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(54) **A COLUMN-SHAPED TOY ELEMENT FOR A CONSTRUCTIONAL BUILDING SET**

SÄULENFÖRMIGES SPIELZEUGELEMENT FÜR EIN KONSTRUKTIVES BAUSET

ELEMENT DE JEU EN FORME DE COLONNE POUR UN JEU DE CONSTRUCTION

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Description

The present invention concerns toy elements for constructional building sets of the type defined in the introductory portion of claim 1.

Known constructional building sets for the construction of e.g. buildings comprise i.a. wall elements having a given depth and a larger width and height dimension with respect to the depth, which makes these elements suitable for the construction of walls in e.g. toy houses, such as doll's houses.

The wall elements are often provided with windows, doors and the like, and e.g. shelves or benches may be provided on one side of the elements, so that these elements form part of the interior of the toy house. When the wall elements are erected in extension of each other, wall structures with windows, doors and the like can be built.

However, the formation of full edge corners from these wall elements when erecting two elements at right angles to each other involves the problem that the side face of one wall element corresponding to the wall thickness in the toy house covers part of the face on the other wall element, so that possible toy appliques on the other wall element, such as windows, doors, interior, etc. are screened in part.

Alternatively, it is possible to erect the two wall elements at right angles to each other so that they are positioned edge-to-edge with respect to each other and do not cover the toy appliques. However, this means that the corner joint is not full-edged.

German Offenlegungsschrift DE 33 03 430, however, discloses a column-shaped toy element for a constructional building set having a square base face and four uniform side faces which have a side width corresponding to the wall thickness of the wall elements incorporated in the constructional building set. Together with the above-mentioned wall elements this column element makes it possible to build full-edged corners in toy buildings, without possible toy appliques being covered or their applicability being lost.

In addition to being used as a corner element in a building, the column element of DE 33 03 430 may also be employed as part of a straight wall. However, the element can just be used in these two ways in wall structures, which restricts the possibilities of varying the construction of buildings using the element.

The object of the invention is therefore to provide a column-shaped toy element which offers the same possibilities for the construction of buildings as the element according to DE 33 03 430, but which in addition offers more possibilities of varying the use.

This is obtained by the features stated in the characterizing portion of claim 1, since the column element has two adjoining side faces without toy appliques which can be directed outwards when the element is used as a corner element, while the two remaining side faces with incorporated toy appliques are directed

toward the side faces on the adjoining wall elements and are concealed by these. On the other hand, with the column element of the invention, when used in a straight wall structure, one of the sides with incorporated toy appliqué is directed outwards on one side of the wall, and one of the sides without toy appliques is directed outwards on the other side of the wall.

Thus, the column element of the invention enables it to be chosen freely which side of the column element with toy appliqué is to be seen on the wall structure, and of whether the chosen toy appliqué is to face outwards or inwards with respect to the wall structure.

In the sense of the present description and appended claims the term "toy appliqué" may mean members such as pictures or physical embodiments of cupboard shelves or doors, letter boxes, door bells, clocks, etc. either integral with the element or mounted in or on it, as well as e.g. cavities and the like formed in the element.

The embodiment according to claim 2 provides a rational possibility of manufacturing the element of a plastics material by injection moulding, without having to use elongate cores in the injection mould, it being possible to use cores which form the cavities and the openings in the side walls of the column element.

The features defined in claim 3 provide a simple element of great torsional stability because of the partition which divides the cavity in the column element.

Further, the claims define a plurality of embodiments of the invention, which each contribute to enabling the column element to be employed in several different connections in a more building-active manner, depending upon the nature of the toy appliques.

The toy appliques may thus comprise separate insert elements, such as cupboard drawers and doors, which are placed in the cavities, as stated in claims 4 to 6. These separate insert elements may either be of a type which may be placed freely in or be freely removed from the column element, or they may be secured permanently in the column element; in the latter situation, the insert elements must not protrude considerably beyond the side faces of the column element or be capable of being positioned or changed, so that the function of the column element as a corner element is not lost.

Embodiments of the invention will be described below with reference to the drawing, in which

fig. 1 shows a perspective view of a column element according to the invention, seen from a corner from above.

Fig. 2 shows another perspective view of the column element of fig. 1, seen from the diagonally opposite corner.

