

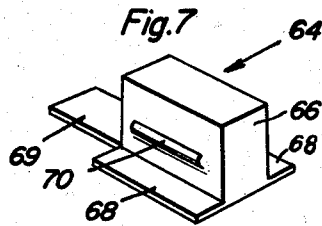
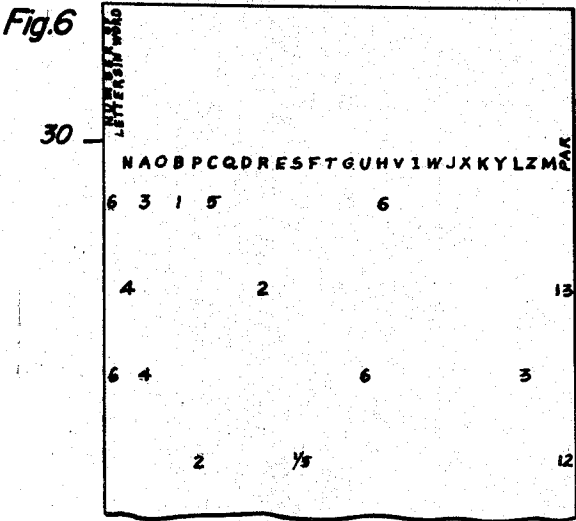
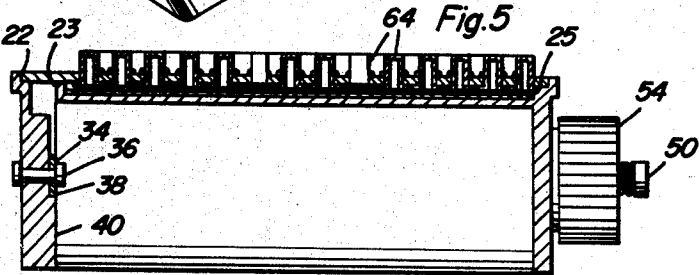
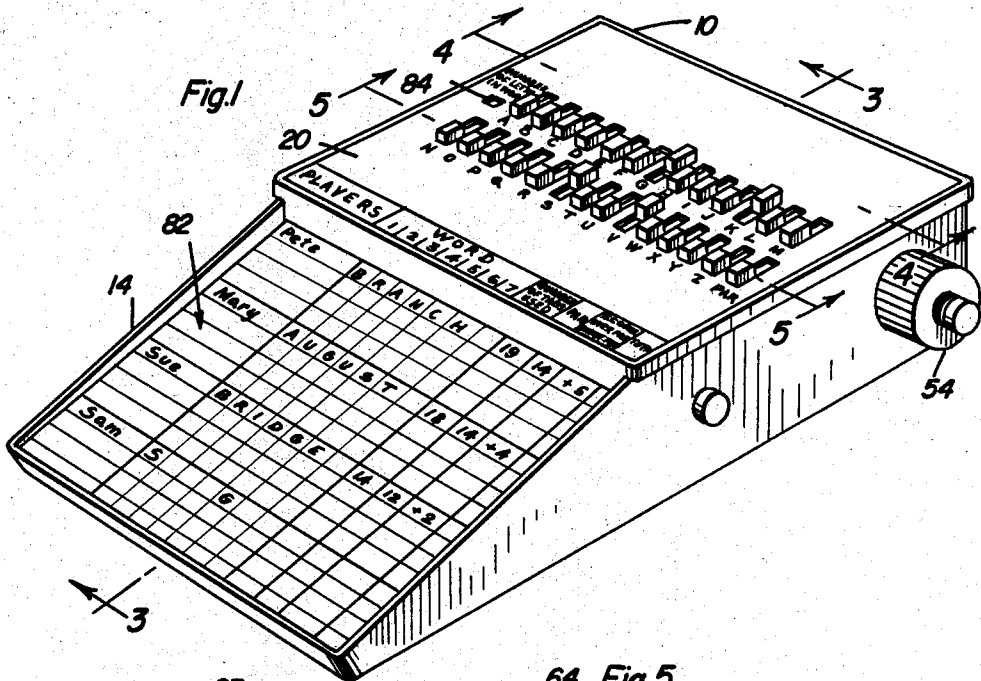
May 25, 1965

W. R. McTAGGART
WORD GAME

3,185,478

Filed Dec. 7, 1960

2 Sheets-Sheet 1



William R. McTaggart
INVENTOR.

