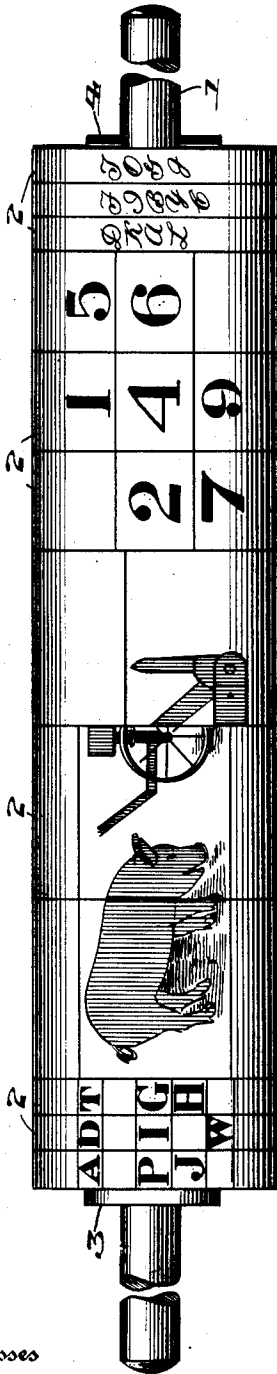


K. D. SMITH.
EDUCATIONAL APPLIANCE.
APPLICATION FILED JAN. 22, 1921.

1,391,986.

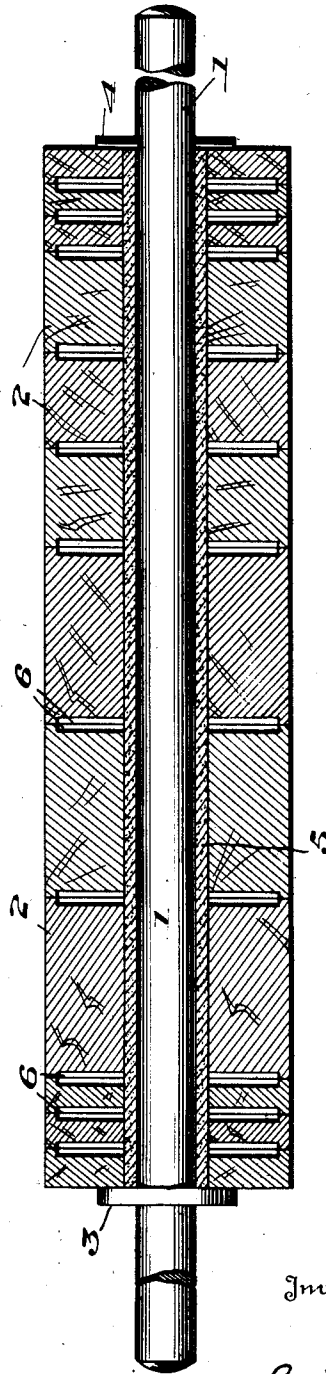
Patented Sept. 27, 1921.

Fig. 1.



Witnesses
Philip E. Barcus
Geo Osborne

Fig. 2.



Inventor

By Kirk D. Smith,
William W. Deane,
his Attorney

UNITED STATES PATENT OFFICE.

KIRK D. SMITH, OF WENDELL, NEW HAMPSHIRE.

EDUCATIONAL APPLIANCE.

1,391,986.

Specification of Letters Patent. Patented Sept. 27, 1921.

Application filed January 22, 1921. Serial No. 439,314.

To all whom it may concern:

Be it known that I, KIRK D. SMITH, a citizen of the United States, residing at Wendell, in the county of Sullivan and State of New Hampshire, have invented certain new and useful Improvements in Educational Appliances, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention pertains to educational appliances, and it has for its general object to provide a simple and easily handled educational appliance, designed more especially for use in kindergartens to assist children, in an amusing and unique manner, to spell words, to associate words with pictures appropriate thereto, to place parts of pictures in proper relation to form complete pictures, to add different sums and to spell different words, and one embodying such construction that its disk-like sections may be moved with great facility about the spindle, on which they are mounted side by side, and yet there is no liability of the sections turning casually around the spindle and little likelihood of the manual turning of one section being attended by accidental turning of the section or sections next to it.

To the attainment of the foregoing the invention consists in the peculiar and advantageous appliance as hereinafter described and definitely pointed out in my appended claims.

In the accompanying drawing which is hereby made a part hereof:

Figure 1 is a broken elevation of my novel appliance.

Fig. 2 is a view showing the spindle in elevation and the disk-like sections and friction-creating sleeve in diametrical section.

Similar numerals of reference designate corresponding parts in both views of the drawing.

It is to be understood that the spindle 1 and the disk-like sections 2 are preferably made of wood, though they may be made of any other material or materials compatible with the purpose of my invention without involving departure from the scope of the same as claimed. I would also make it clear that the independently rotatable sections 2 may be retained on the spindle by confinement between a collar 3 and a pin 4, as shown in Fig. 1, or in any other approved manner.

