

**Oct. 13, 1964**

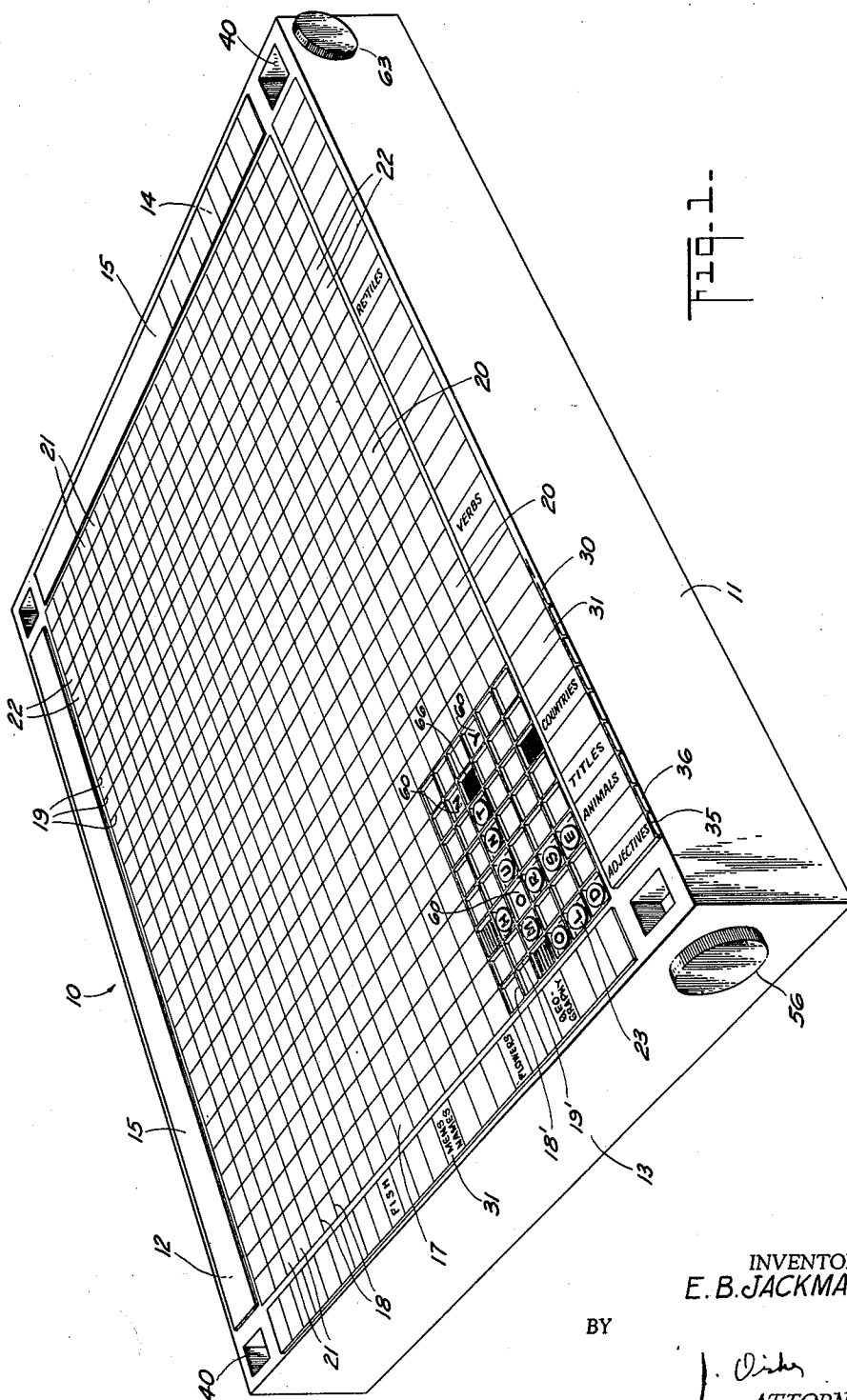
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## CROSSWORD GAME APPARATUS

