July 3, 1934. G. W. NISBET 1,965,083

COMBINED ADVERTISING DEVICE AND PUZZLE

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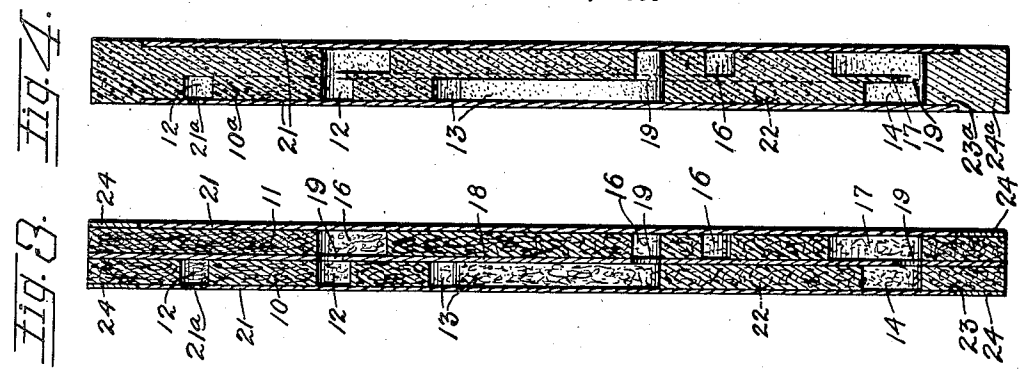


Fig. 4.

Fig. 3.

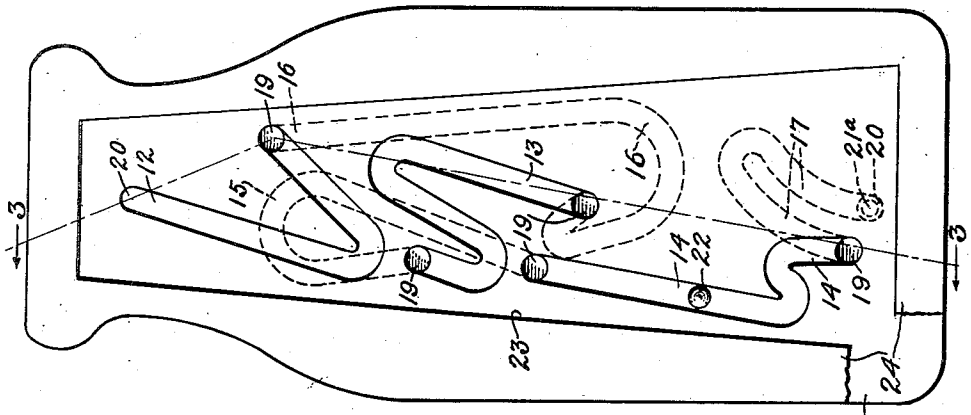


Fig. 2.

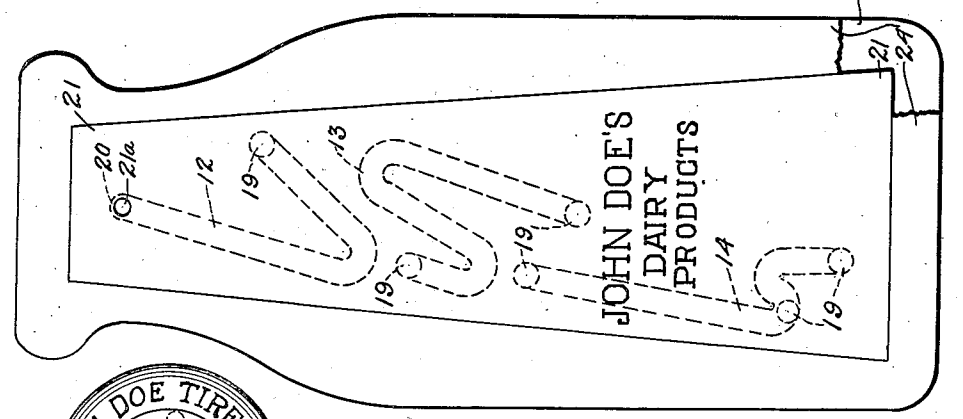


Fig. 1.



Fig. 5.

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COMBINED ADVERTISING DEVICE AND PUZZLE

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3 Claims. (Cl. 273—109)

This invention relates to puzzles, and especially to a combined advertising device and puzzle.

One object of the invention is to provide an improved or novel form of puzzle-body of convenient size and shape to receive and hold an advertising card or cards in position to form part of the puzzle and to display the advertising matter to the persons who manipulate the puzzle.

Another object is to provide a puzzle of this character that is capable of being manufactured so cheaply that advertisers can use them in efficiently and economically advertising their respective commodities thereon.

Another object is to provide an advertising puzzle of such character that it is adaptable to numerous shapes so as to be useful and practical in advertising numerous and various commodities without departure from the general characteristics of the invention.

Other objects and important features are pointed out or implied in the following details of description, in connection with the accompanying drawing in which:

Fig. 1 is a front elevation of a combined advertising device and puzzle made in accordance with one form of the invention, a part being broken away at the lower-right.

Fig. 2 is a view similar to Fig. 1, but the advertising card or sheet being omitted, a part being broken out at the lower-left.

Fig. 3 is a sectional view along the line 3—3 of Fig. 2, but having the advertising card or sheet in place as in Fig. 1.

Fig. 4 is a view similar to Fig. 1, but showing a 3-piece construction instead of the 7-piece construction shown in Fig. 3.

Fig. 5 is a front view showing a different form of the invention, or a different application thereof, while embodying an indicating or guiding feature that may also be applied to the other forms.

