

Dec. 2, 1947.

J. MORRIS

2,432,031

PUZZLE

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2 Sheets-Sheet 1

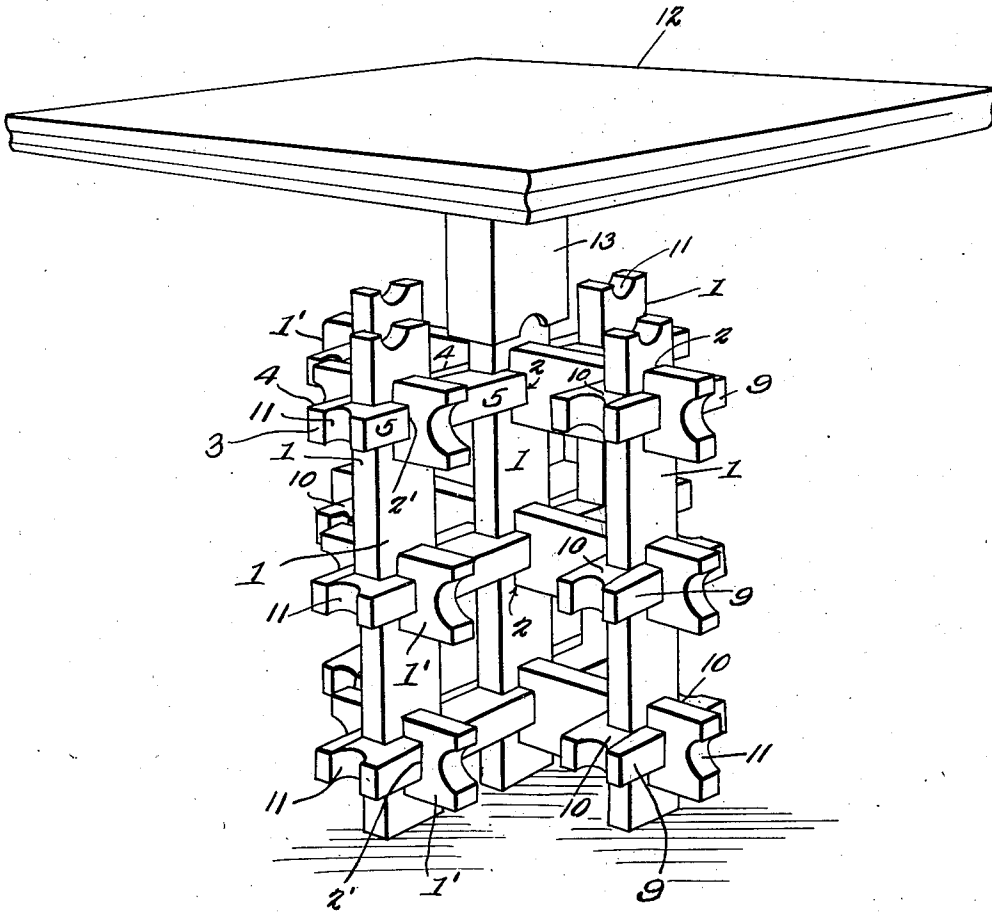


Fig. 1.