Filed Jan. 17, 1963

3 Sheets-Sheet 1



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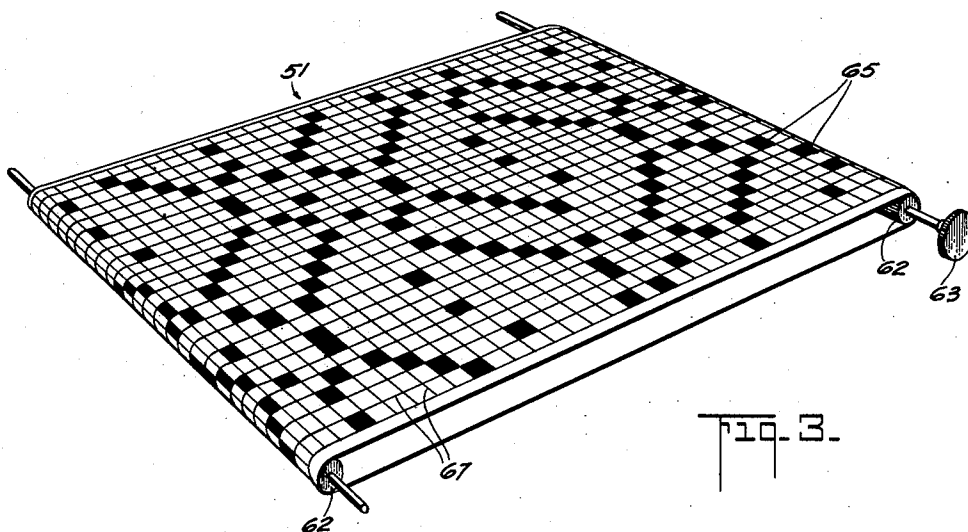
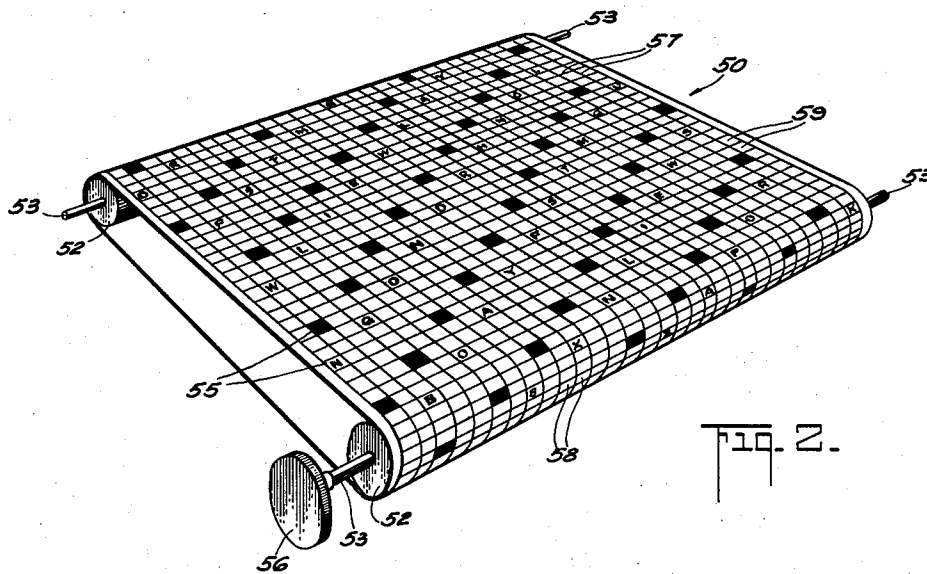
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CROSSWORD GAME APPARATUS