Referring to the drawing in detail, wherein the similar reference numerals refer to similar parts in the several views, the invention consists in the construction and arrangement or combination of elements that will now be described as follows:

In a broad sense, the puzzle comprises a body having a concealed tortuous passage therein and free to be turned by the hands of a person, and a weight confined in said passage and movable by gravity therealong to and from a point designated as a goal, said body having means for indicating arrival of the weight at the goal.

The body of the puzzle is preferably flat and formed of layers or laminations of sheet material such as wood, fibre-board, paste-board, cardboard, composition, or even metal where the devices are made small and die-cast. For instance, in Fig. 3, the parts 10 and 11 are indicated as being made of fibrous sheet material, and in Fig. 4, the molded part 10*a* is indicated as being plastic composition, plaster-Paris, or the like. The fibrous sheets 10 and 11 are formed with through-slots 12, 13 and 14, in sheet 10, and 15, 16 and 17 in sheet 11, so it is seen that there are two sets of these slots, each set in a different plane from the other. These parts 10 and 11 are glued, cemented or otherwise secured on the central sheet 18 which is formed with holes 19 that communicate with the slots 12 to 17 which have their inner sides closed by the sheet 18 so that they constitute grooves that are interconnected through the openings 19 to form a continuous tortuous passage that terminates in goals 20 which are visibly marked by openings or windows in the outer sheets or advertising cards 21.

At 22 is indicated a ball or weight which may be of any solid material or of mercury, the latter used only in case the windows 21*a* are covered with transparent material. This weight, if of solid material, cannot pass through the openings 21*a* which are of smaller diameter than the ball or weight 22, but can be seen through these openings when at the respective goals. The weight is caused, by gravity, to pass along the tortuous passage (including the openings 19) by the user turning the puzzle in a succession of proper directions, and the puzzling part of the operation is to know what the proper directions are, for the user has not only to contend with the bends in the respective slots or grooves, but also to contend with the holes 19 which require that the device shall be tilted in opposite directions that are quite different from the directions required to cause the weight to pass along the grooves; so while it might be possible, by chance, to cause the weight to pass from goal to goal by shaking and turning the device, it is preferable to provide a chart or guide such as will presently be described, or a similar one on a separate card, so that the puzzle will be a test of skill rather than a mere chance-operated device. It should be understood that the outer sheets or advertising cards 21 cover and conceal the tortuous passage with exception of the parts of the goals that are visible through the windows 21*a*, and that these advertising sheets or cards may cover the entire main surfaces or sides of the slotted members, as in Fig. 5, or may cover only

the intermediate parts as in Figs. 1, 3 and 4; and in the latter case, a depression is provided, as at 23, of Figs. 2 and Fig. 3, or as at 23*a* of Fig. 4. In Figs. 2 and 3, the depression is the result of marginal sheets 24 having the main intermediate part cut out to form an opening of a size and shape to conform to that of the advertising card or sheet 21 to be fitted therein; whereas, in Fig. 4, the raised marginal parts 24*a* are molded integrally with the member 10*a* which also has the parallel sets of channels or grooves and intercommunicating holes 19 formed therein during the operation of molding or casting. Inasmuch as I have shown the slots and holes in Fig. 4 of the same respective shapes as in Fig. 3, the same reference numerals are applied to them; but it should be understood that there is practically no limit to the variations that may be made in the shapes, lengths, and relations of the slots or grooves that combine with the holes 19 to form the tortuous passage.

Referring now to Fig. 5, wherein the outer sheet or advertising card 21*x* represents a wheel-tire on a carrying disc, it is seen that the course of the tortuous passage is indicated by a tortuous arrangement of lines 25 that connect with the goal-windows 21*a* and with dotted circles 26 that show the locations of the holes 19. With this guiding arrangement, it would be comparatively easy to pass the weight from goal to goal if the weight could be seen as it travels, but inasmuch as the outer sheets are opaque, and inasmuch as the guiding arrangement does not indicate which set of channels is in one plane, and which in a different plane, it is quite a puzzling operation to cause the weight to progress toward an elected goal without many retrogressions of the weight.

From the foregoing descriptions in connection with these several forms of the invention, it is seen that the invention is not limited to these forms, for various changes may be made within the scope of the inventive ideas as implied and claimed.

Means other than windows may be provided to indicate the arrival of the weight at either goal.

What I claim as my invention is:

1. A puzzle comprising a central sheet having holes therethrough, two through-slotted sheets secured flat against opposite sides of said central sheet in such position that the slots thereof are in open communciation with said holes and thereby in open communication with one another so as to form a continuous tortuous passage, outer sheets secured flat against the respective through-slotted sheets in position to conceal said slots, and a weight in and movable along said tortuous passage to a point designated as a goal, means being provided to indicate the arrival of said weight at said goal.

2. A puzzle comprising an integrally molded or cast flat body having sets of grooves in opposite sides thereof and having holes therethrough in open communication with the grooves of both sets in proper relation to form a continuous tortuous passage, said body having raised marginal parts on opposite sides and surrounding depressed intermediate surfaces of that portion of the body which contains said tortuous passage outer sheets disposed flat against and secured to opposite sides of said body and against said depressed intermediate surfaces in position to conceal said grooves and holes, a weight in said tortuous passage and movable by gravity through said holes from one to another of said grooves and along said grooves to a point designated as a goal, means being provided to indicate the arrival of said weight at said goal.

3. A puzzle comprising a body having a concealed tortuous passage and being freely turnable in all directions by the hands of a person, a weight in said passage and movable therealong by gravity to a point designated as a goal, said body having a raised marginal part surrounding a depressed intermediate part that contains said tortuous passage, and an outer plate normally secured on said depressed intermediate part to conceal said passage and confine said weight therein, means being provided to indicate the arrival of said weight at said goal.

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