Fig. 3 shows a column element like in fig. 1 with inserted toy appliques.

Fig. 4 shows a known wall element, seen obliquely from above from a corner.

Fig. 5 shows another known wall element with interior parts, seen obliquely from above from a corner.

Fig. 6 shows a corner structure with a column element according to the invention, seen from above.

Fig. 7 shows a section of a straight wall structure with a column element according to the invention, seen from above.

Fig. 1 thus shows a column element 1 according to the invention, which has two side faces 2 and 3 with toy appliqués 2a and 3a, which are here formed by two cavities accommodating rail guides 11 to receive further toy appliqués. The two cavities are separated by a partition 12 which is positioned in parallel with the base face 1 of the column element 1.

Fig. 2 shows the same column element seen from the diagonally opposite corner, and it will be seen that the other side of the column element 1 is formed with two blind faces 4 and 5 without toy appliqués.

As will be seen in fig. 1 and fig. 2, the column element 1 is provided with coupling studs 6 at the top, which are adapted to engage complementary coupling parts on other elements included in the constructional building set, e.g. the coupling parts 7 which are shown in fig. 2.

Fig. 3 shows a column element 1 like in fig. 1, but with inserted, further toy appliqués which here consist of a drawer element 10, which is positioned slidably in the upper cavity 3a and can thus be pulled out or inserted, as needed. The lower cavity 2a accommodates a bell 8 with ring functions not shown in the drawing, but can be activated from the outside by means of the operating knop 9. The bell 8 may be permanently secured to the column element 1 either using snap locking, gluing or other prior art approaches, so that the bell 8 cannot be pulled out of the column element 1.

Fig. 4 shows a wall element 13 which has a door opening 14 and is provided with hinge parts 15 to receive a door (not shown) so that the door can be opened and closed in the hinge parts 15. Like the column element, the wall element is provided with coupling studs and complementary coupling parts for coupling to other constructional parts included in the building set. The wall element may thus be used in the construction of a house, in which it is incorporated as part of the wall with an inserted door so as to provide free passage through the wall element upon opening of the door.

Fig. 5 shows an interior wall element 16 provided with a rear plate 18 which covers the entire one side of the element, and which is provided with interior parts 17 at the other side, which are here formed by shelf-like partitions. This element may e.g. be included in a wall structure so that a system of shelves is provided on the

inner side of the wall, and the outer side of the wall forms a continuous, solid wall without passage.

These wall elements are just stated as examples of wall elements which may be included in a complete building set.

If such wall elements are positioned at right angles to each other so that the side face of one wall element engages the other wall element, it may easily occur that the toy appliqués, which are a door or a system of shelves here, are covered completely or partly so that the play value of these is lost.

Therefore, as shown in fig. 6, it is contemplated to use the column element 1 as a corner element preventing the above situation, together with e.g. the two wall elements 13 and 16. As will be seen in fig. 6, there is thus no risk of the wall elements 13 and 16 overlapping each other to cover the toy appliques which are built into the wall elements.

In addition, it is possible to turn the column element 1, as shown in fig. 6, so that the blind faces 4 and 5 face outwards in the corner structure. The side faces 2 and 3 with toy appliqués are hereby directed toward the side faces on the wall elements 13 and 16, so that the toy appliqués in the column element 1 are covered completely.

In contrast, fig. 7 shows a section of a straight wall structure in which the column element 1 is incorporated. This wall structure may likewise comprise e.g. the wall elements 13 and 16 so as to establish a door opening and a system of shelves in the wall structure. In this situation the column element is turned so that one side face 2 with toy appliqué is directed toward the wall element 16, thereby completely covering the toy appliqué in the side face 2. The side face 3, however, is directed outwards with respect to the wall structure, so that the toy appliqué built into the side face 3 is freely accessible. The blind faces 4 and 5 are so oriented that the blind face 4 engages the side face on the wall element 13 and is completely covered by it, and the blind face 5 is directed outwards on the other side of the wall with respect to the side face 3 with built-in toy appliqué. It is hereby ensured that one of the toy appliques established in the column element 1 can be used, while the other toy appliqué is concealed.

Depending upon which toy appliqué in the toy element 1 is to be used, the column element 1 may be positioned in four different positions, so that the selected toy appliqué faces outwards either on one side or the other side of the wall structure.

