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(54) Changeable maze pattern structure.

(57) This disclosure relates to a changeable maze pattern structure, comprising pathways A1-A3, B1-B3, C1-C3, D1-D3 leading in different directions (A,B,C,D), an open space (2) within the maze connected to the pathways, and screens (4) having a common fulcrum (3) at the center of the open space (2). The screens (4) face generally in the various directions of the pathways, and the interconnection of the pathways, which are connected to each other via the open space, (2) is capable of being changed by the rotation of the screens (4), thus changing the maze pattern.

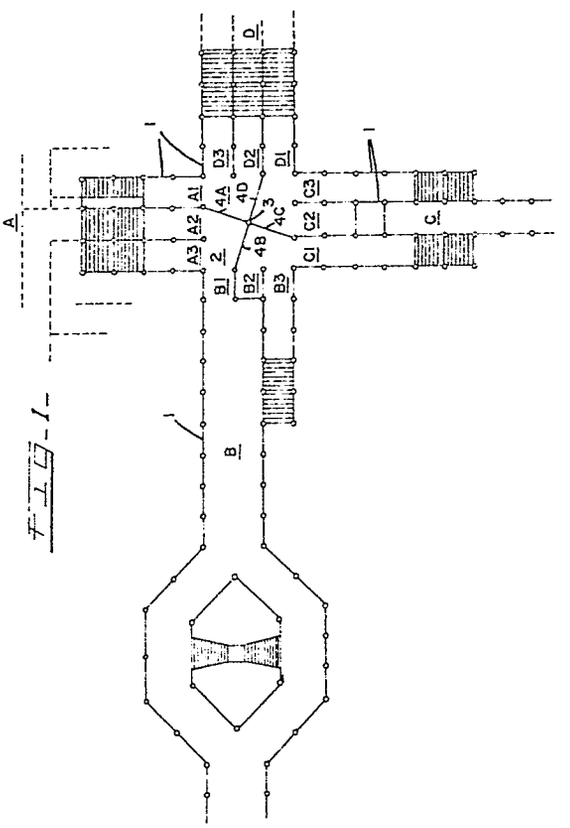

FIG. 1

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This invention relates to mazes of the character provided at amusement parks or other such facilities, which are constructed in such a manner as to allow persons to traverse the maze and to allow the maze pattern to be changed.

Mazes have long been constructed with an intricate network of walled pathways, some walled off to end in a blind or dead end and some open to allow passage therethrough. Such mazes are thus designed to provide enjoyment in the speedy discovery of the course of pathways capable of being traversed from the start to the finsh.

In this type of maze structure, the pathways are usually defined by walls taller than the height of an average person, and in order to provide the maze with variety, such addtional structures as open spaces leading to multiple pathways, decks reached by climbing stairs which allow an overview of the maze pattern from above the walls, and checkpoints to form whether or not the correct course has thus far been followed, are also sometimes included.

In such a maze as the type described, once a person has traversed it and remembers the correct course leading from the start to the finish, the ease with which the maze can be successfully traversed reduces the challenge and makes the maze less interesting. Thus, with this type of maze, the maze pattern, in other words the intricate combination of pathways, some of which are walled off to form dead ends and some of which are open to allow passage, is changed from time to time.

In the prior art, such changes in the maze pattern have been made by removing some of the walls which form the maze and reistalling them in different locations. However, the removal and repositioning of these walls require a considerable amount of time and labor.

In consideration of the problem described above, the general object of this invention is to provide a convenient means for changing a maze pattern, which makes it possible to easily and effectively change the maze pattern at a specified location.

Structure in accordance with this invention to achieve a changeable maze pattern structure comprises pathways leading in different directions, an open space within the maze connected to the pathways, and screens having a common fulcrum at the center of the open space. The screens face generally in the various directions of the pathways, and the interconnection of the pathways, which are connected to each other via the open space, is capable of being changed by the rotation of the screens, thus changing the maze pattern.

This invention will be better understood from the following detailed description taken in conjunction with the accompanying figures of the drawings, wherein:

Fig. 1 is a fragmentary plan view of maze according to an embodiment of this invention;

Fig. 2 is a front view of screens of the maze;

Figs. 3a, 3b and 3c are plan views illustrating the switching of the pathways; and

Figs. 4 and 5 are plan views of screens according to another embodiment of the invention.

