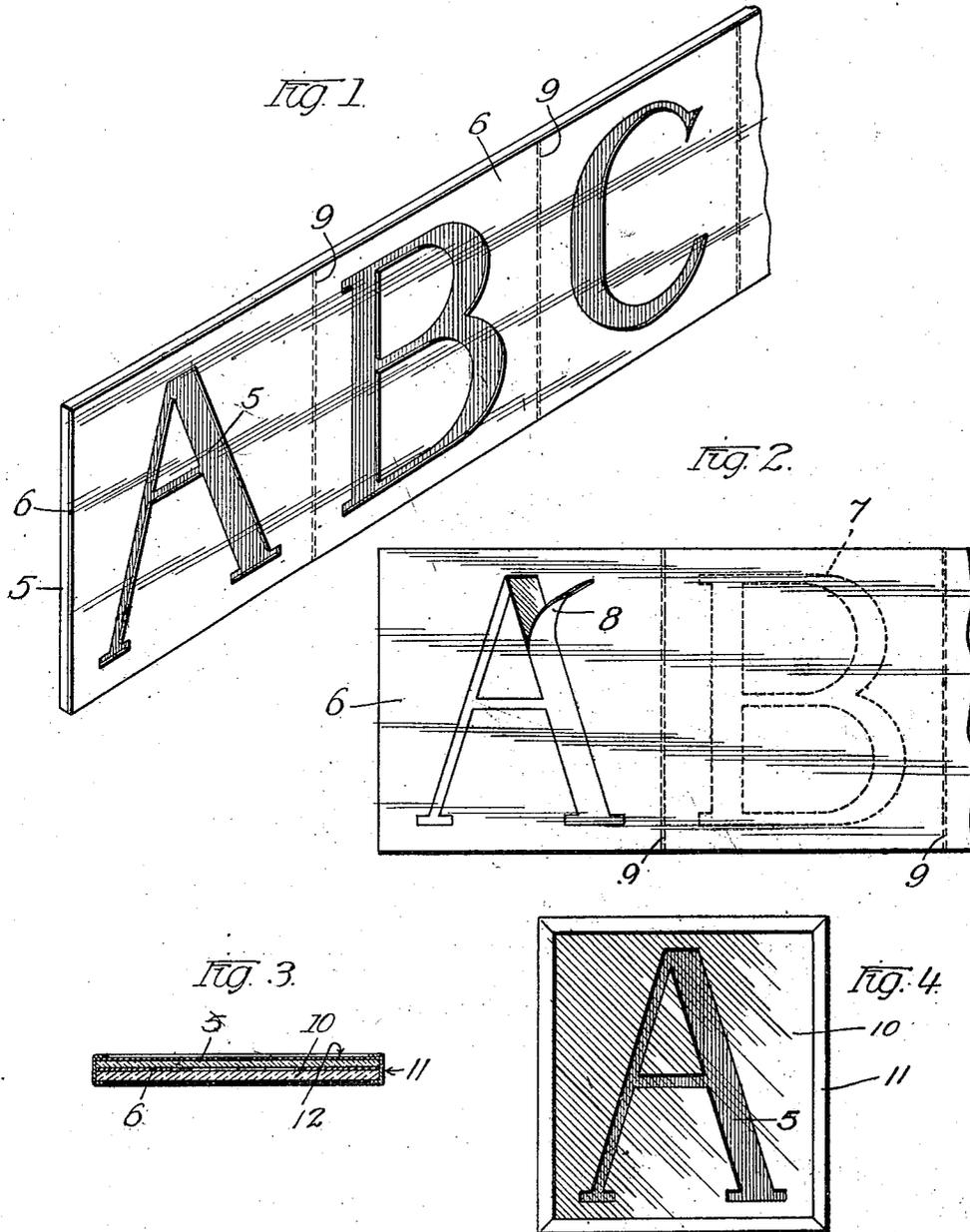


A. M. KNAUBER.
METHOD OF MAKING SIGNS.
APPLICATION FILED AUG. 28, 1919.

1,428,334.

Patented Sept. 5, 1922.



Inventor
Alexander M. Knauber
Jonee Rain
Atty.

UNITED STATES PATENT OFFICE.

ALEXANDER M. KNAUBER, OF OAK PARK, ILLINOIS, ASSIGNOR TO CHICAGO ELECTRIC SIGN COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

METHOD OF MAKING SIGNS.

Application filed August 28, 1919. Serial No. 320,398.

To all whom it may concern:

Be it known that I, ALEXANDER M. KNAUBER, a citizen of the United States, residing at Oak Park, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Methods of Making Signs, of which the following is a specification.

The invention relates to a new and improved method of making signs and it has more especial reference to making illuminated or semi-transparent signs.

One of the objects of the invention is to provide a mode of procedure for making signs on glass plates that are effective, artistic, pleasing in appearance and inexpensive in their production.

A particular object of the invention is to provide a method of manufacture that enables the artisan to lay out the word of a sign on a single plate and subsequently to segregate the letters thereof from the word and finish the constituent letters as separate entities, which may subsequently be assembled to form the word, and still another object is to make a practically waterproof letter to protect the interior thereof from the destructive effects of moisture, dust and other destroying agencies.

