L. M. CHANCE.

DRILL DEVICE.

APPLICATION FILED APR. 20, 1918.

1,285,038. Patented Nov. 19, 1918.

Fig. 1

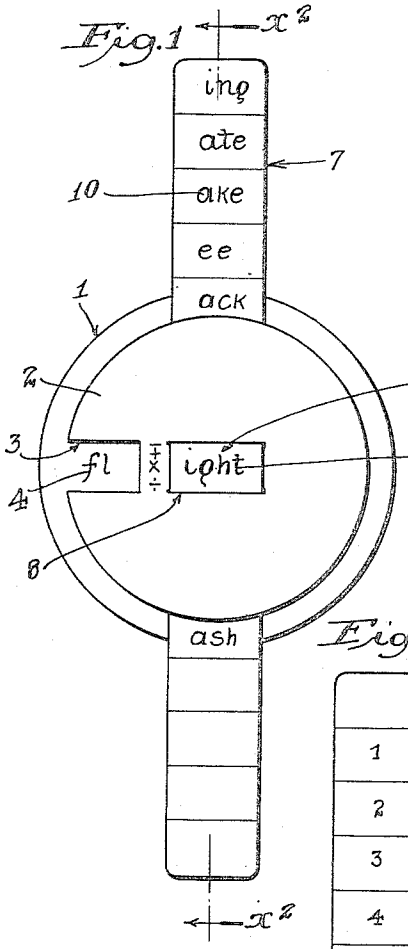


Fig. 2.

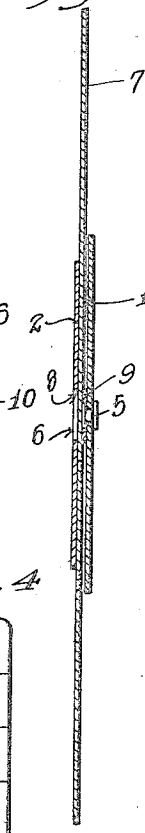


Fig. 3.

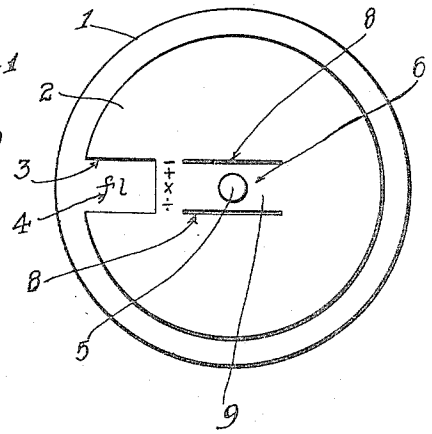


Fig. 4

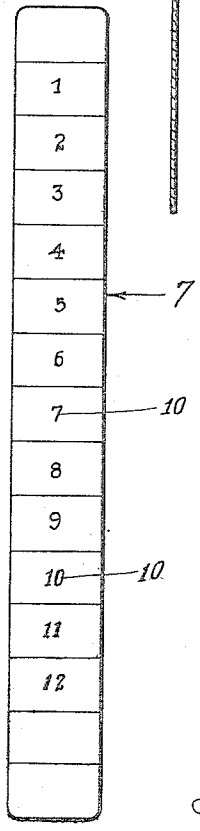
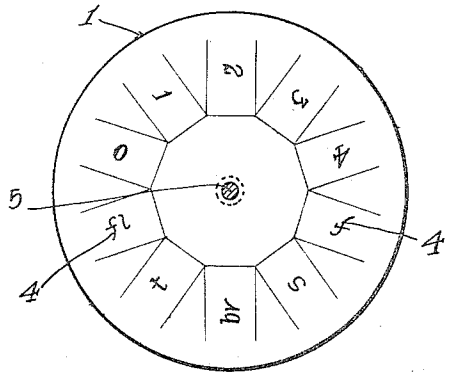


Fig. 5.



Witness
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UNITED STATES PATENT OFFICE.

LULU MAUDE CHANCE, OF RIVERSIDE, CALIFORNIA.

DRILL DEVICE.

1,285,038. Specification of Letters Patent. Patented Nov. 19, 1918.

Application filed April 20, 1918. Serial No. 229,853.

To all whom it may concern:

Be it known that I, LULU MAUDE CHANCE, a citizen of the United States, residing at Riverside, in the county of Riverside and State of California, have invented a new and useful Drill Device, of which the following is a specification.

This invention relates to a device for facilitating the visual instruction of students, more especially very young children, and an object of the invention is to make provision whereby the teacher or student may readily produce a variety of different combinations of letters or other characters or symbols signifying various sounds or combinations of sounds or other matter that may be visually presented.

