United States Patent [19]

Sukys et al.

[11] **3,923,307**

[45] **Dec. 2, 1975**

[54] **PUZZLE**

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[52] **U.S. Cl.** ..... **273/157 R**

[51] **Int. Cl.²** **A63F 9/10**

[58] **Field of Search** ..... 273/156, 157 R, 137 C, 273/137 D

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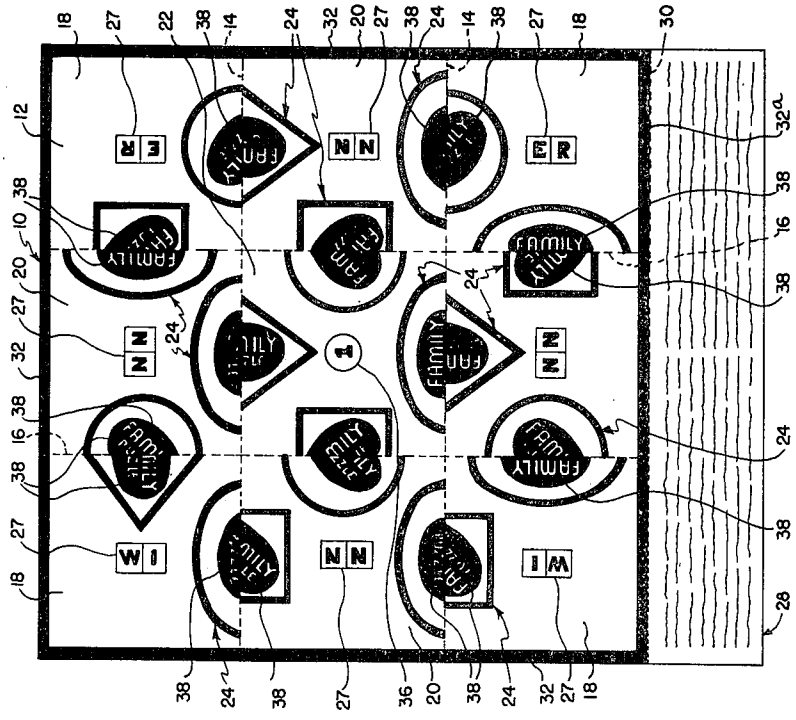
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[57] **ABSTRACT**

A puzzle formed from a flat sheet of paper with criss-crossed lines dividing the sheet into sections; indicia species comprising partial geometric-like figures, and letters printed on at least certain of the sections with at least certain of the indicia species being disposed along the lines and with the indicia species being in scrambled form. The sections are separable along the lines and are adapted to be reassembled into matched relation to attempt to form geometric configurations from the geometric-like indicia and words from the letter indicia.

