Nov. 28, 1967 A. E. AUKENS 3,355,172

WORD GAME

Filed Sept. 1, 1965 2 Sheets-Sheet 1

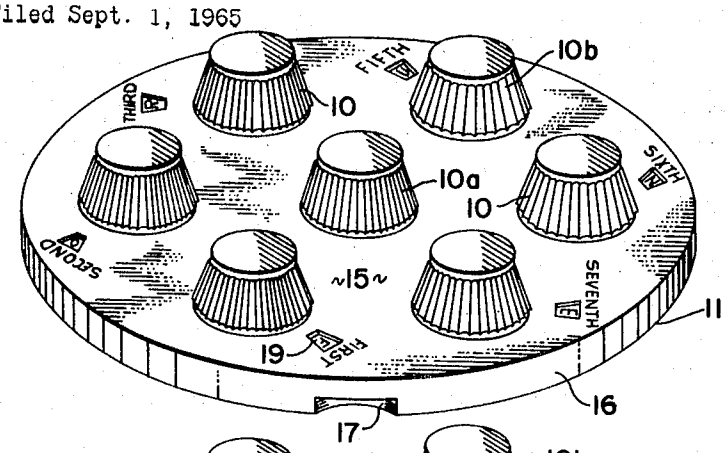


Fig. 1

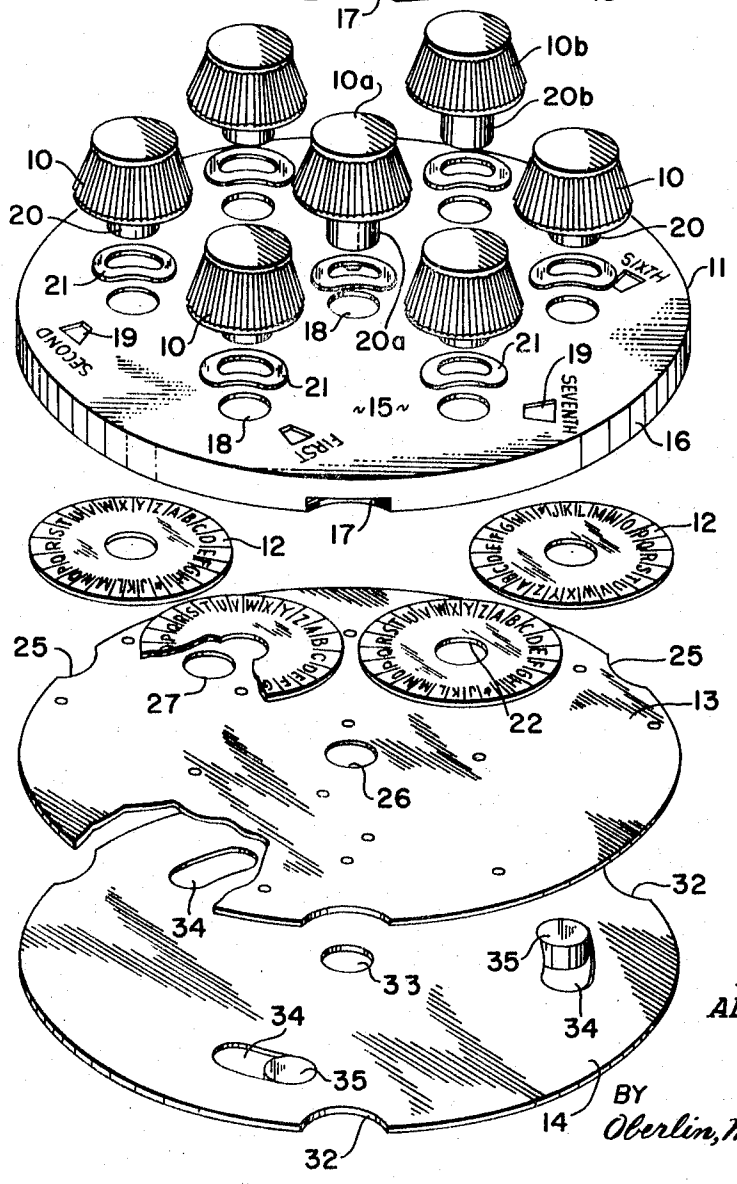


Fig. 2

INVENTOR
ADRIAN E. AUKENS

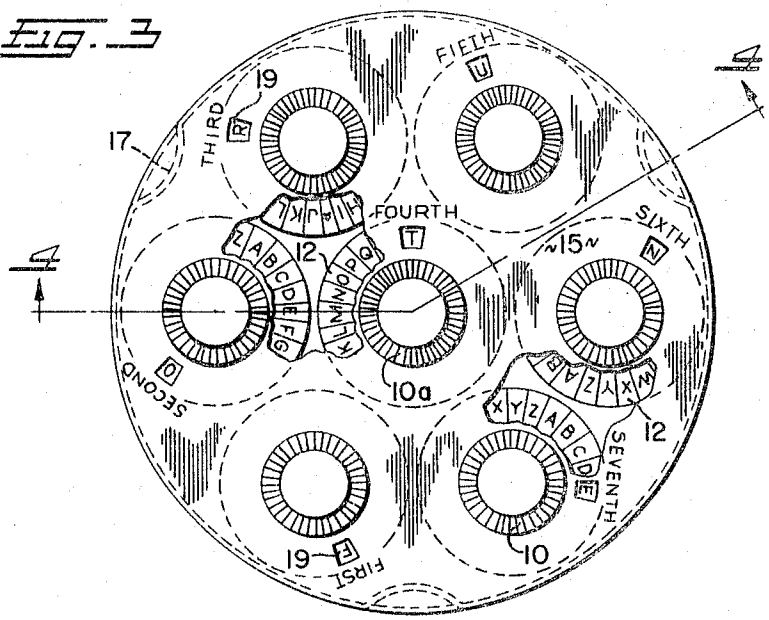
BY
Oberlin, Maky & Donnelly
ATTORNEYS

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Fig. 3



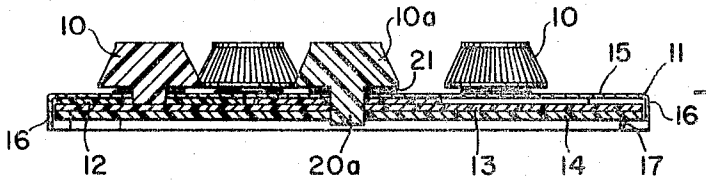


Fig. 4

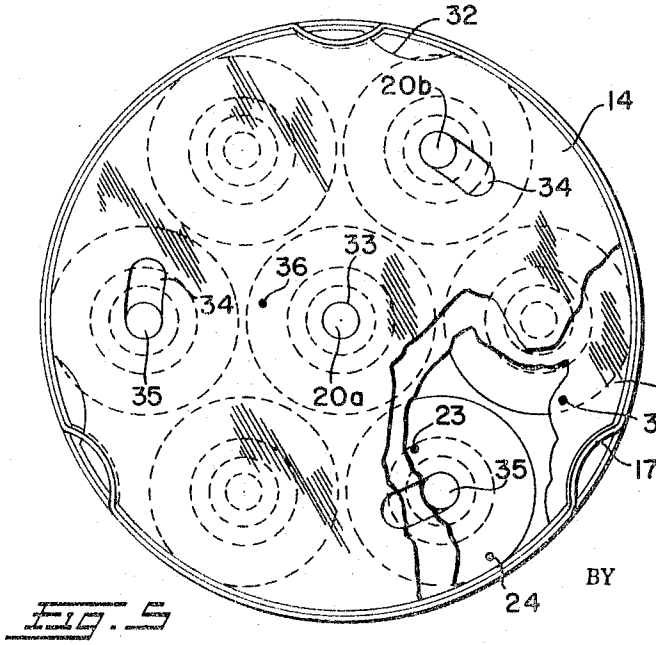


Fig. 5

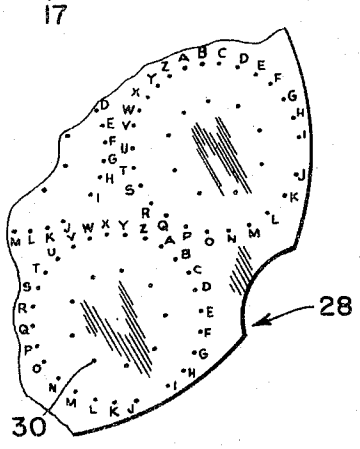


Fig. 6

INVENTOR
ADRIAN E. AUKENS

BY Oberlin, Maky & Donnelly
ATTORNEYS

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WORD GAME

Adrian E. Aukens, 260 Breezewood Drive,
Bay Village, Ohio 44140

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9 Claims. (Cl. 273—1)

The present invention relates as indicated to a word game in which one or a plurality of players try to correctly identify an unknown word with the minimum number of opportunities or trials through the process of inductive reasoning derived from and knowledge gained by previous trials at such identification.