As will be observed by reference to Fig. 1, some of the disks 2 are provided on their perimeters with letters; some have portions of pictures, others are provided with figures, and still others are equipped with letters, preferably of a different kind from the first-named letters—for instance, script letters as opposed to plain block letters. I would also have it understood that when deemed desirable, some disks may be provided on the spindle, each of which bears on its perimeter one or more complete pictures, but these I have deemed it unnecessary to illustrate.

The letters, the portions of pictures or complete pictures, the figures and the secondary letters or script letters may be applied to or formed in or on the perimeters of the sections 2 in any manner known in the arts, without affecting my invention; and it will also be manifest that any desired number of groups of sections 2 may be employed and that each group may comprise any desired number of sections without involving departure from the scope of the appended claims.

In the practical use of the appliance, it will be apparent that a child by manipulating the lettered sections 2 at the left of Fig. 1 is enabled to so relatively arrange letters on the sections as to form a word reading from left to right in the direction of the length of the appliance. The word "pig" is shown, by way of example, and it will be noted that the next sections 2 toward the right bear the picture of a pig. This picture together with others, may be formed complete on the perimeter of a single section 2, but I prefer to form parts of each picture on two or more adjoining sections 2, this because a child is likely to derive as much pleasure in turning the sections 2 and placing the different parts of a picture in proper position to form a whole, the picture of a pig, for instance, as it does in alining the picture with the word denominating the same.

The sections 2 bearing figures are preferably, though not necessarily, arranged at the right of the picture-bearing sections, and by adjusting or turning the said figure-sections, a child is enabled to provide different aggregations of figures on the face of the device in the direction of the length thereof, and in that way enjoyably acquire knowledge of arithmetic. By adjusting the

script-bearing sections 2 at the right of Fig. 1, a child can form words reading from left to right lengthwise of the device and thereby increase its knowledge of reading and its familiarity with script type as distinguished from plain or block type. It will also be manifest that as a child improves in reading, other letter-bearing sections 2 may be added to permit of the formation of words comprising six, or more letters.

It is important to the successful operation of the appliance that loose or casual movement of the sections 2 about the spindle 1 be prevented, and that the section or sections adjoining a section that is moved manually be inhibited from partaking of the movement of the latter section. I therefore provide a friction-creating sleeve 5 about the spindle 1 and between the same, and the inner portions of the sections 2. From this it follows that the frictional contact between each section 2 and the sleeve 5 is greater than the frictional contact between said section and any adjoining section, and hence when the first-named section is turned by hand there is no liability of its movement being attended by casual movement of an adjoining section or sections. The friction-creating sleeve 5 is formed of felt or any other material or composition, and is tightly interposed between the spindle 1 and sections 2, as clearly shown in Fig. 2. I also provide the recesses 6 in the inner portions of the opposed sides of the sections 2 so that but small portions of the said sides are in frictional contact with each other and at the same time the continuity of the peripheral surface of the appliance is preserved which is advantageous because there is no break in a picture when portions of the same are properly matched. Moreover the mounting of the several sections 2 on a single continuous friction-creating sleeve 5 has the effect of holding the sections in close contact with each other as is desirable.

It will be appreciated from the foregoing that my novel appliance is simple and inexpensive, is susceptible of being easily adjusted, and is calculated to simultaneously instruct and amuse a child with the result that the child's interest is held for a much longer period than when the child is taught in any other manner.

The appliance shown comprises in a single unit four different modes of imparting knowledge, and is advantageous for such reason. It is to be understood, however, that appliances embodying my invention may be made with one, two or more groups

of sections 2 without departure from my claims.

While the sections 2 are preferably of circular form, they may be made of octagonal or any other suitable exterior shape without departing from the scope of my claims.

Having described my invention, what I claim and desire to secure by Letters Patent, is:

1. The hereindescribed educational device consisting essentially of a spindle, confining means spaced apart on the spindle, a plurality of disk-like sections having central apertures and arranged side by side between said confining means and around the spindle and bearing educational devices on their peripheries, said sections having recesses in the inner portions of their sides and being arranged with the outer portions only of said sides in contact, whereby frictional contact between the sections is minimized, a wide periphery is provided on each section for the display of an educational device, and an unbroken peripheral surface is afforded throughout the length of the device, and a continuous sleeve, of friction-creating material, extending between the confining means and through the plurality of side by side sections and resting snugly between and in contact with the spindle and the walls of the apertures in the sections, whereby the friction between the sleeve and each disk-like section is greater than the friction between adjacent disk-like sections, and the sleeve is enabled to hold the sections close together.

2. An educational device comprising a spindle, confining means spaced apart on the spindle, a plurality of disk-like sections having central apertures and arranged side by side between said confining means and around the spindle and bearing educational devices on their peripheries, and a continuous sleeve, of friction-creating material, extending between the confining means and through the plurality of side by side sections and resting snugly between and in contact with the spindle and the walls of the apertures in the sections, whereby the friction between the sleeve and each disk-like section is greater than the friction between adjacent disk-like sections.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

KIRK D. SMITH.

Witnesses:

J. D. WALTON,
G. M. PAUL.