

Jan. 17, 1928.

C. C. COSNER

1,656,265

SIGN

Filed Dec. 16, 1925

2 Sheets-Sheet 1

Fig. 1.

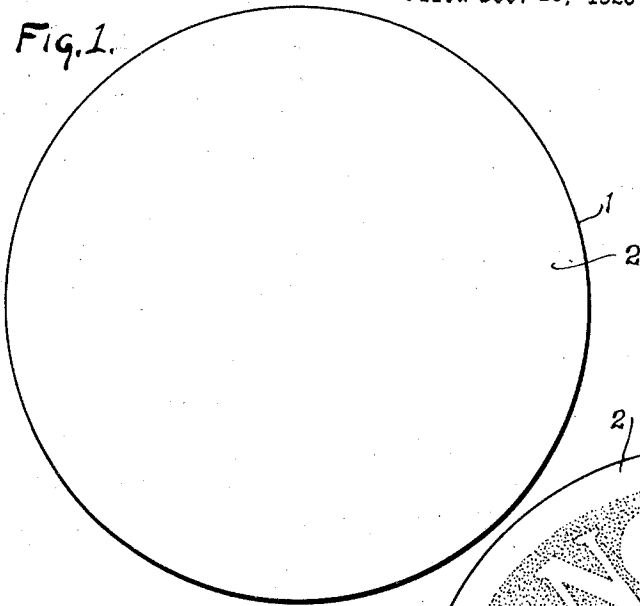


Fig. 2.

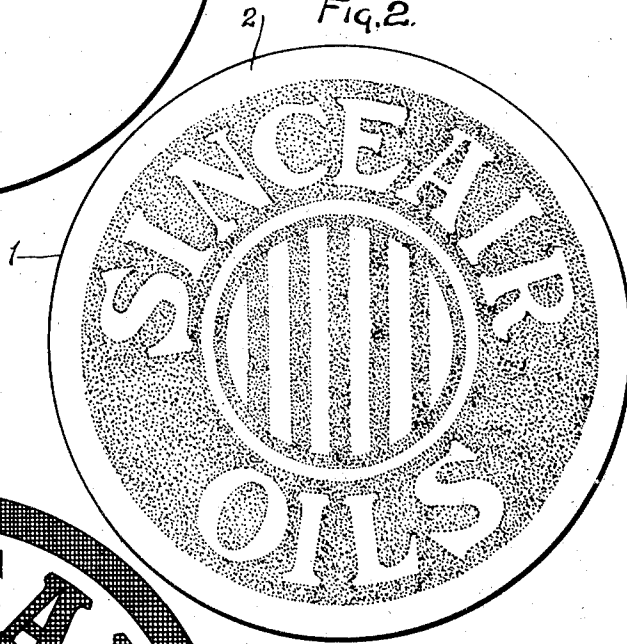


Fig. 3.



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Fig. 4.

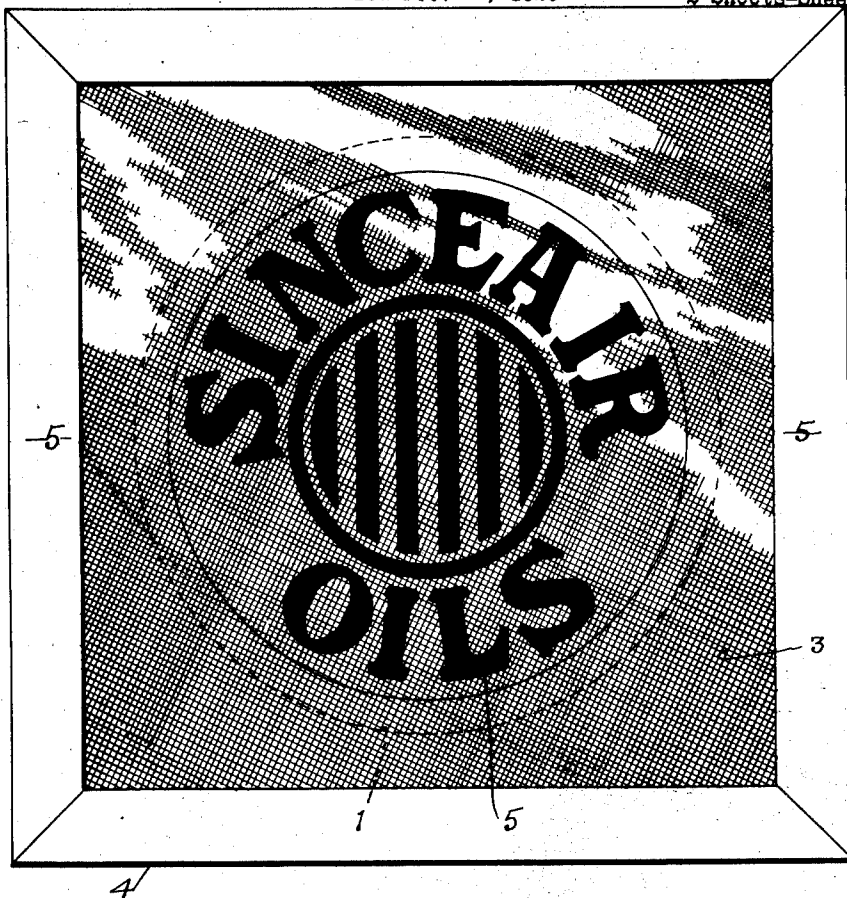
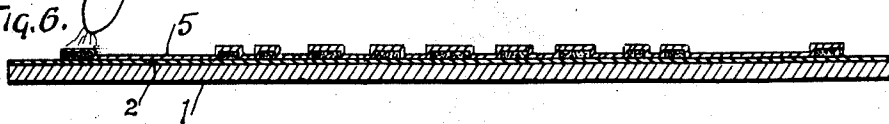


Fig. 5.