BY *Almon W. Wilson*
and Harvey B. Jackson
Attorneys

May 25, 1965

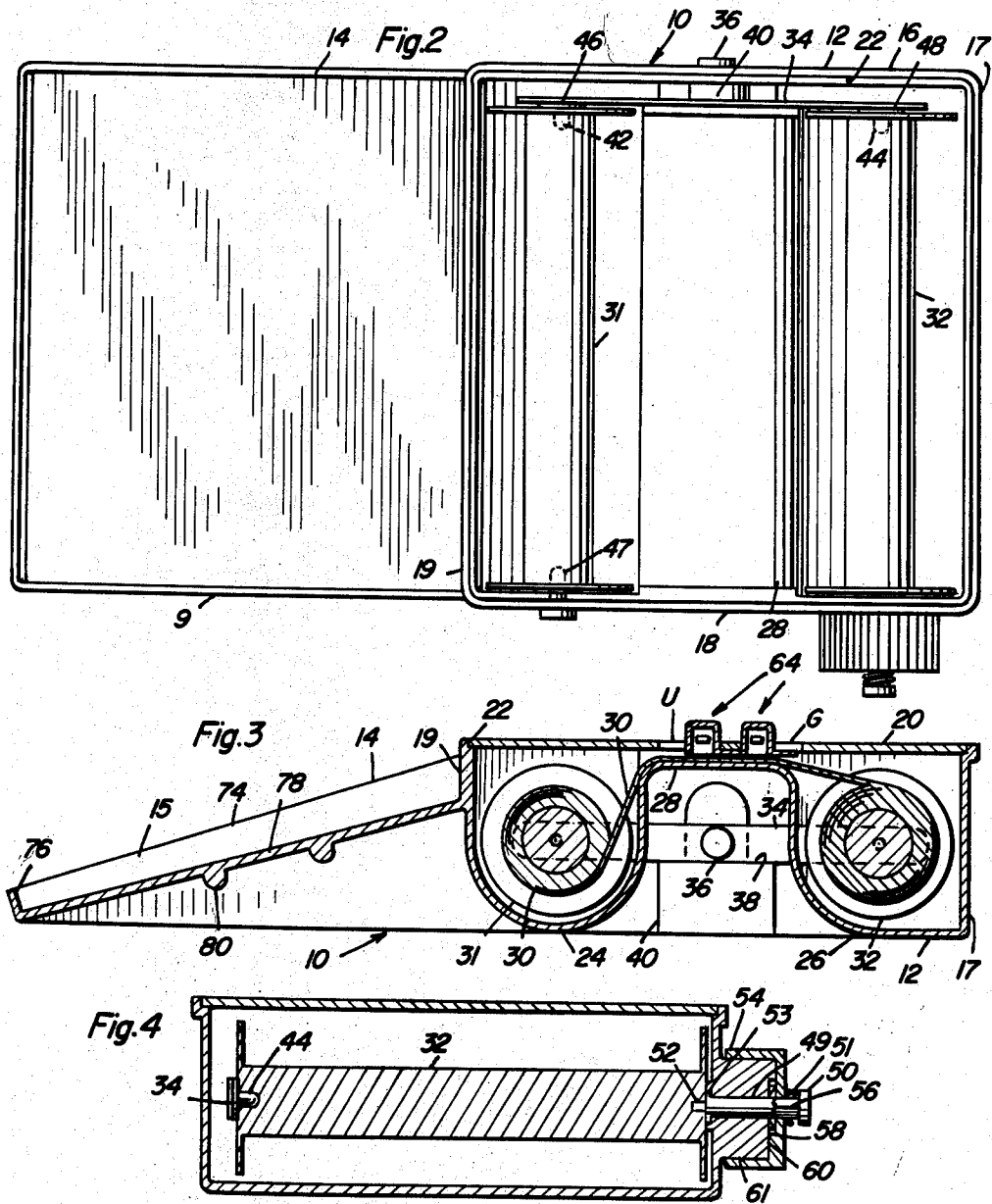
W. R. McTAGGART

3,185,478

WORD GAME

Filed Dec. 7, 1960

2 Sheets-Sheet 2



William R. Mc Taggart
INVENTOR.

BY *Almonce A. O'Brien*
and *Harvey E. Jackson*
Attorneys

1

3,185,478

WORD GAME

William R. McTaggart, 702 Church St., Flint, Mich.