Since the column element may be provided with a very large number of different toy appliqués and be turned and inverted in actual wall structures so as to enable it to be chosen which of the toy appliqués is to be used in the actual situation, it is clear that such a column element presents a very wide range of possible uses in the construction of a wall structure or a corner structure. It may thus be incorporated as an extremely building-active element in a constructional building set for the

construction of various types of structures.

It is clear that the stated embodiments may be modified without departing from the scope of the invention as defined in the claims. Thus, a very large number of different toy appliques can be proposed for the column element 1, and the number of toy appliques in the sides of the column element may be varied, provided that the blind sides on the column element 1 are maintained.

Claims

1. A column-shaped toy element (1) for a constructional building set having an approximately square base face as well as four side walls (2, 3, 4, 5) and having coupling means (6, 7) for coupling to other elements which are included in the constructional building set, **characterized** in that at least one toy appliqué, such as pictures or physical embodiment of cupboard shelves or doors, letter boxes, door bells, clocks, etc. either integral with the element or mounted in or on it, as well as e.g. cavities and the like formed in the element (1), is provided in only two adjacent side walls (2, 3), and the two remaining side walls (4, 5) are blind, and without toy appliques.
2. A toy element according to claim 1, **characterized** in that the element is hollow, and that the toy appliques comprise one or more openings in the side walls to the cavities of the toy element.
3. A toy element according to claim 2, **characterized** in that the cavities are formed by upper and lower cavities (2a, 3a) separated by a partition (12) in parallel with the base face, with access to said openings through openings in two adjacent side walls.
4. A toy element according to claim 2 or 3, **characterized** in that the toy appliques additionally comprise one or more insert elements (8, 10) positioned in the openings of the side walls.
5. A toy element according to claim 4, **characterized** in that the insert elements (8) are permanently secured in the toy element.
6. A toy element according to claim 4, **characterized** in that the insert elements (10) are detachably secured or loosely positioned in the toy element.
7. A toy element according to one of claims 4-6, **characterized** in that the cavities (2a, 3a) are provided with guides (11) on the inner side to guide the insert elements (8, 10).

Patentansprüche

1. Ein säulenförmiges Spielzeuelement (1) für ein

konstruktives Bauset mit einer annähernd quadratischen Basisfläche sowie vier Seitenwänden (2, 3, 4, 5) und mit Kopplungsmitteln (6, 7) zur Kopplung an andere Elemente, die im konstruktiven Bauset enthalten sind, **dadurch gekennzeichnet**, daß wenigstens eine Spielzeugapplikation, so wie Bilder oder physische Ausführungen von Regalbrettern oder Türen, Briefkästen, Türklingeln, Uhren, usw., die entweder in einem Stück mit dem Element ausgeführt oder an diesem befestigt sind, sowie z.B. im Element (1) ausgebildete Hohlräume und ähnliches, nur in zwei nebeneinanderliegenden Seitenwänden (2, 3) vorgesehen ist, während die übrigen beiden Seitenwände (4, 5) blind und ohne Spielzeugapplikation sind.

2. Ein Spielzeuelement nach Anspruch 1, **dadurch gekennzeichnet**, daß das Element hohl ist und daß die Spielzeugapplikationen eine oder mehr Öffnungen in den Seitenwänden zu den Hohlräumen des Spielzeuelements aufweisen.
3. Ein Spielzeuelement nach Anspruch 2, **dadurch gekennzeichnet**, daß die Hohlräume durch obere und untere Hohlräume (2a, 3a) gebildet werden, die durch einen Zwischenboden (12) parallel zur Basisfläche unterteilt werden, mit einem Zugang zu den Hohlräumen durch Öffnungen in zwei nebeneinanderliegenden Wänden.
4. Ein Spielzeuelement nach Anspruch 2 oder 3, **dadurch gekennzeichnet**, daß die Spielzeugapplikationen zusätzlich ein oder mehr Einsatzelemente (8, 10) aufweisen, die sich in den Öffnungen der Seitenwände befinden.
5. Ein Spielzeuelement nach Anspruch 4, **dadurch gekennzeichnet**, daß die Einsatzelemente (8) dauerhaft im Spielzeuelement befestigt sind.
6. Ein Spielzeuelement nach Anspruch 4, **dadurch gekennzeichnet**, daß die Einsatzelemente (10) im Spielzeuelement abnehmbar befestigt oder lose angeordnet sind.
7. Ein Spielzeuelement nach einem der Ansprüche 4-6, **dadurch gekennzeichnet**, daß die Hohlräume (2a, 3a) zur Führung der Einsatzelemente (8, 10) auf der Innenseite mit Führungsschienen (11) versehen sind.