The invention, generally described, comprises a game in which the player or players attempt to identify a word unknown at the outset, with the only knowledge about such word being the number of letters which the same is comprised of. The starting player selects a word at random having the same number of letters as the disclosed number of the unknown word and, through a series of dials accessibly provided at the top of the game, forms his randomly selected word, the individual letters of which appear through openings in the top cover of the game apparatus. His word selection is preferably hidden from the opposing players. By viewing the underside of such apparatus, the starting player can determine the number, but not the particular identity, of coincident letters in his randomly selected word and in the unknown word. By coincident is meant the identical letter and position of the letter within the word, for example, to be coincident it is not enough that both words have an s; the s must appear at the same relative positions in the respective words, for example, the third letter.

The remaining player or players follow in turn, with each player selecting and dialing a word as described and then determining the number of coincident letters for that particular selection. Through succeeding selections as his turn arises, each player, through reasoning based on previous selections, gradually ascertains the letters of the unknown word, with a player knowing he has selected the right word when the number of coincident letters after a particular selection is equal to the number of letters in the unknown word. The winner of the game is the player identifying the word with the fewest selections. When a person plays the game alone, the number of selections required by him to identify the word can be compared to a predetermined and provided scale for that particular word, such scale indicating normal proficiency for such word. Each unknown word is punched in a manner to be presently described on a separate card, and dozens of such cards are preferably provided with the game to afford many non-repetitive word challenges.

It is accordingly an object of the present invention to provide a word game which can be played by one or a plurality of players.

A further object of the invention is to provide a word game which can be set up, with slight modification in accordance with the invention teachings, to accommodate words comprising a reasonably variable number of letters. Although the game as described is set up for unknown words of six or seven letters, words of fewer or more letters could as well be accommodated in accordance with the present invention.

A further object of the present invention is to provide apparatus for such word game in which the separate unknown word cards can be simply and accurately positioned therewithin, and in which letter selection is made simple and convenient.

These and other objects will be apparent from the disclosure and drawings and the specification that follows.

In said annexed drawings:

FIG. 1 is a perspective view of the game apparatus in assembled form;

FIG. 2 is an exploded perspective view showing the game apparatus in completely disassembled form;

FIG. 3 is a top plan view of the assembled apparatus as shown in FIG. 1, with the cover being broken away in certain areas thereof to expose the lettered dial members mounted directly beneath the top cover;

FIG. 4 is a sectional view taken on line 4—4 of FIG. 3;

FIG. 5 is a bottom plan view of the assembled apparatus, with the bottom or back cover and the unknown word card being broken away to show the bottom of the lettered disc members, and

FIG. 6 is a fragmentary plan view of a pattern for punching the unknown word card.

Referring now in more detail to the drawings, wherein like parts are indicated by like reference numerals, and initially to the exploded FIG. 2 view, the game apparatus comprises several major parts or components which include a series of control knobs commonly designated at **10**, a body **11**, a series of alphabet dials commonly designated at **12**, an unknown word card **13** and a back cover piece **14**.

Referring in more detail to the body **11**, the same comprises a flat section **15** which forms the top of the apparatus when assembled, and a depending annular skirt **16** which extends continuously around the body section **15** at the periphery thereof. The skirt or flange **16** is inwardly deformed at arcuately spaced areas to provide a series of retaining lugs commonly designated at **17**. which in the form shown are three in number and substantially equally arcuately spaced. The lug portions can be simply formed by severing the skirt or flange in such areas approximately intermediate the base and outermost edge of the flange, and thereafter pressing the sections thus formed by such severing radially inwardly to form the lugs **17**. As will be hereinafter described in more detail, the lugs **17** function to retain the unknown word card **13** and back cover plate **14** in assembled position.

The body **11** further includes a series of predeterminedly spaced circular openings commonly designated at **18** and a further series of generally trapezoidal shaped openings commonly designated at **19**, with the latter being equal in number to the openings **18** and formed in the body section **15** relatively adjacent thereto.