Another object of the invention is to produce a device of this character of comparatively great simplicity so that it will cost but little to produce and so that it can be easily operated by the student.

Another object is to create interest in and attract the attention of young children to the study of speech.

The accompanying drawings illustrate the invention:

Figure 1 is a front view of the device.

Fig. 2 is a sectional elevation on line indicated by x^2—x^2, Fig. 1.

Fig. 3 is a front view of the device omitting the slide.

Fig. 4 is a face view of the slide.

Fig. 5 is a front view of one of the rotative members.

There are provided two relatively rotative members 1, 2 of any suitable contour and shown in the drawings in the form of flat disks. For convenience of description the member 1 may be termed the "lower disk" and the member 2 may be termed the "upper disk." The disk 2 is provided with a window 3 which may be located adjacent the margin of said disk as shown in the drawings. The member 1 is provided in a circle with separate symbols or characters or with separate groups of symbols or characters. Each separate character or group for convenience of description will be termed an "element" and is designated by the number 4. Any one element may be brought into registration with the window 3 by appropriate relative turning of the members 1, 2. In the drawings some of the elements 4 are shown as being numbers and others are in the form of word endings.

The members 1, 2 are suitably connected together for relative rotation and in the instance shown are pivoted at their centers to one another by a suitable rivet 5, or equivalent.

The member 2 is provided at its central portion in alinement with the window 3 with another window 6 to expose to view any desired portion of a slide 7 which is shiftably mounted to move between the rotative members. The slide 7 is guided by suitable means and in the instance shown in the drawings for this purpose the window 6 is formed by cutting slots 8 parallel with one another on opposite sides of the pivot 5 and the slide 7 passes through said slots and in front of the portion 9 of the member 2 lying between said slots. The pivot 5 is in the portion 9.

The slide 7 is provided at intervals therealong with any desired separate characters or groups of characters, either of which for purposes of description will be termed an "element" and is designated by the number 10. Both sides of the slide 7 may be utilized for the elements 10, one side of said slide being shown in Fig. 1 and the reverse side in Fig. 4.

In practical use it is readily seen that the children may be taught, for example, the sounds of different words by adjusting the members 1, 2 relative to one another so as to expose the letters representing a certain sound or group of sounds, as, for example, "fl" as in Fig. 1. The slide 7 will then be adjusted so as to successively expose the various letters or groups of letters thereon through the window 6 to complete the spelling of different words beginning with "fl." Moving the slide 7 to the position shown in Fig. 1 exposes the letters "ight" and these letters, in combination with those exposed to view through the window 3, spell the word "flight" and all together represent the phonograms of the appropriate sounds for the spoken word. By moving the slide 7 into various positions it is readily seen that the element "ight" on the slide 7 may be caused to register with the element "s" on the member 1 to spell "sight," or the element "ake" to register to spell "sake," and so on with all of the elements on the side of the slide 7 shown in Fig. 1. Thus the phonograms represented by the elements 4, 10 are caused to blend.

Preferably a number of slides 7 will be

furnished with each device so as to make provision for a comparatively great number of different combinations of letters, figures or other signs or characters.

From the foregoing it is readily comprehended that the construction makes provision for changing either one or both of two different elements of a group of elements so as to spell different words or represent various combinations of figures in multiplication, division, addition and subtraction. By marking the member 1 and slide 7 with the appropriate elements the device may be used in teaching phonetics, numbers, spelling and may be used as a calendar.

I claim:

1. A drill device comprising relatively rotative members, one of said members having a window to expose to view a portion of the second member and said second member having characters on its exposable portions, the first member having a second window in alinement with the first window, and a slide shiftable behind the second window and provided with characters adapted to be brought into registration with the characters exposed through the first window.

2. A drill device comprising a member provided with various characters each forming an element, a second member rotative relative to the first named member, and a slide shiftable in the second member and provided with various characters each forming an element and each element being adapted to be brought into alinement with any one of the first named elements by appropriate relative turning of said members and shifting of the slide.

3. A drill device comprising two relatively rotative members, a pivot connecting said members to one another, one of said members having a window adjacent its margin and having slots on opposite sides of the pivot, and a slide passing through the slots and extending in front of the pivot.

4. A drill device comprising two relatively rotative members, a pivot connecting said members to one another, one of said members having a window adjacent its margin and having a second window, and a third member movably mounted with respect to the second window and adapted to have successive portions thereof exposed to view through said second window when the third member is moved into different positions.

Signed at Riverside California this 13th day of April 1918.

LULU MAUDE CHANCE.

Witnesses:
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C. W. DERBY.