13 Claims, 4 Drawing Figures



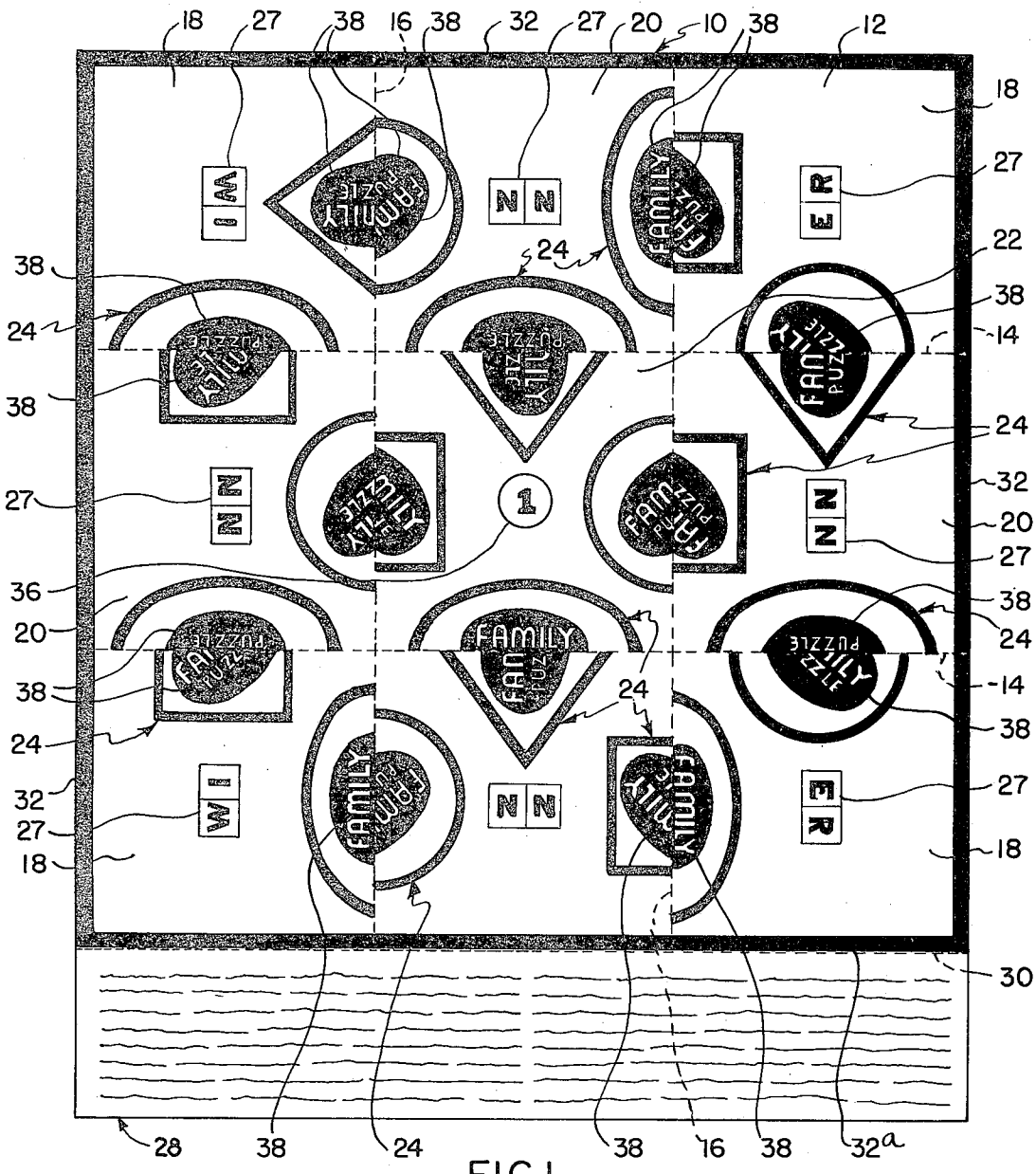

18
27
38
16
38
32
27
20
10
38
12
18
27
22
38
14
24
32
20
27
38
24
-14
38
27
18
30
28
38
24
38
16
38
32a
24
36
1
N
E
W
FAMILY PUZZLE

