Sept. 27, 1932. H. W. SPAULDING 1,879,571

MOVABLE BLOCK PUZZLE

Filed July 28, 1931

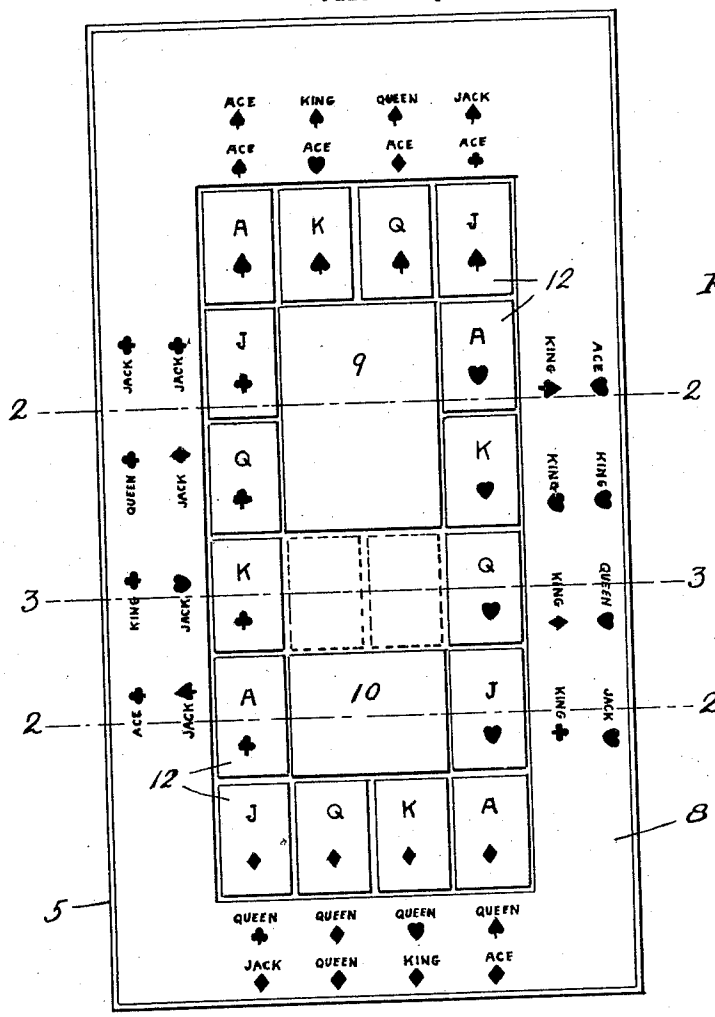


Fig. 1.

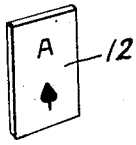


Fig. 4.

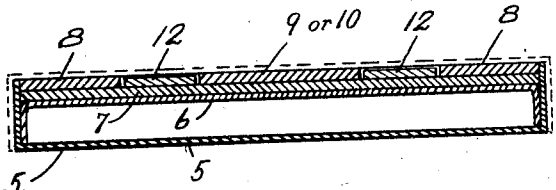


Fig. 2.

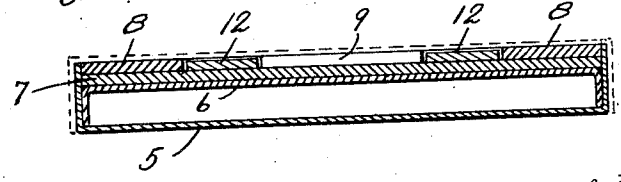


Fig. 3.

Inventor.
Harris W. Spaulding
by L. L. Hamman
Atty.

Patented Sept. 27, 1932

1,879,571

UNITED STATES PATENT OFFICE

HARRIS W. SPAULDING, OF HAVERHILL, MASSACHUSETTS

MOVABLE BLOCK PUZZLE

Application filed July 28, 1931. Serial No. 553,519.

This invention relates to puzzles of the movable block type in which blocks bearing certain indicating marks are slidably moved within an enclosure to secure certain predetermined arrangements of the blocks without removing them from the enclosure.

The objects of my invention are to provide a puzzle of the above described type which will not only afford amusement to the average person, but will provide suitable scope for the ingenuity of the person, so that, by working out a system of movements of the blocks, one may accomplish the objective much more quickly than another, and at the same time the difficulty of working out the puzzle will not be too great an accomplishment for the average person.

I accomplish these objects by means of the construction and arrangement hereinafter described and illustrated in the accompanying drawing in which:

Fig. 1 is a plan view of the block holding enclosure.

Fig. 2 is a cross sectional view which may be considered as taken at either of the lines 2—2, of Fig. 1.

Fig. 3 is a cross section at line 3—3 of Fig. 1.

Fig. 4 is a detail view of one of the blocks.