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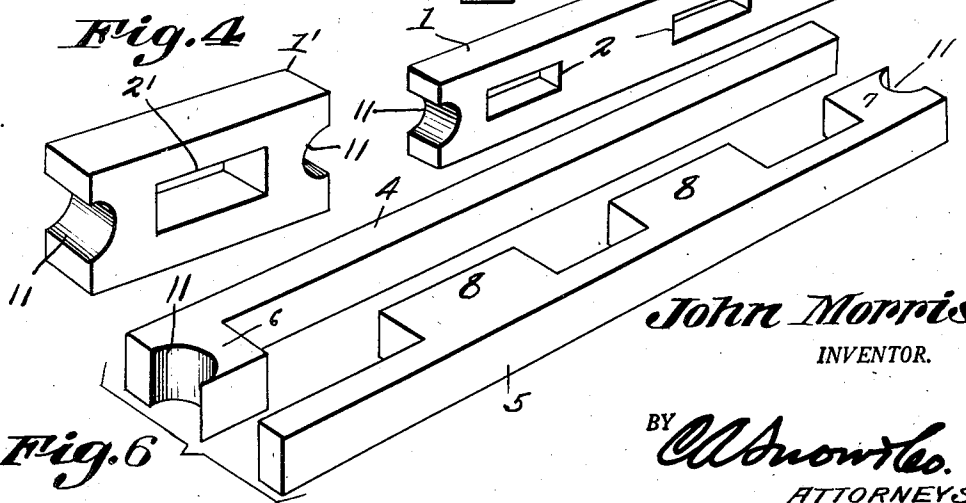
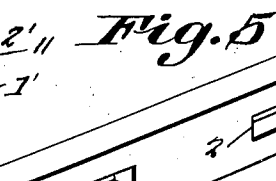
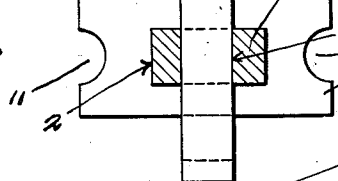
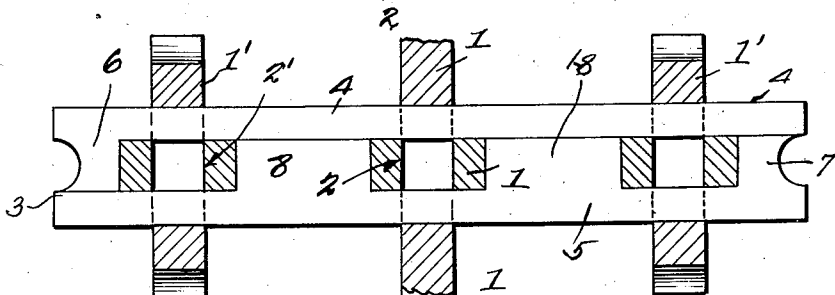
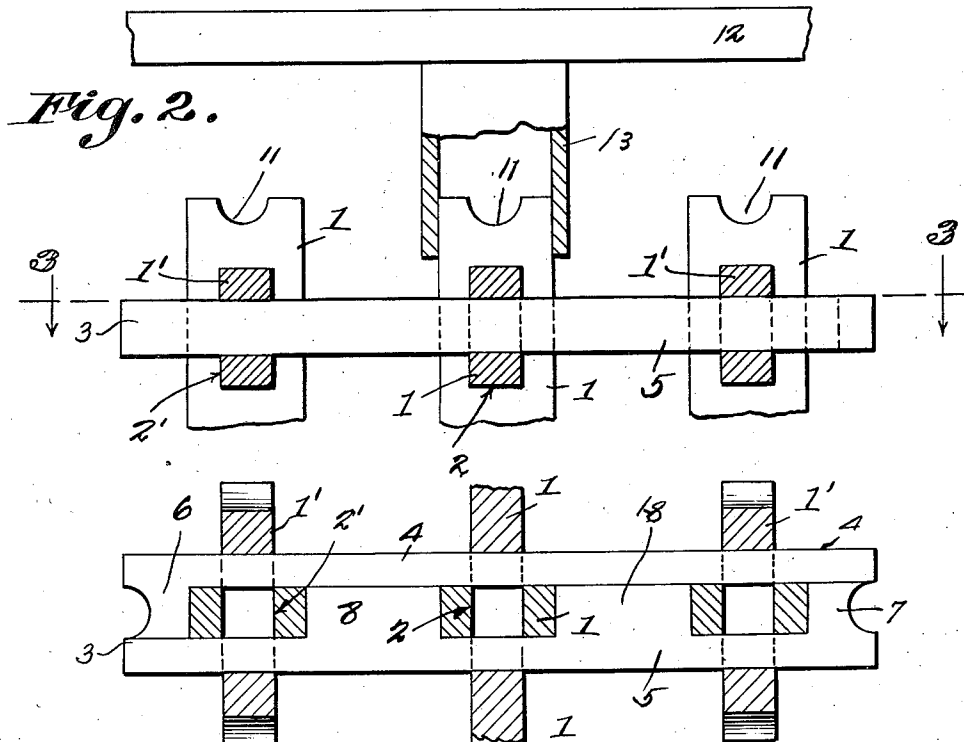
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PUZZLE

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2 Sheets-Sheet 2



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2,432,031

PUZZLE

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Application August 9, 1944, Serial No. 548,718

1 Claim. (Cl. 273-160)

1

This invention relates to a puzzle of that type utilizing interfitting strips of wood or other material which can be assembled to form objects of different designs, the separation of the parts following the completion of an article, being dependent on the removal of one only of the strips which, because of its contour and position, is difficult to distinguish from the other strips incorporated within the article.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts hereinafter more described and pointed out in the claims, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:

Figure 1 is a perspective view of an article formed of strips constituting the present invention.

Figure 2 is a view partly in elevation and partly in section showing the top portion of the structure illustrated in Figure 1.

Figure 3 is a section on line 3-3 Figure 2.

Figure 4 is a perspective view of one of the elements of the puzzle.

Figure 5 is a perspective view of another and longer element of the puzzle.

Figure 6 is a perspective view of a split key, forming a part of the puzzle.

The puzzle can be made up of any desired number of pieces depending upon the number and size of the articles to be made therewith. Each set of pieces includes one or more elongated strips 1 each of which has a plurality of spaced slots 2 formed therein at desired intervals along the longitudinal center of the strip, the slots all being so proportioned as to correspond with the breadth and thickness of the strip 1. Other shorter strips 1' can be used, each of these being provided with single central slot 2' of the same size and shape as the slots 2. Strips 1' are also preferably of the same width and thickness as the strips 1.

