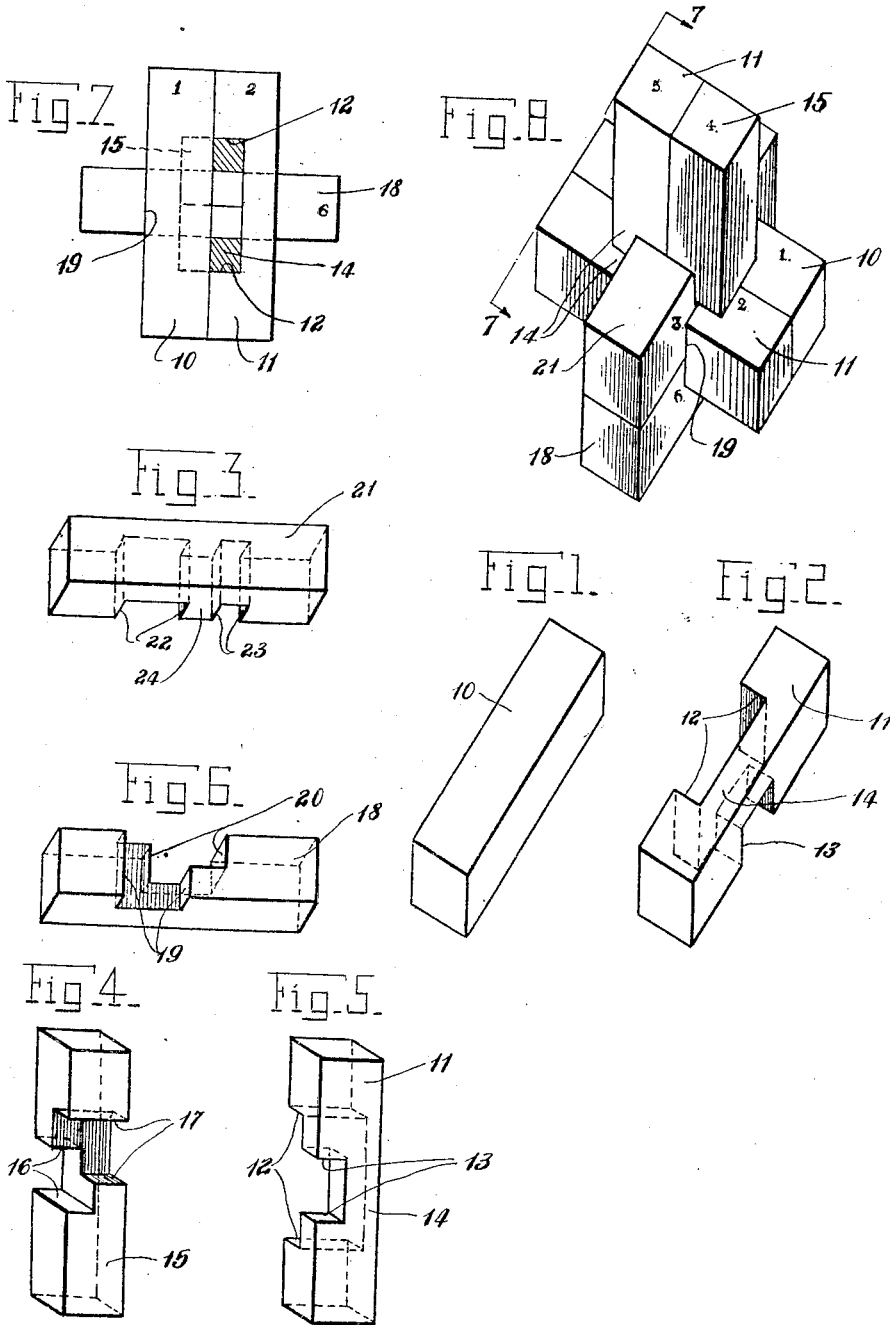


S. SENYK,
BLOCK PUZZLE.
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1,350,039.

Patented Aug. 17, 1920.



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To all whom it may concern:

Be it known that I, SAM SENYK, residing at 51 Uxbridge avenue, Toronto, Province of Ontario, and Dominion of Canada, have invented certain new and useful Improvements in Block Puzzles, of which the following is a specification.

This invention has as its object to provide an intricate puzzle of the block type adapted to exercise the ingenuity of persons attempting to correctly assemble the same, the puzzle consisting of a plurality of uniform blocks or bars formed with correlating recesses and a key block adapted, when the other blocks are properly assembled, to lock the same together, forming a symmetrical geometrical figure.

