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MAGNETIC GAME BOARD HAVING AN INTEGRAL, ROUGHLY GRANULATED UPPER SURFACE

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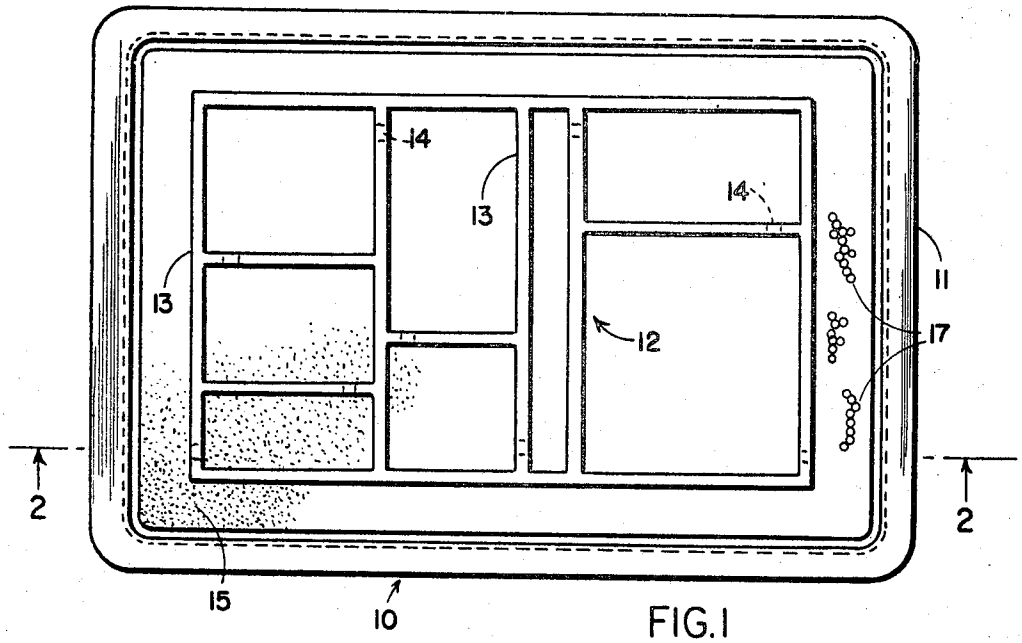


FIG.1

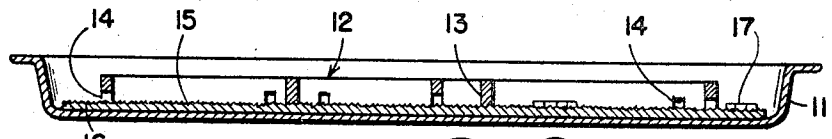


FIG.2

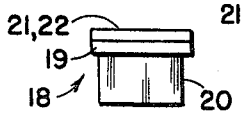


FIG.4

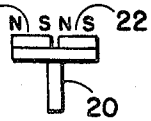


FIG.3



FIG.5



FIG.6

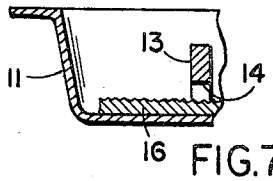


FIG.7

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MAGNETIC GAMEBOARD HAVING AN INTEGRAL, ROUGHLY GRANULATED UPPER SURFACE

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Int. Cl. A63f 9/14, 9/00

ABSTRACT OF THE DISCLOSURE

A game of skill, rather than of chance, substantially consisting of a game board having a roughly granulated surface provided with an obstacle, small magnetic pieces movable around or through the obstacle, the pieces being moved by a larger manually operated magnet held underneath the board.

Background of the invention

The present invention relates to games which require a certain skill and dexterity and which do not rely upon luck or chance. The present invention further relates to games which are played on game boards and which use the property of relatively small magnetic pieces to be either attracted or repelled by a somewhat larger magnet, which is manipulated manually, causing movements of the small pieces on these boards. The larger magnet is operated underneath the game board.

There are many games which employ the use of magnets, mostly simulating "fishing" or moving little models of vehicles of all kinds across an even plane, simulating the surface of a field or sea. However, none of these games use magnetic pieces moved by magnets, thus subjecting the pieces to both magnetic attraction and repulsion. Likewise, none of these games employ a roughly granulated board surface which increases the activity of the pieces.

Summary

The present invention consists in such novel features, construction arrangements, combinations of parts and improvements as may be shown and described in connection with the apparatus herein disclosed by way of example only and as illustrative of a preferred embodiment. Objects and advantages of the invention will be set forth in part hereafter and in part will be obvious herefrom or may be learned by practicing the invention, the same being realized and attained by means of the instrumentalities and combinations pointed out in the appended claims.

It is an object of the present invention to provide an obstacle on a roughly granular game board and to provide a plurality of substantially small magnetic pieces which can be moved across the board and through or around the obstacle.

A further object of the present invention is to provide manually operable magnets, which are substantially larger than the small magnetic pieces and which can be moved freely underneath the board, to move the small pieces.

Another object of the present invention is to provide a sturdy and attractive game which can be manufactured easily and economically.

A still further object of the invention is to provide a novel game, which can be played by several people, which is highly amusing and entertaining.

Various further and more specific purposes, features and advantages will clearly appear from the attached description given below taken in connection with the accompanying drawing which forms part of this specification and illustrates merely by way of example one embodiment of the device of the invention.

