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(54) Three dimensional jigsaw puzzle

(57) A three dimensional jigsaw puzzle includes a topmost puzzle piece (1), a bottommost puzzle piece (20) and mediate puzzle pieces (2-19) of different dimensions. A connection device is provided between two adjacent puzzle pieces to facilitate combination of the two adjacent puzzle pieces such that an object is formed after the combination of all the puzzle pieces.

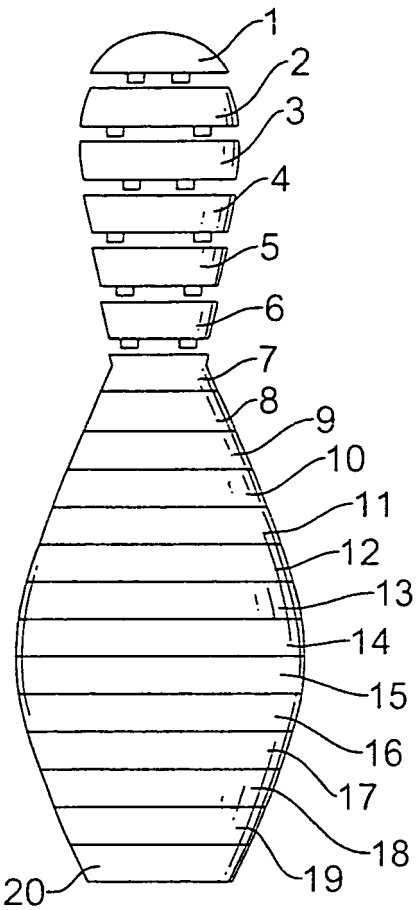

FIG.1

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Description

1. Field of the Invention

[0001] The present invention relates to a three dimensional jigsaw puzzle, and more particularly to a three dimensional jigsaw puzzle composed of multiple plates interconnected to one another so as to form a three dimensional object.

2. Description of the Prior Art

[0002] A conventional plan jigsaw puzzle is composed of multiple pieces each with multiple protrusions and cutouts. With the mutual correspondence between the protrusions and the cutouts, two adjacent pieces are connected together. Therefore, little by little, a complete picture is formed. The difficulty of the jigsaw puzzle depends on the number of the pieces involved. This kind of jigsaw puzzle does provide entertainment to the player. In order to increase the fun of playing with jigsaw puzzles, a three dimensional jigsaw puzzle is introduced to the market to challenge the player's patience and skill.

[0003] The 3D jigsaw puzzle is composed of multiple pieces and may somehow include a bladder. When the 3D jigsaw puzzle includes the bladder, the player is able to depend on the spherical contour of the bladder and place each of the pieces on the outer periphery of the bladder to manage to connect every two adjacent pieces. When there is no bladder provided to the 3D jigsaw puzzle, the player will have to depend on his/her own skill to gradually form a three dimensional pattern.

[0004] No matter what kind of jigsaw puzzle previously described, the pieces are interconnected to one another in a plan surface or a curved surface. That is, the space usage is confined and fixed and the challenge to the player's patience and skill is small.

[0005] To overcome the shortcomings, the present invention tends to provide an improved laminated 3D jigsaw puzzle to mitigate the aforementioned problems.

[0006] The primary objective of the present invention is to provide an improved three dimensional jigsaw puzzle having multiple pieces of different dimensions such that after the pieces are interconnected one another, a three dimensional object is formed.

[0007] Another objective of the present invention is that a connection device is provided to the three dimensional jigsaw puzzle to help position two adjacent pieces.

[0008] Still another objective of the present invention is that a box configured to have multiple receiving recesses defined to receive therein the pieces so that when the 3D jigsaw puzzle is not in use, the 3D jigsaw puzzle is compact for storage.

[0009] Other objects, advantages and novel features of the invention will become more apparent from the following detailed description when taken in conjunction with the accompanying drawings.

In the drawings:

[0010]

Fig. 1 is an exploded plan view of the 3D jigsaw puzzle of the present invention;
Fig. 2 is a plan view showing the assembled 3D jigsaw puzzle in Fig. 1;
Fig. 3 is a perspective view showing the connection device provided between two adjacent pieces;
Fig. 4 is a perspective view showing alternate connection device between two adjacent pieces;
Fig. 5 is a plan view showing that a box is provided to the 3D jigsaw puzzle;
Fig. 6 is a perspective view showing that a puzzle piece may be divided into halves to save space;
Fig. 7 is a perspective view showing that a puzzle piece may be provided with recesses to receive puzzle pieces of different dimension; and
Fig. 8 is a schematic plan view showing that an image is printed on the box for identification of the content inside the box.