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CROSSWORD GAME APPARATUS

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3 Sheets-Sheet 3

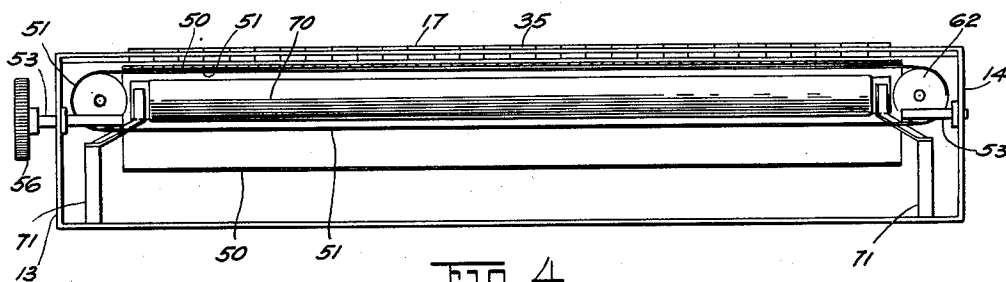


Fig. 4.

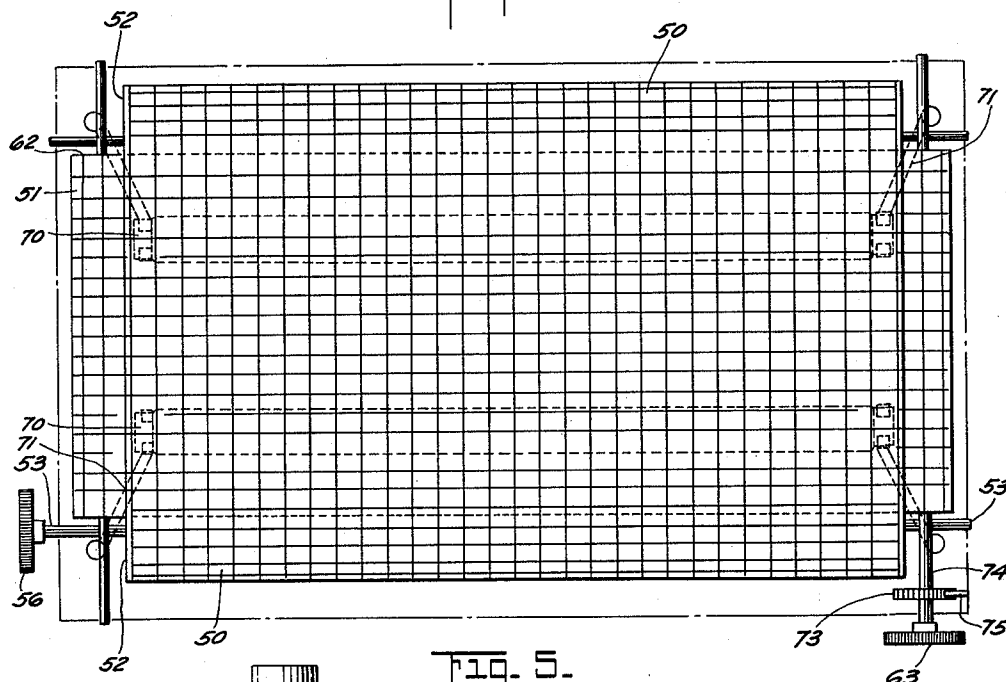


Fig. 5.

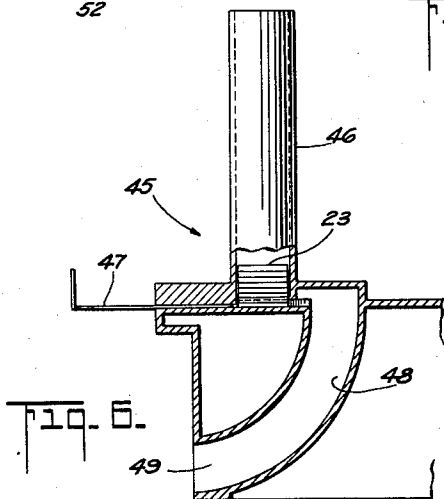


Fig. 6.

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## CROSSWORD GAME APPARATUS

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8 Claims. (Cl. 273-135)

This invention relates to word game apparatus, and in particular to apparatus for use in a crossword competition among several players.

A principal object of the invention is to provide a word game that is interesting and entertaining and will retain its interest and excitement for the players for prolonged periods.

