March 7, 1933. J. P. MEEHAN 1,899,971

METHOD OF MAKING COLORED SIGNS

Filed Aug. 12, 1932

Fig. 1

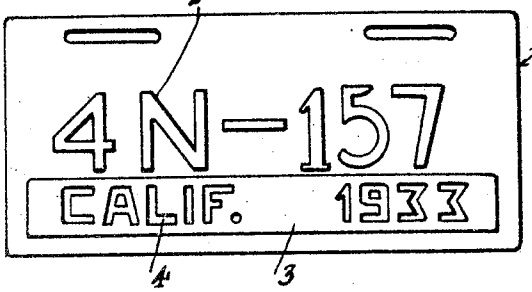
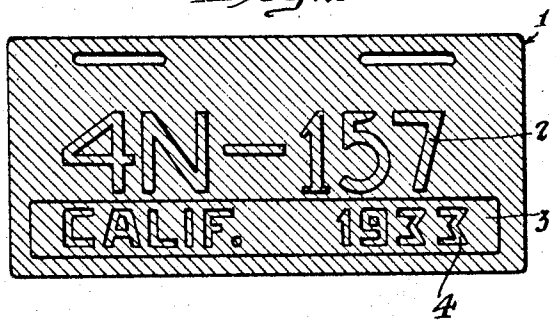


Fig. 2



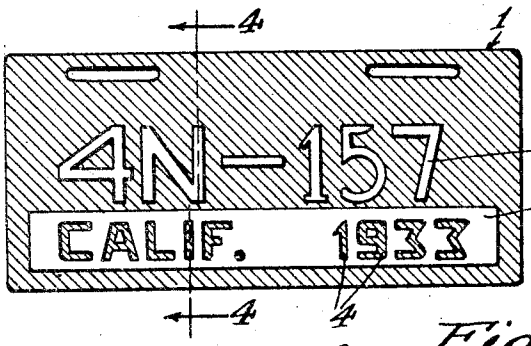


Fig. 3

Fig. 4



Fig. 5

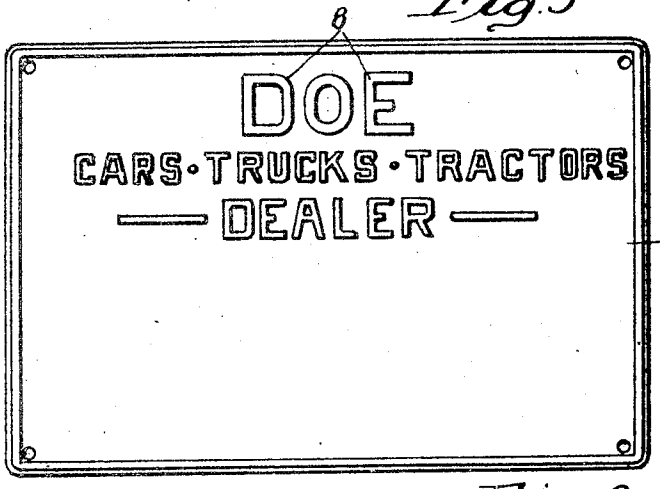


Fig. 6

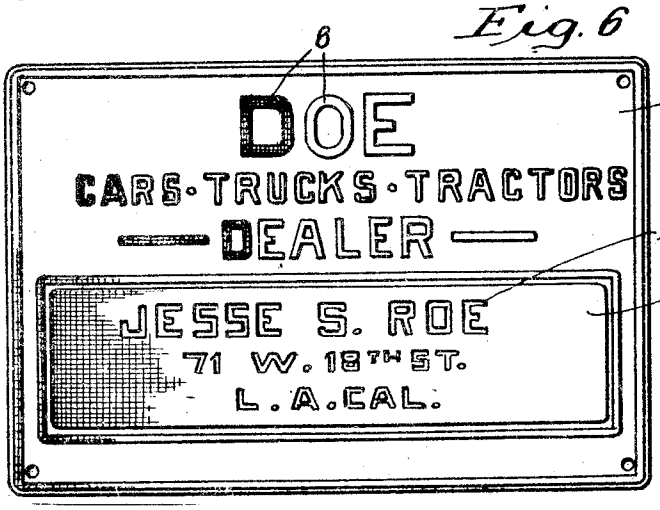
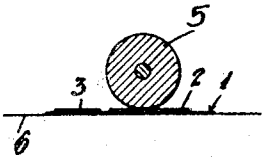


Fig. 7



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UNITED STATES PATENT OFFICE

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METHOD OF MAKING COLORED SIGNS

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This invention relates to a method of making signs of plate form, and while the invention may be readily used for producing signs for many different purposes, it is particularly applicable for making signs formed of metal plates such as used for advertising purposes or for automobile license plates.

Most signs of this type attain their legibility by the use of two colors and as usually constructed, all of the characters on the plate are raised and colored with a color that contrasts with the color used for the body of the plate. In situations where the characters on the plate are relatively small, the ordinary method of coloring the plates described above does not give the plate a striking visibility.

The general object of the invention is to produce a sign or sign plate of simple construction, in which in one area of the plate raised characters contrast with the general color or body of the plate, and having another area producing a contrast by using the color of the body of the plate for the characters contrasting with the field of another color, in order to give the sign a striking appearance and high visibility.

