To all whom it may concern:

Be it known that I, FLOY J. CURTIS, a citizen of the United States, residing at Jackson-ville, in the county of Morgan and State of Illinois, have invented certain new and useful Improvements in Puzzles; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in block puzzles; and it consists of certain novel features of construction, combination, and arrangement of parts hereinafter fully described and claimed.

The object of my invention is to provide a simple, interesting, and amusing toy of this character made up of a plurality of interlocked blocks which when once separated require an expenditure of skill and patience to put them together again.

The above and other objects, which will appear as the nature of my invention is better understood, I accomplish by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved block puzzle, showing the parts in their interlocked position. Fig. 2 is a view showing in perspective one of the different kinds of blocks or bars composing the puzzle. Fig. 3 is a view similar to Fig. 1 with the key-block removed and one of the notched blocks turned in a position to be interlocked with the others, and Fig. 4 is a sectional perspective showing the manner in which the blocks are interlocked.

Referring to the drawings by numeral, 1 denotes my improved puzzle, which consists of eleven blocks or bars of four different kinds, 2, 3, 4 and 5, four of them being constructed identical with the block 2, four identical with the block 6, two identical with the block 4, and the eleventh block 8, which serves as a key, is the only one of its kind, it being a plane rectangular block, as shown. These blocks, which may be made of any suitable material and in any desired size, are all of rectilinear form and are of the same length and of the same size and shape in cross-section—that is, square. The two blocks 4 have formed centrally in one of their faces recesses or mortises 6, which extend transversely through the block and are equal in length to twice the width of the blocks. Each of the four blocks 3 is similarly formed with recesses or mortises 7 in one of their faces, and they have a second recess or mortise 8 of half the length of the recess 7, which intersects centrally, the said recess 8 being in a face of the block which is at right angles to that face in which said recess 7 is formed. Each of the four blocks 2 has in one of its faces a recess or mortise 9 similar to said recesses 6 in the blocks 4, and also a centrally-disposed recess or mortise 10, which is equal in length to three times the width of the blocks, or, in other words, the recess 9 is two-thirds the size of the recess 10. Said recesses 10 are in faces of said blocks 2 which are at right angles to the faces in which said recesses 9 are formed, so that the recesses 9 and 10 intersect at right angles, as shown.

In placing the blocks together in their interlocked position (shown in Fig. 1 of the drawings) the four blocks 2 are placed together to form a single block, with their large recesses 10 turned inwardly and their small recesses 9 outwardly. The two blocks 4 are then inserted in the opening formed by the recesses 10, and the four blocks 3 are then placed in the recesses 9 of the blocks 2 and the recesses 6 of the blocks 4, two of said blocks 3 being placed upon each side of the blocks 2, as shown. In doing this the two blocks 8, which extend between the two blocks 4, are first placed in position, and another of said blocks 3 is then slipped in its place. The last one of the blocks 3 is then placed in the position shown in Fig. 3 of the drawings, and by giving it a slight turn it will slip into place, and the four blocks 3 will engage each other and form a single block, which intersects the single block formed of the blocks 2 at right angles. When the parts are in this position, the key-block 5 may be readily inserted in the opening formed by the recesses 10 in the blocks 2 and alongside the adjacent block 4, so that the three blocks 4, 5, and 5 will form a single block, which intersects each
of said single blocks in a plane at right angles to them. By reversing the operation just described the parts or blocks may be readily separated.

5 From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

10 Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention.

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

A block puzzle comprising two counterpart rectilinear blocks having centrally-disposed recesses in one of their faces, four counterpart rectilinear blocks having centrally-disposed intersecting recesses in two of their faces, one of said intersecting recesses in each of said blocks being twice the length of the other in the same block, four counterpart rectilinear blocks having centrally-disposed intersecting recesses in two of their faces, one of the last-mentioned intersecting recesses in each of said blocks being two-thirds the length of the other in the same block, and a plain rectilinear key-block, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FLOY J. CURTIS.

Witnesses:

W. B. COUGHLIN,
E. D. CURTIS.