Aug. 14, 1951 C. M. RADFORD 2,564,502

MOVABLE LETTER, WORD FORMING TOY APPARATUS

Filed Sept. 13, 1950

Fig. 1.

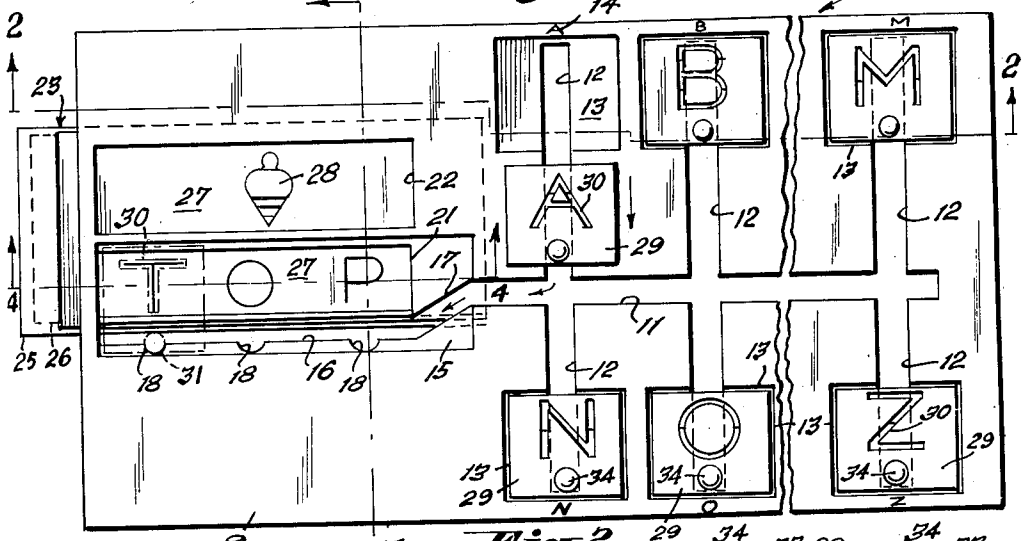


Fig. 2.

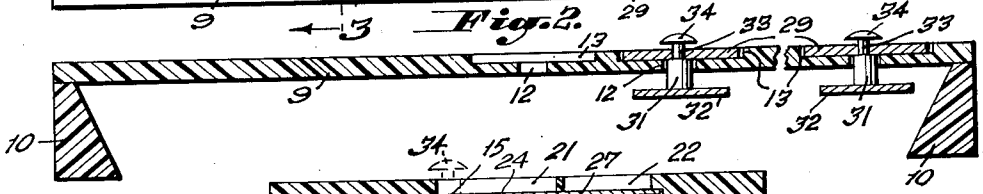


Fig. 3.

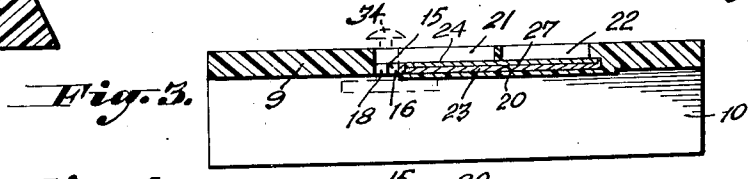


Fig. 4.

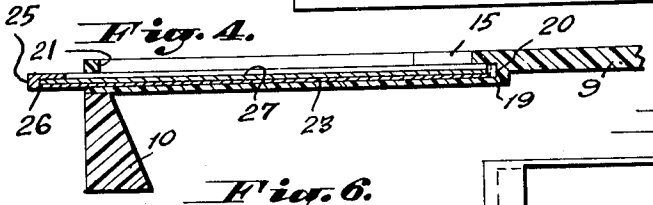


Fig. 5.

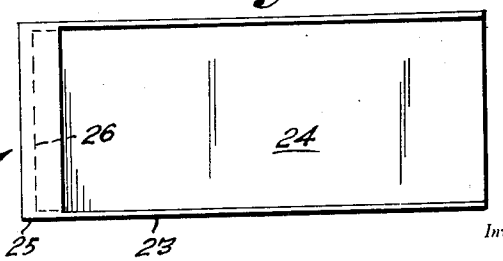


Fig. 6.