Filed Dec. 7, 1960, Ser. No. 74,349

5 Claims. (Cl. 273-135)

This invention relates to a word game. More specifically, the invention relates to a word game that is not only entertaining but also educational, and it may be played by one or a plurality of people.

Accordingly, it is an object of this invention to provide a game that may be played by one or a plurality of people and is both entertaining and educational.

Another object of this invention is to provide a device for improving one's vocabulary and understanding of a language.

Another object of the invention is to provide a word game which may be modified by changing the difficulty and complexity of the words therein so that the game will present a challenge to one of any age group or of any educational level.

It is yet another object of my invention to provide a word game that is not only entertaining and educational, but is designed in such a manner that it may be economically produced and operated.

It is still yet another object of my invention to provide a device for entertainment that is durable and long lasting.

It is still another object of my invention to provide a word game having portions thereof printed on spools which may be easily and rapidly removed and replaced with different spools so as to vary the words used in the game or to change the difficulty of the game.

It is another object of my invention to provide a word game having means for winding a roll of word indicating paper from one spool to another spool wherein the knob for the winding spool can only be turned in one direction and thus preventing jamming of the paper.

It is still yet another object of my invention to have the spools and roll of paper used therein so arranged that the paper may be reversed thereby permitting both sides of the paper to be printed with word indicating means.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 shows a perspective view of my word game;

FIGURE 2 is a plan view of my word game as seen with the top and score card removed therefrom;

FIGURE 3 is a cross sectional view substantially on the plane of line 3-3 of FIGURE 1;

FIGURE 4 is an elevational cross sectional view taken substantially on the plane of line 4-4 of FIGURE 1;

FIGURE 5 shows an elevational cross sectional view taken substantially on the plane of line 5-5 of FIGURE 1;

FIGURE 6 is an illustration or sample of the roll of paper used in the word game; and

FIGURE 7 is a view in perspective of one of the sliding tabs.

The word game machine 10 is composed of two primary sections, namely, a rolling section 12 and a scoring section 14.

The rolling section 12 of the housing 10 is rectangular in shape and is enclosed by the four vertical sides 16, 17, 18 and 19 joined together at their ends as shown in FIGURE 2. The top of the rolling chamber is enclosed by a removable cover 20 which fits snugly and tightly with-

2

in the recesses 22 in the side walls. The bottom of the rolling chamber is enclosed by two U-shaped members 24 and 26 integrally joined together at their inner legs by the flat horizontally extending member 28. The chamber enclosed by the U-shaped member 24 encloses an unwinding reel 31, and the chamber formed by the substantially U-shaped member 26 and wall 17 encloses a winding reel 32.

Wound upon the reels 31 and 32 is a relatively long strip of paper 30 which also connects the two reels by extending over the flat plate 28.

The reels and winding mechanism for loading and winding the paper roll 30 is very similar in structure to the mechanism in an ordinary box camera for winding and unloading the film therein.

As shown in FIGURE 2 and in FIGURES 3 and 4, the spools 31 and 32 are rotatably supported on spindles 42 and 44. The spindles 42 and 44 are each fixed to circular shims 46 and 48 which in turn are fixed to the ends of a leaf spring 34. The leaf spring 34 is fixed to a thickened portion of the wall 16 by means of a rivet 36 and the thickened portion 40 has a recess on its inner side having a straight lower edge 38 upon which the lower edge of the spring 34 rests as more clearly shown in FIGURE 5. By having the spring 34 rest on the straight horizontal edge 38, pivotal movement of the spring about rivet 36 is thereby prevented.

The lower or right end of the spool 31 is rotatable on a spindle 47 which is screwed into or force fitted with an aperture in the side wall 18. The lower or right end of the winding spool 32 is supported by and rotatable with a spindle 49. The right end of the spindle 49 has its cross sectional shape square as shown at 56 and also has the left end of square cross sectional shape but reduced in size. The square portion 52 fits snugly within a square aperture in the right end of the reel 32 as shown in FIGURE 4. The winding knob 54 also has a square aperture slidably fitting the square portion 56 of the spindle 49. Spindle 49 also has a circular head 50 on its right end and mounted between this head 50 and the winding knob 54 is a compression spring 51. The compression spring 51 tends to normally hold the winding knob against the surface 60 thereby frictionally holding the winding knob and the reel 32 in any set position desired. The flange 53 on the left end of the spindle 49 prevents the coil spring 51 from urging the spindle 49 outwardly. Mounted between the inside face of the knob 54 and a recess in the right end of the projection 61 is a conventional ratchet mechanism 58 which prevents the winding knob 54 from turning backwards or in a counter-clockwise direction as viewed in FIGURE 1. It can thus be seen that by turning the knob 54 in a clockwise direction, the paper will be wound upon the spool 32. The spindles 47, 42 and 44 are all circular in cross section and thereby act as rigid axles for the reels 31 and 32.

