

No. 717.105.

Patented Dec. 30, 1902:

R. W. MANSFIELD.
GAME AND PUZZLE BLOCKS.

(Application filed June 5, 1902.)

(No Model.)

Fig:1

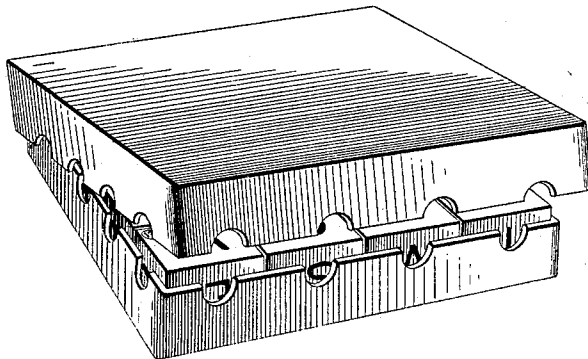
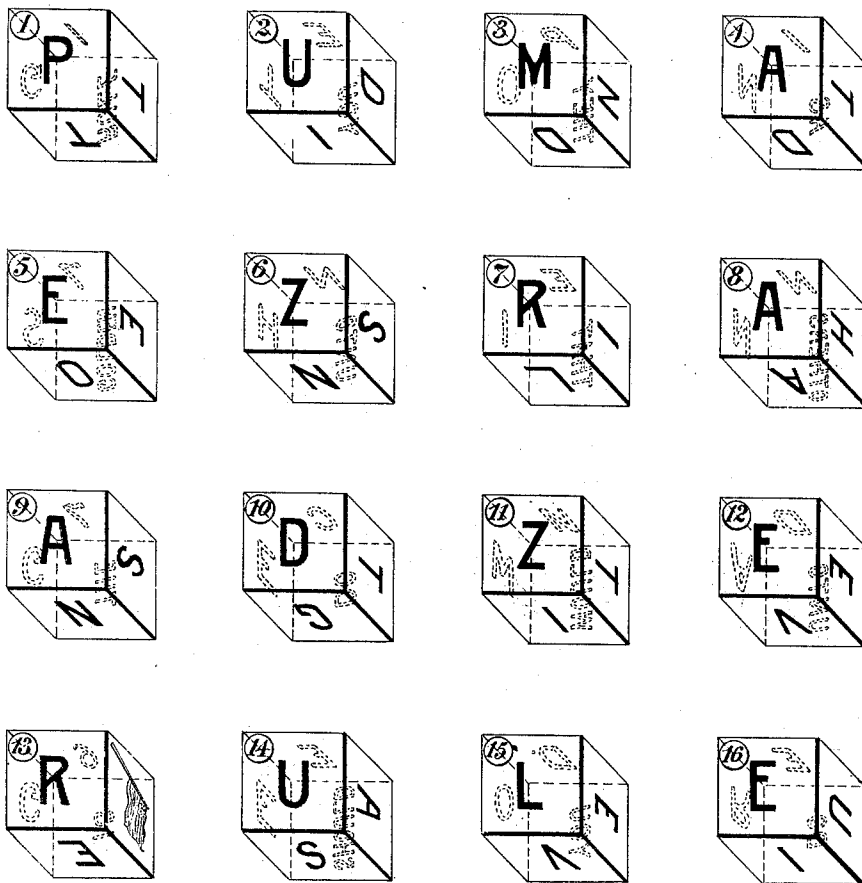


Fig:2.



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UNITED STATES PATENT OFFICE.

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GAME AND PUZZLE BLOCK.

SPECIFICATION forming part of Letters Patent No. 717,105, dated December 30, 1902.

Application filed June 5, 1902. Serial No. 110,250. (No model.)

To all whom it may concern:

Be it known that I, RICHARD W. MANSFIELD, a citizen of the United States, residing at New London, New London county, Connecticut, have invented certain new and useful Improvements in Game and Puzzle Blocks, of which the following is a full, clear, and exact description.

My invention relates to improvements in blocks, and particularly to the arrangement of letters, figures, pictures, and other illustrations upon blocks having a plurality of sides.

The object of my invention is to provide a set of blocks which in addition to the features of amusement ordinarily incident thereto may be a source of information and instruction. As a puzzle they present matters of interest to people of all ages, as will hereinafter appear.