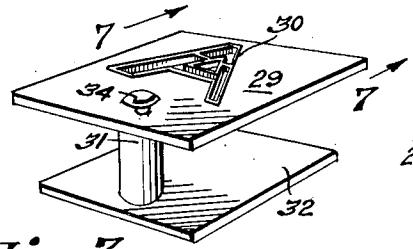
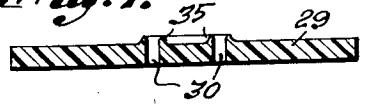


Fig. 7.



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MOVABLE LETTER, WORD FORMING TOY APPARATUS

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Application September 13, 1950, Serial No. 184,660

5 Claims. (Cl. 35—35)

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This invention relates to a novel construction of toy to provide education and amusement to children and has for its primary object to provide a toy by the use of which a child may readily learn the alphabet and also learn to spell, read and form the letters of the alphabet.

More particularly, it is an aim of the present invention to provide a word forming toy including stencil type movable letters by means of which words may be formed and thereafter written utilizing the letters as a guide.

Still a further object of the invention is to provide a toy of extremely simple construction having means for locking the letters in predetermined positions while being utilized to form words and as writing stencils.

Various other objects and advantages of the invention will hereinafter become more fully apparent from the following description of the drawing, illustrating a presently preferred embodiment thereof, and wherein:

Figure 1 is a fragmentary top plan view of the game apparatus;

Figure 2 is a longitudinal sectional view thereof taken substantially along a plane as indicated by the line 2—2 of Figure 1;

Figure 3 is a cross sectional view thereof taken substantially along a plane as indicated by the line 3—3 of Figure 1;

Figure 4 is a longitudinal sectional view of one end of the toy apparatus taken substantially along a plane as indicated by the line 4—4 of Figure 1;

Figure 5 is a plan view of the removable card holder;

Figure 6 is an enlarged perspective view of one of the movable letter units, and

Figure 7 is an enlarged sectional view thereof taken substantially along a plane as indicated by the line 7—7 of Figure 6.

Referring more specifically to the drawing, the word forming apparatus in its entirety is designated generally 8 and includes an elongated relatively wide letter supporting plate or member 9 which is adapted to be supported in an elevated position by means of depending supporting legs 10 which are secured to the ends thereof. The plate 9, which is relatively thick as illustrated in Figures 2 to 4, is provided with a longitudinally extending slot 11 which extends from near one end thereof to a point spaced from its opposite end and which connects with the inner ends of a plurality of transverse slots 12 which extend laterally therefrom to adjacent the side edges of the plate 9. The plate 9 is provided with at

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least twenty-six lateral slots 12, one for each letter of the alphabet and may be provided with a greater number of said slots in order to provide for duplication of certain of the most common letters used in the spelling of words. Only six of the slots 12 have been illustrated in the drawing wherein the plate 9 is shown broken away. The upper surface of the plate 9 at the outer end of each transverse slot 12 is provided with a recess or depression 13. The upper surface of the plate 9, between each side edge thereof and the adjacent depression 13 is inscribed with a letter of the alphabet, as indicated at 14, to provide a guide for indicating the correct letter to be positioned in the adjacent depression 13, as will hereinafter become apparent.

The end of the plate 9, remote to the slots 12 and depressions 13, is provided with an elongated depression 15 in its upper surface, which extends longitudinally thereof and which is centrally disposed with respect to the slot 11. The plate 9 is provided with a longitudinal slot 16 formed in the depression 15, near one longitudinal edge thereof and which is offset with respect to the longitudinal slot 11. An oblique slot 17, which likewise extends through the depression 15, connects the adjacent ends of the slots 11 and 16. The longitudinal edge of the slot 16, located nearest the adjacent edge of the depression 15, is provided with longitudinal spaced depressions 18, in the embodiment of the invention as illustrated, three of said notches 18 being shown. The under surface of the plate 9, adjacent and partially underlying the depression 15, is thickened as seen at 19 and is recessed to provide a relatively long and wide socket 20 which opens outwardly of the end of the plate 9, disposed adjacent the depression 15. The depression 15 is provided with an elongated longitudinally extending opening 21 which is laterally spaced from its slot 16 and which opens into the socket 20 and the upper surface of the plate 9, adjacent the depression 15, is provided with an elongated opening 22 which likewise opens into said socket 20.