A further object is to provide a puzzle which may be manufactured at a low cost and which will afford amusement and pleasure in its solution, taxing the patience and ingenuity of the operator in the manipulation of its various elements in obtaining success.

These objects are attained by the novel construction and combination of parts hereinafter described and shown in the accompanying drawings, forming a material part of this disclosure, and in which—

Figure 1 is a perspective view showing the key block.

Figs. 2 and 5 are different perspective views showing one duplicate of a pair of the several recessed blocks.

Fig. 3 is a perspective view of a block having recesses unlike the others.

Figs. 4 and 6 are perspective views of another pair of blocks alike in their recesses but formed respectively right and left.

Fig. 7 is a view looking on line 7—7 of Fig. 8, and

Fig. 8 is a perspective view showing the puzzle when in an assembled position.

Referring to the drawings in detail, it will be seen that all of the several blocks are uniform and alike in length, width and thickness, forming parallelograms of square cross section. The key block 10 is perfectly plain and smooth upon each of its four sides.

The mating block 11 has formed upon one of its sides a transverse recess 12, the recess extending from its surface to the median line of the block, and is of a length suited to receive a pair of the blocks placed side by side, the recess being central so as to present ends of equal length.

Another recess 13 is formed in the proximate side of the block 11, also extending to its median line, central with the recess 12, and is of a width adapted to receive one of the blocks therewithin. The connecting element 14 between the ends has a cross sectional area of one fourth the entire cross sectional area of the block. Two of these blocks are used in this puzzle, the shape of which is shown in Fig. 2 and 5, one, as will be afterward explained, being finally arranged adjacent to the block 10, while the other is arranged adjacent to one of the faces of the block 15, which is recessed to the center upon adjacent sides, the recesses 16 and 17 being of sufficient width to receive one of the blocks and cut to the center of the bar, but are offset in extent equal to one half of the thickness of the bar.

The block 18 contains transverse recesses 19 and 20, which are so disposed that the recesses 19 and 20 are opposite to the recesses 16 and 17.

The remaining block 21 is formed with two cross recesses 22 and 23 respectively, both extending to the center of the block from the same side, the recess 22 being of a width capable of receiving the thickness of the width of a block, while the recess 23 is but one half the thickness of a block, the recesses being separated by the wall 24.

The stages in assembling the puzzle are as follows—

The blocks 11 and 15 are held vertical in such position that the side of the block 11, containing the recess 12, contacts with the side of the block 15 containing the recess 16. The block 18 is then entered between the blocks 11 and 15, the side containing the recess 20 being uppermost, whereupon the block 21 is entered above it, in the square opening formed by the recess 20 and a portion of the recess 12, the end of the block containing the recess 22 being first entered and before the recess 23 is passed over the upper surface of the block 18, the reduced element 14 of the block 11 is entered into the recess 23, the block 21 being then pressed forward so that the ends of the blocks as well as their sides are in alinement, and the key block 10 passed into the remaining square opening of the puzzle, alongside the block 11, binding the puzzle rigidly together.

As five of the recessed blocks are used, each having four faces and each may be turned either end about, obviously the

number of permutations which may be made by the blocks, according to permutative rules, is 1600, one only of which is correct. The puzzle will therefore serve to test the
5 ingenuity and patience of an operator to an unusual degree.

It will also be obvious that the cost of the puzzle is relatively very small, the blocks being preferably made of wood, and that the
10 same are light, strong and of neat appearance.

I claim—

A block puzzle comprising fixed rectilinear blocks, of uniform length, thickness,
15 and arranged in pairs, one of said blocks being plain upon each of its four sides, another block having two recesses formed in corresponding sides, one of said recesses being half the width of the other and spaced

therefrom at a distance corresponding to
20 half the width of the block, a pair of blocks each having a recess in their sides equal to the combined width of the blocks, and another recess in the side adjacent thereto
25 equal in length to the width of the block, and another pair of blocks recessed upon adjacent sides, each of said recesses being equal to the width of the block and offset one from the other in amount equal to one
30 half the width of the block, the recesses in one block being formed oppositely to the recesses to the other block, all of said blocks being capable of interengagement when correctly assembled presenting a symmetrical
35 curved portion of the gear wheel 15.

In testimony whereof I have affixed my signature.

SAM SENYK