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K. R. GRIMM

2,284,815

MINIATURE PACKAGE

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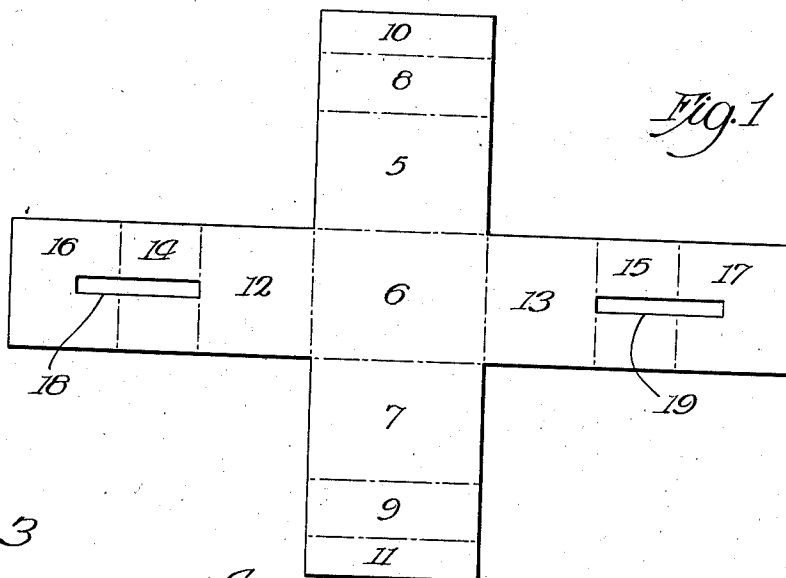


Fig. 1

Fig. 3

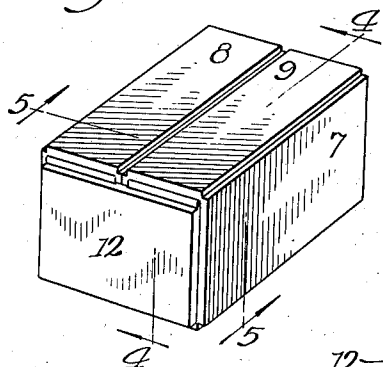


Fig. 2

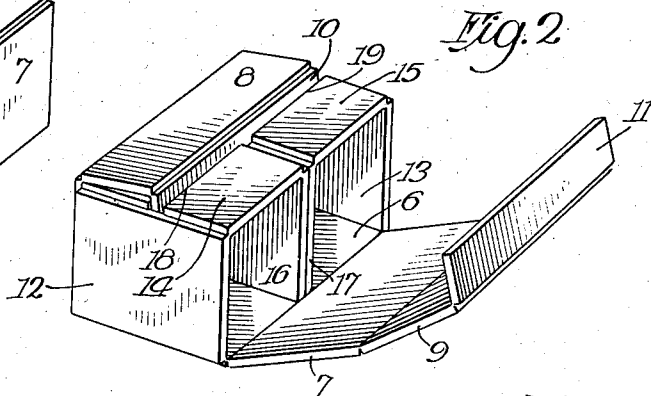


Fig. 4

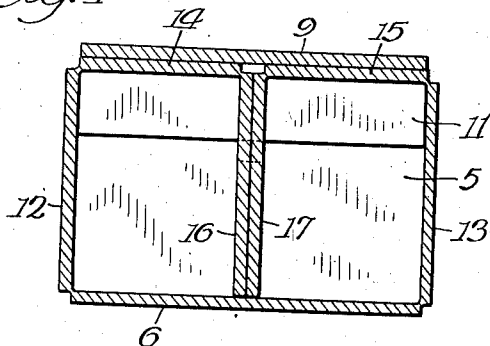
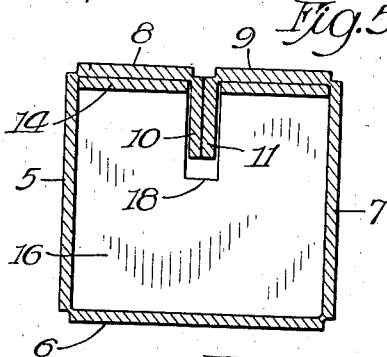


Fig. 5



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UNITED STATES PATENT OFFICE

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MINIATURE PACKAGE

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Application September 29, 1938, Serial No. 232,386

1 Claim. (Cl. 229-27)

This invention relates to a miniature package or a representation of a package or article in miniature form. The article herein contemplated is primarily designed to serve as a toy for use in connection with toy railroads, 5 toy trucks and the like, in connection with which the handling of "express" or "freight" and the like is a part of the play value available from such toys.

The principal objects of the invention are to 10 provide a miniature package which may be made economically and at low cost from paper or other comparably inexpensive material; to provide such a package structure which will be especially strong and durable notwithstanding 15 its construction from paper; to provide such a structure which will maintain its normal shape and play value condition through considerable rough and careless handling to which toys are normally subjected; to provide a structure of 20 the character indicated which may be supplied in blank form and easily and quickly folded to package form by children of such ages as will employ the article in their play; to provide such a package structure which may be not only easily 25 set up but which may also be easily unfolded to flat condition for storage purposes but which nevertheless will not tend to accidentally unfold itself during play; and in general, it is the object of the invention to provide an improved 30 toy or miniature package structure of the character indicated.

Other objects and advantages of the invention will be understood by reference to the following specification and accompanying drawing, wherein there is illustrated in somewhat enlarged size a miniature package embodying a preferred form of the invention.

