R. A. MILLER.

PROCESS OF MAKING PATTERNS FOR TRIPLE SIGNS.

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990,490. Patented Apr. 25, 1911.

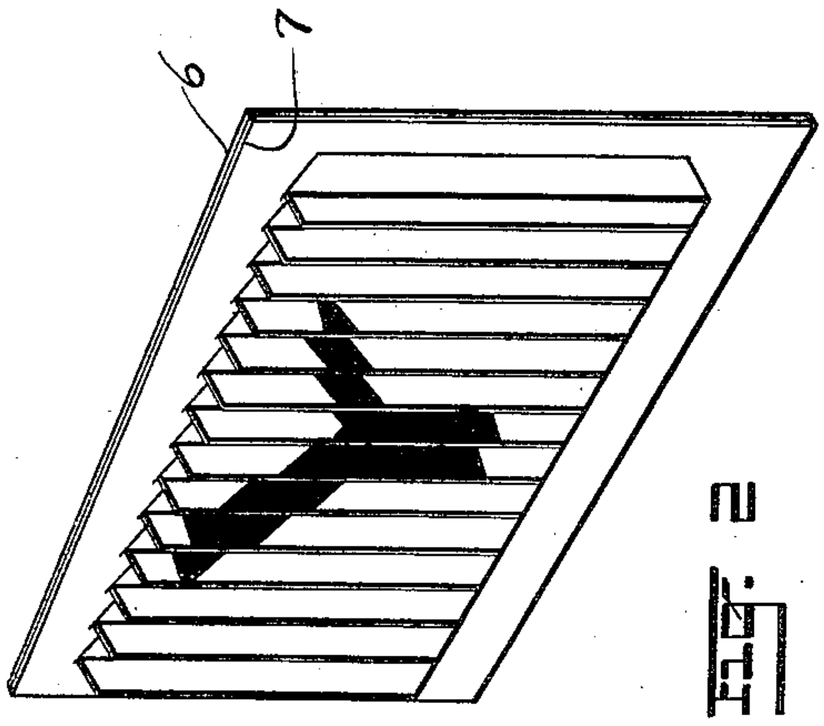

FIG. 2.

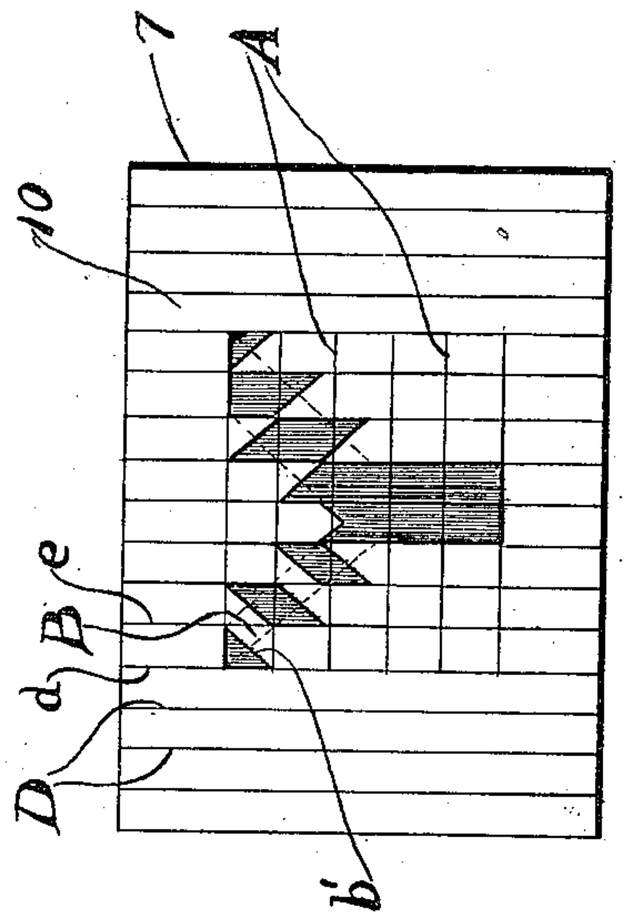

FIG. 5.

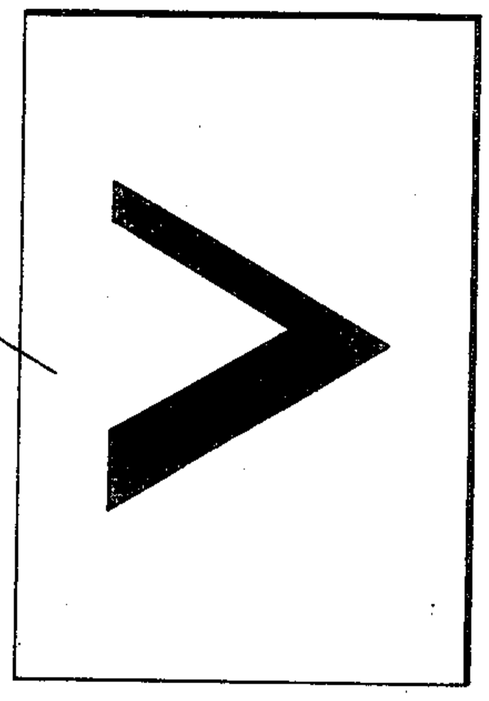

FIG. 3.

