April 4, 1939. M. J. CARPENTER 2,152,728

TOY BUILDING

Filed April 4, 1938

Fig. 1.

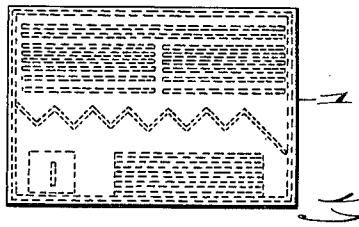


Fig. 7.

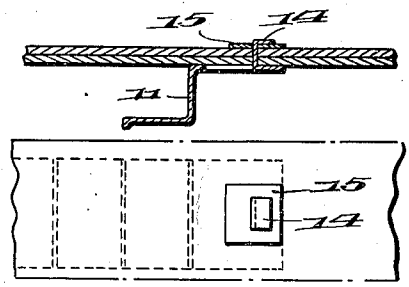


Fig. 8.

Fig. 10.

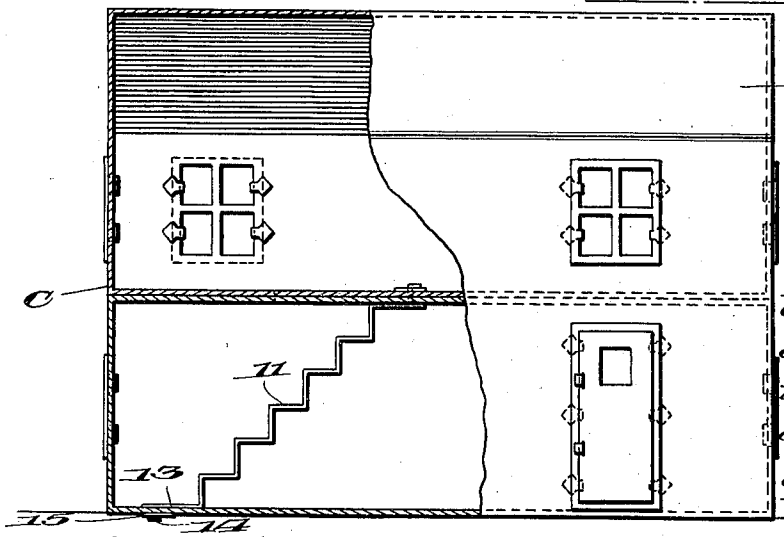


Fig. 9.

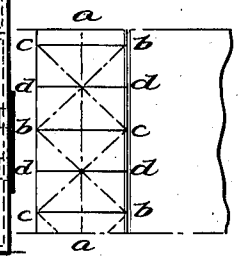


Fig. 2.

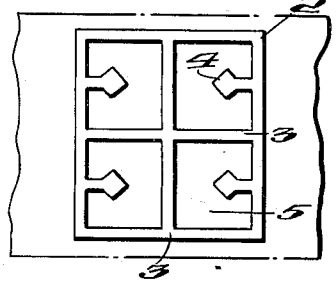


Fig. 4.

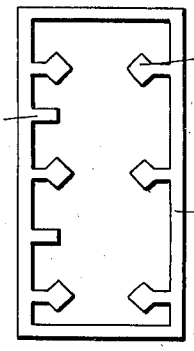


Fig. 5.

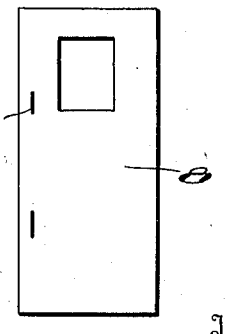


Fig. 3.

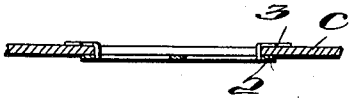
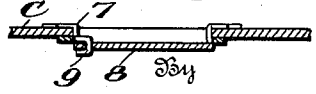


Fig. 6.