FIG.1

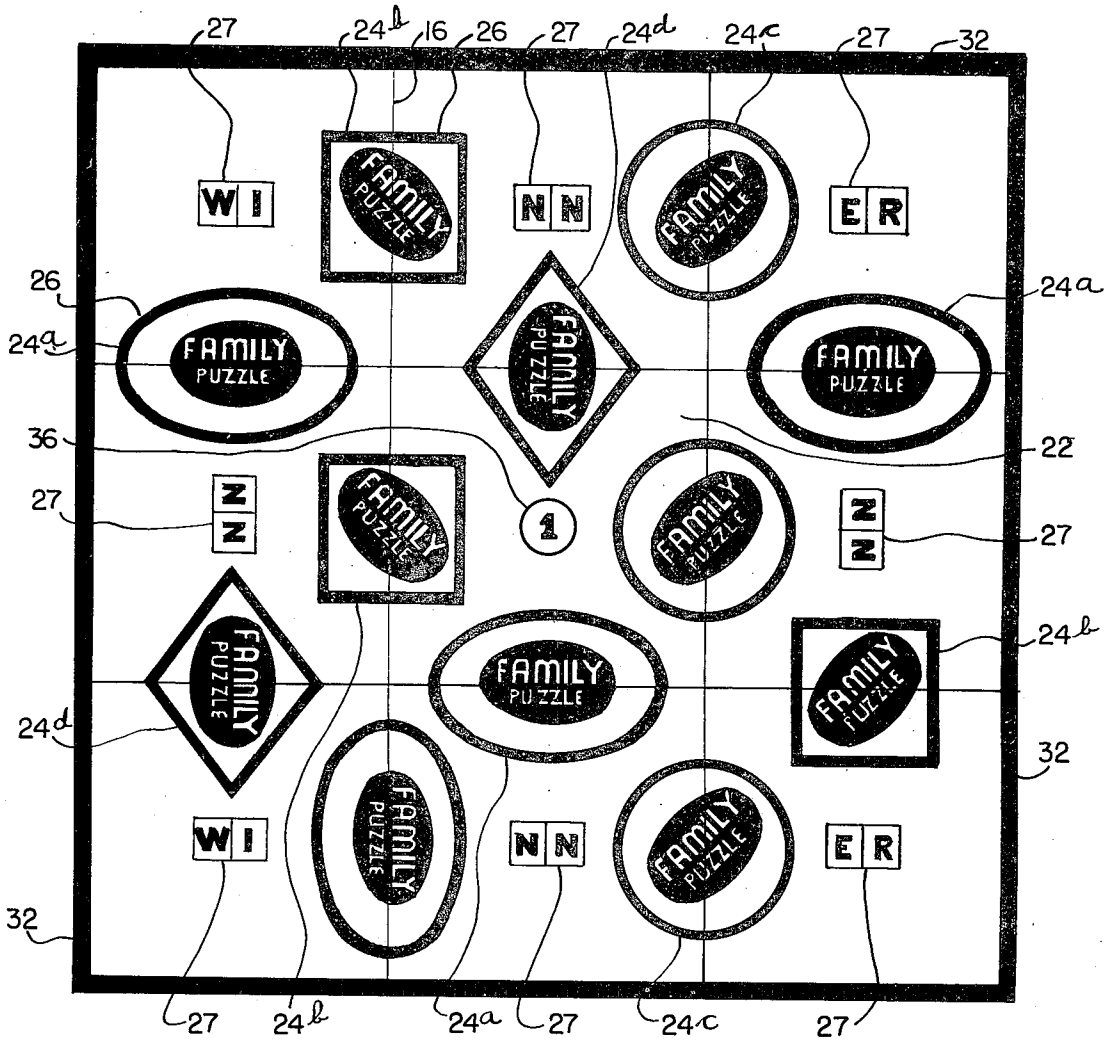

27
24b
16
26
27
24d
24c
27
32
WI
NN
ER
FAMILY PUZZLE
26
24a
36
22
27
1
24b
24d
32
24a
27
24b
24a
27
24c
27