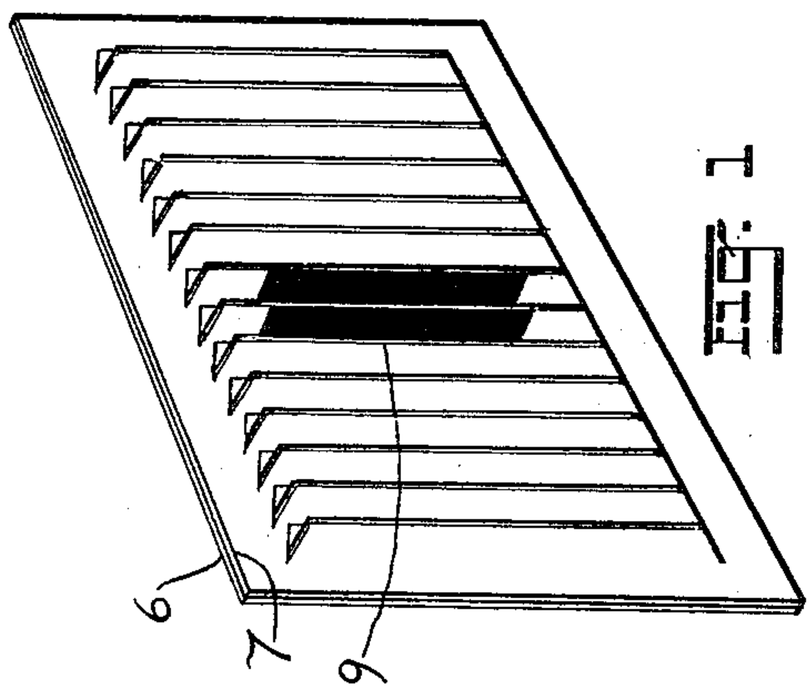

FIG. 1.

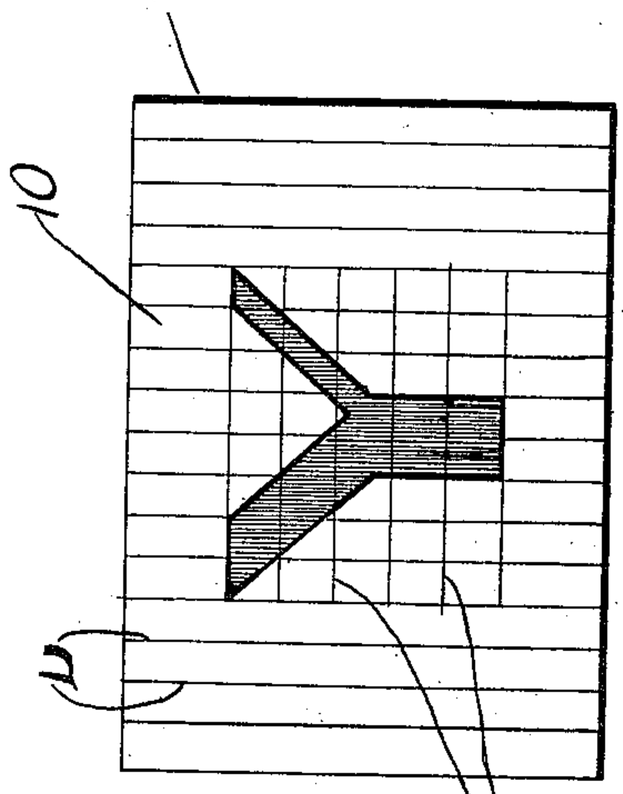

FIG. 4.

Witnesses

V. Thornton Bogert

C. F. Wroth

Inventor

Rudolph A. Miller

By Walter J. Murray

Attorney

UNITED STATES PATENT OFFICE.

RUDOLPH A. MILLER, OF CINCINNATI, OHIO, ASSIGNOR TO JAMES J. HEEKIN, CHARLES LEWIS, AND ALBERT E. HEEKIN, ALL OF CINCINNATI, OHIO.

PROCESS OF MAKING PATTERNS FOR TRIPLE SIGNS.

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To all whom it may concern:

Be it known that I, RUDOLPH A. MILLER, a citizen of the United States of America, and resident of Cincinnati, county of Hamilton, State of Ohio, have invented certain new and useful Improvements in Processes of Making Patterns for Triple Signs, of which the following is a specification.

