Nov. 10, 1959 W. O. MILLER 2,911,740

EDUCATIONAL DEVICE WITH MULTI-SHAPED BLOCKS

Filed March 10, 1958

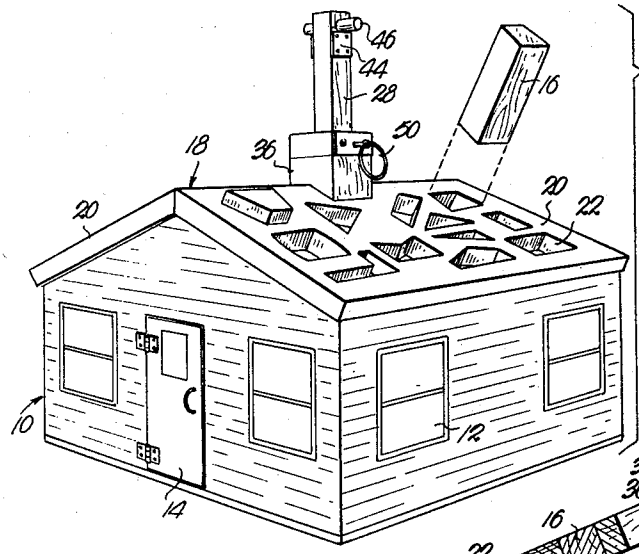


Fig. 1.

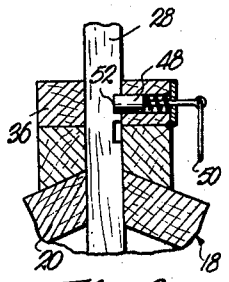


Fig. 2.

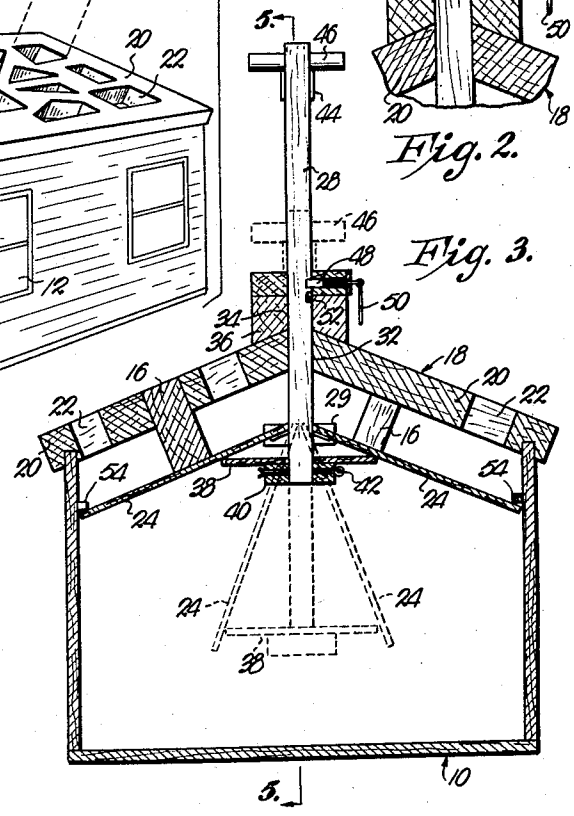


Fig. 3.

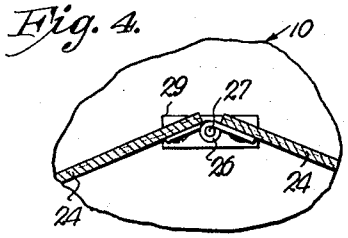


Fig. 4.

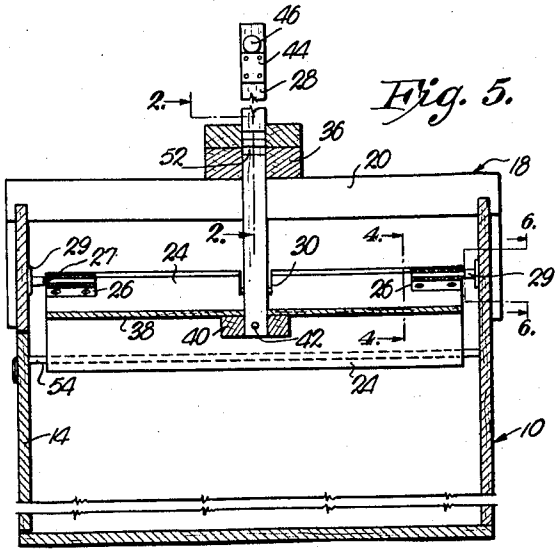


Fig. 5.

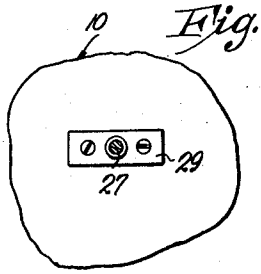


Fig. 6.

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United States Patent Office 2,911,740
Patented Nov. 10, 1959

2,911,740

EDUCATIONAL DEVICE WITH MULTI-SHAPED BLOCKS

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Application March 10, 1958, Serial No. 720,150

2 Claims. (Cl. 35—22)

This invention relates to an educational toy in the form of multi-shaped blocks to be inserted into correspondingly shaped openings of a panel, the primary object being to combine with such assembly, structure for releasably retaining the blocks in their openings until such time as the child desires to release the same so as to fall through the openings and advantageously in a container therefor.

