

(No Model.)

P. J. HOGAN.
TOY OR PUZZLE.

No. 460,014.

Patented Sept. 22, 1891.

Fig. 1.

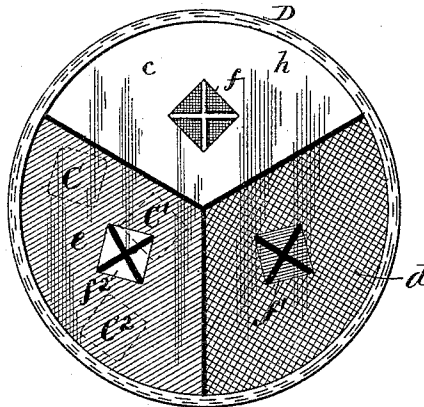


Fig. 2.

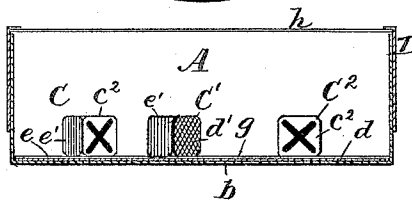
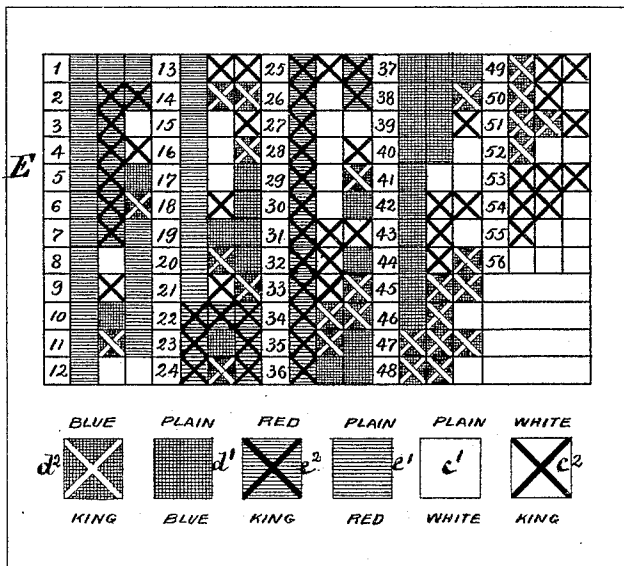


Fig. 3.



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TOY OR PUZZLE.

SPECIFICATION forming part of Letters Patent No. 460,014, dated September 22, 1891.

Application filed May 5, 1891. Serial No. 391,653. (No model.)

To all whom it may concern:

Be it known that I, PHILIP JOSEPH HOGAN, of Negaunee, in the county of Marquette and State of Michigan, have invented a new and Improved Toy or Puzzle, of which the following is a full, clear, and exact description.

This invention consists in a new toy or puzzle comprising a box having a suitably marked or colored field on the interior of its bottom and a series of suitably colored or marked loose polygonal-shaped bodies or cubes contained therein for movement over or change of position on said field by merely jerking or tossing the box without necessarily inclining it and without any interposed moving means to solve the puzzle or by the aid of a chart and key thereto for playing various games, such as telling fortunes or answering questions for social amusement and entertainment, substantially as hereinafter described, and more particularly pointed out in the claims, the whole forming what may be termed a "push-box puzzle" by reason of the manner in which the loose polygonal-shaped bodies are pushed, moved, or tossed to assume different positions and change of face on the field by the direct manipulation of the box.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a plan view of the toy or puzzle. Fig. 2 is a vertical section of the same, and Fig. 3 is a face view of a chart used in connection with the toy or puzzle.

While numerous puzzles can be solved by the combinations formed in the push-box and any ingenious person can make new and interesting games with the box and its contained loose cubes or polygonal-shaped bodies and chart belonging to the same—also the field in the bottom of the box may be differently colored or marked and the faces of the loose cubes or polygonal-shaped figures also differently colored or marked—the following description will suffice to explain the general construction, operation, and use of the toy or puzzle.

A indicates a box, preferably of circular form, designed to be held in the hand and

having a field on the interior of its bottom *b* divided or marked into three sectors or separated sections *c d e*, each of a different color—as, for instance, the section *c*, made to present a white ground, the section *d* a blue ground, and the section *e* a red ground—and each of these sections having a figure *f f' f²*, preferably of square shape, of different color delineated upon it; also, if desired, with a special mark, such as a cross or the letter X delineated upon it. Thus the figure *f* on the white ground or section *c* may be of a blue color, the figure *f'* on the blue section *d* of a red color, and the figure *f²* on the red section *e* of a white color. A transparency or glass *g* is arranged over this field in the bottom of the box, not only for the purpose of exposing and protecting it, but to form a smooth gliding surface for the loose polygonally-shaped bodies or cubes *C C' C²* upon or over it. Any number of these cubes may be used and any number of different-colored sections in the field on the bottom of the box to correspond; but three, as here shown, will suffice to explain. Said loose polygonal-shaped bodies when of cube form present six sides or faces each, and each of these sides is differently colored or distinguished, but all of them for the several cubes are colored or distinguished alike. Thus, in the illustration represented in the drawings, each cube is supposed to have a plain white side *c'*, a white side or face *c²*, having a cross or distinguishing mark upon it, a plain blue side *d'*, a blue side or face *d²* with the cross or mark upon it, a plain red side *e'*, and a red side or face *e²*, having the cross or mark on it, all as shown at bottom of the chart in Fig. 3, where the six sides of any one of the cubes are represented. When these cubes are placed promiscuously in the box, as shown, for instance, by dotted lines in Fig. 1, a cover *D*, having a glass or transparent top *h*, is shut down or over the box, when the toy or puzzle is ready for use, said cover exposing the interior and preventing the cubes from being tossed out of the box.