Revendications

1. Élément de jeu (1) en forme de colonne pour un jeu de construction avec une surface de base approximativement rectangulaire ainsi qu'avec quatre faces latérales (2, 3, 4, 5) et avec des moyens d'accouplement (6, 7) pour l'accoupler avec

d'autres éléments compris dans le jeu de construction, **caractérisé en ce que** au moins un élément d'application comme des images ou la réalisation corporelle de buffet à étagère ou de portes, de boîtes aux lettres, de sonnettes, de montres ou autres, 5
soit en partie intégral avec l'élément ou disposé à l'intérieur ou dessus, et par exemple comme des cavités ou éléments semblables formés dans l'élément (1) n'est prévu qu'en deux faces latérales adjacentes (2, 3) et en ce que les deux faces latérales restantes (4, 5) sont feintes et sans élément d'application. 10

2. Élément de jeu selon la revendication 1, caractérisé en ce que l'élément est creux et que l'élément d'application comprend une ou plusieurs ouvertures dans les faces latérales envers les cavités de l'élément de jeu. 15
3. Élément de jeu selon la revendication 2, caractérisé en ce que les ouvertures se composent d'ouvertures supérieures et inférieures (2a, 3a) qui sont séparées par une cloison (12) en parallèle avec la surface de base et en ce que les dites ouvertures sont accessibles par des ouvertures dans deux faces latérales adjacentes. 20 25
4. Élément de jeu selon une des revendications 2 ou 3, caractérisé en ce que l'élément d'application comporte additionnellement une ou plusieurs éléments d'insertion (8, 10) qui sont disposés dans les ouvertures des faces latérales. 30
5. Élément de jeu selon la revendication 4, caractérisé en ce que les éléments d'insertion (8) sont fixés d'une manière permanente dans l'élément de jeu. 35
6. Élément de jeu selon la revendication 4, caractérisé en ce que les éléments d'insertion (10) sont fixés d'une manière détachable ou librement amovibles dans l'élément de jeu. 40
7. Élément de jeu selon une des revendications 4 à 6, caractérisé en ce que les cavités (2a, 3a) sont équipées avec des guides (11) sur leur faces intérieures pour guider les éléments d'insertion (8, 10). 45

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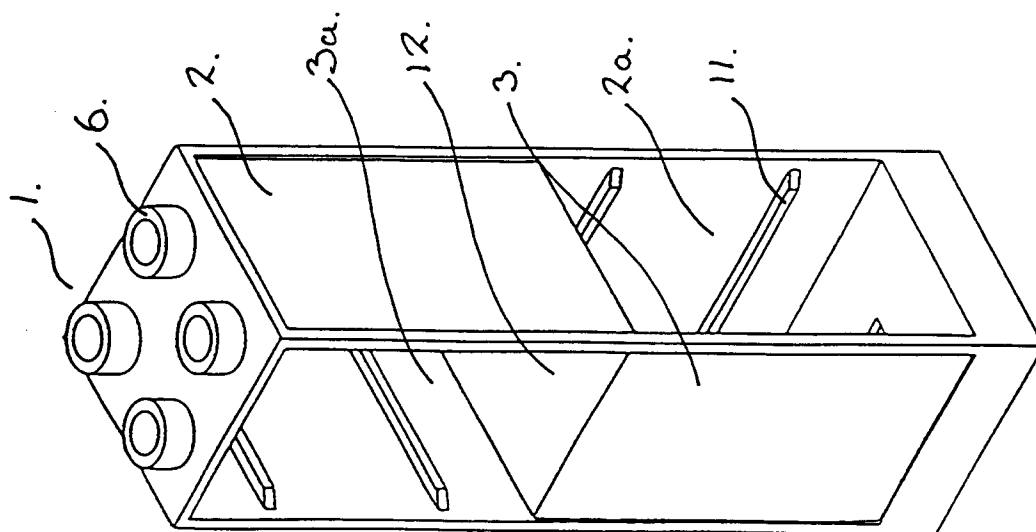


Fig. 1.