Each of the knobs **10** includes a depending shaft portion **20** which is adapted to extend loosely through an associated opening **18** to an area below the body section **15**. Two of the knobs have been designated **10***a* and **10***b* and are particularly characterized by having shaft portions, correspondingly indicated at **20***a* and **20***b*, of relatively greater length for a purpose to be more fully explained hereinbelow. Disposed around each of the knob shafts is a generally dish-shaped washer **21** which serves, when the control knobs are operatively mounted, to bias the same upwardly thereby to frictionally maintain the several knobs in their adjusted position.

Suitable indicia are formed on the top of the body section **15** adjacent each of the openings **19**, with such indicia in the form shown comprising words "first" through "seventh" to guide a person in the dialing of his selected word. The first letter of his selected word should be dialed, for example, by the knob **10** adjacent the opening **19** designated "first" and so forth. In the game apparatus shown, there are seven such control knobs and associated windows or openings **19** through which the dialed letters are visible. The illustrated game apparatus can thus be used for ascertaining unknown words having seven letters or less. With seven-letter words, all the control knobs **10** would be used in the selection and dialing of words having the same number of letters as the unknown word. Where the unknown word contains fewer than seven letters, only those control knobs **10** required

would be used. For example, for five-letter unknown words, only the control knobs **10** associated with the openings **19** indicated "first" through "fifth" would be used. It will also be apparent that, in accordance with the present invention, apparatus can be provided having significantly fewer control knobs, for example three or four, for use, for example, by elementary school children.

Each of the dials **12** is generally disc shaped and has a central opening **22** corresponding in diameter to the diameter of the control knob shafts **20** whereby the several dials can be press-fitted or otherwise retained on such shafts. The top of each dial **12** is divided into arcuate segments each of which contains adjacent the dial periphery a letter of the alphabet. An extra space is preferably provided on each dial face, with such space in the form shown being starred and between the I and J. The purpose of such space will be explained hereinbelow. The letters printed on the top of the dial **12** are slightly less in size than the openings or windows **19** formed in the body section **15** so that when a particular dial **12** is rotated by the knob **10**, a particular letter can be dialed to the opening or window **19** as selected. The underside of each dial **12**, referring to FIG. 5, is completely blank with the exception of a pair of solid round circles, hereinafter referred to as blips, which are imprinted thereon, such blips being indicated at **23** and **24** in the dial illustrated in FIG. 5. One of these blips is significant and required for letter identification, with the other blip being merely provided for purposes of deception or confusion. By providing an additional, false blip on the bottom of each dial, the changing of the unknown word cards, which necessarily exposes the bottoms of all of the dials, presents fourteen blips rather than seven making it relatively more difficult to correlate or ascertain the positions of the significant blips on the underside of the various dials with the lettering on the top side of such dials.

The circular word card **13** is preferably made of semi-rigid paper and is formed with three arcuately spaced notches **25** in the periphery thereof. The card **13** is also formed with a central opening **26** and a similar sized opening **27** for respectively receiving the shafts **20***a* and **20***b* of the knobs **10***a* and **10***b* for guiding the card in properly oriented position beneath the dials **12**. The diameter of the card **13** is substantially the same as the diameter of the body section **15**, with the notches **25** formed in the card receiving the lugs **17** formed in the body flange or skirt **16**.

A plurality of openings are punched in each unknown word card, with the positioning of at least seven of such openings or perforations controlling the word each card represents. The remaining openings are for purposes of deception and make it more difficult when merely viewing the perforations on the card to determine the letters which the various blips are intended to represent. The only markings on the card are the indication of which side should be placed up, or against the bottoms of the dials, a statement of the number of letters that are in the word represented by the card and, if desired, additional information such as, for example, the number of the card set to which that particular card belongs. A set number for a particular group of cards is desirable to separate card sets from one another. For example, it is contemplated that several additional packages or sets could be purchased for use with the game, with each set perhaps varying in the degree of complexity of the unknown words.

To prepare each unknown word card, that is, to correctly perforate the same for representation of a particular word, a master pattern of the type shown fragmentarily in FIG. 6 is preferably employed. The master pattern, generally indicated at **28**, in identical in shape to the unknown word card blanks, with the pattern thus being provided with peripheral notches and openings corresponding to the openings **26** and **27** formed in the word