[0011] With reference to Figs. 1-3, it is noted that the 3D jigsaw puzzle in accordance with the present invention includes multiple puzzle pieces. In this embodiment, reference numerals (1~20) are respectively assigned to a corresponding one of the puzzle pieces and the multiple puzzle pieces are divided into a topmost puzzle piece (1), a bottommost puzzle piece (20) and mediate puzzle pieces (2-19). A connection device is provided between two adjacent puzzle pieces to facilitate assembly of the two adjacent puzzle pieces. In this embodiment, a puzzle piece (2) is provided with connection rods (22) extending from a bottom thereof and connection holes (21) defined in a top face thereof. A puzzle piece (3) is provided with connection rods (32) extending from a bottom thereof and connection holes (31) defined in a top face thereof. With the extension of the connection rods (22) into the connection holes (31), the puzzle pieces (2,3) are combined. In addition, the connection rods extending from a bottom of the puzzle piece (1) are able to extend into the connection holes (21) of the puzzle piece (2) so as to combine the puzzle pieces (1,2). Alternate embodiment of the connection device, as shown in Fig. 4, is that the puzzle piece (2) is provided with magnetically positive material receive therein and the puzzle piece (3) is provided with magnetically negative material received therein such that the attraction between the magnetically positive material and the magnetically negative material facilitates the combination between two adjacent puzzle pieces (2,3).

[0012] With reference to Fig. 5, to facilitate storage and tidiness, a box (30) is provided and has multiple receiving recesses (301) defined therein to receive the puzzle pieces (1~20) of different dimensions. That is, each of the receiving recesses (301) is of different dimensions so as to accommodate the puzzle pieces (1~20).

[0013] With reference to Fig. 6, it is noted that each puzzle piece (1~20) may be divided into two halves so that when the puzzle pieces (1~20) are received in the box (30) (as shown in Fig. 5), every available space inside the box (30) is able to be used.

[0014] With reference to Fig. 7, a puzzle piece (15), for example, is provided with multiple recesses (155,157) such that two puzzle pieces (5,7) are able to be received in the puzzle piece (15). The purpose of the provision of the recesses in one puzzle piece is to save space in the box (30) and to organize the puzzle pieces (1~20).

[0015] With reference to Fig. 8, it is noted that an image may be printed on top of the box (30) so that a customer or a player of the jigsaw puzzle is able to identify the content inside the box (30) without the trouble of opening the box (30) to find out what exactly is received in the box (30).

[0016] It is to be understood, however, that even though numerous characteristics and advantages of the present invention have been set forth in the foregoing description, together with details of the structure and function of the invention, the disclosure is illustrative only, and changes may be made in detail, especially in matters of shape, size, and arrangement of parts within the principles of the invention to the full extent indicated by the broad general meaning of the terms in which the appended claims are expressed.

Claims

1. A three dimensional jigsaw puzzle, **characterized in that**:

   a topmost puzzle piece (1), a bottommost puzzle piece (20) and mediate puzzle pieces (2-19) of different dimensions; and
   a connection device provided between two adjacent puzzle pieces to facilitate combination of the two adjacent puzzle pieces.

2. The jigsaw puzzle as claimed in claim 1, wherein the connection device is composed of connection rods (22) extending from one puzzle piece and connection holes (31) defined in the puzzle piece so that the puzzle piece is able to be combined with an adjacent puzzle piece by extending the connection rods (22) into the connection holes (31) of the adjacent puzzle piece.

3. The jigsaw piece as claimed in claim 1, wherein the connection device is composed of magnetically positive pole and magnetically negative pole in two adjacent puzzle pieces so that attraction between the positive pole and the negative pole is able to combine two adjacent puzzle pieces.

4. The jigsaw puzzle as claimed in claim 2 or 3 further comprising a box (30) having multiple receiving recesses (301) defined to receive therein the puzzle pieces.