With reference to Fig. 1 which shows a portion of a maze, a plurality of walls 1 form multiple pathways A1, A2, A3, B1, B2, B3, C1, C2, C3, D1, D2, and D3 which extend from, for example, four different directions A, B, C, and D. These pathways intersect and are connected by an open space 2. A vertical fulcrum support 3 (Figs. 1 and 2) capable of being rotated horizontally on a vertical axis is located at the center of the open space 2, and four screens 4A, 4B, 4C, and 4D extend in the four directions A, B, C, and D from the support 3. The four screens are capable of being rotated together with the fulcrum support 3, and the screens may be supported on rollers 5 shown in Fig. 2. As shown in Fig. 1, the screens extend from the support 3 to the ends of selected walls in the open space 2. The four directions A, B, C and D and the four screens 4A, 4B, and 4D are angularly spaced at 90° intervals.

The walls 1 terminate at the open space 2 at points indicated by the numerals 6 through 17 which are arranged in a square configuration. The points 6, 9, 12 and 15 form the corners of the square and the remaining points are intermediate the corners. In Figs. 1 and 3a, the ends of the four screens 4A, 4B, 4C and 4D are positioned closely adjacent the points 7, 10, 13 and 16, respectively. In Fig. 3b the ends of the screens are positioned closely adjacent the points 8, 11, 14 and 17 of the walls.

By rotation of the fulcrum support 3 together with the screens 4A, 4B, 4C, and 4D, the outer ends of the screens 4A, 4B, 4C, and 4D thus change the connections with the ends 6-17 of the walls which form the pathways A1, A2, A3, B1, B2, B3, C1, C2, C3, D1, D2, and D3, in the corresponding directions A, B, C, and D.

Consequently, as shown in Figs. 3a, 3b, and 3c, the rotation of the screens 4A, 4B, 4C, and 4D in the counterclockwise direction moves the ends of the screens from the points 7, 10, 13 and 16 (Fig. 3a) to the points 8, 11, 14 and 17 and then to the points 6, 9, 12 and 15 (Fig. 3c), thereby changing the connections between the pathways, either between pathways of the same direction or between pathways of different adjacent directions, and the pathways are interconnected via the open space 2.

Figs. 4 and 5 are plan views of screens in accordance with another embodiment of this inven-

tion. In this embodiment, the screens 4A, 4B, 4C, and 4D are constructed in such a manner that they are capable of being extended or shortened in the lengthwise direction of the screens. Thus, as shown in Fig. 4, the screens are shortened and extend between intermediate points 8, 1, 14 and 17. In Fig. 5 the screens are lengthened and extend between corner points 6, 9, 12 and 15. Consequently, in addition to providing the same switching of the pathways interconnected via the open space 2 as shown in the embodiment of Fig. 1 already described, this embodiment also allows the pathways to be interconnected via the open space 2 and be all of the same direction as shown in Fig. 5, with no switching to pathways of other directions.

Each of the screens shown in Figs. 4 and 5 may be constructed of an inner portion 18 secured to the fulcrum 3 and an outer portion 19 which is slidable on the inner portion 18.

It will be apparent that, as described above, this invention provides a changeable maze pattern structure comprising pathways leading in different directions, an open space connected to the pathways within the maze, and screens having a common fulcrum at approximately the center or the open space. The screens face in the different directions of the pathways, and the interconnections of the pathways, which are connected to each other via the open space, are capable of being changed through the rotation of the screens. Thus this invention provides a convenient means of easily and effectively changing the maze pattern at a specified location without necessitating the previously required troublesome task of removing and repositioning the walls which define the maze. In this way, by allowing the maze pattern to be changed, this invention makes it possible to enjoy new maze courses, thus not limiting the enjoyment of challenging the maze to just one time.

Claims

1. A changeable maze pattern stucture, comprising a plurality of walls forming multiple pathways leading in different directions, an open space connected to said pathways within said structure, a support fulcrum at approximately the center of said open space, and a plurality of screens attached to said fulcrum, said screens extending to adjacent said walls forming the different directions of said pathways, and said screens being rotatable on said fulcrum to different walls, whereby the interconnection of said pathways, which are connected to each other via said open space, are capable of being changed through the rotation of said screens.

2. A changeable maze pattern structure as set forth in Claim 1, wherein said multiple pathways leading in said different directions are arranged in multiple rows in each of said directions.

3. A changeable maze pattern structure as set forth in Claim 2, wherein some of said walls are more distant from said support fulcrum than other of said walls, and said screens include means for adjusting the length thereof.