For the purpose of providing a construction which may be easily and economically manufactured from ordinary cardboard, I provide an oblong, or rectangularly shaped box 5 having a flanged false bottom 6 fitted therein, on which another false bottom 7 is placed as a filler. A cardboard frame 8 is also fitted in the box 5 and rests on the bottom 7, the inner edges thereof forming an enclosing wall for an oblong space or field. Two rectangularly shaped pieces of cardboard 9 and 10 are secured on the bottom 7 within the frame 8 in positions in which they are spaced at equal distances from the longitudinal edges of the frame 8, and also at equal distances from the transverse edges thereof, and from each other, forming filler walls, or what may be more conveniently termed "islands" in the field. The islands 9 and 10 are of equal width and the length of the island 9 is twice that of the island 10, and, as compared with the field or space within the frame 8, the length of the island 9 is one-third, and that of the island 10 is one-sixth the length thereof, and the width of the islands is one-half the width of the field, so that the width of the spaces between the side edges of the islands and the longitudinal edges of frame 8 is equal to one-fourth the width of the field and the width of the space between the islands and between the ends of the islands and the adjacent transverse edge of the frame 8 is equal to one-sixth of the length of the field.

All the parts above described are secured together in fixed relation by any suitable means.

The movable blocks 12 which are employed in connection with the above described construction are preferably made in an oblong form to represent ordinary playing cards, and are preferably made of cardboard of the same thickness as that of the frame 8 and islands 9 and 10. The length of each block approximates to one-sixth the length of the field within frame 8 and the width thereof approximates to one-fourth the width thereof. 16 of said blocks are provided having characters thereon indicating the four high honors of each card suit. The construction thus permits 6 blocks to be placed end to end along each side of the field between the longitudinal edges of the frame 8 and the islands 9 and 10, and 4 blocks to be placed side by side across each end, the 16 blocks thus leaving 2 spaces unoccupied. The dimensions of the blocks are such that they are slidably fitted to, and may be moved freely in the channels thus provided about the islands.

The above described construction thus provides three endless channels, or paths for movement of the blocks, one, which may be termed the main path, which extends entirely about both islands 9 and 10 and has as its outer periphery the inner edge of the frame 8, and two auxiliary paths, one of which extends about each island 9 and 10, each auxiliary path being in part common to the other and in part common to the main path.

While various initial arrangements of the blocks may be made, after which they may

be moved so as to arrange them differently according to some predetermined manner, a suggested arrangement and problem is preferably indicated on the margin or frame 8, as shown in the drawing, and which may be coupled with suitable printed directions which will be supplied. This consists in arranging the blocks according to the indicators on the outer margin of the frame, so that the four honors of each suit will be arranged in sequence along each side, as indicated in Fig. 1, and then moving the blocks so that the four corresponding honors will be arranged in order along the four sides, according to the indicators on the inner margin of the frame, and then moving the blocks so that they will be returned to their original position.

In performing the puzzle the three endless paths above referred to are employed, the blocks being moved endwise and sidewise and shifted from one path to another to place them in the desired sequence. The two spaces between the two islands 9 and 10 are also employed as switching spaces, for example, if it is desired to place a certain block at one end of a sequence which has been formed in the main outer path, the block may be moved into one or the other of these spaces, and then the sequence may be moved about in the main path until the block can be moved into the required position.

Various systems may also be worked out which involve the use of the three paths in conjunction with each other, so that the rapidity with which the various combinations may be changed from one to another may be greatly facilitated.

I claim:

1. A movable block puzzle comprising a rectangular field having a main rectanguular path and a series of blocks having characters thereon distinguishing each from all the others and slidably fitted to and supplied in sufficient number to fill said path completely, the transverse portions of said path and the longitudinal portions thereof between the transverse portions each having the same number of block spaces and said field having a transverse auxiliary path opening to directly opposite intermediate spaces in said longitudinal portions of the main path and having one half the number of block spaces between said portions as are provided in the transverse portions of the main path.

2. A movable block puzzle comprising a rectangular field having a main rectangular path and a series of blocks having characters thereon distinguishing each from all the others and slidably fitted to and supplied in sufficient number to fill the said path completely, the transverse portions of said path each having four block spaces and the longitudinal portions thereof each having four block spaces between the transverse portions and said field having a transverse auxiliary path opening to directly opposite intermediate spaces in said longitudinal portions of the main path and providing two block spaces between said portions.

3. A movable block puzzle comprising a rectangular field having a main rectangular path and a series of blocks having characters thereon distinguishing each from all the others and slidably fitted to and supplied in sufficient number to fill the said path completely, the transverse portions of said path and the longitudinal portions thereof between the transverse portions each having the same number of block spaces and said field having a transverse auxiliary path opening to directly opposite intermediate spaces in said longitudinal portions of the main path and having one-half the number of block spaces between said portions as are provided in the transverse portions of the main path, the margin of the field about the main path having two sets of characters, each of which correspond to the characters of said blocks, one set indicating the positions in the main path in which the blocks are to be initially placed and the other set indicating positions therein to which they are to be moved.

In testimony whereof, I have signed my name to this specification.

HARRIS W. SPAULDING.