There are used with the strips 1 and 1' certain key strips one of which has been shown in detail in Figure 6. Each key strip 3 is made up of opposed longitudinal members 4 and 5. The member 4 has its longitudinal faces parallel while at one end of the member there is provided a head 6 extending laterally from the member in distance equal to the width of one of the slots 2 or 2'. The

2

member 5 of the key strip is provided at one end with a head 7 similar to the head 6 and extended laterally a distance equal to the width of any one of the slots 2 and 2'. Extended from member 5 at the same side on which head 7 is located are spacing blocks 8 so proportioned that when head 7 is placed against member 4 and head 5 is placed against member 5 with the two members oppositely disposed as at Figure 6, the spacing blocks 8 will engage the member 4. Thus the two members 4 and 5 will cooperate to produce a strip having slots proportioned and arranged like the slots 2.

Other key strips shorter than the key strips 3 can be used and some of these have been shown at 9. These shorter key strips are also made up of opposed members like the ones shown in Figure 6 but, instead of having spacing slots between them, the members are separated solely by the heads at the ends of the key strip 9, these heads being indicated at 10. In a structure of this type the heads are so spaced apart that when the two members of the key strip are assembled they cooperate to form a slot proportioned and shaped like the slots in the other members of the puzzle.

All of the strips making up the puzzle, whether they are one piece strips or key strips, have their ends of the same contour. In the present instance all of them have end recesses 11, all the recesses being of the same depth and width so that when all the strips are assembled in a puzzle they will look alike. The key strips can be so made that the lines of contact on the surfaces thereof where the opposed members come together can be practically invisible.

When it is desired to assemble the various strips for the purpose of producing an article, the procedure will depend upon the number of strips used and the kind of article to be produced. In Figure 1 there is shown a table comprising a top 12 having a depending sleeve 13 proportioned to receive one end of a strip 1 and to fit snugly thereon. In the assembly of the parts to form this table, a strip 1 is inserted into the sleeve 13 as shown in Figure 1. Thereafter another strip 1 can be inserted into each of the slots 2 in the main or first placed strip 1 so that the central slot 2 in the inserted strip 1 will be extended through the slots 2 in the main strip 1. This will leave the central slots of the inserted members exposed at their ends and these exposed portions are of exactly the proper size to receive the opposed members of a key strip 3. In order to place this key strip in position, the inserted members 1 are shifted longitudinally so that the central slots

3

therein are exposed sufficiently to receive the member 5 of key strip 3 and allow two of the blocks 8 thereof to be positioned at opposite sides of the central or main strip 1. Thereafter the inserted strip is thrust longitudinally until the member 5 of the key strip is pressed against the main or central member 1 whereupon said member 1 will be straddled as shown. The other member 4 of the key strip can then be inserted into the exposed end portion of the slot 2 in the inserted member 1 and moved into position where its ends will be flush with the ends of the key member 5. Thus the main or central strip 1 will be securely held to the inserted strip 1 by the key member 3 the parts of which, when assembled, will give this strip the same appearance as the strip 1.

Should it be desired to add other vertical strips 1 to the structure, they can be slid on to the inserted strips after which short key strips 9 can be assembled therewith as shown and in the same manner as heretofore explained in connection with key strips 3.

It might be added that the key strips 3 can be used as a means for holding additional vertical strips 1 assembled with the central or main strip 1. This is done by inserting into the openings of the added vertical strips 1 short strips 1' and positioning them so that when the key member 5 is inserted into position, it can be passed successively through these strips 1' and the inserted strips 1, placed astride of said strips 1, and then held by inserting the key member 4 through all of the strips 1. Obviously it thus becomes possible, as shown in Figure 1, to provide a standard made up of a central strip 1 and four added strips 1 all parallel therewith, these added strips all being locked in a predetermined relation to each other by key strips inserted therein at the proper points.

Other combinations than that illustrated can be made by the use of a greater number or a lesser number of strips but it is to be understood that in every case the final operation is the insertion of one member of a key strip. It is fur-

4

ther to be understood that when the key strips are assembled they will look like the other strips making up the puzzle so that when an effort is made to separate the parts by a person not acquainted with the exact structure, considerable difficulty will be experienced in locating the proper piece to be first withdrawn. In every case, after the key member 4 has been withdrawn, the other parts thereafter can be successively disconnected.

What is claimed is:

A puzzle including separate strips each having a slot of substantially the same size and proportions as the transverse area of the strip thereby to receive one of the strips when inserted therein, and a key strip comprising opposed members proportioned for insertion in the respective end portions of a slot in the inserted strip when positioned within and transversely of another slotted strip, each of said members having a head at one of its ends constituting means for snugly fitting against the other end of the opposed member, spaced blocks on one of the members cooperating with the heads and the opposed member to provide slots each of substantially the same size and proportions as the transverse area of one of the slotted strips, one of the members having flat longitudinal faces extended from the head at one end of the member to the other end of the member, each of said faces being parallel with the corresponding opposed face of the member, said last-named member being removable solely by shifting it longitudinally in the direction of its head.

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