cards. A pattern **28** has printed thereon a series of seven sets of circular letters of the alphabet, with the letters being arcuately spaced on a radius closely approximating the spacing of the letters formed on the top face of each of the dials **12**. An inner arcuate set **30** of dots is also provided, with one of such set being perforated to provide a series of fake perforations. Each circular set of letters on the pattern represents by its position a particular letter of the word adapted to be selected by the knobs **10**. For example, the lowermost circular set of letters shown in FIG. 6 might represent the seventh letter of the unknown word, and the particular letter can be punched or perforated where indicated by the dot adjacent each letter. Assuming the word card blank positioned with the pattern is desired to be punched to represent the word "FORTUNE," the E would be punched in the lowermost circle of letters and in the card blank as representing the seventh letter of such unknown word. In the same manner, assuming that the circular set of letters shown uppermost in FIG. 6 is for the sixth letter of the word represented by the card, the letter N would be punched. In this manner all seven of the letters can be punched in the card blank, with an additional seven perforations also being formed as described for deception purposes. In this manner, the finished word card contains fourteen perforations with the result that little information can be gleaned from merely visually inspecting the same.

The back cover piece **14** is preferably of a relatively rigid, transparent plastic and is formed with a plurality of peripheral notches **32** arcuately spaced to correspond with the lugs **17** formed in the body **11**, a central opening **33**, and three arcuate slots commonly designated at **34**. The knob shaft **20***a* extends through the central opening **33** and the shaft **20***b* extends through one of the three slots **34** to a position below the back cover piece when the same is mounted in operative position. Fixedly mounted in the remaining two slots **34** are false posts **35** which extend downwardly from the bottom of the back cover piece a distance closely approximating the degree of extension of the shaft post **20***b*. The false posts **35** serve the dual purpose of serving as a handle or manipulating means for rotating the cover into and out of a retaining position and providing a balanced appearance of the bottom of the apparatus when the same is assembled so as to enhance concealment from any player any possible correlation between a visible blip and a particular dial at the other side of the device.

To place or replace an unknown word card in the game apparatus, the back cover piece **14** is rotated through manipulation of the false posts **35** to a position where the notches **32** coincide with the lugs **17** of the body **11**. The cover can then be removed and an unknown word card placed or replaced, with the alignment of the latter being guided by the openings **26** and **27** and the posts **20***a* and **20***b* of knobs **10***a* and **10***b* respectively. The back cover **14** can then be replaced, with the notches **32** being lined up with the lugs **17** and the cover **14** being rotated until the lug members **17** and the notches **32** are disaligned.

The playing of the game should be apparent from the above description. To briefly summarize, the unknown word card is placed in the apparatus as described and the participating players are told only the number of letters in such word. The starting player then dials any seven-letter word which comes to mind on the several knobs **10**, **10***a* and **10***b*. As shown in FIG. 3, the player has selected and dialed the word "FORTUNE" by proper turning of the several control knobs. This selection is preferably hidden from the opposing players. Assuming that the unknown word is "LASTING," a visual inspection of the bottom of the apparatus, preferably only by the selecting player, will show the presence of two blips, indicated by reference numerals **36** and **37** in FIG. 5, which show through the transparent back cover **14**. The

presence of a blip indicates that a particular dial **12** has been rotated to a position wherein the significant or functional blip on the bottom thereof is aligned with the significant or functional perforation formed in the word card **13** for that particular letter, which, as described above, signifies letter coincidence. In the word "LASTING," the fourth and sixth letters, T and N, are coincidental with the fourth and sixth letters of the selected word "FORTUNE," which accounts for the showing of two blips through the back cover of the apparatus. Even though the selecting player is thus made aware of two coincident letters, the viewing of the apparatus bottom, especially if the apparatus is rotated somewhat before the same is turned and viewed, does not disclose to the viewer the particular letters which are coincident.

The next player then selects and dials a word in the same manner. Since each word selection is preferably hidden by each player, the dials are normally turned before use by the next player. To insure against accidental showing of blips, each knob can if desired be turned to expose the starred extra space in each of the openings **19**. Such knob setting can also be employed when cards are changed to insure that no blips are visible by accident to one or more of the players before the game is started.

Through trial and error, each player, through several word selections, can ascertain progressively more letters of the unknown word, with the showing of seven blips on the underside of the card, in the illustrated example of a seven-letter word, indicating that the selected word and the unknown word are the same. The player identifying the unknown word in the fewest number of tries is the winner of that particular game.

The present invention thus provides a word game which is interesting and challenging and which can be played by one or more persons. Although in the form shown the apparatus is adapted for accommodation of seven-letter words, words of fewer letters can as well be accommodated with the apparatus disclosed, or with modified apparatus containing fewer control knobs and dials. The apparatus is relatively simply constructed and can be manufactured at relatively low cost.