The invention can be practiced to advantage in the preparation of signs used by a large company which has agents at different points throughout the country, as it enables signs having a fixed or standardized legend to be readily adapted to receive the name of an agent or local dealer.

Further objects of the invention will appear hereinafter.

The invention consists in the novel parts and combinations of parts to be described hereinafter, all of which contribute to produce an efficient method of making colored signs.

A preferred embodiment of the invention is described in the following specification, while the broad scope of the invention is pointed out in the appended claims.

In the drawing:

Fig. 1 is an elevation of a sign plate, indicating the first step in producing a sign in accordance with my method.

Fig. 2 is an elevation of the sign indicated in Fig. 1 and indicating the second step in my method, that is to say, this view shows the sign in the next stage of preparation.

Fig. 3 is a view similar to Figs. 1 and 2 but representing a completed sign.

Fig. 4 is a section upon an enlarged scale, taken on the line 4—4 of Fig. 3, but with the upper and lower portions of the sign plate broken away.

Fig. 5 is a front elevation of a standardized sign plate of a dealer in the form which it would have when being sent to an agent for use by him.

Fig. 6 is a view showing the plate illustrated in Fig. 5, after it has been completed by the addition of the name of the agent.

Fig. 7 is a diagrammatic view, illustrating the step of my method in which the color is applied to the raised characters or field formed on the plate.

Before proceeding to a more detailed description of the invention, it should be stated that while the invention could be practiced by forming the plates with raised characters and a raised field in any suitable manner, this is preferably accomplished by means of dies, and while the signs could be made of any material which could be readily embossed, the invention is particularly applicable on metal signs such as license plates, which are made of thin metal readily embossed with dies.

Referring particularly to Figs. 1 to 4 inclusive, in practicing the invention I provide a sign plate 1, preferably consisting of thin sheet metal, and on an area of this plate I form any desired legend, for example, a license number—"4N-157", said legend being formed by means of characters 2 which are outwardly embossed or raised from the plane of the plate. This is preferably accomplished by means of dies, which at the same time that they form the raised characters 2, also form a raised field 3 which is preferably in the same plane as the plane of the upper face of the characters 2. In the same operation, the dies form sunken characters 4 on the area of the field 3, for example, the legend "CALIF. 1933".

It is preferable to stamp the plates before color is applied to them because if colored

before the application of the die, the dies are apt to break and remove portions of the color pigment. Hence, in practicing my invention, after the plate has been stamped as described above, I prefer to apply a color pigment to the entire face of the plate to operate as a general background or color for the body of the plate. This is preferably accomplished by dipping the plate in paint of a desired color. After dipping, the plate will have the appearance indicated in Fig. 2, that is to say, the characters will appear on the plate but without contrast in colors. After the color pigment has been permitted to dry, I apply a roller to the characters 2 and to the field 3 simultaneously. This may be preferably accomplished by applying a color roller 5 (see Fig. 7) to the raised portions of the plate by laying the plate on the upper face 6 of a platen which is moved forward under the roller. The roller, of course, only touches the high spots or raised letters and field, and in this way applies the contrasting color only at these points.

By reason of the fact that the contrast for the characters 2 and the characters 4 is made by applying a single color, it will be evident that a sign prepared according to my method does not require any additional operations as compared with the ordinary method of making such a sign.

One of the advantages of my method is that it is most useful when employed by a company having agents throughout the country. This is illustrated in Figs. 5 and 6, in which 7 illustrates a sign of the principal dealer or manufacturer. This sign would be supplied uncolored to the agent and would have raised characters 8 on its face, for example as indicated in Fig. 5. When the agent receives these blank signs, he would have a die prepared carrying his own name and address, as indicated in Fig. 6. The plate would then be pressed between the dies so as to form a raised field 9 having sunken characters 10 on it, after which the plate would be dipped in a suitable color pigment and permitted to dry. The plate would then be given its contrasting color, as indicated in Fig. 7. This could be accomplished in this way because the characters 8 on the plate and the raised field 9 would be in the same plane so that they could be touched by the roller 5 in the manner indicated in Fig. 7.

It is understood that the embodiment of the invention described herein is only one of the many embodiments this invention may take, and I do not wish to be limited in the practice of the invention, nor in the claims, to the particular embodiment set forth.

It is obvious that if different colors are desired on the field 3 and the characters 2, the plates can be run longitudinally under two different color rollers. In a plate employing two different colors for this, there must, of course, be sufficient vertical clearance between the field 3 and the lower ends of the characters 2.

What I claim is:

1. A method of making a colored sign plate, which consists in embossing the plate to form raised characters, and a raised field on the plate with sunken characters therein, applying a color pigment to the face of the plate thereafter, permitting the color to dry, and then applying other color to the raised characters and to the field.

2. A method of making a colored sign plate, which consists in forming raised characters on an area of the plate and a raised field on another area of the plate, with sunken characters in the raised field, applying a color pigment to the said areas of the plate thereafter, permitting the color pigment to dry, and then applying a contrasting color simultaneously to the raised characters and to the field.

3. A method of making a colored sign plate, which consists in forming raised characters and a raised field in the same plane on the plate, forming sunken characters in the field, applying a color pigment to the plate, permitting the color to dry, and then applying a color-coating roller carrying a contrasting color to apply the contrasting color simultaneously to the characters and to the field.

Signed at Los Angeles, Calif., this 4th day of August, 1932.

JOHN P. MEEHAN.