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Quercetti

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[54] **MOSAIC PLAY**

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[52] **U.S. Cl.** **35/27,** 46/16

[51] **Int. Cl.** **A63h 33/08**

[58] **Field of Search** ..... 35/27, 28; 46/16, 46/25; 24/201 S, 208 A; 339/18 B, 18 C, 221 M; 401/52

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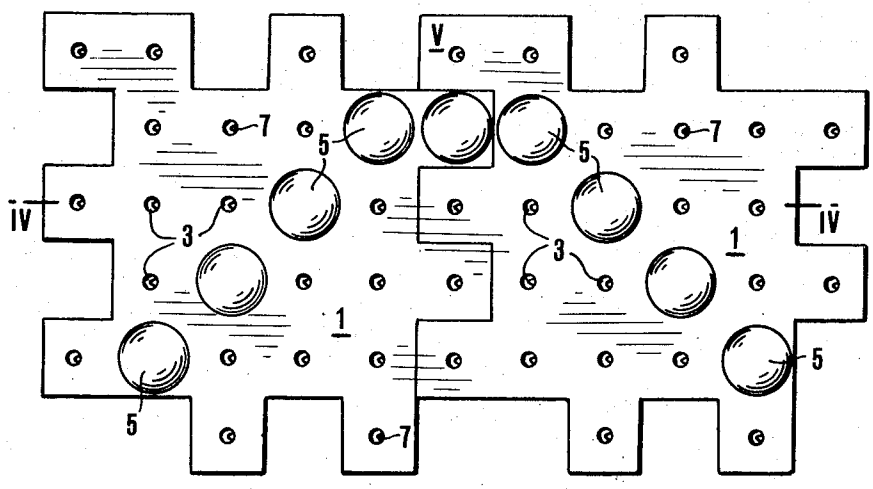
[57] **ABSTRACT**

A mosaic play of the type comprising a base plate with holes and a number of mosaic elements intended to be inserted in the holes of the base plate, wherein the base plate comprises a number of plate elements. Each plate element is made of slightly flexible synthetic material and its sides are indented in the form of castellations for allowing connection with adjacent plate elements, so that base plates of any shape and size may be formed by mutually joining the plate elements shaped in this manner.