In playing or solving the toy or puzzle, the marked faces of the cubes are called "kings," and distinguished according to the colored sides of the cubes upon which the cross or

mark appears. Thus there is a white king a blue king, and a red king. The other faces or sides of the cubes simply represent plain white, blue, and red surfaces.

5 To solve the puzzle, shake the box until the white king, the blue king, and the red king face uppermost. Then by tapping or jerking the box, not necessarily inclining it, cause the red king to move or face upward on the
10 red square or figure f' on the blue section d of the playing-field, the blue king on the blue square or figure f on the white section c of the field, and the white king on the white square or figure f^2 on the blue section e of
15 the field. When the three kings are covering their correspondingly colored squares or figures on the different sections of the field, which will require very nice manipulation of the box to accomplish, the puzzle will be
20 solved.

To use the device as a toy for answering questions with a simple affirmative or negative, ask the question first and then shake the box. Two or three of the marked faces on
25 the sides of the cubes turning up means "yes" for the answer; and two or three of the plain sides or faces of the cubes turning up means "no" for the answer.

To further use the device as a toy or game for social recreation and amusement a chart E may be used in connection with it. In explanation of this it should be stated that the three upturned faces of the cubes form a combination, and there are fifty-six different
35 combinations that can be formed by the upturned faces of the three cubes. The chart E signifies or shows in rows or sets of squares these different combinations, each set consisting of three squares and numbered, respectively, from 1 to 56. The squares themselves are colored or marked to correspond with the differently colored and marked or
40 plain sides of the cubes, but of course differently arranged to accord with the different combinations produced by the upturned faces of the cubes. This is shown in the chart or main portion thereof by the squares being differently line-ruled and left plain or marked to conform with the differently lined or plain
50 or marked faces of the cubes, as represented by the drawings in Figs. 1 and 2, and space below the chart proper in Fig. 3. Thus the three plain white squares in the row or set of squares on the chart numbered 56 form or
55 correspond with the combination produced by the three cubes presenting their plain white faces c' uppermost in the manipulation of the box. The set of three squares numbered 1 correspond with the combination produced by the upturned plain red sides or faces of the three cubes, and so on throughout the chart. Thus the chart shows an exact copy of each combination formed by the three cubes, and the number opposite each
60 combination as represented on the chart may

signify or stand for a particular letter of the alphabet. Thus the set of squares numbered 1 may stand for the letter A, the set of squares numbered 2 may stand for the letter B, the set of squares numbered 3 may stand for the letter C, and so on. Accordingly, if it be required to spell a word or sentence by the shaking of the box, it will be necessary to shake it successively until each letter in the word or sentence is produced as expressed
70 by the combinations formed by the upturned faces of the cubes and shown on the chart. For instance, to commence the spelling by the letter A, it will be necessary to produce the combination shown on the set of squares numbered 1 in the chart; to indicate the letter B, produce the combination shown in the set of squares numbered 2 in the chart, and so on for any number of letters or words; or the numbered combinations as shown in
80 the chart may be made to indicate by means of a printed list or key certain sayings, answers, or predictions—as, for instance, in "fortune-telling," or other like games for social pleasure or amusement—so that every combination produced by the shaking of the cubes in the box will have its own meaning and interpretation shown on the chart and explained by the key. These are only a few of the puzzles or games which can be worked by the
90 box and its cubes.

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

1. In a toy or puzzle of the character herein described, a box having an interior exposed playing-field divided into sections and each section having a square or marked space of different color to each other and of different color to the sections on which they appear, the whole being adapted for use in connection with a series of loose polygonal-shaped bodies or cubes within the box, having their faces or sides both plain and marked and differently colored for movement within the box by manipulating the latter, substantially as specified.

2. The combination of the box having a sectionally-divided and differently-colored exposed playing-field within it, marked with squares or spaces of different colors, and a series of loose polygonal-shaped bodies having their sides both plain and marked and of different colors for operation within the box by the manipulation of the latter, and whereby they are made to form different face combinations, substantially as specified.

3. In a toy or puzzle of the character herein set forth, the combination, with the box provided with an exposed interior playing-field and with the loose polygonal-shaped bodies both plain and marked and of different colors on their sides, adapted to move over and form different combinations on said field by the manipulation of the box, of a chart com-
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posed of divided squares or spaces in sets having numbers or symbols to distinguish them, said squares or spaces being made both plain and marked and of different colors corresponding with the sides of the polygonal-shaped bodies, and arranged to correspond with the different combinations formed

by said bodies, essentially as and for the purposes specified.

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