FIG. 2

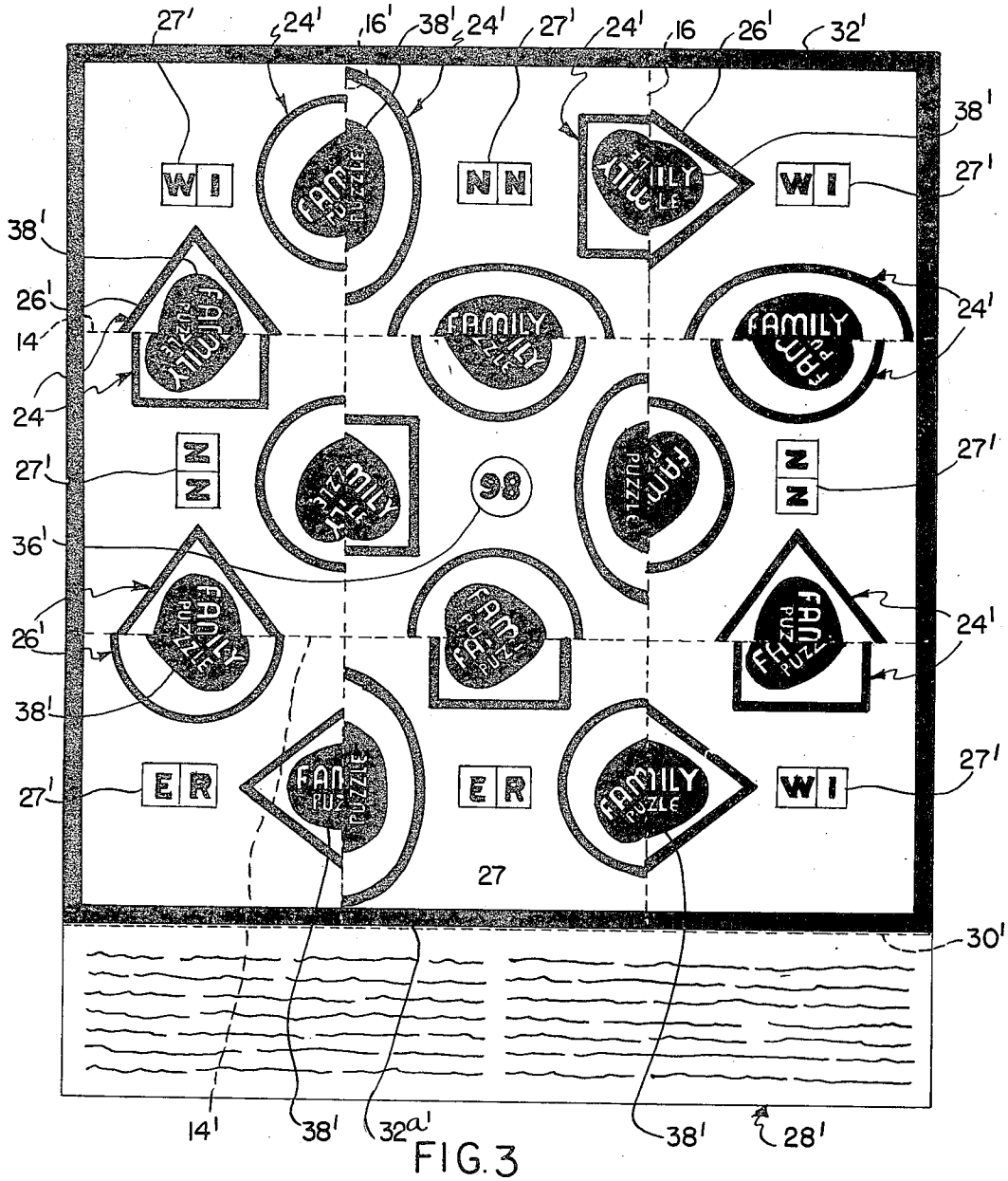

27'
24'
16'
38'
24'
27'
24'
16
26'
32'
38'
27'
38'
26'
14'
24'
24'
27'
36'
26'
24'
38'
27'
27'
30'
14'
38'
32a'
38'
28'
W I
N N
W I
N N
98
N N
E R
E R
W I
27