4 Claims, 4 Drawing Figures



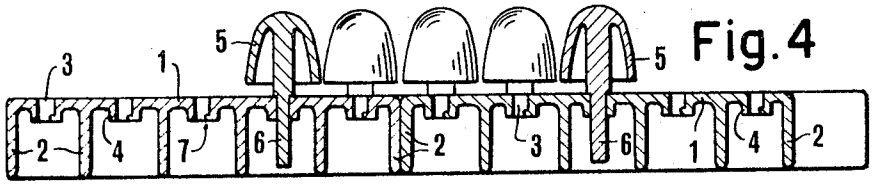


Fig. 4

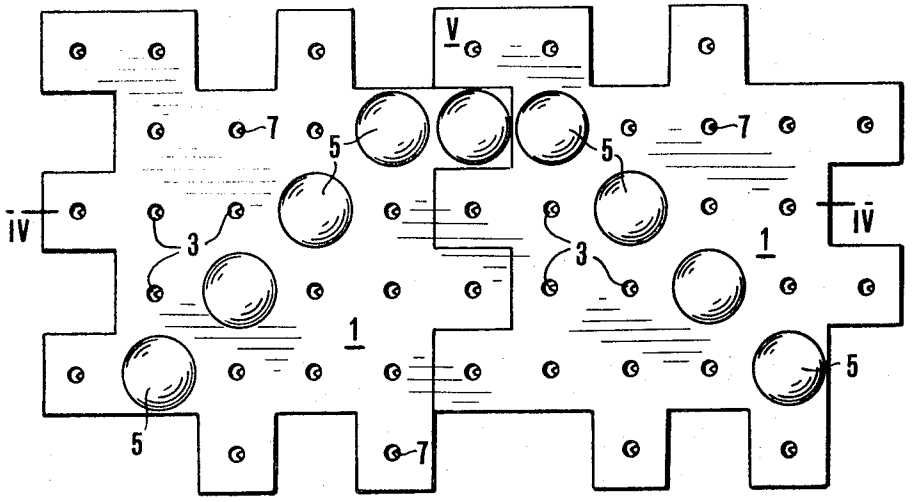


Fig. 1

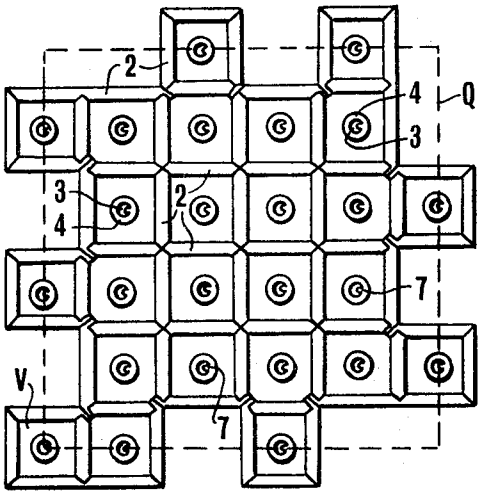


Fig. 2

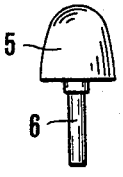


Fig. 3

MOSAIC PLAY

BACKGROUND OF THE INVENTION

This invention relates to mosaic plays of the type comprising a base plate having a plurality of regularly located holes therein, and a plurality of mosaic elements, so-called sticks, each stick being composed of a head which constitutes the visible part of the mosaic and may be variable in shape and colour, and of a stem intended to be inserted selectively in one of the base plate holes to keep in position the mosaic element.

Plays of this kind are considered to be very useful for the intellectual development of children inasmuch as they represent a means allowing the children to concretize and schematize their impressions of shapes and colours. However, such plays have a great limitation deriving from the unavoidably limited dimensions of the base plate, which constrain the child to restrain his composition within predetermined dimensions and dimensional relationships, which obviously may be such as not to correspond to the development possibilities of the composition which the child has in mind. Although such base plates have generally a rectangular form and dimensions having the ratio of about 1 to 1.4 so that they represent a framing suitable for a major number of cases, it is clear that they can never be suitable for a composition in which one dimension must largely prevail over the other. Furthermore, once a certain design has been formed adjacent one edge, it is obvious that the child is compelled to continue the composition on the side opposite that edge, where more space is available, even when his imagination would suggest to him to add another design or part of a design just on the side on which such further development is no more possible.

As such plays are sold with base plates of different sizes, it has been suggested to provide on the backside of the plates means for mutual connection of the plates, which allow the formation of larger base plates by placing smaller plates side by side and joining them to each other. However, the operations which are required for this purpose are attended by a certain difficulty of execution and above all are lacking in the character of immediate evidence, so that this system is not adapted to be developed in such a way as to permit the child to compose by himself the base plate according to the opportunities of the moment.

BRIEF SUMMARY OF THE INVENTION

An object of the invention is to obviate the above mentioned disadvantages by providing a play of the specified type wherein the base plate is systematically composed of a plurality of relatively small elements adapted to be connected to each other in any combination of shapes and dimension ratios without any difficulties of conjunction and over all presenting such possibility to the mind of the child as an essential and evident feature of the plate elements.

This object is attained according to this invention due to the fact that the play includes in its assembly: a plurality of identical plate elements, made of slightly flexible synthetic material, provided with an orthogonal network or equidistant holes and having their sides indented in the shape of castellations having a half pitch equal to the pitch of the mentioned network of holes, the lines on which the segments of these castellations are located being disposed in the middle between the lines whereon the holes of the network are located; and a plurality of mosaic elements, each having a head of any shape and colour and a stem having a diameter corresponding to the diameter of the holes of the plate elements. In this way, the plate elements may be connected to each other side by side in the preferred number and disposition by interfitting the adjacent sides indented in the shape of castellations, by means of an operation both easy and evident, and once this has been done the lines whereon the holes of the networks of the different elements are located come to correspond to each other so as to form a single continuous and uninterrupted network, adapted to receive the mosaic composition. Thus the child is in a position to compose a base plate having the size and the proportions deemed to be suitable for the composition he has in mind to create. Moreover, he can add plate elements at the location wherein he intends to further develop the composition, thereby getting completely free from inopportune bounds to his creativeness. Another possibility which this play offers to the child consists in detaching from a composition the plate elements or the groups of plate elements bearing determined designs, and grouping them into different dispositions or combinations. There is also a possibility for a group of children possessing this play to put together the respective elements in order to obtain giant compositions. All this besides the fact of overcoming the above mentioned disadvantages, adds completely new interest to the known mosaic play.