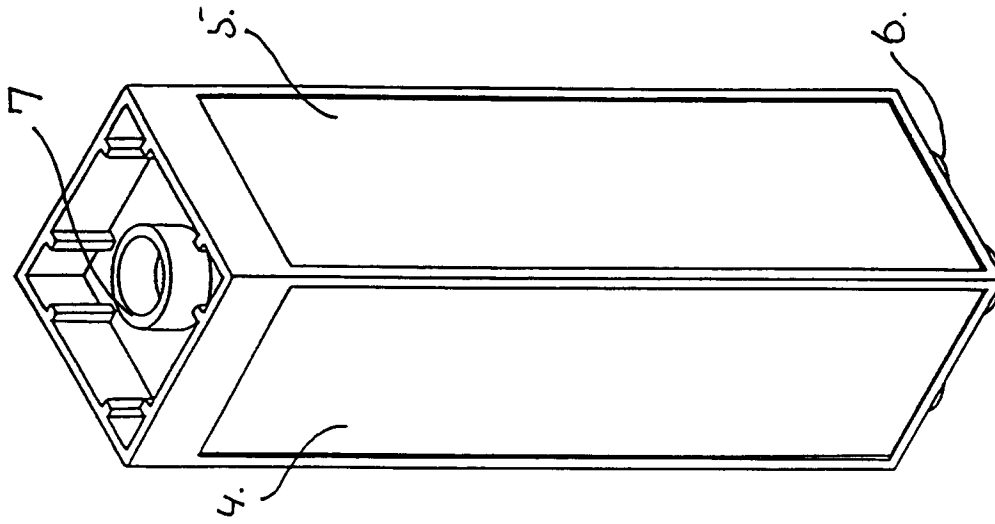


Fig. 2.

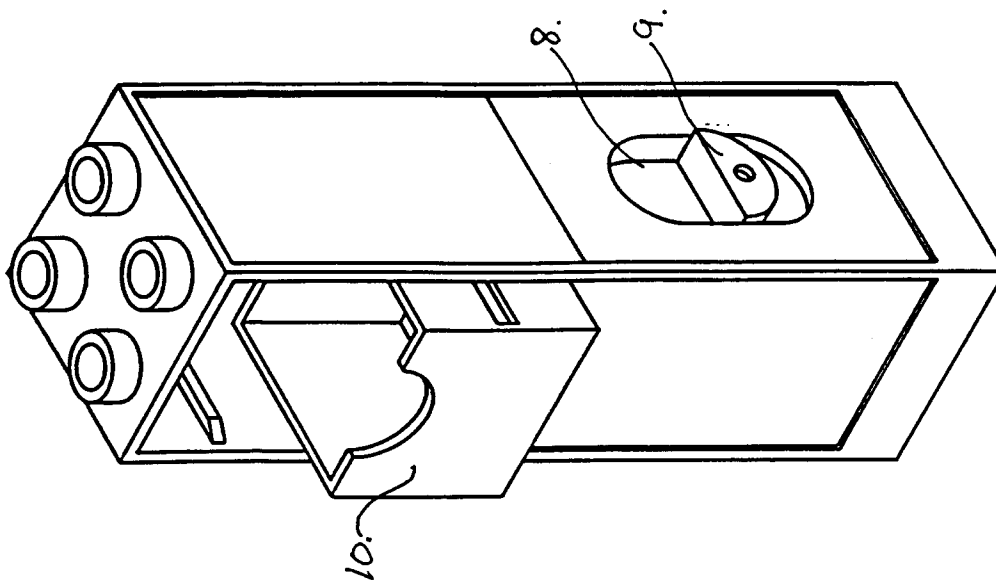


Fig. 3.