The invention consists in so arranging letters, words, pictures, or the like upon the blocks of a set that when placed in proper order definite words, sentences, or pictures will be exhibited. When the entire set of blocks is turned completely over or turned by columns or lines, new words, sentences, &c., will appear, as hereinafter described. A regular series will thus be made to appear after proper preliminary arrangement upon turning the blocks in their proper regular order. For this purpose the letters, pictures, or other illustration upon each individual block must be arranged in accordance with a premeditated system. A set of blocks is herein shown with illustrations properly located. The system by which the blocks are to be turned will be described.

In the drawings, Figure 1 represents a perspective view of a box partially opened and containing a set of blocks. Fig. 2 represents in perspective a set of sixteen blocks, which are adapted to be used together in a complete set. For convenience in reading they are shown separated from one another and as if transparent.

In Fig. 1 I have shown the box cover and body so notched around the edges as to render it much easier to extract the blocks by rows or by columns by means of the thumb and finger.

In Fig. 2 the blocks are numbered from "1" to "16" in regular order. For the purpose of illustrating the invention the words and figures as shown have been selected. The faces bearing the numbers will be called the "key-face" and would by preference be colored uniformly or have a uniform system of designation. A set may be made with any other suitable number of blocks and in various sizes or having suitable colors or for any language or style of lettering, as desired. As shown herein, the key-face words read by lines from top to bottom, with one letter upon each block, as follows:

P-U-M-A

E-Z-R-A

A-D-Z-E

R-U-L-E.

It will be noted that the letters on the first column of blocks, numbered "1," "5," "9," and "13," spell "P-e-a-r." Furthermore, the word "P-u-z-z-l-e" is spelled out by tracing the letters on the blocks "1, 2, 6, 11, 15, 16." This particular arrangement is shown to illustrate the fact that words having various and sundry meanings may be used and be, if desired, in the form of an acrostic or the like.

The key-face may bear upon it an illustration of a portrait, map, &c., as in the ordinary sectional picture. The first object of the blocks is to arrange them in such an order, their key-faces being uppermost, as to spell out or illustrate the proper key. This may be made amusing and instructive in degree according to what is used as a key-face. The key may be given in the usual form of an acrostic, if desired, or by stating that the figure to be formed illustrates a certain word, subject, portrait, map, or drawing. The game known as the "15-puzzle" may be played by withdrawing one block from the box, as usual, and proceeding to move about with the remainder.

For the purpose of the game it is well to retain the blocks in the box as much as possible. After having the key-face properly arranged the next object is to discover the proper series of turns of the blocks necessary to disclose the remainder of the plan. By "turns" I mean either placing the cover on the box

and inverting the entire set in the box or turning the various columns or lines in their proper order until other series of words, sentences, or pictures have been brought to view.

5 In the set of blocks herein illustrated when the blocks have been arranged with the key-face in proper order, as shown in Fig. 2, and in the box the entire box should be inverted and in such a manner that the block numbered "16" shall be in the position formerly occupied by the block numbered "1." When in this position, you will read upon the blocks the words "Do- unto- others- as- you- would- that- they- should- do- unto- you- is- the- Golden- Rule." This appears inverted and dotted in Fig. 2. The blocks now rest in the cover of the box. When the blocks have been placed in this position, which we may call "Position No. 2," each line may be successively
10 lifted between the thumb and finger, turned through a quarter of a revolution away from you, and until the letters "G- E- O- R- G- E- W- A- S- H- I- N- G- T- O- N" appear. The box should then be revolved so that the left-hand edge becomes the top, when the words will read right side up. In this position, called "No. 3," the blocks number, respectively, "13-14-15-16," "9-10-11-12," &c. As shown in Fig. 2, these letters appear upon the blocks on the face at the left, which is dotted, being in the background. If now the body of the box be placed over the blocks and the entire set inverted cornerwise, as before, you will read "T- H- E- U- N- I- T- E- D- S- T- A- T- E- S- (flag.)" This matter is of course on the sides of the blocks opposite to that before displayed bearing the name "George Washington." It may be clearly read upon the drawing on the right-hand faces of the blocks. The blocks now should be in the order "4- 8- 12- 16," "3- 7- 11- 15," "2- 6- 10- 14," "1- 5- 9- 13"—the fourth position. This face, bearing the United States flag, might conveniently for instructive purposes have a map printed thereon. The next turn of the blocks should be by columns, and if through a quarter of a revolution from right to left will reveal the name "D- A- V- I- D- L- I- V- I- N- G- S- T- O- N- E." In this
50 fifth position the blocks are in the same numerical order as in the fourth.