A further object of the invention is a word game that is flexible in its operation and in which the conditions of the game can be constantly manipulated in so many ways that endless variations are afforded maintaining constant player interest.

Another object of the invention is a word game affording an opportunity for the players to exhibit their skill in forming words but also providing a degree of chance and luck in the competition enabling a lesser skilled player to compete favorably with a greater skilled player.

Still a further object of the invention is a word game which can be controlled so that it can be played by adults of various skills and even by children with equal interest and satisfaction.

These and other objects of the invention are achieved in a word game apparatus comprising a transparent or semi-transparent playing surface divided by a grid or lattice into squares or like areas or spaces similar to a crossword puzzle, i.e., in rows and columns, except that each square or space preferably is blank. Underneath the playing surface and visible therethrough is a transparent or semi-transparent first member divided by a grid or lattice into squares or like areas or spaces matching that of the playing surface, so that the first member's grid or lattice can be registered with the playing surface grid. On the grid of this first member is preferably provided a pattern of letters and black spaces visible through the playing surface. Underneath the first member is preferably provided a second member also divided by a grid into squares or like areas or spaces matching that of the playing surface and the first member and capable of registration therewith and whose surface is visible through the playing surface and through the first member. On the grid of the second member is preferably provided a pattern of black spaces. Thus, exposed to the players' view is a crossword puzzle pattern consisting of black spaces and letters arranged throughout the playing grid surface. Playing pieces are provided preferably in the form of tokens or discs each exhibiting a letter of the alphabet, and the general object of the game is for the players to spell out words with the letter playing pieces provided them on the crossword puzzle pattern visible on the board playing surface.

To enhance player interest and afford endless amusement, a feature of the invention is to constitute each row or column of the playing surface grid in a specific category of words, so that the players are limited to forming words along a particular row or column in the designated category. A further feature is a board construction enabling the categories to be rearranged, thus completely changing the character of the game.

Another feature of the invention is to provide means for moving, modifying or changing the first or second members, or both, so that the letter-space pattern visible on the playing surface is altered or modified, again completely changing the game character. The modifiable pattern alone, or together with the modifiable categories, with the various rule changes possible, affords a word game of

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endless variation and of controllable skill running the whole gamut of adult and child abilities.

Other objects and advantages of the invention will be apparent from the following detailed description of an exemplification thereof, given in conjunction with the accompanying drawing wherein:

FIG. 1 is a perspective view of one form of game apparatus of the invention;

FIG. 2 is a perspective view of the first movable member in the position it occupies in the embodiment of FIG. 1 and showing the top surface, most of which is visible to the players;

FIG. 3 is a perspective view of the second movable member in the position it occupies in the embodiment of FIG. 1 and showing its top surface, most of which is also visible to the players;

FIG. 4 is a side view of the game illustrated in FIG. 1 with the sides removed;

FIG. 5 is a top view of the interior of the FIG. 1 embodiment, but with the letter-space pattern omitted.

FIG. 6 is a cross-sectional view of a playing piece dispenser usable with the apparatus of FIG. 1.

Referring now to the drawing, FIG. 1 is a perspective view of one form of game board apparatus in accordance with my invention. This embodiment comprises a generally rectangular box 10, which may be of cardboard, plastic, wood, or other suitable material, preferably opaque, provided with front and back walls 11, 12 and side walls 13, 14 supporting a top playing surface 15. The central region 17 of the playing surface 15 is divided by a series of parallel horizontal 18 and parallel vertical 19 right-angle intersecting lines into plural squares or spaces 20. As shown, twenty-four horizontal rows 21 of spaces and thirty vertical columns 22 of spaces are provided. The spaces 20 are dimensioned to receive coin-shaped discs or tokens 23 constituting the playing pieces. The playing pieces 23 may be formed of cardboard, wood, plastic, or similar materials, with the plastic preferred. Each disc may be constituted of translucent plastic of a particular color overprinted with a letter of the alphabet, as shown, in a contrasting color. All the playing pieces belonging to each player form a set of the same color, with differently-colored sets for each of the players. While the playing surface grid or lattice 18, 19 may be flat, I prefer that the spaces 20 are recessed, as illustrated in the lower left-hand corner, by providing the lines 18 and 19 as raised edges 18', 19'. Thus small pockets are formed for receiving the letter discs 23 and retaining them in position if the board is jostled or moved. The central region 17 containing the squares is transparent or substantially transparent so that the underlying parts are visible to the players. Thus, it may be constituted of clear plastic, such as clear polystyrene.