Brief description of the drawing

In the following description and in the claims, parts will be identified by specific names for convenience, but such names are intended to be as generic in their application to similar parts as the art will permit. Like reference characters denote like parts in the several figures of the drawing, in which

FIG. 1 is a plan view of the game board with a maze thereon;

FIG. 2 is a cross section of the game board shown in FIG. 1, taken along the line 2—2 in the direction of the arrows;

FIG. 3 is a front view of the manually operable magnet;

FIG. 4 is a side elevation of the magnet shown in FIG. 3;

FIG. 5 is a plan view of one of the smaller magnetic pieces;

FIG. 6 is a side view of the pieces shown in FIG. 5; and

FIG. 7 is an enlarged cross section of the board, partly broken away, along the line 2—2 of FIG. 1.

Description of the preferred embodiment

Referring now in more detail to the drawing illustrating a preferred embodiment by which the invention may be realized, there is in FIG. 1 a game board designated by the general numeral **10**, which may be flat but which preferably consists substantially of a relatively shallow, dished tray **11**. Tray **11** may be made of light-weight non-magnetic material, preferably of a stiff plastic. In tray **11** is a maze **12**, the walls **13** of which have gates **14** leading from one "compartment" of maze **12** to another. The surface **15** of board **10** has a substantially uneven or roughly granulated surface. It may consist of a thin layer **16** of plastic with such a surface.

A plurality of small, thin pieces **17** may freely move over the granulated surface. Pieces **17** are preferably thin disks and preferably consist of a material having a permanent magnetism on the outside cylindrical surface, thus having distinct North and South poles. They may be made of any conventional magnetic material, or of a magnetic plastic or rubberlike material, for example of "Koroseal." A substantially larger magnet **18** is provided which move pieces **17**. Magnet **18** preferably consists of a flat strip **19** having an upright center handle **20** to be held between thumb and forefinger of the hand of the player (FIGS. 3 and 4). Two bar magnets **21, 22** are affixed to the surface of strip **19** opposite handle **20**. Magnets **21, 22** may be made of any conventional permanent magnetic material, but are preferably made of the same material as pieces **17**, such as "Koroseal."

The operation

The game may be played by two or more persons where each player is given a game board **10**, a plurality of small pieces **17** and one magnet **18**. Pieces **17** are placed on surface **15** outside walls **13** where they will adhere to one another at random in the form of little chains or clusters. The players will start at the same instant to set pieces **17** in motion by moving magnet **18** below board **10**, attempting to guide them successively through gates **14** through all compartments of maze **12**. The first player to get all his pieces through to the end of the maze wins the game. Obviously any other system or rules may be established, for example by using one board and timing the player from start to finish or by setting up a scoring system whereby one player may be through the maze before the next other one reaches a certain point of the maze, or similar rules. Another version may consist of a race game in which the players must separate the pieces and re-assemble them in new groups of the same color. Obviously pieces **17** would have to be made in several

different colors in this case. It is apparent that this game is adaptable to any game in which magnetic pieces are moved over a roughly granulated surface, by manual operation of a larger magnet, through any sort of obstacles to a destination. The maze version shown is one example of such an obstacle.

A vivid animation of pieces **17** is attained by rapid movements of magnet **18** below board **10** since the magnetic pieces are passed through a field of the larger magnet. This animation is further increased by floor **15** having a granulated, random multiplaned, uneven surface. As pieces **17** are drawn over the irregular surface, their poles attract and repel each other more than they would do on a smooth, planed surface, thus causing a much more rapid variation in the polar attraction and repelling resulting in an "excited" animation. It is this uniqueness of these features that distinguishes this highly amusing and entertaining novel game from all hiterto known magnetically propelled games.

While the invention has been described and illustrated with respect to a certain preferred example which gives satisfactory results, it will be understood by those skilled in the art after understanding the principle of the invention, that various other changes and modifications may be made without departing from the spirit and scope of the invention and it is intended therefore in the appended claims to cover all such changes and modifications.

We claim:

1. A game comprising a board having an integral roughly granulated upper surface, an obstacle on said surface, a plurality of magnetic pieces freely movable on said surface and around said obstacle, and a manually operated magnet larger than said pieces, whereby said magnet may be operated to move said pieces around said obstacle.

2. A game according to claim **1**, wherein said pieces consist of substantially cylindrical disks.

3. A game according to claim **2**, wherein said disks have magnetized peripheries.

4. A game according to claim **1**, wherein said board is a substantially shallow tray.

5. A game according to claim **1**, wherein said pieces and said magnet consists of a resilient magnet material.

6. A game according to claim **1**, wherein some of said pieces have a color different from that of the other said pieces.

7. A game according to claim **1**, wherein said obstacle is a maze, said maze consisting of compartments, walls separating said compartments from one another, and gates in said walls, said pieces being freely movable through said gates.

8. A game according to claim **7**, wherein said pieces consist of substantially cylindrical disks.

9. A game according to claim **8**, wherein said disks have magnetized peripheries.

10. A game according to claim **7**, wherein said board is a substantially shallow tray.

11. A game according to claim **7**, wherein said pieces and said magnet consist of a resilient magnetic materail.

12. A claim according to claim **7**, wherein some of said pieces have a color different from that of the other of said pieces.

References Cited

UNITED STATES PATENTS

2,749,127	6/1956	Kittel	46—240 XR
3,045,393	7/1962	Knott	273—1 XR
3,106,042	10/1963	Roethler	46—240

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