An elongated card holder 23 is provided with a recessed card receiving upper surface 24 and has an outer end 25 which is internally recessed to provide a socket 26 which opens into the adjacent end of the card receiving recess 24. An elongated card 27 is removably disposed in the recess 24 and has one end engaging in the socket 26, said card 27 having indicia suitably applied, preferably to each side thereof, one side of which preferably comprising the picture 28 of a simple object, here illustrated as a top and the other

side preferably likewise including a picture of a top and also the letters spelling the word "top," not shown. It will be readily understood that any number of cards 27 containing different indicia such as pictures of different objects and letters of the word designating such objects may be provided and which are selectively applied to the card holder 23 with either side uppermost while the card holder is removed as seen in Figure 5. The card holder 23 is then slipped into the socket 20 as illustrated in Figures 3 and 4 so that a portion of the card 27 containing the indicia 28 will be visible through the opening 22 while another, blank portion of the card will be exposed beneath the opening 21.

Each of the depressions 13 contains a letter block 29 which is preferably square and in which a block type letter 30, corresponding to the letter 14, designating said depression 13, is cut through the block similar to a stencil. The letters 30 are located adjacent the upper edges of the blocks 29 when said blocks are disposed in their normal positions on the plate 9 or in the depressions 13 or 15. A stem 31 extends downwardly from each block 29 adjacent its opposite, bottom edge and is spaced from the portion of the block containing the letter 30. A smaller retaining flange 32 is secured to the lower end of the stem 31 and is spaced from the block 29. The stem 31 of each block 29 has a restricted shank 33 which extends upwardly through and is suitably anchored in the block 29 and which is provided at its upper end with a head or enlargement forming a knob 34, as best seen in Figure 2, which is disposed above and spaced from the block 29. It will be understood that one of the block units 29, 31, 32 is provided for each depression 13 and slot 12 and the stems 31 thereof are adapted to slidably engage the slots 11, 12, 16 and 17 while the blocks 29 are intended to slide over the upper surface of the plate 9 or to rest in their respective depressions 13 or in the depression 15. The flanges 32 are disposed beneath the plate 9 and spaced sufficiently therefrom to allow the blocks 29 to be lifted out of the depressions 13 or 15 and to underlie a portion of the enlargement 19 when the blocks are disposed in the depression 15 without binding engagement therewith.

The plate 9, legs 10, card holder 23 and the parts 29, 31 and 32 may be formed of any suitable material preferably plastic.

Assuming that the card holder 23 containing a card 27 is disposed in the socket 20 and that all of the letters are located in their correct depressions 13, after the child has had an opportunity to view the picture 28 the card holder may be removed from the socket 20 and the child then selects the correct letters to spell the word represented by the picture 28. In this case the child would first select the letter "T" and by grasping the knob 34 associated with the block 29 containing this letter would lift the block out of the depression 13 and by moving it over the upper surface of the plate 9 would cause the stem 31 of said block to slide first through its associated branch slot 12 into the slot 11 thence into the slot 17 and finally along the slot 16 until the letter block was disposed at the left hand end of the depression 15 and resting therein. The depression 15 is sized so that the block 29 must be laterally displaced in order to rest therein and in so moving its stem 31 is positioned in the notch 18, as illustrated in dotted lines in Figure 1. The other two blocks 29 containing the letters "O" and "P" are then similarly positioned to spell the word "TOP." The card holder 23 is then replaced and as the side edge of the socket 20, located adjacent the slot 16, is open, as seen in Figure 3, and as the contiguous side edge of the card holder 23 extends partially into the slot 16, said side edge will be disposed against the stems 31 to prevent said stems from being laterally displaced out of the notches 18 to thereby effectively anchor the three letter blocks 29 in the depression 15 and to hold said letter blocks against sliding movement while the stencil letters 30 thereof are utilized as a guide by the child who inserts the point of a pencil therethrough for forming the letters on the portion of the card 27 which is disposed beneath the opening 21. To assist the child in this forming of the letters, the upper surfaces of the letter blocks 29 are preferably provided with upstanding ridges forming borders 35 around the slots constituting the stencil letters, as best seen in Figure 7.