FIG. 3

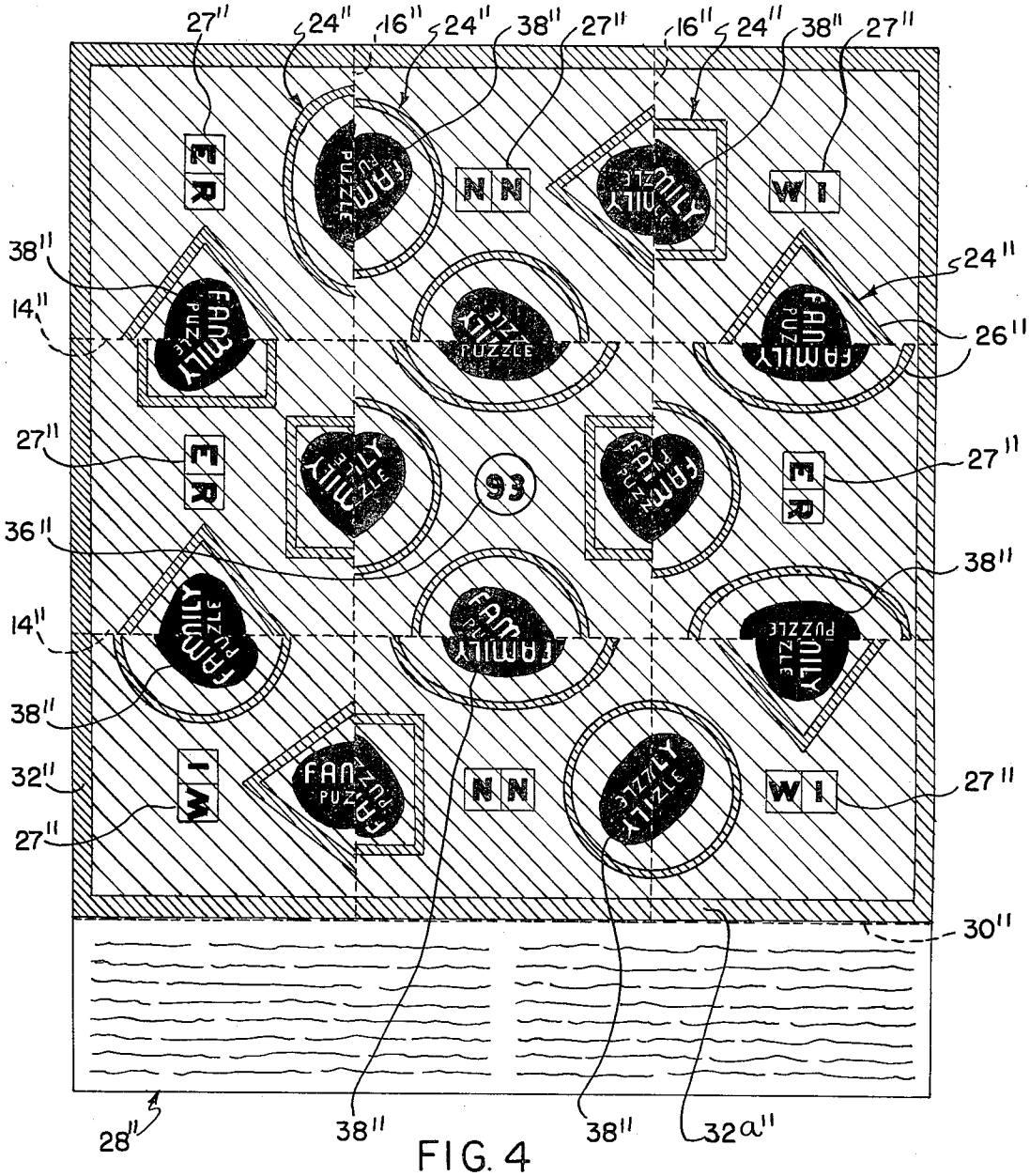

27''
24''
16''
24''
38''
27''
16''
24''
38''
27''
38''
14''
24''
26''
27''
36''
38''
14''
38''
32''
27''
30''
28''
38''
38''
32a''
93

FIG. 4

PUZZLE

This invention relates to puzzles, and more particularly to a puzzle in the form of a sectional printed sheet having depicted thereon certain marks, configurations or symbol species disposed in scrambled form and which are adapted for attempted matching with or assembly into predetermined relation with marks, configurations or symbol species on adjacent sections, when the sheet sections are properly arranged into assembled relation with one another.

BACKGROUND OF THE INVENTION

Various puzzles of the general type with which the present invention are concerned, are known in the art. Examples of these are those shown in U.S. Pat. No. 487,798 dated Dec. 13, 1892 in the name of E. L. Thurston; U.S. Pat. No. 487,797 dated Dec. 13, 1892 in the name of E. L. Thurston; U.S. Pat. No. 1,006,878 dated Oct. 24, 1911 in the name of A. K. Rankin; and U.S. Pat. No. 1,129,604 dated Feb. 23, 1915 in the name of F. W. Rice.

SUMMARY OF THE INVENTION

The present invention provides a puzzle wherein the puzzle sheet is formed into a plurality of sections with partial geometric-like indicia, and letter indicia imprinted on the sections in generally scrambled form, with the sections being separable from one another and adapted for attempted rearrangement to construct geometric configurations from the partial geometric-like indicia and word indicia from the letter indicia. The indicia preferably also include scrambled trademark logo of a particular entity, whereby the puzzle may be utilized, for example, in connection with advertising of, for instance, a business or trade by means of such trademark.

Accordingly, it is an object of the invention to provide a puzzle construction which embodies both partial geometric-like indicia and letter indicia on separable sections of the puzzle, and which are adapted for attempted reassembly into matched relation, to form geometric configurations from the partial geometric-like indicia and word configurations from the letter indicia

Another object of the invention is to provide a puzzle of the aforediscussed type wherein the puzzle sheet comprises nine substantially equal area sections disposed in three adjacent, equal length, parallel rows, with the central section having indicia positioned thereon along all four peripheral defining lines thereof.