Other modes of applying the principle of the invention may be employed, change being made as regards the details described, provided the features stated in any of the following claims or the equivalent of such be employed.

I therefore particularly point out and distinctly claim as my invention:

1. Word game apparatus comprising a body, a plurality of control knobs having manipulable portions at one side of said body, a plurality of dial members disposed on the other side of said body and operatively connected to said knobs, each of said dials bearing indicia on the upper face thereof, said body having means for displaying for view a single indicium of each dial, each of said dials additionally bearing indicia on the lower face thereof, an unknown word card positioned beneath said dials and formed with a series of significant perforations each representing a portion of a word, the location of said card perforations being so correlated to the locations of said lower face indicia that the perforations and lower face indicia will be in registration when the viewable indicia on the dials indicate the word represented by the card, and a back cover of relatively transparent material beneath said word card.

2. Word game apparatus comprising a body formed with a first group of openings, a plurality of control knobs having manipulable portions at one side of the body and shaft portions extending through said openings in said body to the other side thereof, a dial mounted on each of said shaft portions at such other side, each of said dials having indicia on the upper face thereof adapted to be selectively exposed through one of a second group of openings formed in said body, each of said dials additionally bearing indicia on the lower face thereof, an unknown word card positioned beneath said dials and formed with a series of significant perforations each representing a portion of a word, the location of said card perforations being so correlated to the locations of said lower face indicia that the perforations and lower face indicia will be in registration when the viewable indicia on the dials indicate the word represented by the card, and a back cover of relatively transparent material beneath said unknown word card.

3. Word game apparatus comprising a body member having a flat circular section serving as the top of the apparatus and an annular depending skirt at the periphery of said top section, a first group of openings formed in said top section, a plurality of control knob members each of which comprises a knurled, manipulable portion above said top section and a shaft portion extending through an opening in said first group of openings, a dial member mounted on the shaft section of each of said knob members on the underside of said top section and being rotatable with said knob, each of said dial members having a series of letters on the upper face thereof and significant markings on the bottom face thereof, said top section having formed therein a second group of openings, with each of such openings being sized and arranged to expose at least one letter on the upper face of said dial, an unknown word card positioned beneath said dials and within said annular skirt, said card being formed with a series of significant perforations each representing a portion of a word, the location of said card perforations being so correlated to the locations of said lower face indicia that the perforations and lower face indicia will be in registration when the viewable indicia on the dials indicate the word represented by the card, and a back cover member of relatively transparent material disposed beneath said unknown word card and within said skirt, said skirt being provided with means for retaining said card and said back cover member in such assembled position.

4. The apparatus of claim **3** wherein said retaining means comprises a plurality of inwardly bent lugs formed in the flange of said body member.

5. The apparatus of claim **4** wherein said word card and said back cover member are provided with notches in the periphery thereof complemental in size and arcuate arrangement to said lugs whereby said word card and said back cover member can be positioned closely beneath said dial members, with subsequent rotative movement of said back cover member serving to disalign said notch formed therein and said lugs thereby to lock said back cover member and thus said word card in assembled position.

6. The apparatus of claim **3** further including means for accurately aligning said word card in position beneath the underside of said dial members.

7. The apparatus of claim **3** wherein the shaft portions of at least two of said knob members are relatively elongated to extend substantially below the dial members when mounted thereon and through predeterminedly arranged openings provided therefor in said word card, with the word card being accurately positioned when said openings are aligned with said elongated shaft portions.

8. The apparatus of claim **3** wherein the shaft portions of at least two of said knob members are relatively elongated and extend through openings provided therefor in said word card and said back cover member, with at least one of said openings thus formed in said back cover member being a slot, said word card and said back cover member being formed with peripheral notches complemental in size and arcuate arrangement to inwardly bent lugs formed in the skirt of said body member, said word card and said back cover member being accurately positioned by means of alignment of said notches formed in periphery thereof with said lugs, with the back cover

member being thereafter rotated as permitted by said slot to disalign the peripheral notches of said cover member and said lugs thereby to lock said word card and said back cover member in assembled position.

9. The apparatus of claim 8 wherein said back cover member is formed with slots and false shafts mounted therein to provide a balanced appearance at the back of the apparatus to aid in concealing from the participating players any correlation between the marking indicia showing through the transparent back cover member and the control knob members.

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ANTON O. OECHSLE, *Primary Examiner.*

P. SHAPIRO, *Assistant Examiner.*