A marginal portion 30 surrounds the central playing region 17. The marginal portion is divided by lines into a series of rectangular areas 31 each aligned or registered with a row or column of spaces. Thus, the front and rear marginal portions are divided into thirty areas for the thirty columns of spaces 22, and the side marginal portions are divided into twenty-four rectangular areas for the twenty-four rows of spaces 21. Each of the rectangular areas, as shown, bear indicia of categories or classifications of words. A number of suitable categories have been spelled out in FIG. 1. As will be explained later in describing the rules of the game, only words that fall within the categories listed can be spelled out along the associated row or column. For example, in the third column bearing the classification "animals," the word "horse" has been spelled out with four letter discs 23, the letter "O" being projected from below onto the space in which it appears, as will be explained later. While the

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marginal portions can be permanently marked, I prefer a construction enabling the categories to be shifted around. For example, the marginal portions 30 may be made of opaque plastic and blank, and the contestants can write in the categories from lists provided by the manufacturer. When desired, the names can be erased and new names substituted. In a more permanent arrangement, as shown in the lower left-hand corner, each of the rectangular spaces 31 can be framed-in providing open or visible slots or transparent receptacles 35 for receiving flat rectangular inserts 36, for example, of cardboard or plastic, bearing the desired names of the various categories of words. Thus, they are easily replaced or moved around. If desired, differently colored sets of category inserts can be made available containing category definitions suitable for use by players of different skills, with one color for the novice, another for the intermediate player, and so on.

The four corner regions 40 of the apparatus may be used as receptacles for holding the playing pieces of the individual players, and may be suitably colored to match the associated set of playing pieces. As will be explained later, each player, in accordance with a preferred manner of playing the game, works with a small number of playing pieces selected at random from a much larger stock. The excess can be stored in a designated receptacle and new pieces selected therefrom as needed. If desired, each player can place all of his letter pieces with the letters face down on a table or other support, and then select the number prescribed by the rules as needed. In a preferred arrangement, however, each corner of the apparatus is provided with a simple dispenser which stores the player's pieces and dispenses them, in a random manner, one at a time as needed. A suitable dispenser 45, which may be attached to or built into each corner of the box 10, is illustrated in FIG. 6 and comprises an opaque housing 46 for holding a stack of the desired number of playing pieces 23. Within the housing is located a slide 47 whose end engages the bottom playing piece. As will be evident, each time the slide 47 is pushed forward, the single playing piece at the bottom is pushed into a chute 48 from which it is dispensed via an opening 49 in a side wall of the box 10 into the hand of the player operator. When the slide 47 is withdrawn, the next playing piece drops into position ready to be dispensed.

In a preferred form of my invention, a pair of endless rolls or webs 50, 51 are mounted within the box 10 for movement underneath the central playing region 17. As shown in FIGS. 4 and 5, the upper or outer roll 50 is mounted on a pair of cylindrical rollers 52 located at the front and rear of the game apparatus. Each of the rollers has smaller spindle ends 53 journaled in opposite side walls 13, 14 and adapted for rotation therewithin. The left spindle end 53 of the front roller 52 passes through the side wall 13 and is provided with an external knob 56 frictionally engaging the spindle for rotating the roller. A perspective view of the outer roll 50 mounted on its two rollers in the position it occupies in the assembly view of FIG. 1, is shown in FIG. 2. The roll may be constructed of clear transparent or substantially transparent plastic such as flexible polyvinylchloride, and is held tautly on its rollers so that when the front roller is rotated, the roll is correspondingly moved. As shown in FIG. 2, substantially the entire surface of the outer roll 50 is divided by parallel horizontal and vertical lines 57 into thirty columns of spaces 58 and approximately fifty to sixty rows of spaces 59, forming a grid or lattice extending parallel to and underneath the playing surface 17 and which grid can be registered with the grid on the playing surface, i.e., the spaces formed on the roll grid 50 have the same dimensions, or multiples thereof, as the spaces 20 on the playing surface. On the surface of the outer roll in a pattern as illustrated in FIG. 2 of the drawing is overprinted black spaces and letters 55. While the precise pattern is not critical, the one illustrated will prove satisfactory. As the playing surface 17 is transparent, that