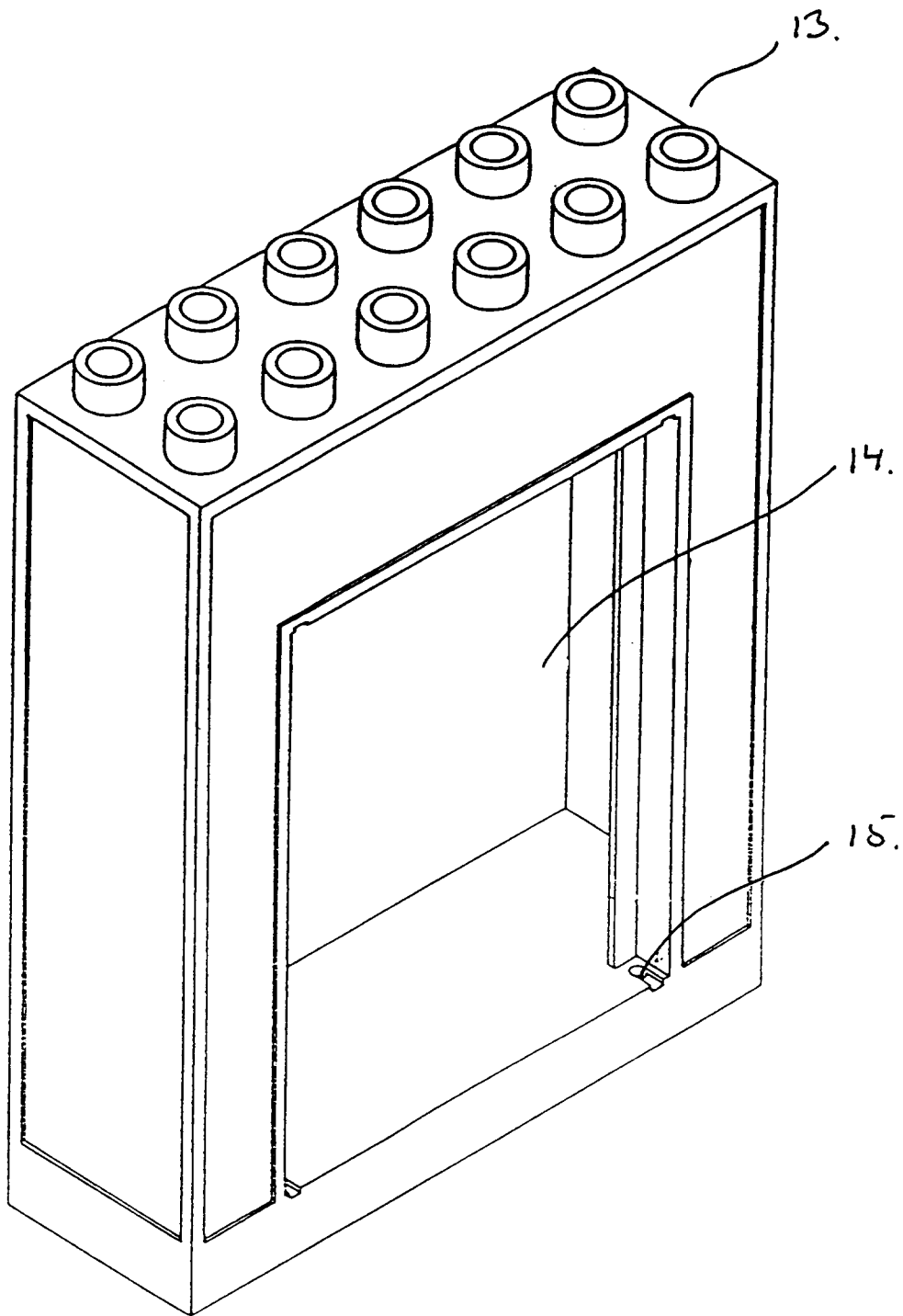


Fig. 4.