5. The jigsaw puzzle as claimed in claim 4, wherein each puzzle piece is divided into two halves.

6. The jigsaw puzzle as claimed in claim 5, wherein each mediate puzzle piece (2-19) is provided with multiple recesses (155,157) to accommodate other puzzle pieces having dimensions smaller than the mediate puzzle piece.

7. The jigsaw puzzle as claimed in claim 6, wherein an image is formed on a top face of the box for identification.

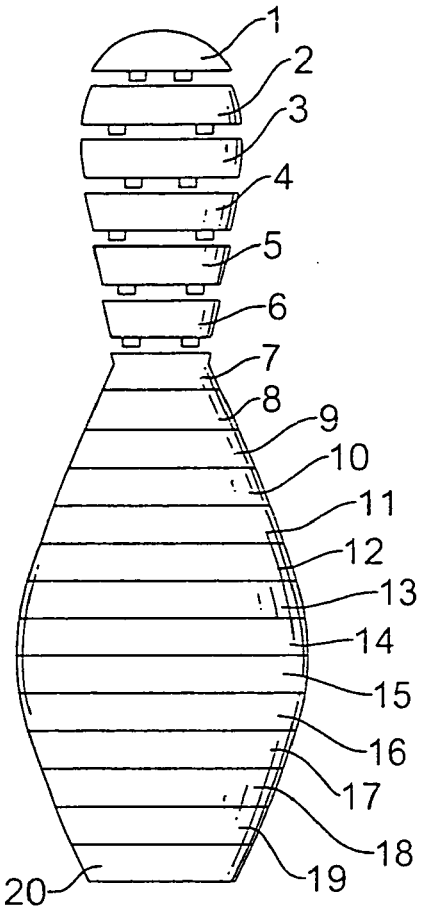

FIG.1

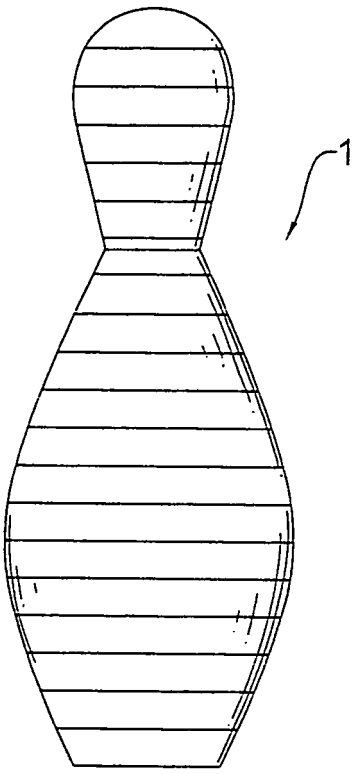

FIG.2