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part of the pattern on the outer roll 50 registered with the central playing region 17 will be visible thereon. The letters "O," "N," and "Y" from the surface of the outer roll 50 are shown in FIG. 1 at 60.

A second or inner roll 51 is also provided and mounted similarly to the outer roll 50 on a pair of rollers 62 journaled in the front and back walls 11, 12 except that it extends within and moves transverse to the outer roll 50. It is similarly provided with an external knob 63 for moving it. The inner roll 51 is illustrated in perspective in FIG. 3 in the position it occupies in FIG. 1. It further differs from the outer roll 50 in that it is constructed of translucent or frosted material, such as plastic, e.g., of flexible polyvinylchloride. It however has a similar grid or lattice 67 printed on it to match and register with that of the outer roll 50 and playing surface 17, and a pattern of black spaces 65 is overprinted on the lattice, and owing to the transparency of the overlying outer roll portions 50 and playing surface 17 is also visible on or through the latter, which has been shown at 66 in FIG. 1.

To ensure that the two roll patterns are clearly visible, a light or radiation source is mounted within the inner roll. Any suitable light source may be utilized, the form shown being a pair of fluorescent or like elongated lamps 70 mounted on supports 71 within the box 10. The parts arrangement is shown more clearly in FIGS. 4 and 5. As will be noted, the rollers 52 supporting and driving the outer roll 50 are larger than the rollers 62 supporting and driving the inner roll 51, so that the latter extends within and through the outer roll. The lamps 70 extend within the inner roll 51. When energized, the lamps illuminate the overlying frosted inner roll 51 and project the blackened space pattern on it through the overlying outer roll 50 and together with its letter-black space pattern onto the playing surface 17. The translucent inner roll 51 prevents the lamps or the bottom roll surfaces from being visible to the players.

As will be evident, when either or both of the rolls are advanced or moved, the letter-black space pattern on the playing surface is altered. A huge number of possible patterns are thus made available by means of these transversely moving rolls. To assist in registering the patterns with the playing surface and limit the movements to one or more prescribed rows or columns, a notched disc or gear 73 may be fixedly mounted on a spindle end 74 of one or both of each pair of rollers, and a spring member 75 mounted within the box 10 and provided with a curved end to engage the notches on the gears 73 and serve as a detent mechanism to lock the rollers in position and afford the required stepped movements.

While the preferred arrangement of a pair of transverse movable endless rolls has been described and illustrated, it will be appreciated that other arrangements can also be employed within the scope of my invention. For instance, the rolls need not be endless, but one of the rollers could be used as a supply spool and the other as a take-up spool for a flexible web of suitable length. When the end of the web is reached, the entire web can be re-wound and thus reused. As a further alternative, cards with the 30 x 24 space pattern containing a prescribed black space and/or letter pattern can be substituted for the rolls. The cards can be suitably mounted in slots within the box in a position to be visible through the playing surface. After each game, the cards can be replaced with other cards with different patterns. However, the endless rolls illustrated are preferred because of the huge number of variations thereby made available.