The cover plate 20 has twenty-six identical recesses, one for each letter in the alphabet. These recesses are rectangular in plan view and extend entirely through the cover 20 as shown in FIGURE 3. These apertures or openings are arranged in two rows, the first row being for the letters A through M and the second row being for the letters N through Z. Each aperture is appropriately lettered as indicated in FIGURE 1 by a capital letter and the apertures in the lower row are staggered in relation to the apertures in the upper row for reasons explained below. The lower row of apertures has an additional aperture on its right end which is indicated as "Par" and the upper row of apertures has an additional opening square in shape on the left end of the row and this aperture is indicated on the plate as "Number of Letters in Word." Mounted within the twenty-six

alphabet apertures and the "Par" aperture are substantially rectangular tab members 64.

The tabs 64 are shown enlarged in FIGURE 7 and comprise a hollow box shape body 66 having retaining wings 68 extending outwardly from the bottom of each side of the body 66. The covering tab 69 extends forwardly from the bottom edge of the body 66. Detent portions 70 are pressed outwardly from each side of the body 66, and these detent portions permit the tabs 64 to be snapped through the recesses in the cover 20 from the underside thereof. Once the tabs have been inserted in the recesses, they are retained therein by the wings 68 and detent portions 70 extending over the edges of the rectangular openings in the cover 20.

The scoring section 14 is enclosed by the side walls 74, 76, 9 and 19. These walls are connected by a floor member 78 which is inclined upwardly from the front of my device and is substantially parallel to the upper edges of walls 9 and 74. The floor 78 is reinforced and made more rigid by horizontally extending projections 80 formed thereon. The floor member 78 and the wall portions extending around and above the floor portion form a chamber 15 for holding a stack of score cards 82. The score cards are illustrated only in FIGURE 1.

FIGURE 6 illustrates how the tape 30 is printed. The tape is substantially filled with horizontal rows of numbers which are printed to be aligned with the alphabetical slots in the cover 20. In production, the paper tape is substantially entirely used with only about $\frac{1}{16}$ " spacing between horizontal rows of numerals. As shown in FIGURE 3, the tape extends over the horizontal plate 23 and lies just under the slots U and G for easy viewing from above when the tabs are pushed forward as shown by the left tab 64. In operation, as shown in FIGURE 3, the spool 32 is wound clockwise which pulls the paper tape 30 to the right and turns spool 31 counterclockwise or in just the reverse direction as spool 32. This arrangement permits both sides of the paper tape to be printed with horizontal rows of numbers. After substantially all of the tape has been wound upon spool 32 and spool 31 becomes substantially empty, then the spools are removed from the housing assembly 10 by lifting and removing cover 20 and then lifting upwardly the spools 31 and 32 after the spring supported spindles 42 and 44 have been urged outwardly from the ends of the spools. Spool 32 is then rotated around the axis of spool 31 180° and then the spools are reinserted into the rolling section 12 in just the reverse manner as shown in FIGURE 3. By having both sides of the tape printed with numerals this permits a saving in tape of 50%.

When the game is played, all of the sliding tabs 64 are pushed downwardly towards the score card so as to cover the tape of paper underneath the tabs. Then the turning knob 54 is rotated clockwise so as to pull the tape of paper underneath the tabs upwardly until a number appears in the extreme left slot 84. The slot or opening 84 has no sliding tab and is therefore continuously open as shown in FIGURE 1. When a number appears in the slot 84 it indicates that the tape is properly lined up under the tabs and tells the player the number of letters in the word which is sought.

As shown in FIGURE 1, the cover plate 20 has printed on its lower edge "Word." Under this "Word" is horizontally arranged the numbers from 1 through 7. This indicates that the word which is sought may contain from one to seven letters. Any number of letters from one to seven is possible; it is simply a matter of choice. The object of this game is for the player to determine the correct word with the least number of guesses.