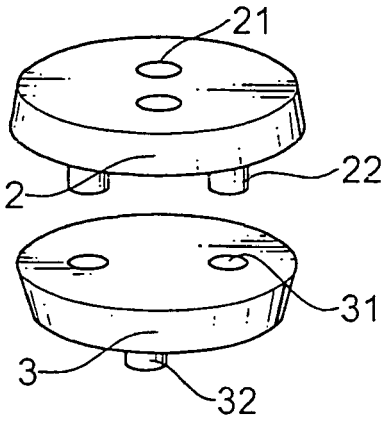

FIG.3

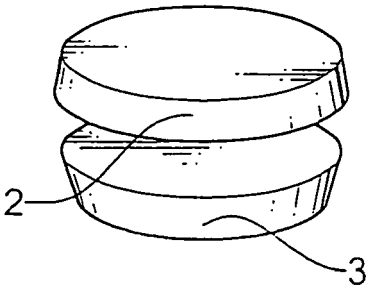

FIG.4

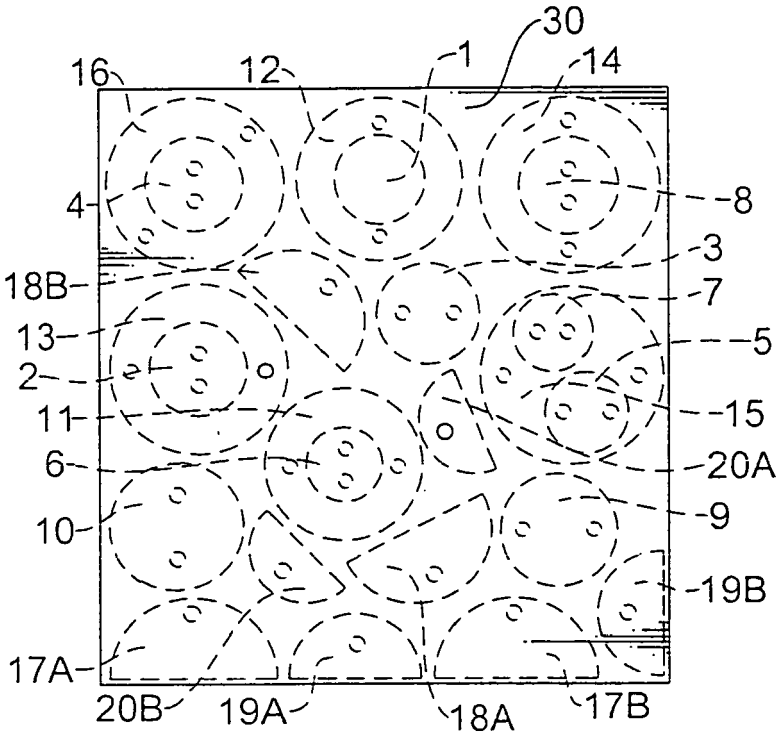

FIG.5

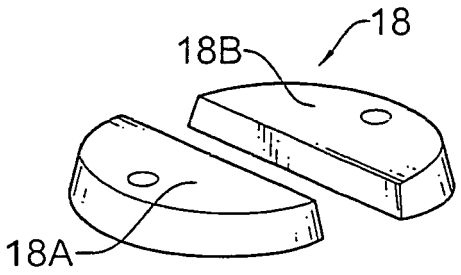

FIG.6

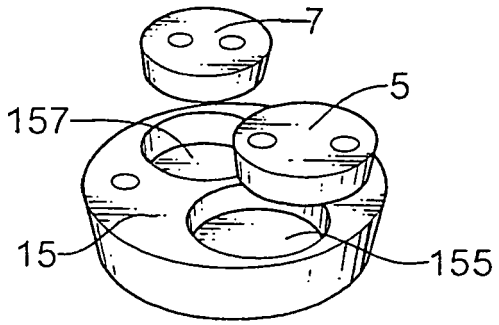

FIG.7

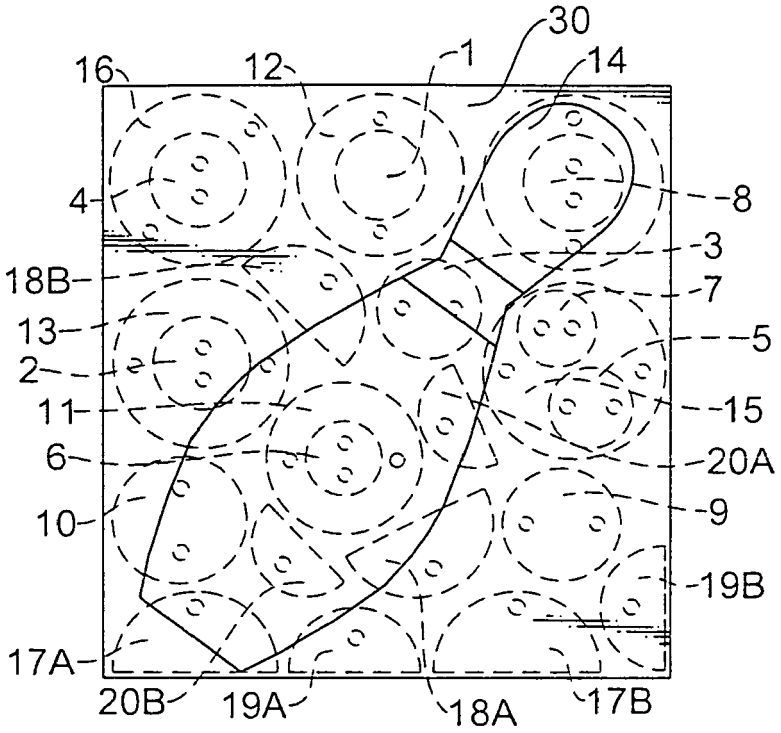

FIG.8

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EUROPEAN SEARCH REPORT

Application Number
EP 06 00 3564

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	28 July 2006	Lucas, P

CATEGORY OF CITED DOCUMENTS

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