March 23, 1965 W. S. MILLER 3,174,753

CROSSWORD PUZZLE

Filed April 30, 1962

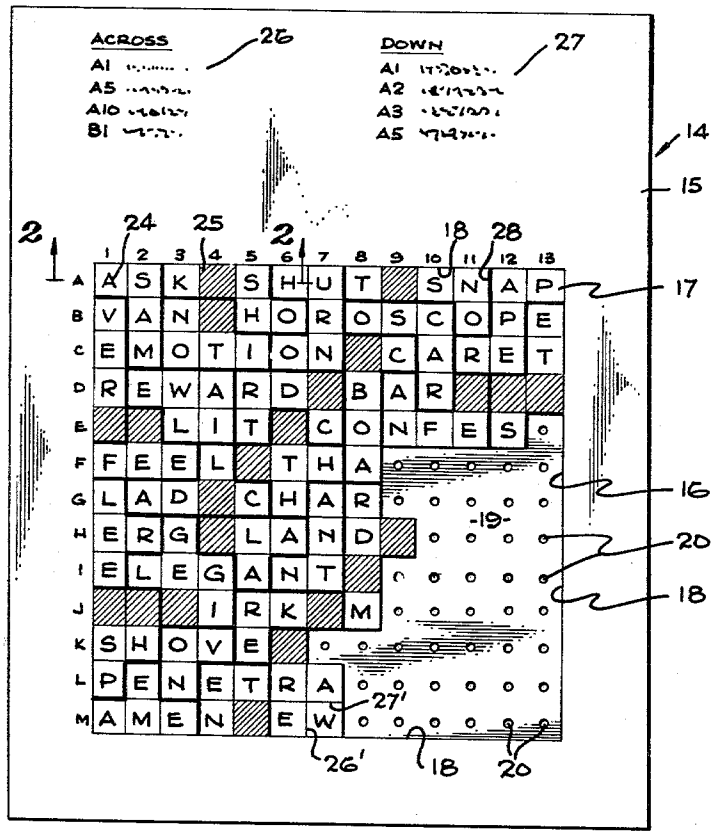


Fig. 1

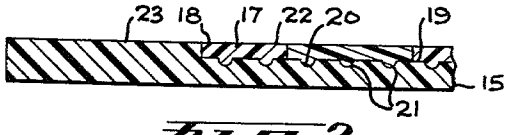


Fig. 2

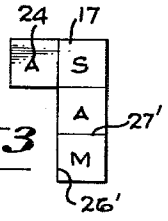


Fig. 3

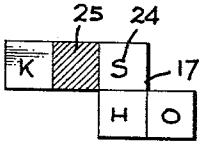


Fig. 4

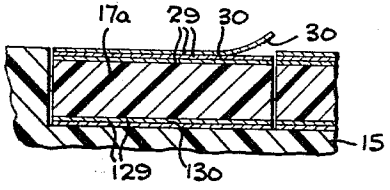


Fig. 5

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CROSSWORD PUZZLE

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This invention relates to an improved puzzle which is in certain respect somewhat similar to conventional crossword puzzles, but is designed to be solved in a manner different than such ordinary puzzles, in a manner introducing considerably greater interest and enjoyment to the solution of the puzzle.

A puzzle embodying the invention is formed of a large number of individual puzzle pieces or sections adapted to be assembled together in a predetermined manner, and serving when assembled in this manner to form together a composite crossword puzzle pattern. As in the case of conventional crossword puzzles, this pattern has letters forming words extending in two perpendicular directions. The individual pieces of the puzzle have groups of letters formed thereon which, in most if not all cases, form less than complete words, so that the grouping of the letters may be helpful in determining where each of the pieces should be placed to arrive at the ultimate composite pattern, but that grouping does not in most cases give more than a clue to the proper positioning of the parts, and therefore does not render assembly of the puzzle too simple. The shapes of the different puzzle pieces may be irregular, to include different numbers of letters arranged in different patterns, so that such shape characteristics of the pieces may also be considered by a person in attempting to properly arrange the pieces. In addition, the person working the puzzle is given the usual series of definitions of the various words included in the puzzle, so that these definitions, in conjunction with all of the other factors, may be employed for properly assembling the pieces.

For facilitating the retention of the assembled parts in proper relationship, I may employ a board or carrier structure, provided with means for retaining the parts in set positions. For example, the puzzle pieces and board may have interfitting lugs and recesses capable of engaging one another to secure the puzzle pieces in predetermined locations.

The above and other features and objects of the present invention will be better understood from the following detailed description of the typical embodiment illustrated in the accompanying drawing, in which:

FIG. 1 is a plan view of a partially assembled puzzle constructed in according with the invention;

FIG. 2 is an enlarged fragmentary section taken on line 2—2 of FIG. 1;

FIG. 3 is an enlarged plan view of one of the puzzle pieces;

FIG. 4 is a view similar to FIG. 3 but showing a second differently shaped puzzle piece; and

FIG. 5 is a view similar to FIG. 2 showing another type of puzzle piece.

The puzzle **14** embodying the invention may include a flat board **15** containing a shallow recess **16** at its upper side for receiving a number of puzzle parts **17** in a predetermined arrangement. Recess **16** may typically be square in horizontal section, as shown, being defined about its periphery by side walls **18** (FIG. 2). The bottom surface or wall **19** of the recess may be planar, except at the location of locating means **20** for retaining the puzzle pieces in set positions. These locating means **20** may take the form of small dimples formed in the board, and adapted to receive mating lugs **21** at the undersides of puzzle pieces **17**. The dimples **20** are arranged in rows and columns, extending in two perpendicular directions,

so that the arrangement of the dimples will not assist the person working the puzzle in deducing the proper positioning of the puzzle pieces.