Other, further and more specific objects of my invention will become readily apparent, to persons skilled in the art, from a consideration of the following description when taken in conjunction with the drawings, wherein:—

Fig. 1 shows a strip of glass with a series of spaced apart, selected letters appearing thereon in linear sequence, to subsequently be cut apart to form individual letters.

Fig. 2 shows a series of letters on a strip of glass before they have been completely formed by my method.

Fig. 3 is a transverse section through a completed letter.

Fig. 4 is a front view of the completed letter.

In all the views the same reference characters are used to indicate similar parts.

In carrying my invention into effect I provide a strip or plate of glass 5. This strip or plate may be translucent with an inherent coloring matter in its composition, red, blue, purple, white, or the like, or it may be substantially transparent, backed up by a suitable colored sheet, depending upon the effect

to be produced by the finished article of manufacture.

In the following example, we will assume that it is marbled glass that is translucent or partially transparent. Over the top of the glass plate, and substantially the same length and width, I paste, or cement to the top surface of the glass plate an opaque, flexible sheet, such, for example, as cloth 6, of which window shades are made, will answer the purpose very satisfactorily. After the sheet has become sufficiently adherent to the glass, master letter forms, made preferably of metallic plates and presenting substantially the outlines to be produced upon the glass sign, are laid uniformly apart on top of the cloth and held firmly in place. A sharp knife is then moved along the edges of the master letters, one at a time, and the sheet or cloth is cut through to the glass. The letter, as formed in this manner, is shown in dotted lines, as at 7, in Fig. 2. By outlining the letter in this manner, using the master sheet metal letters for the purpose, an inexperienced workman can very perfectly produce the sign letters, without requiring the service of a more artistic proficient and expensive employee.

After the cloth has been severed, on the outlines of the letter desired to be made, the enclosed portion of the cloth is torn away, as at 8, in Fig. 2, thus leaving the white body portion of the underlying glass exposed to view. After the parts 8, of each of the outlined letters have been removed from the glass strip, then the cloth is severed in the same manner on a division line between the letters, as at 9. A sufficiently wide strip is cut away between the letters to permit the use of a glass cutter, to sever the glass plate on the dividing line so that the letters may thus be segregated. The sheet 6 may be of any suitable material of contrasting color with the exposed surface of the glass plate 5, to produce harmonious effects or it may be semi-transparent or translucent to any desired degree. After the letters have been segregated from the elongated glass strip, a clear glass cover plate 10 is placed immediately over the cloth surface of the segregated plate 5, which is a part of the original, elongated plate or strip, and of each of the segregated letters. When the plates are thus placed together, a molding or frame 11, of suitable metal,

surrounds the composite letter and protects the enclosed sheet from the effect of moisture, at its edges, while the two glass plates protect both sides of the sheet, between the two glass plates, being substantially hermetically sealed.

Of course, it will be manifest, to persons skilled in the art, that instead of using the cloth of the character described, other cloth or sheet of a similar nature may be substituted, and paper or other desirable translucent or opaque covering may be used instead of cloth. After the letters have been made in the manner described, they are then assembled in proper supports or frames and placed in order, to spell the word for which they were made.

By making the letters, in accordance with my plan of procedure, they are more uniform in length than they would be if made from separate plates of glass, and furthermore the fabric or flexible sheet overlying the glass plate is more easily cemented to the plate and holds with a greater tenacity than would be the case if the flexible sheets were separately prepared for each letter, built up on smaller separate plates of glass.

Instead of using a glass having incorporated with it a color, as in the former example, I may use a substantially transparent plate 5 and paint or cement to its under side a sheet 12 of suitable color, of partially transparent or translucent material, so that it will form a contrasting color with the overlying cover sheet 6, from which the letters are cut. When the letters have been made, in the manner described, and placed in the proper frame, they present a very desir-

able and artistic effect when the interior of the frame is suitably illuminated by the use of electric lamps, or otherwise.

Having described my invention, what I claim is:—

1. The method of making sign characters which comprises cementing a relatively opaque sheet of easily cut material to a strip of glass, arranging a series of master characters on the opaque sheet in proper spaced relation, cutting the opaque sheet in conformity with the master characters thereon, removing the portions of the opaque sheets segregated by the cuts, cutting narrow segregating strips in the opaque sheet between the characters, removing the strips of opaque material to uncover the glass, and separating the characters by cutting the glass in the uncovered strips.

2. The method of making signs which comprises cementing a relatively opaque sheet of easily cut material to a piece of glass, arranging a series of master characters on the opaque sheet in proper order and relation to form a related part of the sign, cutting the opaque sheet in conformity with the outline of the master characters, removing the portions of the opaque sheet segregated by the foregoing cuts, dividing the opaque sheet by narrow strips cut and removed therefrom, and separating the glass into units by cutting the same within the boundaries of the strips of material so cut and removed.

In testimony whereof I hereunto subscribe my name.

ALEXANDER M. KNAUBER.