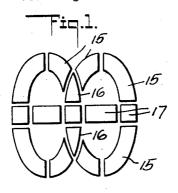
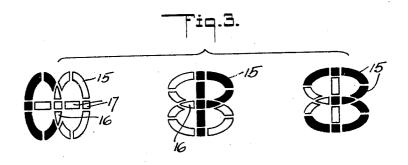
J. F. CARROLL

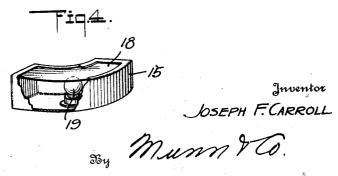
COMPOSITE CHARACTER

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UNITED STATES PATENT OFFICE.

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COMPOSITE CHARACTER

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My invention relates to and has for its a plurality of sections of wood, metal or any purpose the provision of a composite character possessing certain geometrical characteristics by which it is possible to form 5 singly the several letters of the alphabet, the several single digit numerals and certain punctuation marks used in writing or print-

10 provide a composite character which is made up of a relatively small number of units or sections capable of being associated in innumerable combinations to form letters, numerals and punctuation marks, and par-15 ticularly adapted, although not necessarily, for use as an educational puzzle for children.

A further purpose of my invention is the provision of a composite character as above set forth wherein the sections are formed 20 hollow and with translucent front walls, thus permitting them to be adapted for use as a changeable electric sign, and by employing a plurality of the characters in a single group or in a plurality of groups forming a sign in which suitable means can be provided for illuminating various combinations of the sections of each character to form the desired letter, numeral or mark, and to thereby collectively produce any de-30 sired words and numbers in any order to give the effect of continuous reading.

I will describe only two forms of composite characters embodying my invention, and will then point out the novel features 35 thereof in claims.

In the drawings

Figure 1 is a view showing in top plan one form of composite character embodying my

Figure 2 is a view showing in edge elevation the composite character shown in Fig-

Figure 3 is a view showing a plurality of the composite characters in plan, and with various portions of the character darkened to illustrate the manner in which the character may be employed in the formation of letters and numerals;

Figure 4 is a view showing in perspective a modified form of the character section, with a portion of the section broken away to reveal the illuminating means thereof.

Referring specifically to the drawings, my invention as illustrated in Figures 1 and 2,

other suitable material, each of which is preferably of substantially square shape in cross section in order to give them the proper thickness to facilitate handling in the forma- 60 tion of various letters, numerals and punctuation marks. Certain of the sections, indicated at 15, are curved, other sections 16 It is also a purpose of my invention to are of tapered triangular form, while the remaining sections 17 are of rectangular form. The meeting ends of the several sections are preferably constructed to have substantially flat contacting engagement with each other in order that when they are set up they will form certain uninterrupted regeometrical figures necessary to the production of a composite character having the property of forming any letter of the alphabet, any single digit numeral, and various punctuation marks.

As shown in Figure 1, the several sections are arranged to form a character consisting of two ellipses of the same dimensions arranged in side by side relation, with those sections forming the confronting sides of the 80 ellipse being common to both ellipses so that it may be said that the confronting sides of the ellipses overlap. The two ellipses are intersected at points medially of their ends by a line made up of the several rectangular 85 sections so as to divide the two ellipses into

semi-ellipses.

A composite character constructed as described possesses the property of defining all of the twenty-six letters of the alphabet, all 90 of the single digit numerals from zero to nine, and various punctuation marks, such as the period, comma, semicolon, dash, etc. The defining of the punctuation marks is thought to be obvious and in Figure 3 I have 95 illustrated the manner in which certain letters of the alphabet and one of the single digit numerals are defined by the composite character. In the left-hand view of Figure 3, the letter C is defined. In the right-hand 100 view the numeral 3 is defined.

The sections 15, 16 and 17 comprising the composite character have been described as formed separately, and in the adaptation of my invention as a puzzle for teaching chil-dren the letters of the alphabet, the numerals and the punctuation marks, it will be understood that the sections can be assembled in various combinations to form any of such 55 comprises a composite character made up of letters, numerals or marks, as will be obvi-

ous from a consideration of Figure 3. My invention is also adaptable as an integral character or puzzle in which the several sections are formed integral with each other to 5 produce a permanent character having the geometrical configuration of that shown in Figure 1. In this adaptation the letters, numerals and marks defined by the composite character can be individually and visually 10 selected, and if desired, portions of the character may be colored to aid in selecting the particular letter, numeral or mark desired.

Referring now to Figure 4, I have here shown a modified form of my invention 15 which consists in constructing each of the character sections 15, 16 and 17 hollow and with a translucent top or front wall 18, so that when a lamp 19 within the section is illuminated, that particular section will be visible at night, as against the invisibility of the unilluminated sections. With the sections constructed in this manner the composite character is adaptable as a changeable sign, it being understood that suitable means (not shown) may be provided for illuminating the lamps of any desired combination of the sections to form any desired letter, numeral or punctuation mark, and as the several sections of the character are capable 30 of producing any letter of the alphabet, any single digit number and any punctuation mark, it will be manifest that by illuminating the proper sections successively in groups any word or group of words can be spelled, or any number displayed. In this manner it is possible to produce a change-

able illuminated sign which produces the effect of continuous reading.

It will of course be understood that my invention is also adaptable as a stencil with 40 portions cut out to form any letter, numeral or punctuation mark and to produce any letter, etc. on a surface by painting in the usual manner.

Although I have herein shown and described only two forms of composite characters embodying my invention, it is to be understood that various changes and modifications may be made therein without departing from the spirit of the invention, 50 and the spirit and scope of the appended claims.

I claim:

1. Means comprising a combination of separate elements adapted to be diversely 55 associated with each other to optionally produce characters, each of said elements having the shape of a part of a character and consisting of a box-like body having a translucent panel, and an illuminating device in- 60 side of the box-like body adjacent its translucent panel.

2. Means comprising a combination of divers groups of similar separate elements adapted to be diversely associated with each 65 other to optionally produce characters, each of said elements having the shape of a part of a character and consisting of a box-like body having a translucent panel, and an illuminating device incide of the box like an illuminating device inside of the box-like 70 body adjacent its translucent panel. JOSEPH F. CARROLL.