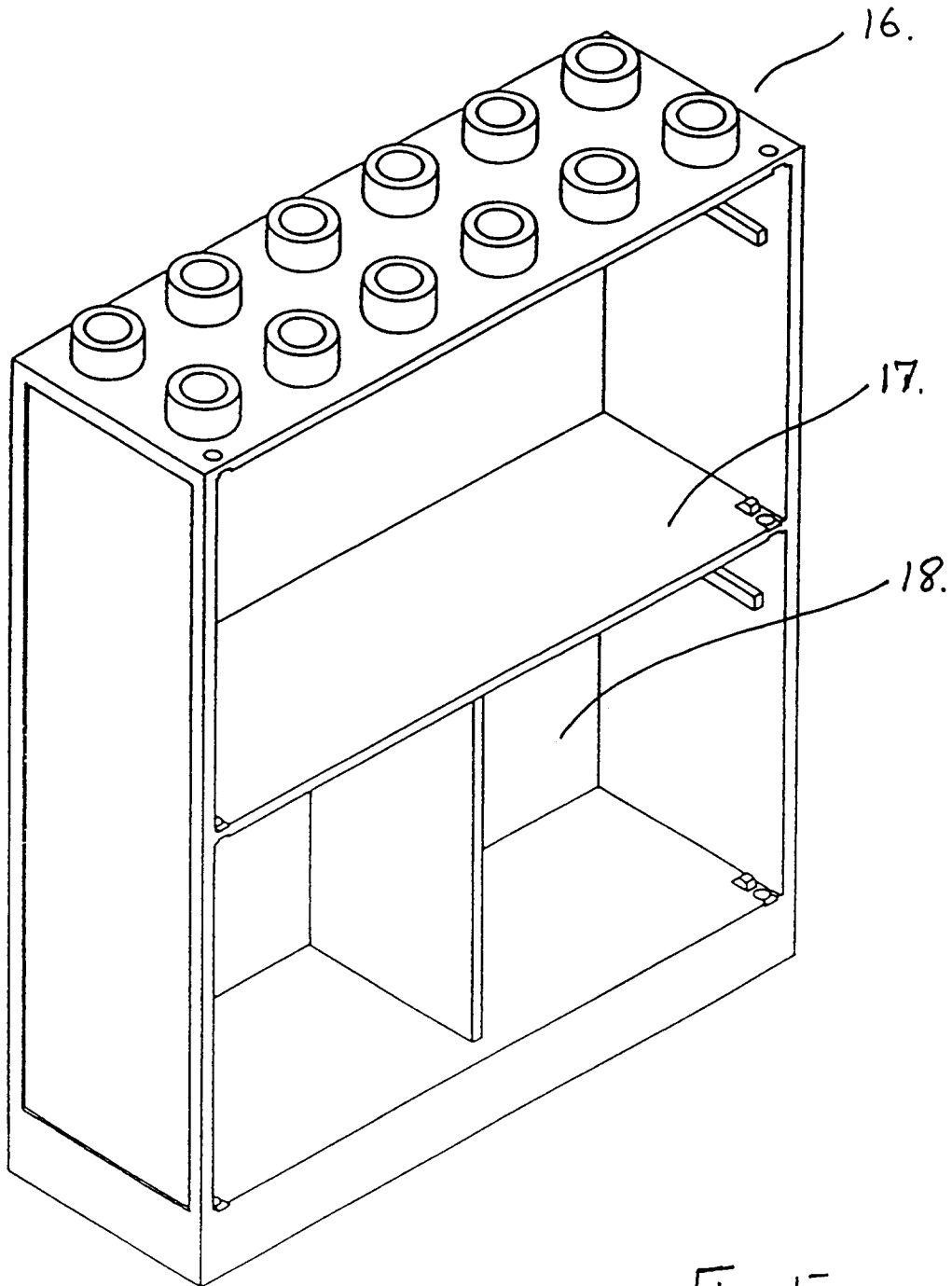


Fig. 5.