In setting forth the names of discoverers and important personages it may sometimes be desirable to accompany them with an illustration of some place or event of importance connected with their history.

Thus far five series have been depicted. Upon the next turn of the blocks, which in this set should be by turning the individual lines of blocks over through a half-revolution, you will read "I- N- D- E- P- E- N- D- E- N- C- E- 1- 7- 7- 6." The series of turns may of course be gone through in the reverse order to the original position of Fig. 2 for proof. Although
65 this use of the blocks is exceedingly simple when the words or pictures are known beforehand and the proper direction and sequence

of turns necessary to obtain the same, yet when no information is given as to them it forms an exceedingly interesting puzzle to determine just what kind of turns and in what particular order they must be made to bring forth the entire series in the least number of turns.

The drawings and description herein should be taken only as illustrative of some of the possibilities of the invention. It is preferred to confine the matter illustrated in a single set of blocks to some particular subject—as, for instance, history, geography, science, biography, religion, art, literature, music, manufactures, mathematics, zoölogy, &c. Different sets can then be supplied for the purpose of instruction in any subject. They are valuable in kindergarten work, and may of course be used as are ordinary blocks in building and, if lettered, in miscellaneous spelling. Sets may also be made with an arrangement of numbers for addition, subtraction, and other mathematical processes. The letters or other illustrative matter may of course be printed, painted, embossed, or otherwise made apparent upon the sides of the blocks.

A great variety of modifications of the puzzle idea will at once suggest itself to one. The order and direction of "turning" of the blocks will of course depend upon the arrangement of the matter imprinted thereon. It may be very easily planned out as desired by experiment with a set of blanks. By the term "illustration" as used in the claims is meant matter—either words, pictures, figures, drawings, &c.—setting forth some subject.

The turning of a line or column of course means turning the blocks of the line or column. This may be done conveniently by grasping the ends of the line or column and turning all at once. If desired, or if the length of the column or line is too great to be compassed easily, then each block may be turned separately.

It is obvious that the shape and dimensions of the box will depend upon the size, number, and arrangement of the blocks in the set and may be square or rectangular, depending on whether there are an equal or unequal number of columns and lines.

Instead of inverting the set after arranging the key-face, the opposite face of the set may be observed from the rear if the blocks are stood up on their lower edges.

What I claim is—

1. A set of blocks each having designating matter upon six different sides so arranged that by turning the blocks by columns and lines predetermined series of matter may be brought to view in order.

2. A set of blocks each block of which bears illustrations on its different sides so arranged as to unite with the illustrations on the sides of the other blocks to disclose a series of ideas when the blocks are turned by lines and columns from a given key-face.

3. A set of blocks illustrated on their dif-

ferent sides so as to disclose a predetermined series when turned by columns and lines and as a set.

5 4. Blocks bearing illustrations on more than four sides and in such an order or arrangement as to show predetermined matter when properly turned by columns and lines, substantially as described.

10 5. A set of blocks incased in a box, and adapted to be withdrawn by columns or lines, one part of said box being notched in the edges to correspond with the columns and lines of blocks for the purpose specified.

15 6. A plurality of cubical blocks, each block having illustrative matter on the sides so arranged and of such a character that when the blocks are properly placed different illustrations may then be shown in order by turning the blocks by columns and lines.

20 7. A set of illustrated blocks, the matter on one side of the blocks of the set comprising a key-face, the illustrations being so arranged that when the key-face is properly

shown the blocks may be turned by columns and lines to reveal the other illustrations in 25 order, substantially as described.

8. A set of cubical blocks, each block having illustrative matter on the sides so arranged as to comprise in combination with the remainder of the set six predetermined 30 collections when the blocks have been arranged in their proper order.

9. A set of illustrated blocks, the combined illustration on one side of the blocks as arranged in proper order constituting a key- 35 face, the illustrations on the other sides of the blocks being so disposed as to reveal complete combinations when the blocks are turned properly by lines and columns from the key-face.

40 Signed at New London this 28th day of May, 1902.

RICHARD W. MANSFIELD.

Witnesses:

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