BRIEF DESCRIPTION OF THE DRAWINGS

An embodiment of the elements forming the play according to the present invention is shown diagrammatically by way of a non-limitative example in the accompanying drawings, in which:

FIG. 1 represents a pair of interconnected plate elements, with some mosaic elements positioned in a certain number of holes;

FIG. 2 shows a single plate element in reversed position;

FIG. 3 shows a single mosaic element; and

FIG. 4 is a sectional view taken along line IV—IV of FIG. 1.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The plate element shown in the figures has an ideal square shape, indicated in FIG. 2 by the broken line Q, in which each side is replaced by indented lines having the shape of a castellation, all these lines being disposed in such a way as to form a recess at an apex of the square Q and to be interrupted before reaching the other apex, thus leaving a recess also in the latter, whereas according to the configuration of the castellation there should be a projection; the only exception is the apex V in which the castellation terminating there shows the due projection which results adjacent to the first projection of the castellation of the adjacent side. This configuration permits one to join the plate elements to each other thus obtaining a plate without discontinuities. Each element has a plain portion 1 serving to form with its outer surface the base surface of the plate for the mosaic, and ribs 2 extending perpendicularly therefrom towards the lower part of the element along the segments of the peripheral castellations and preferably also along all lines to which these segments

belong, so as to form a cellular structure, particularly shown in FIGS. 2 and 4, which structure confers strength to the element without considerably increasing its weight. The height of the ribs 2 is preferably equal to the length of the single segments of the castellations. This feature insures the possibility of regularly connecting adjacent plate elements, not only with their plain portions 1 lying in the same plane, as shown by the section of FIG. 4, but also perpendicularly to each other, so as to permit forming three dimensional base surfaces for the mosaic. Besides the coplanar and the perpendicular disposition of the elements, it is also possible to insert them into each other in intermediate angular positions or also with their plain portions situated in parallel but not coincident planes.

Along a network of ideal lines located in the middle between the lines including the segments of the castellations, holes 3 are formed in the plain portion 1 of each element, said holes being preferably provided with a strengthening collar 4 on the inner face of the element. As can be seen in FIG. 1, when more elements are joined their holes form an uninterrupted network similar to that of an integral plate of the prior art plays.

Each mosaic element (FIG. 3) is provided with a head 5 to which various shapes may be given in a well known manner, from the lower part of which head extends a stem 6 having a diameter corresponding to the diameter of the holes 3 of the plate elements with a slight interference suitable to allow a firm engagement under slight friction. These elements are applied in the usual way onto the plate formed by the elements 1.

The plate elements are preferably obtained by means of high-pressure die-casting or injection of a relatively flexible synthetic material such as polyethylene or the like, in order to insure a firm engagement under slight friction both of the mutually engaged castellations, and of the holes 3 in respect of the stems 6. The mosaic elements 5–6 instead are preferably obtained by high-pressure die-casting or injection of rigid synthetic material. The mosaic elements may preferably be of various colors, whereas the plate elements may preferably be all of the same, rather neutral colour, suitable to serve as a ground for the composition.

In order to insure the necessary slight friction in the engagement between the stems 6 and the holes 3, without requiring a manufacturing with extremely small tolerances, according to the present invention all of the holes 3 are provided, preferably at the lower end of the strengthening collars 4, with at least one small projection 7 directed towards the interior. This configuration, taking into account the flexibility of the material forming the plate elements, insures an efficient stop of the stems 6 inserted into the holes 3, without any danger of locking.

Of course, different modifications can be applied to the shown and described embodiments. For example, the plate elements may have rectangular form instead of the square form, and the disposition of the castellations on their contours may be different: also some plate elements may be provided which are not all identical, marginal plate elements may be provided having one or two straight sides instead of sides having the shape of a castellation, and eventually forming a frame; the cellular structure of the back face of the elements may be formed differently; and various other modifications are possible within the limits of the described principle and consequently without departing from the scope of the invention.

Having thus described my invention, what I claim is:

1. A mosaic play including a plurality of plate elements, in each plate element a number of through holes regularly arranged in an orthogonal network, each plate element having peripheral sides indented in the shape of castellations forming a succession of alternate recesses and projections, said castellations having a half pitch equal to the pitch of said network of holes, each plate element having an upper plain portion wherein said holes are formed, and perpendicular ribs extending from said plain portion downward, said perpendicular ribs being located at least along said peripheral indented sides, and said plain portion having a number of collars projecting downward, each collar surrounding a said hole, each collar further having a small projection directed toward the interior of said hole; and a plurality of mosaic elements, each mosaic element having a head and a single stem, the diameter of said stem being substantially equal to the diameter of said through holes in the plate elements, whereby the stem of each mosaic element may be inserted in any selected one of said holes, and is guided by said collar and is frictionally retained by said small projection.

2. A mosaic play as claimed in claim 1, said ribs forming an orthogonal network thereby to impart a cellular structure to each said plate element.

3. A mosaic play as claimed in claim 1, each said rib having a height, inclusive of the thickness of said plain portion, equal to the half pitch of the castellations and equal to the pitch of said network of holes.

4. A mosaic play as claimed in claim 1, said plate elements being made of a slightly flexible synthetic material and being obtained by high pressure die casting or injection.

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