This invention relates to the manufacture of triple signs, and particularly to a method of making the patterns for delineating a character, or characters, on the rear face of the plate from which the strips of the sign are to be struck up.

A triple sign is a sign which shows one character, or set of characters, when viewed directly from the front, a different character, or set of characters, when viewed diagonally from the left, and still a different character, or set of characters, when viewed diagonally from the right. These signs are usually formed by means of two plates or sheets, one of which has a series of slats struck out from it and is located in front of the other, as illustrated in U. S. Patent No. 386,883, granted to T. P. Heinemann, upon July 31st, 1888.

An object of this invention is to produce a new and simple method of forming a pattern for delineating the characters on the rear face of the front plate of a triple sign. This and other objects I attain by employing the method described in this application.

In the drawings accompanying this application and forming a part thereof, Figure 1 is a perspective view of a triple sign, as it appears when viewed from the left hand side. Fig. 2 is a perspective view of the sign illustrated in Fig. 1, when viewed from the right hand side. Fig. 3 is an elevation of the rear plate of the sign illustrated in Figs. 1 and 2. Fig. 4 illustrates a step in the method of producing a pattern for delineating a character on the rear face of the front plate of the sign. Fig. 5 illustrates the completed pattern, which is illustrated in the process of construction in Fig. 4.

Referring to the drawings: The triple sign consists of two members, a rear plate 6 and a front plate 7. Any character, or set of characters, may be delineated on the front face of the plate 6. I have illustrated the letter "V" as delineated on this plate at 8. In like manner, a character, or set of characters, may be delineated on the front face of the front plate 7.

In Fig. 1 I have illustrated a sign on which the letter "I" is delineated at 9. Any character, or set of characters, may be delineated on the rear face of the front plate, but normal characters will not appear normal, when the front plate is divided into strips and these strips turned at right angles to the front plate, as illustrated in Figs. 1 and 2. It is, therefore, necessary to form a pattern for the rear face of the plate, which, when the strips are struck outward from the plate, will form the normal sign matter, when viewed from a position at one side of the front of the sign.

I first draw or otherwise imprint the characters which the pattern is to form when the plate is struck up, on some tracing material, such as tracing cloth or other semi-transparent or translucent material. In Fig. 4 I have illustrated the letter "Y," as drawn on a section of tracing cloth 10. I then draw a series of transverse lines D across the face of the cloth, at a distance apart equal to the width of the slats or strips of the sign to be formed. I may also draw a series of longitudinal lines A to guide the eye in laying off the transverse distances of the pattern from the transverse lines, and to avoid changing the longitudinal relations, as hereafter explained. I then turn the cloth face downward, so that the characters and lines depicted on the face are visible upon the back of the sheet. In Fig. 5, I have illustrated the figures and lines of the normal sign matter thus seen in dotted lines, while I have illustrated the transverse and longitudinal lines by full lines. The pattern is illustrated by shaded figures. The transverse lines, it will be noted, contain between them fractions of the normal sign matter. The pattern is laid off by transversely transposing the boundary lines of each of said fractions, relatively to the transverse lines, between which such fraction lies, without changing the longitudinal relation of said fraction to said lines. For instance, take line B of the fraction of the normal sign matter, seen through the paper between transverse lines *d* and *e*. It is seen that the corresponding line *b'* of the pattern has its transverse distances from lines *d* and *e* respectively reversed, while the longitudinal

relation of said lines B and *b'* to the lines *d* and *e* are the same. The pattern thus formed may be delineated upon the back of plate 7 by transferring or copying it thereon, so that the pattern when copied on the rear face of the plate 7, bears the same relation to the lines along which the plate is to be cut to form the strips, as it bears to the transverse lines upon the transparent sheet. When the strips are struck outward from the plate, and are viewed from a position at one side of the sign, the sign matter will appear in its normal form, as illustrated in Fig. 2.

What I claim is:

1. A process of forming the pattern for the rear face of the plate for forming the strips of a triple sign, consisting of depicting the normal sign matter upon the face of a transparent sheet, delineating transverse lines upon the sheet across the normal sign matter and at a distance apart equal to the width of the strips of the sign to be formed, turning the sheet with said face downward, and upon the back of the sheet delineating the fractions of the normal sign matter seen through the sheet in positions longitudinally transposed to the positions which said fractions bear to the transverse lines which inclose them.

2. A method of making patterns for delineating characters on the rear face of the front plate of triple signs, which consists in delineating upon the pattern sheet sections which correspond to the strips of the sign to be produced, delineating upon the sheet a normal character, and then delineating upon the sections the reversed counterpart of the delineation first placed upon each section.

RUDOLPH A. MILLER.

Witnesses:
E. W. McCallister,
Walter F. Murray.