As seen best in FIG. 2, the puzzle pieces **17** may be just thick enough to occupy the full vertical extent of recess **16**, so that in the assembled condition of the puzzle, the upper surfaces **22** of the puzzle pieces are aligned with one another and with the planar top surface **23** of board **15**. The puzzle pieces have letters **24** printed on their upper surfaces, and at some locations have darkened or blank areas **25** similar to those occurring at irregular points across the face of conventional crossword puzzles. When the puzzle is completely assembled, the different groups of letters between the darkened or blank areas **25** spell horizontal and vertical words, intersecting one another, in a crossword puzzle-type pattern. The different squares of the puzzle pattern on which various words commence may be designated by reference to a series of letters "A, B, C, etc.," identifying the different horizontal rows in the puzzle pattern, and by a series of numerals "1, 2, 3, etc.," referring to the different vertical columns in the pattern. Definitions for the words commencing at different points on the board are given at a convenient location, preferably on the surface of the board itself as represented at **26** and **27** in FIG. 1. The definitions listed at **26** under the word "ACROSS" define the words starting at squares A–**1**, A–**5**, A–**10**, etc. Similarly, the definitions of the vertical words given in listing **27** of FIG. 1 define the words extending downwardly from the points A–**1**, A–**2**, A–**3**, A–**5**, etc.

As stated previously, the individual puzzle pieces have different letters on their face, preferably arranged in different patterns. For example, the piece represented in FIG. 3 is the one which is located in the upper left hand corner of the FIG. 1 puzzle, and has the two letters "A" and "S" extending horizontally, with the two letters "A" and "M" extending downwardly beneath the "S." The puzzle piece illustrated in FIG. 4, on the other hand, has the letters "K," "S," "H," and "O" in an entirely different pattern, with a darkened or blank area **25** received between the K and S. As will be apparent from FIG. 1, the K of the piece represented in FIG. 4 is receivable adjacent the S of the piece represented in FIG. 3, so that these parts together form the word "ASK."

The boundaries between the different letters and darkened areas of the ultimate puzzle pattern are formed by a series of vertical parallel uniformly spaced straight lines **26'**, and a series of intersecting horizontal parallel straight lines **27'**, defining uniformly dimensioned squares containing the individual letters and darkened areas. As will be apparent from a consideration of FIGS. 1, 2 and 3, the cuts or separations between adjacent ones of the puzzle pieces **17** are preferably, in all instances, formed along the mentioned dividing lines **26'** and **27'** between different squares. These cuts are represented in FIG. 1 as dark lines **28**, while the uncut portions of the lines **26'** and **27'** are represented as lighter lines.

In using the puzzle, a person first removes all of the puzzle pieces **17** from recess **16** in board **15**, and then may refer to the first definition in listing **26** to see if it can be determined what letters should extend horizontally across the upper row from the point A–**1**. If the person working the puzzle is able to determine from the definition that this word is probably "ASK," he searches through the various puzzle pieces to see which of them could possibly be placed in proper position to spell this word. Similarly, the other definitions are studied, in conjunction with such information as may be given by the shapes of areas left unfilled on the board, to gradually fill in the entire board and complete the proper crossword puzzle pattern.

FIG. 5 represents a variational type of puzzle piece **17***a*

which may be substituted for the pieces **17** of FIGS. 1 to 4, and which may be essentially the same as pieces **17** except for the provision on the upper and lower surfaces of each piece **17***a* of a number of superimposed sheets **29** and **129** formed of plastic, paper or the like. Each of the upper sheets **29** has an adhesive coating **30** on its undersurface, and each lower sheet **129** has an adhesive coating **130** on its upper surface, to secure the sheets together and to piece **17**. Letters and darkened or blank areas are printed on sheets **29** and **129** to form different crossword puzzle patterns, with different ones of the sheets having different background colors.

In use, a puzzle employing the pieces **17***a* of FIG. 5 may first be solved by matching together the letters on the uppermost layers **29** of the different pieces, to form a first crossword puzzle pattern with a first characteristic background color, following which the top sheet **29** on each piece **17***a* may be stripped off so that the puzzle may then be solved again, using another set of definitions, to form a second pattern with a second characteristic background color. Similarly, the pieces may be inverted to use the first of the layers **129**, having a third background color, which layer may then be removed, etc. Thus, there may be as many different puzzles as there are sheets **29** and **129**, plus two final puzzles formed on the upper and lower surfaces of the pieces **17***a* themselves.

I claim:

A puzzle comprising a plurality of puzzle pieces adapted to be assembled together in a predetermined pattern, each of said puzzle pieces comprising a support having a first surface, and a layer of sheet material having a surface area equal to the area of a respective first surface removably adhesively attached to said first surface of each puzzle piece to provide a second surface therefor, said first surface of each of said pieces marked to distinguish it from each said second surface, said pattern consisting of intersecting rows and columns of essentially square indicial areas on both said first and second surfaces, said different puzzle pieces being separable one from another only along the boundaries of said square indicial areas, various of said puzzle pieces being shaped differently from others, each indicial area of said first and second surfaces of said pieces having a letter or a uniform color therein so that when assembled, each piece with the same first or second surface exposed, a crossword puzzle pattern including words extending in two different directions and intersecting one another is formed.

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