The word game apparatus of the invention may be used in various ways. A typical game can be played by two, three or four players. Each player is provided with, say, 150 letter pieces in a set with the sets, if desired, differently colored. Each set is thoroughly mixed and deposited in the player's dispenser, and then 15 letter pieces withdrawn. Each player, in turn, then attempts to spell out complete words along the various rows and columns

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on the playing surface limited by the word categories designated for each row and column. Each word must fill the spaces between the blackened areas projected onto the playing surface from the underlying rolls and must utilize any letters also projected onto the playing surface from the underlying rolls, and must, as in the usual game of crosswords, synchronize with any existing transverse words. Each player, in turn, can utilize any or all of the 15 letter pieces available to him, and when he is no longer able to spell out further words, it becomes his opponent's turn. The letter pieces used to spell out words remain on the board, and the player replenishes his supply by replacing the used pieces with pieces dispensed at random from his own dispenser, so that for each turn he starts with a new supply of 15 letter pieces. The game ends when a player uses up all of his letter pieces. The game lends itself to many variations requiring lesser or greater skills depending upon the age or education of the players. For instance, each of the players can be confined to spelling out words only in the category (row or column) in which he starts, and he can only pass on to another category after he completes the one started. The players can be limited to playing only along either the horizontal rows or the vertical columns. Scoring systems can be provided granting points to the player depending upon how many words he can spell out, or how many letters are used in each row, and granting bonus points depending upon the number of letter pieces remaining to his opponent when he has exhausted his own supply of 150 letter pieces.

After each completed game, the board pattern is modified by moving one or both of the rolls in a given direction one or more fixed number of spaces, e.g., each roll is moved one space, and then a new game commenced by providing each of the players with a new supply of 150 letter pieces. Many further variations are possible. The board pattern can be altered after each player has taken a certain number of turns. Some of the categories can be left blank, so that any word can be spelled out along the associated row or column. After each game, the categories can be altered by rearranging the inserts which define them. Of course, the word categories can be broadened or narrowed depending upon the skill of the players.

It will readily be appreciated from the foregoing that the apparatus of the invention affords a word game of almost unlimited variety and adapted to be played by players of all ages and all educational levels. By means of the movable rolls by which the board pattern can be altered, and the means described for varying the word categories, an entirely new situation can present itself at the inception of each game, maintaining player interest and entertainment at a high level for prolonged periods of time. The skilled player retains the opportunity to demonstrate his skills, yet the changing board patterns or categories or the game rules are easily modified to offset his skills and equalize the competition.

While I have described what I deem to be a preferred embodiment of my invention, it is obvious that many of the details may be varied without in any way departing from the spirit of my invention, and I therefore do not limit myself to the exact details of construction herein set forth except within the scope of the appended claims.

What is claimed is:

1. Word game apparatus comprising a substantially transparent playing surface divided into plural spaces arrayed in rows and columns, said spaces being adapted to receive letter playing pieces for spelling out along the rows and columns various letter combinations, a first member having a portion extending beneath the playing surface and similarly divided into plural spaces arrayed in rows and columns registerable with those on the playing surface, said portion of said first member being substantially transparent and containing indicia including letters of the alphabet in some but not all of its spaces visible through the playing surface, a second member

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having a portion extending beneath the said portion of the first member and similarly divided into plural spaces arrayed in rows and columns registerable with those on the playing surface, said portion of said second member containing indicia including black spaces in some but not all of its spaces visible through the playing surface and the first member, at least some of the indicia-containing spaces on the first member being non-registerable with indicia-containing spaces on the second member, first means for moving the first member and second means for moving the second member to selectively alter the indicia-containing space pattern visible through the playing surface.

2. Word game apparatus comprising a substantially transparent playing surface divided into plural spaces arrayed in rows and columns, said spaces being adapted to receive letter playing pieces for spelling out along the rows and columns various letter combinations, a marginal portion of said playing surface being divided into areas each aligned with one of the rows and columns and containing indicia designating word categories limiting the words that can be spelled out along the aligned row or column to words within the designated category, a member having a portion extending beneath the playing surface and divided into plural spaces registerable with those on the playing surface, said portion of said member containing indicia in some but not all of its spaces visible through the playing surface, said member being movable thereby to alter the pattern of indicia-containing spaces visible through the playing surface.

