet.

3. A portable foldable sound producing mat for use in playing the game of hopscotch, comprising in combination, a sheet of flexible air tight material, an upper layer of resilient material attached to the upper surface of said sheet forming a plurality of pre-shaped, resilient air filled cells spaced apart in a predetermined pattern on said sheet, a sound producing means retained between said upper layer and said sheet and extending from the outer edge of each of said air cells, each said sound producing means providing a two way air passage to said air cell, whereby when the game is being played, a sound is emitted each time an air cell is depressed.

4. The device as described in claim 3 wherein each said sound producing means comprises a cylindrical body portion having an axial passage and a vibrating reed member retained within said passage.

5. The device as described in claim 4 wherein the reeds of the various sound producing means associated with said cells are of different lengths thereby varying the sound emitted from said air cells.

6. A portable sound producing appliance for delineating a game field, comprising a plurality of resiliently collapsible air-retaining cells of flexible, air impervious material, said cells being arranged in a predetermined spaced apart relationship in generally the same plane and thereby forming a particularly prearranged pattern on said appliance, each of said cells having an outside air passage; flexible means for interconnecting said cells and retaining them in said prearranged pattern; indicia on said flexible means for defining game areas containing said cells; and a whistle means associated with each of said cells and located adjacent its said outside air passage, said whistle means adapted to produce a sound when the cell is depressed as a game is played on the appliance.

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