Fig. 6.



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UNITED STATES PATENT OFFICE.

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SIGN.

Application filed December 18, 1925. Serial No. 75,723.

My invention relates to signs and in particular to a method and apparatus for making signs.

It is the object of my invention to provide a method and means of making signs quickly and cheaply, which will have great durability and which will have the same advantages as a lithographed or enamelled on porcelain sign, without the expense of such signs and the equipment necessary to produce them.

In particular, it is my object to provide a sign which can be placed on any material, such as metal, made out of durable material, such as pyroxylin lacquer, in any color desired and in any configuration.

It is a further object to produce such a sign very rapidly with the minimum of equipment.

Referring to the drawings:

Figure 1 is a sign plate with its base of pyroxylin lacquer such as duco;

Figure 2 is a plan view of the same plate with the background covered with the resist of my invention, and the letters and designations cut away so as to expose the metal carrying the duco background;

Figure 3 is a plan view of the same plate after a second duco coat has been sprayed upon the plate upon the resist, and the exposed portions of the plate and resist with its coating of duco washed away leaving the letters in the second coat of duco on the background;

Figure 4 is a plan view of the frame and stencil used in my method or process;

Figure 5 is a section on the line 5-5 of Figure 4 showing the stencil after the plastic shield has been squeezed through the supporting silk gauze;

Figure 6 is a similar view after the gauze has been removed showing the application of the lacquer to the resist and through the resist to the supporting metal and its surface of duco.

Referring to the drawings in detail, I take a sheet of metal, or any similar material, which has a supporting surface for the sign, designated 1. On this, I spray a quick drying pyroxylin lacquer, such as duco, which is designated 2.

I then lay over this surface, when it is dry, a silk screen 3 carried in a frame 4 of such mesh that a resist will pass through it readily. This silk screen carries paste-board letters of the stencil 5 which prevent the resist from passing through to the sign beneath at the points, or over the areas, which the letters and designations of paste-board cover.

I then place on the screen, which is known as a No. 5 silk screen, a quantity of my resist material.

My preferred combination for this purpose is a mixture of a binder, such as glucose, a protecting agent, such as glycerin, which is impervious to all colors, including red, when in this combination, and a filler, such as rotten stone.

I first mix the glycerin and glucose in approximately half and half proportions, heating the mixture until it thoroughly mixes. (I find that it is desirable not to bring the mixture to boiling point but up to that point approximately.) When the glycerin and glucose are thoroughly mixed, then the rotten stone is introduced. One fifth of the whole mass should be composed of rotten stone. The rotten stone should be fine enough to pass through a No. 17 screen.

Other fillers, such as chalk, could be employed.

Under some conditions, I find a combination of gypsum, water and glycerin to be desirable.

I also find that it is not objectionable to wash the resist from the plate with gasoline or kerosene, and that lubricating grease, gypsum and varnish make a desirable combination.

I squeegee the plastic material through the screen so that there is left upon the duco covered plate a covering of the plastic material except beneath the letters and designations, which I desire to leave in such a condition that the area beneath such letters and designations will be exposed.

I then spray a coat of pyroxylin lacquer upon the exposed portions and upon the resist. As soon as this lacquer dries, I then wash the entire plate with water. This removes the lacquer on top of the resist to

gether with the resist, leaving the lacquer which has been applied directly to the back-ground in unimpaired condition.

I then have a sign which is painted with the lacquer which is one of the most indestructible of present painting materials, such as duco.

I have the sign in any desired configuration with any desired color.

As I spray the lacquer on with the usual air spray, I am enabled to secure signs quickly and cheaply with a minimum of equipment, as it only requires a few minutes for the lacquer to dry before it can be washed.

It will be understood that when I refer to duco I refer to any type of pyroxylin lacquer, and when I refer to pyroxylin lacquer I refer to any material of similar characteristics. These names are well known in the trade and I use them because they do have that significance.

It will be understood that I desire to comprehend within my invention such modifications of it as may be necessary to adapt it to varying conditions of use and to varying articles.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. In a process of making signs, suspending a porous shield carrying a stencil over a support, squeezing through the porous shield a plastic shield consisting of glucose, glycerin and rotten stone, removing the porous shield and allowing the plastic shield to remain in place, spraying pyroxylin lacquer over the

entire surface, drying the lacquer and washing away the plastic shield with a coating of lacquer thereby supported.

2. In a method of making signs, supporting a screen having masked portions upon a suitable support, squeezing through the screen a plastic resist, removing the screen, coating the entire surface with a coloring material and removing the plastic resist.

3. In a method of making signs, supporting a screen having masked portions upon a suitable support, squeezing through the screen a plastic resist, removing the screen, allowing the plastic resist to remain in place, coating the entire surface with a coloring material and removing the plastic resist.

4. In a method of making signs, supporting a meshed screen having masked portions upon a suitable support, squeezing through the screen a resist of plastic material, removing the screen, coating the entire surface with a coloring material and removing the plastic resist.

5. In a method of making signs, supporting a meshed screen having masked portions upon a suitable support, squeezing through the screen a plastic resist, removing the screen and allowing the plastic resist to remain in place, coating the surface with a coloring material, removing the plastic resist and coloring material thereon and later coating the surface with a suitable finishing coating of any desired translucent material.

In testimony whereof, I affix my signature.

CALVIN C. COSNER.