It will be readily apparent that the size of the plate or board 9 may be varied, as previously pointed out, to provide more than one letter block for certain letters of the alphabet and the size of the depression 15, card holder 23 and socket 20 may also be varied for using the apparatus for forming words having more than three letters. For beginners, the side of the card 27 spelling the word represented by the picture 28 is preferably disposed uppermost initially to guide the child in selecting the correct letter blocks 29 and thereafter the other side of the card containing only the picture 28 may be employed or said last mentioned side only of the card is employed for older children.

Various modifications and changes are contemplated and may obviously be resorted to, without departing from the spirit or scope of the invention as hereinafter defined by the appended claims.

I claim is my invention:

1. A toy apparatus for use in teaching reading, spelling and the formation of letters, comprising an elongated plate having a longitudinally extending slot and a plurality of transversely extending slots, said longitudinal slot having a laterally offset end disposed adjacent one end of the plate, said plate having an elongated depression in its upper surface in which the laterally offset end of said longitudinal slot is disposed and positioned adjacent one longitudinal edge of said depression, said transverse slots having outer closed ends, the upper surface of the plate having letter block receiving depression into which the closed ends of said transverse slots extend, a block containing a letter normally disposed in each of said letter block depressions, a stem depending from each letter block adjacent one edge thereof, a retaining flange secured to the lower end of each stem and disposed beneath and substantially parallel to the letter block thereof and normally disposed beneath and spaced from the under surface of said plate, said letter blocks and flanges each being of a length and width greater than the width of the slots, said stems being sized to loosely engage the slots, each letter block being provided with a letter of the alphabet located between the stem and the edge of the block disposed remote to said stem, said stems being slidable in the transverse and longitudinal slots for positioning the letter blocks in said longitudinal elongated depression to form words, and means removably mounted in said plate in a visible position containing indicia representing or corre-

sponding with the word formed by the letters of the blocks disposed in the elongated depression, said means including an elongated card holder having an upper surface provided with a card receiving recess, an indica bearing card removably disposed in the cord holder recess, a socket formed in said plate and opening outwardly of the end thereof located adjacent said elongated depression and in which the card holder is removably disposed, and said plate having an opening therein for exposing the indica on the card contained in the card holder when the holder is disposed in said socket.

2. A toy apparatus for use in teaching reading, spelling and the formation of letters, comprising an elongated plate having a longitudinally extending slot and a plurality of transversely extending slots, said longitudinal slot having a laterally offset end disposed adjacent one end of the plate, said plate having an elongated depression in its upper surface in which the laterally offset end of said longitudinal slot is disposed and positioned adjacent one longitudinal edge of said depression, said transverse slots having outer closed ends, the upper surface of the plate having letter block receiving depressions into which the closed ends of said transverse slots extend, a block containing a letter normally disposed in each of said letter block depressions, a stem depending from each letter block adjacent one edge thereof, a retaining flange secured to the lower end of each stem and disposed beneath and substantially parallel to the letter block thereof and normally disposed beneath and spaced from the under surface of said plate, said latter blocks and flanges each being of a length and width greater than the width of the slots, said stems being sized to loosely engage the slots, each letter block being provided with a letter of the alphabet located between the stem and the edge of the block disposed remote to said stem, said stems being slidable in the transverse and longitudinal slots for positioning the letter blocks in said longitudinal elongated depression to form words, and means removably mounted in said plate in a visible position containing indicia representing or corresponding with the word formed by the letters of the blocks disposed in the elongated depression, said means including an elongated card holder having an upper surface provided with a card receiving recess, an indicia bearing card removably disposed in the card holder recess, a socket formed in said plate and opening outwardly of the end thereof located adjacent said elongated depression and in which the card holder is removably disposed, and said plate having an opening therein for exposing the indicia on the card contained in the card holder when the holder is disposed in said socket, said letter blocks having slots cut therein forming stencil type letters, said elongated depression having an opening therein spaced from the offset portion of the longitudinal slot beneath which another, blank portion of the card is disposed and over which the stencil letters of the blocks, contained in said elongated depression are positioned whereby the letters may be inscribed on the blank portion of the card with a writing implement utilizing the stencil letters as a guide.