In the drawing:

Figure 1 is a plan of a blank from which the miniature package is formed;

Figure 2 is a perspective illustrating the blank partially folded to package form;

Figure 3 is a perspective illustrating the package in set-up condition; and

Figures 4 and 5 are sections on the lines 4-4 and 5-5, respectively, on Figure 3.

Referring now to the drawing, the blank shown in Figure 1 for forming the package represents 50 a card-board blank, the stock employed being of any pre-selected thickness and stiffness.

The blank is cut in the form of a cross as clearly shown in Figure 1 and it is provided with fold lines represented by dot and dash lines 55

in the drawing. The fold lines may be of any suitable form such as ordinary scoring or creasing but it is preferred, when the stock is of a thickness in excess of one-thirty-second of an inch, to employ so-called "cut scoring" which consists merely in continuous slits extending only part way through the thickness of the stock. In the drawing the fold lines contemplated are of the latter type and the folds made in the blank are represented in the form resulting from such scoring. It will, of course, be understood that any suitable form of scoring so as to facilitate folding may be employed.

The blank, as shown in Figure 1, is provided with scoring which serves to divide the blank into side walls 5, 6 and 7 of pre-determined full length and width. Other scoring serves to divide the blank into a pair of side wall portions 8 and 9, which in this instance are of full length but of only one-half the width of the wall member 6. Tongue portions 10 and 11 are also provided integral with the side wall portions 8 and 9.

End walls 12 and 13 are formed for closing the ends of the package and the outer ends of the end walls are provided with end flaps 14 and 15, respectively, which are in turn equipped with extensions 16 and 17. For a purpose which will presently appear, the flap 14 and extension 16 are slotted as indicated at 18 and the flap 15 and extension 17 are slotted as indicated at 19.

The blank as formed in Figure 1 is provided with cut scoring, all of which is on the outside of the blank. In forming the blank into a package, the end walls 12 and 13 are first folded to perpendicular relation to the side wall 6, and then the flaps 14 and 15 and their extensions 16 and 17 are folded into inwardly extending and transversely extending positions, respectively, as shown in Figure 2. The length of the tongues 14 and 15 is preferably, although not necessarily, of such length that when the end walls 12 and 13 are disposed in parallel relation, the extensions 16 and 17 are, when folded as above set forth, in face-to-face relation, forming in effect a two-ply wall intermediate the end walls 12 and 13. It will be observed that the slots 18 and 19 are disposed in alignment, and the next step in forming the blank into a package is to fold the side walls 7 and 8 upwardly, and then to turn the side wall portions 8 and 9 inwardly and to insert the tongues 10 and 11 into the aligned slots 18 and 19. The resulting package is illustrated in Figure 3 and it will be un-

derstood that the package is reinforced intermediate its ends by means of the two-ply, transversely extending, intermediate wall comprising the extensions 16 and 17.

The package formed as above described is very rigid owing to the very heavy intermediate reinforcement resulting from the extensions 16 and 17, and there is little or no tendency for the package to open due to the large amount of frictional contact between the meeting tongues 10 and 11 and the adjacent edge portions of the flaps and extensions through which the said tongues extend.

The structure may also be assembled by first folding the side walls 5 and 7 to their operative relation and then folding the wall portions 8 and 9, and their tongues 10 and 11 into operative position, after which the end walls 12 and 13 and their connected parts may be folded into operative position. Thus it will be seen that there is a desirable degree of flexibility in respect of the method of assembling, such flexibility being highly desirable in toys of this character employed by very young children.

The employment of the cut scoring for facilitating bending of the blank not only serves to make bending to square or other pre-determined form very easy without cracking or breaking the paper stock, but it also adds to the appearance of the finished article in that each wall of the structure is, in effect, given a visible thickness as clearly shown in Figure 3. Hence, sturdy and realistic appearance is obtained.

The described miniature package construction may, of course, be employed for packages of various dimensions. One toy package typical of the above structure for toy purposes measures approximately one inch by one and one-quarter inches by one-half inch; another such structure measures approximately one inch by seven-eighths inch by two inches. Such packages may represent various articles of commercial express or freight and they may have their outer sides ornamented with printing or lithographing or

the like, in simulation of current commercial products.

Changes in the described construction and in the form and proportions of parts may, of course, be made without departing from the spirit of the invention, the scope of which should be determined by reference to the following claim, the same being construed as broadly as possible consistent with the state of the art.

I claim:

A miniature or toy representation of a shipping package, comprising a paper board blank having a central rectangular panel and extensions from each of the four edges thereof, said extensions being foldably connected to the edges of said central panel, the width of each of said extensions substantially corresponding to the length of the respective edges from which they extend and being substantially constant throughout the length of the extension, each of said extensions being provided with a pair of relatively spaced fold lines extending transversely thereof in parallel relation to said edges of the central panel, said fold lines being so disposed that said extensions are foldable upwardly and inwardly relative to said central panel to form a rectangular, hollow, box-like structure, the outer end portions of said extensions being folded toward said central panel substantially midway of opposite side walls of the structure, one pair of said outer end portions terminating in spaced relation to said central panel and the other pair of outer end portions and the inwardly folded portions from which they extend being apertured to receive said first mentioned pair of outer end portions, the apertured outer end portions being of such size as to traverse the entire interior of the structure so as to reinforce the structure, and said aperture terminating in spaced relation to said central panel so as to maintain an integral connection between the extreme or free end portions of said apertured outer end portions.

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