3. Word game apparatus as set forth in claim 2 wherein the word category indicia are arranged on removable inserts removably mounted in the areas along the marginal portion.

4. Word game apparatus comprising a box having a top surface whose central region includes a substantially transparent playing surface divided by a series of crossing parallel lines into plural generally rectangular spaces arrayed in rows and columns, said spaces being adapted to receive letter playing pieces for spelling out along the rows and columns various words, a marginal portion of the said top surface being divided into areas registered with the said rows of spaces, and another marginal portion being divided into areas registered with the said columns of spaces, at least some of said areas along the marginal portions bearing indicia of different word categories limiting the spelling out of words along the associated row or column to words falling in the designated category, a first flexible roll mounted within the box for movement in the direction of the rows of spaces, said first roll having a portion extending beneath and generally parallel to the playing surface and similarly divided by lines into plural spaces arrayed in rows and columns registerable with those on the playing surface, said portion of said first member being substantially transparent and containing indicia in some but not all of its spaces visible through the playing surface, a second flexible roll mounted within the box for movement in the direction of the columns of spaces, said second roll having a light-diffusing portion extending beneath the said portion of the first roll and similarly divided by lines into plural spaces arrayed in rows and columns registerable with those on the playing surface, said portion of said second roll containing indicia in at least some of its spaces visible through the playing surface and the first member, at least some of the indicia-containing spaces on the first roll being non-registerable with indicia-containing spaces on the second roll, light radiating means extending underneath the second roll portion for illuminating the playing surface and for projecting thereon the indicia on the first and second rolls, and means available on the outside of the box for selectively moving one or both of the rolls thereby to vary the pattern of indicia projected onto the playing surface.

5. Word game apparatus as set forth in claim 4 wherein

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the indicia in the marginal portions are arranged on removable inserts.

6. Word game apparatus comprising a box having a top surface whose central region includes a substantially transparent playing surface divided by a series of crossing parallel lines into plural generally rectangular spaces arrayed in rows and columns, said spaces being adapted to receive letter playing pieces for spelling out along the rows and columns various words, a marginal portion of the said top surface being divided into areas registered with the said rows of spaces, and another marginal portion being divided into areas registered with the said columns of spaces, said areas along the marginal portions bearing indicia of different word categories limiting the spelling out of words along the associated row or column to words falling in the designated category, first and second generally parallel rollers journaled at opposite ends of and within the box, a first endless flexible roll engaging and extending around and between the first and second rollers and movable in the direction of the rows of spaces when the first and second rollers are rotated, said first roll having a portion extending beneath and generally parallel to the playing surface and similarly divided by lines into plural spaces arrayed in rows and columns registerable with those on the playing surface, said portion of said first roll being substantially transparent and containing indicia including a letter of the alphabet in some but not all of its spaces visible through the playing surface, third and fourth rollers journaled at the opposite free ends of and within the box and transverse to the first and second rollers, a second endless flexible roll engaging and extending around and between the third and fourth rollers and movable in the direction of the columns of spaces when the third and fourth rollers are rotated, said second roll extending within the first roll, said second roll having a light-diffus-

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ing portion extending beneath the said portion of the first roll and similarly divided by lines into plural spaces arrayed in rows and columns registerable with those on the playing surface, said portion of said second roll containing indicia including dark areas in some but not all of its spaces visible through the playing surface and the first roll, at least some of the indicia-containing spaces on the first roll being non-registerable with indicia-containing spaces on the second roll, light radiating means extending within the second roll for illuminating the playing surface and for projecting thereon the indicia on the first and second rolls, and means available on the outside of the box for rotating at least one of the first and second rollers and at least one of the third and fourth rollers for selectively moving one or both of the endless rolls thereby to vary the indicia projected onto the playing surface.

7. Apparatus as set forth in claim 6 wherein means are provided to limit the movement of the rollers to a whole number of spaces.

8. Apparatus as set forth in claim 6 wherein associated with the box is at least one dispenser for dispensing letter playing pieces one at a time.

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