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TOY BUILDING

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Application April 4, 1938, Serial No. 199,964

6 Claims. (Cl. 46—21)

This invention relates to toy buildings and the object of the invention is to provide a package containing a sufficient number of structural units, such as door and window frames, to be secured to an ordinary pasteboard carton to produce an attractive toy building.

Another object of the invetnion is to provide door and window frames and other parts for a toy building in flattened form for packaging which can easily be fashioned into shape and secured to a pasteboard or corrugated board carton by a small child.

Another object of the invention is to provide structural units for toy buildings of inexpensive sheet material which can be readily attached to a carton by a very young child wtihout the use of any tools.

Discarded cartons from retail stores have heretofore been adopted for building toy houses not only in the home but in schools for young children thus teaching the children to use their imagination in fashioning an attractive toy building. The greatest difficulty the child encounters in doing this is in producing attractive doors, windows and stairways which resemble those of real buildings.

By the use of my invention, this difficulty is overcome since the package contains suitable doors, door frames, window frames, stairways, mantels, etc. which structural parts are made to resemble similar parts of real houses which when attached to the carton produce a small building of attractive and natural appearance.

I accomplish the foregoing objects of the invention, and others which will be apparent as the description proceeds, by means of the construction shown in the accompanying drawing, in which

Fig. 1 is a side elevation of a Cellophane wrapped package embodying my invention and comprising several doors and doorframes, window frames and a stairway;

Fig. 2 is an elevation of a window frame constituting one of the elements of my invention;

Fig. 3 is a section through a wall of a carton showing a window frame secured in an opening therein;

Fig. 4 is an elevation of a door frame constituting an element of my invention;

Fig. 5 is an elevation of a door constituting an element of my invention;

Fig. 6 is a section through a carton wall showing a door and door frame secured in an opening therein;

Fig. 7 is a section through the walls of two superposed cartons showing a stairway secured thereto;

Fig. 8 is a fragmentary top plan of a stairway shown in Fig. 7;

Fig. 9 is a fragmentary plan of a cardboard blank for forming a stairway; and

Fig. 10 is a front elevation of two superposed cartons with a door and door frame and several window frames secured thereto, the front wall being partly broken away to show the stairway therein.

On the drawing, in which like reference characters indicate like parts on all the views thereof, 1 indicates a Cellophane wrapped package constituting my invention and showing in dotted lines several structural units in flattened form.

2 indicates a sheet metal window frame having cross bars 3 to resemble the cross bars of a real window. The frame is provided with inwardly extending prongs 4 which are to be bent around an opening in the carton wall C, thus serving to hold the frame in place without requiring punching of holes for the prongs or any additional securing means. Pieces of Cellophane 5 of suitable size may be provided for the window frame thus giving them the appearance of glass windows, the Cellophane being held to the frame and the frame to the carton wall by passing the prongs through the Cellophane and then bending them around the wall of the opening in the carton.

A door frame 6 is shown in Fig. 4 having inwardly extending prongs 7 which are to be bent around the door opening in the carton wall to hold the frame in place. The door 8 is secured to the frame 6 by means of prongs 9 forming hinges which are passed through openings 10 in the door and then bent back upon themselves.

In the event that it is desired to provide a door frame between two adjacent cartons, it is desirable that the prongs 7 be much wider and longer so that they will serve to hold the cartons together when they are bent around the walls of the registering door openings. In some instances, as when thick corrugated cartons are used, it may prove desirable to make the pronged extensions practically the full height and width of the door frame.

The stairway 11 may be made of sheet metal or cardboard and is scored alternately on opposite sides at regular intervals to provide, when bent at the scorings, a series of steps. The bottom step 13 will be provided with prongs 14 for piercing the lower wall of the carton thus holding it in place. Similar prongs are provided on the upper step for securing it to the superposed walls

of the cartons adjacent the openings therein which form the stair well. Preferably, in order to hold the stairway firmly in place, it is desirable to have an additional plate 15 through which the prongs 14 pass. It is apparent that prongs might be provided on the plate 15 in lieu of having them integral with the steps, or prongs might be provided in both the step and the plate, such alternative arrangements being obvious expedients. The formation of the stairway is such that it may be completely flattened out for packaging instead of partially folded to its operative form, as shown in Fig. 1.