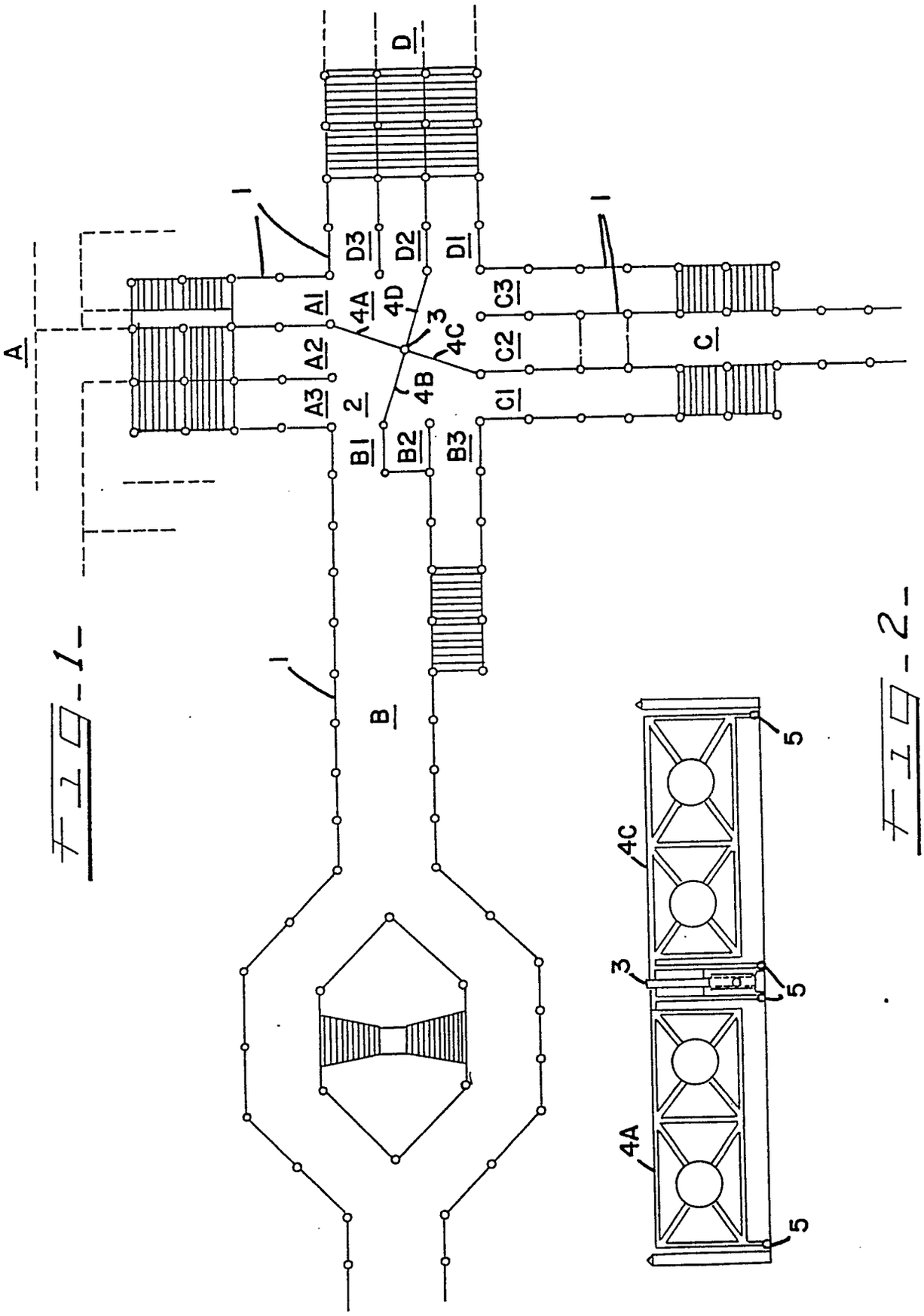

D
D3
D2
D1
A1
4A
4D
3
4C
C3
C2
C1
C
A
A2
A3
2
4B
B1
B2
B3
B
1
1
1
1

Fig-1

5
4C
3
5
5
4A
5

Fig-2

Fig 4

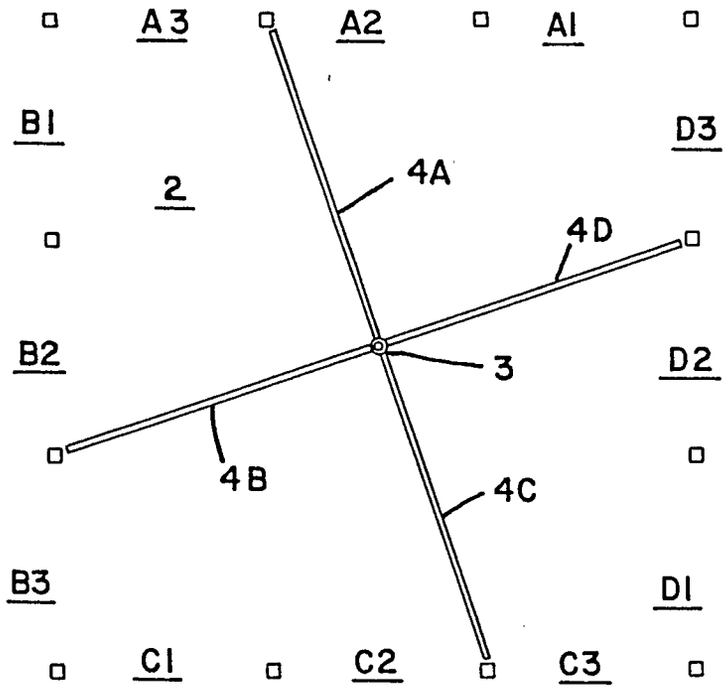
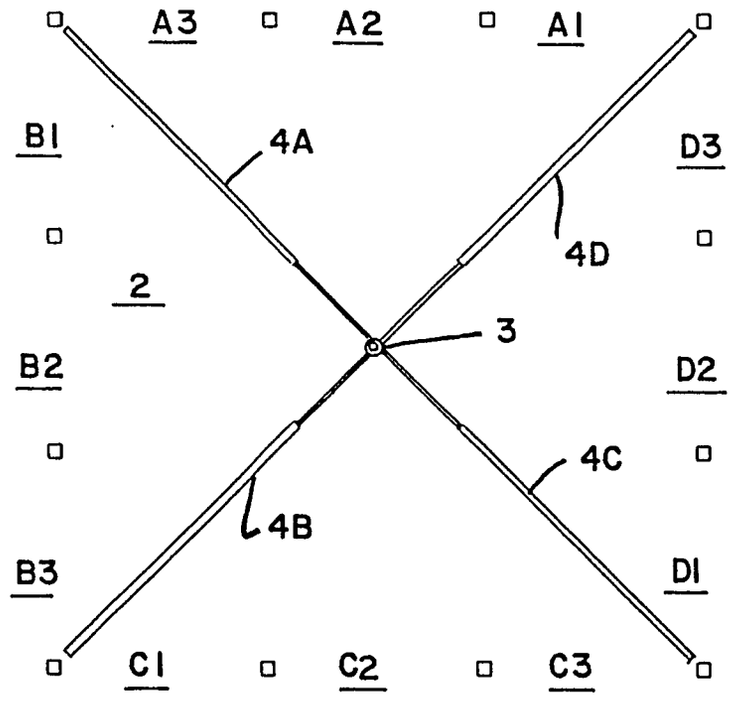


Fig 5



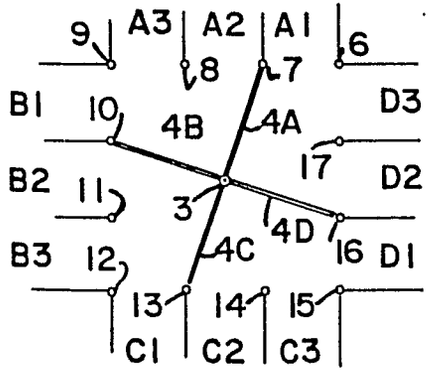


Fig 3a

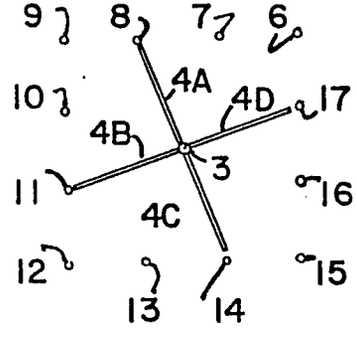


Fig 3b

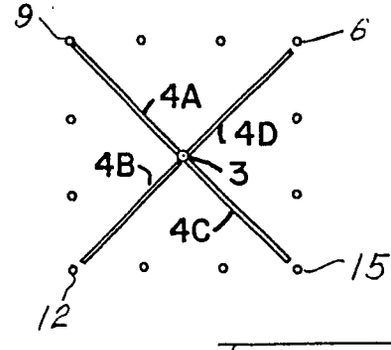


Fig 3c

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EUROPEAN SEARCH REPORT

Application Number

EP 87 30 4357

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	DE-C- 720 251 (ROTHENBURG) * Page 1, line 35 - page 2, line 7; page 2, lines 30-45; figure 1 *	1	A 63 J 11/00
Y	DE-A- 720 251	2,3	
Y	GB-A-1 223 699 (AIRWAYS CORP.) * Page 3, line 14 - page 4, line 9; figures 4a-4c *	2	
Y	DE-U-8 617 296 (GROTHKARST) * Page 8, lines 1-21; figures 2,6-8 *	3	
A	DE-A- 62 031 (BICKEL) * Figure 1 *	2	

TECHNICAL FIELDS SEARCHED (Int. Cl.4)

A 63 J
E 06 B
A 63 F

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	12-01-1988	SCHOENLEBEN J.E.F.

CATEGORY OF CITED DOCUMENTS

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