Once the number of letters in the word sought has been indicated by or through the opening 84, the player then commences to push up the sliding tabs 64 for revealing the paper underneath and any numerals which may be printed thereon. Normally the player would try the

vowels first since they are the most common letters used in the spelling of words, and then he would try the consonants or the high frequency letters.

As illustrated by the score card in FIGURE 1, Pete was the first player and he rotated the knob 54 until the numeral 6 appeared in the opening 84. This indicated that the word he must spell had six letters therein. He first pushed up tab A which revealed the number 3; he then wrote "A" on the pad under the numeral 3 at the bottom of the metal plate. He then may have pushed tabs E, I, O, U, and Y but without success. None of these tabs had any numerals on the tape under them. Gradually as Pete pushed up varying tabs the word "Branch" was indicated to be the word sought. Altogether, it took Pete nineteen attempts before he was able to spell out his word "Branch." Once the tabs are pushed up, they are left up to enable the player to tell what letters he has tried and also to enable him to easily count the tabs when he has finally found the correct word and finished his portion of the game. The paper tape 30 contains only numerals thereon and not any letters. The capital letters are permanently printed on the central portion of the cover plate 20 as shown in FIGURE 1.

When Pete finally finished his word, "Branch," he then pushed up the last tab on the lower right marked "Par." Par for the word "Branch" was then revealed to be fourteen. Thus Pete's score was plus five, the number of tabs used less "Par." After Pete had recorded his score the tabs were then pushed down again, the tape advanced one line until the next numeral appeared in opening 84 and then Mary played the game in the same manner. Mary's word was "August" and it took her eighteen tries or eighteen tabs pushed up before she completed her word and therefore her score was recorded as plus four or four over "Par." Sue then played the game in a similar manner and you will note her score was plus two.

Sam is now playing the game and the number of letters in his word as revealed by the opening 84 are six. As shown in FIGURE 1, he has already pushed up tabs G, K, S and V. The tape under tab "G" indicates that "G" is the fifth letter in his word. The tab "S" discloses the letter "S" is the first letter in the word sought. Sam was unsuccessful in the tabs "K" and "V." Thus far in the game Sue is leading with only a plus two for her score. As in golf, the lower the score the better the player. "Par" is predetermined and printed on the underlying tape for each word and the "Par" for each word depends upon the difficulty of that specific word.

The game can be played by one person against "Par," or with as many players as desired.

The tape rolled on the spool may be as long as desired and will hold any number of lines of numerals for as many words as the manufacture so desires. One line of numerals takes up approximately $\frac{1}{4}$ " and thus, on each foot of paper tape the numerals for forty-eight words can be printed on each side of the tape.

The sample piece of tape illustrated in FIGURE 6 contains only a minor fraction of the rows of numerals that would actually be printed thereon in actual practice. Certain lines of numerals in FIGURE 6 have been omitted for purposes of simplification and explanation. As shown in FIGURE 6, the upper two rows of numerals indicate one word and the lower two rows of numerals indicate a second word. The letters of the alphabet in FIGURE 6 are staggered in the same manner as they are in the two rows in FIGURE 1, however in FIGURE 6, the lower row of letters have been pushed upwardly until they are in the same horizontal line as the upper row of letters. If the upper numeral 6 on the tape were rolled upwardly until it appeared in the opening 84 and then the tape stopped, and if the player pushed up the tabs until all of the numerals 3, 1, 5, 6, 4 and 2 were uncovered it can be seen that the word

5

BRANCH would be indicated as the proper word. Of course if after the operator had uncovered the first four letters in this word and if he were fairly intelligent, he may easily guess the last two letters as being CH. As indicated on the right side of the second line "Par" for the word BRANCH is thirteen. This numeral thirteen would appear under the "Par" tab after it was pushed upwardly after the player had finished the word BRANCH. In a similar manner, the bottom two rows of numerals indicate that a six letter word must be spelled out and the numerals 4, 6, 3, 2 and $\frac{1}{5}$ indicate that the word "SPLASH" is the proper word. "Par" for this word is twelve as shown on the bottom line.