A further object of the invention is to provide a puzzle of the latter described type wherein the central section of the puzzle has a number or mark imprinted at the axial center of the central section, with such number having a predetermined relationship positionwise with respect to all four sides of the defining periphery of said central section as well as the defining periphery of the puzzle sheet.

A further object of the invention is to provide a puzzle in accordance with the above wherein the separable sections are nine substantially equal area square configuration sections, with the sheet being of parallelogram exterior configuration.

A still further object of the invention is to provide a puzzle of the latter type wherein trademark logos are included as indicia on the puzzle sections, and are adapted to read properly when the puzzle sections are

assembled so that the partial geometric-like indicia are oriented into predetermined regular geometric configurations, and whereby the puzzle can be expeditiously utilized in advertising a particular entity's product or service.

Other objects and advantages of the invention will be apparent from the following description taken in conjunction with the accompanying drawings wherein:

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a plan view of a puzzle sheet embodying the invention and shown in its scrambled form;

FIG. **2** is a plan view of the puzzle of FIG. **1** wherein the sections have been separated and then reassembled into matching relationship to form geometric configurations from the partial geometric-like indicia, and words from the letter indicia;

FIG. **3** is a plan view of a puzzle in scrambled condition similar to FIG. **1** except illustrating a different scrambled format for the puzzle sections as compared to FIG. **1**;

FIG. **4** is a plan view of a further scrambled format of puzzle, illustrating a colored background for the puzzle sheet and the partial geometric-like indicia configurations, thus adding a further variable to the puzzle format.

DESCRIPTION OF PREFERRED EMBODIMENTS

Referring now again to the drawings and particularly to FIGS. **1** and **2**, there is shown a puzzle **10** in its initial scrambled condition, and comprising a sheet **12** of any suitable material, and which is preferably of flexible paper material on which indicia can be readily formed, such as for instance by printing or the like. The face of the sheet **12** is provided with horizontal lines **14** and vertical lines **16** disposed in criss-crossed relationship, to divide the sheet **12** into a plurality of substantially equal area sections **18, 20** and **22.**

In the embodiment illustrated, the sections **18, 20, 22** are substantially square and with the aforementioned lines **14, 16** preferably being perforations in the sheet, for ready separation of the sheet sections for a purpose to be hereinafter set forth. Also in the embodiment illustrated, there are provided nine of the separable sheet sections disposed in adjacent, generally parallel, equal length rows, whereby the central sheet section **22** is encircled by the outer sheet sections **18, 20.** While the puzzle has been illustrated as having nine sections, it will be understood that it would be possible to have a greater or lesser number of sections, with, however, nine sections being the preferred arrangement.

Each of the sheet sections carry partial geometric-like indicia **24** thereon, disposed along the respective peripheral defining lines **14, 16** of the section. In this connection it will be noted that central sheet section **22** has partial geometric-like indicia **24** disposed along each of its peripheral defining sides, while sheet sections **20** have the indicia along three of the sides of its respective periphery, and sheet sections **18** have geometric-like indicia **24** disposed only along two sides of the respective periphery.

The geometric-like indicia **24,** in the embodiment illustrated, are taken from the group consisting of the ellipses **24***a*, squares **24***b*, circles **24***c* and diamonds **24***d* (FIG. **2**). The partial geometric-like indicia are formed in the embodiment illustrated by means of thickened lines **26,** and when assembled into matched relation as shown in FIG. **2,** the partial geometric-like indicia are

symmetrically disposed on opposite sides of the respective dividing line **14** or **16**, and positioned centrally of the respective peripheral extremity of the respective sheet section, to form the regular or conventional geometric configurations of the aforementioned ellipses, squares, circles or diamonds.

Each sheet section **18, 20** also has letter indicia **27** thereon, which in the embodiment illustrated is disposed generally centrally of the respective sheet section. When the sheet sections are reassembled into the unscrambled or matched condition illustrated in FIG. **2**, such letter indicia spell a dictionary word which is in this instance, the word "Winner", in the longitudinal direction of the puzzle.

An instruction area **28** is provided running along one edge of the lower edge of the puzzle format in the embodiment illustrated, which such instructional area **28** comprising printed instructions for attempting to work the puzzle. Such instructional area **28** is preferably divided from the remainder of the puzzle sections by means of dividing line **30** (FIG. **1**) which is preferably perforated for ease of removal of the instructional area **28** from the remainder of the puzzle.