Since cartons are of different heights, it will be seen that if the stairway when folded on all the score lines is too long for the height of the carton, some of the lower steps could be flattened out and rest on the bottom of the carton.

In the event that the stairway is made of cardboard, it is desirable that the modification illustrated in Fig. 9 be provided. Each step and each riser is provided with an extension having score lines *a*—*a*, *b*—*b*, *c*—*c*, and *d*—*d* as shown in Fig. 9 on which they are bent, the extensions then being interfolded with each other and the overlapping portions pasted to each other. These extensions may be interfolded in several different ways, as is obvious, and I do not desire to limit myself to any particular manner of folding.

While a pronged metal plate, similar to 15, could be employed for holding the top and bottom steps of the cardboard stairway in proper position, it is preferable to paste them to the top and bottom walls of the carton respectively.

In order to form the sloping roof R, the end wall flaps of the carton are held in angular position by a strip of wide gummed paper which will bridge the gap between the flaps when so positioned.

It will thus be seen that I have provided a package of inexpensive structural units for attachment to an ordinary merchandise carton without the use of tools or implements. It is desirable, as is apparent, that the cartons be provided with weakened lines for door and window openings and stair wells so that they may be easily punched out to provide the necessary openings for the attachment of the structural units. However, it is apparent that a carton having such scored lines would cause a demand therefor and children would urge their parents to purchase packages of the product contained therein and ask the dealer to give them the carton when emptied. A package embodying my invention might be offered as a prize for a certain number of labels from packages.

Besides the various structural units which have been described in detail, the package might also contain sufficient decorative paper to paste on the outside of the carton to resemble brick or stone or shingles, and also decorative paper for the inside of the carton.

While there are many attractive cardboard toy buildings on the market, they lack the feature supplied by my invention of providing opportunity for constructive endeavor.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A package of structural units for a toy building, each of said units being formed from flat sheet material, and certain of said units each comprising an open frame having bendable inwardly projecting portions integral therewith for securing the same to a wall of the building by bending them around the edges of an opening therein.

2. A door or window frame for a toy building comprising an open frame of bendable sheet material having inwardly projecting portions extending towards each other for securing the same to a wall of the building by bending them around an opening therein.

3. A stairway for toy buildings comprising a strip of sheet material scored alternately on opposite faces, means for securing the stairway to the lower wall of a carton, means for securing the stairway to a top wall of the carton adjacent an opening therein, both of said means comprising metal members carried by the stairs having projections entering the walls of the carton.

4. A stairway for toy buildings comprising a strip of sheet material scored alternately on its opposite faces to provide a plurality of steps and risers, an extension on each step and riser, the extensions on each step and riser being constructed and arranged to be interfolded with the extensions on the adjacent riser and step respectively.

5. In a toy building, a door frame of bendable sheet material, a set of inwardly extending prongs integral with said frame for securing the frame around an opening in a wall of the building, and a door for said frame, said door having openings along one side edge thereof, and a second set of prongs integral with said frame, said second set of prongs being constructed and arranged to pass through the openings in the door and forming hinge means therefor.

6. A stairway for toy buildings comprising a strip of sheet material scored alternately on its opposite faces to provide a plurality of steps and risers when bent on said scorings, means for securing the lower step to the bottom of the building, means for securing the top step to an upper wall of the buildings, the construction being such that certain of the steps and risers may be flattened out whereby the height of the stairway may be adjusted for securing to buildings of different heights and means for securing the flattened portion of the steps and risers to a wall of the building.

MARGARET J. CARPENTER.