As shown in FIGURE 1, the tabs in the bottom row are staggered between but below the tabs of the upper row. The tabs are separated by a space of approximately $\frac{1}{8}$ " to $\frac{1}{4}$ ". This staggering and spacing of the tabs allows a player to push the bottom tab with less chance of touching an adjacent tab or the tabs in the adjacent row. Also, the space allows the numerals from a previous word (line N-Z) to slide between without being seen and confusing the player. This manner of arranging the slots permits only $\frac{1}{4}$ " of the tape to be needed for each word. If desired, the word game machine could be made twice as wide and all the letters from A through Z with their corresponding sliding tabs could be arranged thereon in side-by-side relationship all on one line. The letters shown on the tape in FIGURE 6 are for purposes of explanation only and in actual practice could be omitted.

The score cards may be arranged in tablet form or they may be merely a stack of cards inserted one upon each other in the scoring section 14.

The horizontal plate 28 which maintains the tape 30 adjacent the underside of the cover 22, is provided with side flanges 23 and 25 as shown in FIGURE 5 for properly maintaining the tape 30 and its numerals thereon in proper alinement with the slots for tabs 64.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A word game device comprising a housing, a plurality of apertures through a wall of the housing, the number of apertures corresponding to the number of letters in a specific alphabet, each aperture representing a specific one of the alphabet letters, closure means provided in conjunction with each aperture movably mounted for selectively opening and closing the apertures, means in the housing, said last mentioned means having a plurality of spaced sets of numerals thereon, said sets each representing a different word and being selectively alignable for exposure of the numerals therein through the apertures, the numerals in each set each indicating the position of a predetermined letter in the corresponding word, each of these numerals being orientated for exposure through the open aperture representing the corresponding predetermined letter, the number of numerals in each set being between the number of letters in the shortest word and the number of letters in the longest word of said alphabet, said means in the housing consisting of an elongated flexible tape, and two

6

spaced parallel rotatably mounted reels, said tape being wound on said reels and movable therebetween, said reels consisting of a winding reel and a supply reel, both having one end thereof rotatable on spindles carried in the ends of a flexible leaf spring which is riveted at its central portion to the housing, said leaf spring being adapted, when flexed, to remove said spindles from the ends of said reels, said tape being positioned for clockwise winding upon the winding reel and counterclockwise unwinding from the supply reel thereby permitting both sides of the tape to be conveniently used, sets of numerals appearing on both sides of the tape.

2. The device of claim 1 including a winding knob attached to the winding reel and means for limiting the rotation of the winding reel to only one direction.

3. The device of claim 2 wherein twenty-six apertures are provided, and the number of numerals in each set ranges from one to seven.

4. The device of claim 3 wherein said apertures are arranged in two parallel adjacent rows with the apertures in each row being offset from the apertures in the other row.

5. A word game device comprising a housing, a plurality of apertures through a wall of the housing, the number of apertures corresponding to the number of letters in a specific alphabet, each aperture representing a specific one of the alphabet letters, closure means provided in conjunction with each aperture movably mounted for selectively opening and closing the apertures, means in the housing, said last mentioned means having a plurality of spaced sets of numerals thereon, said sets each representing a different word and being selectively alignable for exposure of the numerals therein through the apertures, the numerals in each set each indicating the position of a predetermined letter in the corresponding word, each of these numerals being orientated for exposure through the open aperture representing the corresponding predetermined letter, the number of numerals in each set being between the number of letters in the shortest word and the number of letters in the longest word of said alphabet, said means in the housing consisting of an elongated flexible tape, and two spaced parallel rotatably mounted reels, said tape being wound on said reels and movable therebetween, said reels consisting of a winding reel and a supply reel, said tapes being positioned for clockwise winding upon one reel and counterclockwise unwinding from the other reel thereby permitting both sides of the tape to be conveniently used upon a reversing of the reels, sets of numerals appearing on both sides of the tape.

References Cited by the Examiner

UNITED STATES PATENTS

511,470	12/93	Stone	35-76
553,555	1/96	Doster.	
666,999	1/01	Bordon et al.	35-76
951,600	3/10	Doyle	35-76
2,058,079	10/36	Heath	273-136
2,193,745	3/40	Sterne	35-8.2
2,524,704	10/50	Henderson	74-54
2,674,458	4/54	Hayden	273-135
2,676,087	4/54	Wales	273-130
3,096,092	7/63	Bredhorn	273-135

RICHARD C. PINKHAM, *Primary Examiner.*

ELLIS E. FULLER, JAMES W. LOVE, *Examiners.*