3. A toy apparatus for use in teaching reading, spelling and the formation of letters, comprising an elongated plate having a longitudinally extending slot and a plurality of transversely extending slots, said longitudinal slot having a laterally offset end disposed adjacent one end of the plate, said plate having an elongated depression in its upper surface in which the laterally offset end of said longitudinal slot is disposed and positioned adjacent one longitudinal edge of said depression, said transverse slots having outer closed ends, the upper surface of the plate having letter block receiving depression into which the closed ends of said transverse slots extend, a block containing a letter normally disposed in each of said letter block depressions, a stem depending from each letter block adjacent one edge thereof, a retaining flange secured to the lower end of each stem and disposed beneath and substantially parallel to the letter block thereof and normally disposed beneath and spaced from the under surface of said plate, said letter blocks and flanges each being of a length and width greater than the width of the slots, said stems being sized to loosely engage the slots, each letter block being provided with a letter of the alphabet located between the stem and the edge of the block disposed remote to said stem, said stem being slidable in the transverse and longitudinal slots for positioning the letter blocks in said longitudinal elongated depression to form words, and means removably mounted in said plate in a visible position containing indicia representing or corresponding with the word formed by the letters of the blocks disposed in the elongated depression, said means including an elongated card holder having an upper surface provided with a card receiving recess, an indicia bearing card removably disposed in the card holder recess, a socket formed in said plate and opening outwardly of the end thereof located adjacent said elongated depression and in which the card holder is removably disposed, and said plate having an opening therein for exposing the indicia on the card contained in the card holder when the holder is disposed in said socket, said letter blocks having slots cut therein forming stencil type letters, said elongated depression having an opening therein spaced from the offset portion on the longitudinal slot beneath which another, blank portion of the card is disposed and over which the stencil letters of the blocks, contained in said elongated depression are positioned whereby the letters may be inscribed on the blank portion of the card with a writing implement utilizing the stencil letters as a guide, said elongated depression having notches opening into the side edge of the offset portion of the longitudinal slot located remote to said last mentioned opening to receive portions of the stems of the letter blocks disposed in said elongated depression, said card holder having a side edge disposed to be engaged by said stems and retaining the stems in said notches to hold the letter blocks immobile in the elongated depression while the card holder is in an applied position.

4. A toy or game apparatus comprising a plate provided with a plurality of connecting slots including a main slot and a plurality of branch slots each having an end opening into the main slot, a plurality of letter blocks disposed above said plate, a stem depending from each letter block adjacent one edge thereof slidably engaging one of said slots, a retaining flange secured to the lower end of each stem and disposed beneath the plate and combining with the letter block connected to said stem for retaining the stem in engagement with the slot, each of said blocks having a stencil letter disposed between the portion connected to the stem and the edge

of the letter block disposed remote to the stem, said plate having a card receiving socket openin-outwardly of one end thereof and opening through the upper surface of the plate adjacent one end of said main slot, and an indicia bearing card removably disposed in said socket having a blank portion thereof disposed beneath the stencil letters of the blocks which are located in said end of the main slot whereby said stencil letters may be used as a guide for a writing implement for forming corresponding letters on the blank portion of the indicia bearing card.

5. An apparatus as in claim 4, said plate having a recessed upper surface into which said end of the main slot extends and in which the blocks disposed over the indicia bearing card are seated, and latch means associated with the indicia bearing card for engaging the stems of the

letter blocks disposed over said cards for releasably retaining the letter blocks in stationary positions while the indicia bearing card is disposed in the socket.

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