In the embodiment illustrated, the puzzle has a margin or border **32** thereabout and including a border area **32***a* dividing instructional area **28** from the remainder of the puzzle format.

The central section **22** of the puzzle format preferably has a mark or, in the embodiment illustrated, a number designation **36**, centrally located thereon, and which is positioned at a predetermined positional distance from the peripheral sides defining the area of section **22**, as well as from the peripheral sides of the puzzle sheet **12**. Mark **36** is useful in conjunction with a master puzzle format for insuring that the unscrambled and matched puzzle format (FIG. **2**) has not been counterfeited, and thus will aid in insuring that the puzzle is a genuine puzzle in the event that the latter is utilized in a contest.

Disposed interiorly of each of the partial geometric indicia is, in the embodiment illustrated, a partial trademark logo **38** which, when the puzzle is reassembled into matching condition as shown in FIG. **2**, spells out the trademark of an entity, such as a business or manufacturing concern.

Accordingly, the puzzle can be used in conjunction with sales promotion or the like, for promoting a particular product or service of a particular entity. When the trademark sections are assembled into matched complementary condition, as illustrated in FIG. **2**, the partial trademark logo portions match so as to form the complete trademark. It will be seen therefore that the dividing lines **14, 16** pass through the axial center of the trademark logo as well as the axial centers of the geometric configurations, so that when the sheet sections are reassembled into matching condition, the trademark portions are disposed evenly on opposite sides of the respective dividing line **14, 16**.

Referring now to FIG. **3**, there is shown another embodiment of puzzle format generally similar to that of FIG. **1** and including partial geometric-like indicia **24'** as well as the letter indicia **27'** and divided into sheet sections **18'**, **20'** and **22'** by the criss-crossed horizontal or vertical lines **14'**, **16'** and in a generally similar arrangement as aforediscussed in connection with the FIGS. **1** and **2** puzzle. However, the scrambling of the indicia of this puzzle is such that it is not able to be reassembled into a matched condition in the manner of for instance the puzzle of FIG. **2**. The central section **22'** of the FIG. **3** puzzle also preferably has a mark or number designation **36'** centrally located thereon, similar to the mark designation **36** in the FIGS. **1** and **2** embodiment.

FIG. **4** illustrates another embodiment of puzzle format and wherein colors add another variable to the puzzle in addition to the partial geoemetric-like indicia **24''** and the letter indicia **27''** formed thereon. The sheet has been hatched in the manner illustrated to show a background of for instance green with the lines **26''** forming the partial geometric-like indicia **24''** on each of the respective puzzle sections being hatched, to show a different tone of the same color, together with hatching of the border areas **32''**, **32***a''*, to likewise show a different tone but the same color. In other respects, this puzzle may be generally similar to other described embodiments, but in that connection this puzzle is more similar to that of the FIG. **3** puzzle, wherein it is not possible to assemble the puzzle sections into matched condition to produce regular geometric configurations from the partial geometric-like indicia and dictionary words from letter indicia.

From the foregoing drawings and accompanying description, it will be seen that the invention provides a novel puzzle formed from a flat sheet of severable material, with the sheet being divided by dividing means into sections, and with indicia species comprising partial geometric-like indicia and letter indicia printed on at least certain of the sections. The sections are separable along the dividing means and are adapted for attempted matching or assembly into predetermined relation with the partial geometric indicia and the letter indicia on the adjacent sections, to provide regular or conventional geometric configurations from the partial geometric-like configuration indicia and dictionary words from the letter indicia. The partial geometric-like indicia are disposed, when properly matched with the adjacent puzzle sections, on opposite sides of the respective dividing line and symmetrically centered with respect to opposite perpheral borders of the respective puzzle section. The invention also provides a puzzle wherein a trademark logo may be utilized as indicia, so that when the puzzle sections are assembled into matched condition, the trademark logo is properly readable and thus provides for use of the puzzle in conjunction with promotion of a business or trade, or the like.

The terms and expressions which have been used are used as terms of description and not of limitation, and there is no intention in the use of such words and expressions of excluding any equivalents of the features shown or described, or portions thereof, and it is recognized that various modifications are possible within the scope of the invention claimed.