Another important object of the present invention is to combine with the aforementioned block and panel arrangement, a storage compartment for the blocks disposed to receive the same through the simple expedient of releasing a secondary panel that is normally disposed in supporting relationship to the blocks while the same are in their openings.

Another important object of the present invention is to uniquely incorporate the features aforementioned in the form of a simulated house or other building and to utilize the door thereof as a means of access to the blocks; to employ the roof of the building as the block-receiving panel; and to use the chimney as a guide for a vertically reciprocable holding means for a secondary block-supporting panel within the confines of the house itself.

Details of construction are also important and each will be made clear or become apparent as the following specification progresses.

In the drawing:

Fig. 1 is a perspective view of a toy game made pursuant to my present invention.

Fig. 2 is an enlarged, fragmentary, detailed, cross-sectional view taken on line 2—2 of Fig. 5.

Fig. 3 is an enlarged, vertical, transverse cross-sectional view through the house illustrated in Fig. 1.

Fig. 4 is a fragmentary, detailed, cross-sectional view taken on line 4—4 of Fig. 5.

Fig. 5 is a cross-sectional view taken on line 5—5 of Fig. 3; and

Fig. 6 is a fragmentary, detailed, cross-sectional view taken on line 6—6 of Fig. 5.

As above indicated, the instant invention is illustrated in the drawing incorporated as a part of a building 10 such as a house, provided with simulated windows 12 and a door 14 that may be hingedly mounted as seen in Fig. 1 so as to gain access to blocks 16 as will hereinafter appear.

House 10 presents a container having a top 18 that may take the form of a pair of identical sloping panels 20 in order to simulate a roof. Each panel 20 is provided with a plurality of openings 22 of various shapes and manifestly, the blocks 16 are of similar configurations.

An elongated member or secondary panel 24, simulating a false ceiling, is provided within the container 10 for each panel 20 respectively. The members 24 are preferably substantially coextensive in length with the overlying panels 20 as shown in Fig. 5 and are interconnected for vertical swinging movement by a pair of hinges 26. Hinge pins 27 are carried by brackets 29 secured to the inner faces of the end walls of container 10.

Members 24 are normally held in substantial parallelism with corresponding panels 20 by an elongated, vertically reciprocable device 28 that extends through an opening 30 in the members 24 at the upper edges of the latter, an opening 32 in the top 18, and a bore 34 within a block 36 that simulates a chimney.

Plunger device 28 also extends through a rectangular, horizontal plate 38 and through a washer 40, the latter of which is attached to the plunger 28 by a cotter key 42. Stops 44 on the plunger 28 engage the upper end of block 36 to limit the extent of descent of plunger 28, and a crosspin 46 through the plunger 28 presents a handle for lifting the plunger 28 to the position illustrated in Fig. 1.

A spring-loaded latch 48 which may be retracted through use of ring 50 is reciprocably carried by the block 36 and engages in one of a plurality of notches 52 in the plunger 28 to releasably hold the latter at the uppermost end of its path of travel and thereby hold the members 24 against stops 54 secured to the inner faces of the side walls of the container 10.

In operation, with the members 24 disposed in the full-line position of Fig. 3, blocks 16 are placed in the proper openings 22 and come to rest on the members 24. At any time, the child may release the blocks 16 by pulling outwardly on the ring 50, whereupon the plunger 28 will gravitate to the dotted-line position shown in Fig. 3, the members 24 will swing downwardly and the blocks 16 will fall through the openings 22 and slide downwardly along the members 24 to be collected within the container 10.

Blocks 16 are accessible by opening door 14 and before the same are again inserted into the openings 22, the plunger 28 should be lifted upwardly through use of handle 46 until the plunger 48 snaps into place in one of the notches 52. Manifestly, as the plunger 28 is elevated, the plate 38, in sliding engagement with the members 24, will swing the latter upwardly until the same come into engagement with the stops 54.

It is seen that the container 10 provides a storage chest for the blocks 16 and that, as each operation is repeated, the child need not remove each of the blocks 16 individually or invert the panels 20 in order to dislodge the blocks 16 as has heretofore been the practice in educational devices of this kind. The very fact that the blocks 16 drop automatically into the container 10 upon release of the latch 48, provides an attractive inducement to use of the toy by the child, teaching him the art of matching various shaped pieces with openings of similar configuration.

Having thus described the invention what is claimed as new and desired to be secured by Letters Patent is:

1. An educational toy comprising a hollow container having a top provided with a plurality of openings of various shapes adapted to receive pieces of similar configurations; a member mounted in the container for swinging movement to and from a position supporting the pieces when the same are in the openings; and releasable means normally holding the member in said position, the container having means of access to said pieces after the same have been dumped into the container by release of the member, said releasable means including a device engageable with the member and vertically reciprocable in said top.

2. An educational toy comprising a hollow container having a top provided with a plurality of openings of various shapes adapted to receive pieces of similar configurations; a member mounted in the container for swinging movement to and from a position supporting the pieces when the same are in the openings; and re-

leasable means normally holding the member in said position, the container having means of access to said pieces after the same have been dumped into the container by release of the member, said releasable means including a device engageable with the member and vertically reciprocable in said top, and a latch normally holding the device against descent.

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