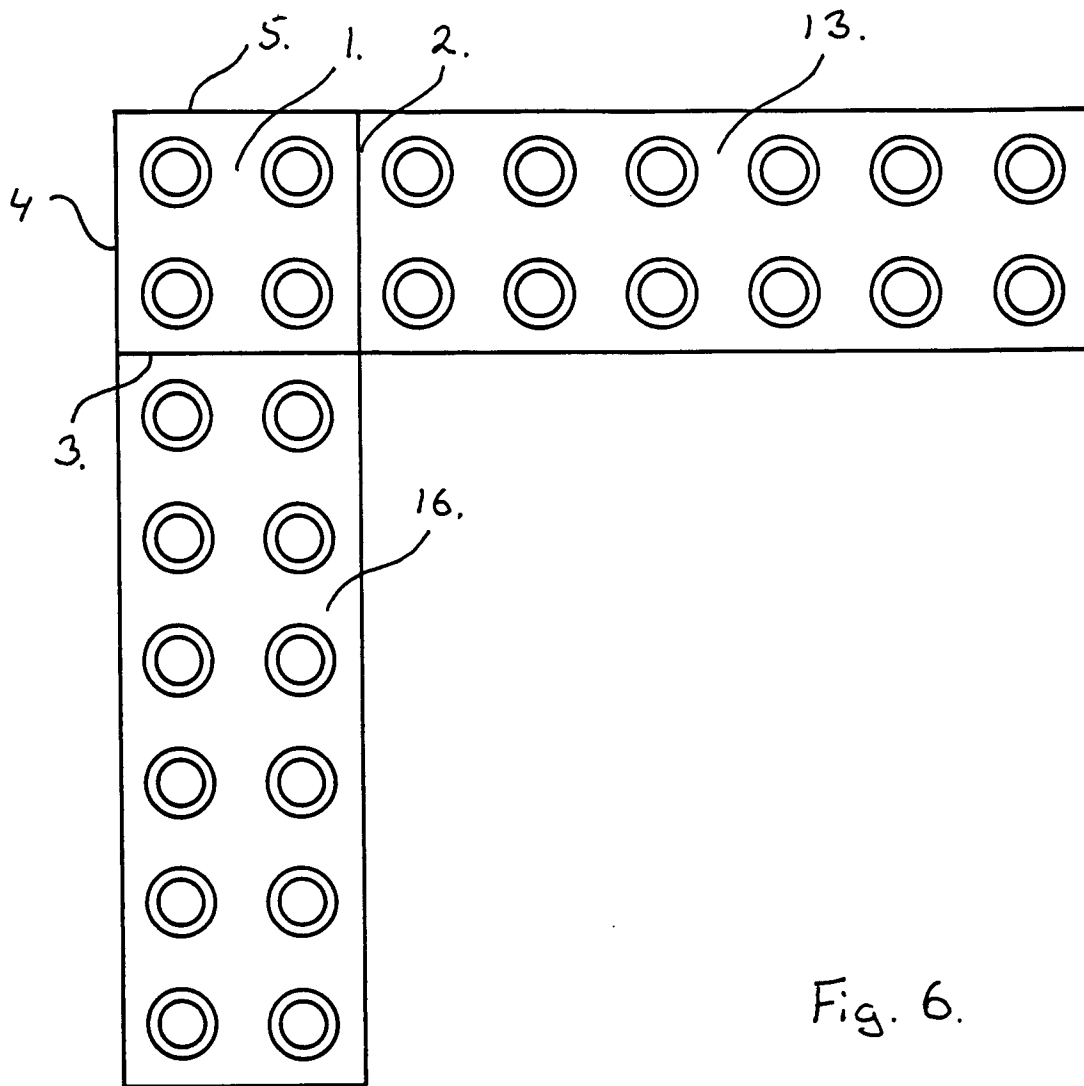


Fig. 6.

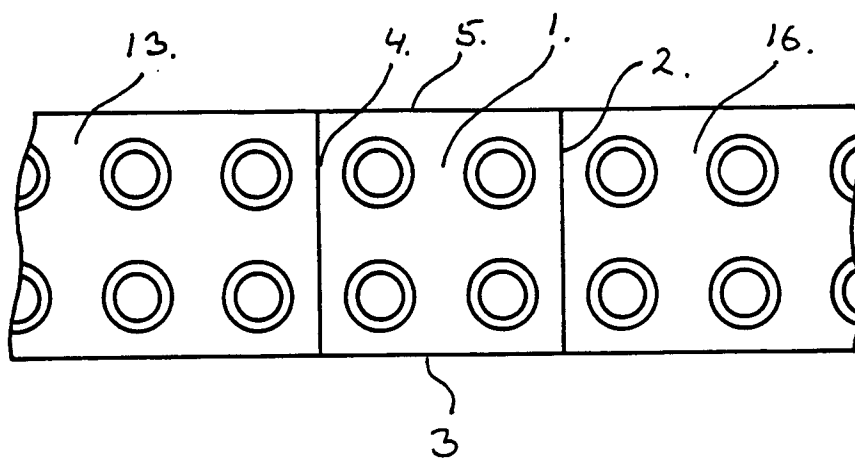


Fig. 7.