What is claimed is:

1. In a puzzle, a flat sheet of severable material having a peripheral edge, line means dividing said sheet into sections, indicia on said sections, said indicia on at least certain of said indicia carrying sections comprising plural indicia species including letter indicia species and plural partial geometric-like indicia species, said sheet comprising indicia carrying sections disposed in adjacent aligned equal length parallel rows, said geometric-like indicia species being disposed along said dividing line means, the central of said sections having said geometric-like indicia species disposed along all of the dividing line means defining its area, said other sec-

tions having said geometric-like indicia species disposed only along said dividing line means defining the area of each of said other sections with none disposed along said peripheral edge, said partial geometric-like indicia species generally not cooperating to form conventional geometric configurations along said dividing line means, said sections being severable from one another along said dividing line means and being adapted for attempted reassembly into matched relation to form conventional geometric configurations from said partial geometric-like indicia and at least one dictionary word from said letter indicia whereby said complete conventional geometric indicia configurations appear along all of said dividing line means associated with each of said sections with none disposed along the peripheral edge, when said sections are matched into said geometric configurations with formation of said word.

2. A puzzle in accordance with claim **1** wherein said sheet is paper, and said indicia are printed on each of said sections.

3. A puzzle in accordance with claim **1** wherein said sheet comprises nine substantially equal area indicia carrying sections, with said sheet being of parallelogram configuration in plan.

4. A puzzle in accordance with claim **1** wherein said dividing means comprises perforated criss-crossed lines in said sheet.

5. A puzzle in accordance with claim **4** wherein said geometric configurations comprise two dimensional illustrations of circles, ellipses, rectangles and diamonds, halves of at least two of said illustrations appearing on each of said indicia carrying sections and providing said partial geometric-like indicia species thereon.

6. A puzzle in accordance with claim **1** wherein said sheet is of predetermined background color, with said sheet having a peripheral border of distinguishing characteristic.

7. A puzzle in accordance with claim **1** wherein said sheet includes an area of instructions disposed along one peripheral edge thereof, and means dividing said area from said indicia carrying sections, the last mentioned means providing for selective separation of said area from said sections for leaving the latter defining a predetermined puzzle arrangement.

8. A puzzle in accordance with claim **1** wherein said indicia carrying sections of said sheet consists of nine equal area square sections disposed in three of said adjacent aligned parallel rows.

9. A puzzle in accordance with claim **8** wherein said partial geometric-like indicia comprise line geometric-like configurations including portions of circles, squares, ellipses and diamonds, and including portions of a trademark logo disposed interiorly of at least certain of said line geometric-like configurations, said portions of trademark logo being formed into complete trademark logos when said sections are matchable into said geometric configurations with formation of said word.

10. A puzzle in accordance with claim **8** wherein said central section includes a predetermined number positioned generally centrally thereof and disposed at the axial center of said central section, and at predetermined positional distances from the peripheral edges of said sheet.

11. A puzzle in accordance with claim **9** wherein said sheet is of a predetermined background color and said line geometric-like configurations are of the same general color but a different tone as said background color.

12. A puzzle in accordance with claim **1** wherein said sections are of generally square configuration of substantially equal size and disposed in adjacent equal length aligned parallel rows, said sheet being of parallelogram configuration in plan, and including an area of instructions disposed along a peripheral edge thereof, and means dividing the last mentioned area from said indicia carrying sections providing for selective separation of said last mentioned area from said sections, thereby leaving said sections carrying said indicia thereon intact for formation of a puzzle upon separation of said sections from one another along said dividing means, said partial geometric-like indicia species consisting of half portions of line circles, rectangles, ellipses and diamonds, and verifying means adapted for use with a master puzzle format for aiding in insuring that an unscrambled and matched puzzle format is genuine.

13. A puzzle in accordance with claim **12** wherein portions of a trademark logo are disposed interiorly of at least some of said partial geometric-like indicia species and are adapted for matched relation in the event said partial geometric-like indicia are matchable into said conventional geometric configurations, and said letter indicia spelling the dictionary word in at least one dimension of said sheet when said geometric-like indicia are matchable into said conventional geometric configurations, each of said other sections having paired letter indicia formed thereon generally centrally of the respective section for attempted formation of said dictionary word, with said central section having no central letter indicia thereon.

* * * * *