E. O., V. I. AND I. J. CILLEY.

PANEL FOR DIRECTION INDICATORS.

APPLICATION FILED OCT. 13, 1919.

1,357,273.

Patented Nov. 2, 1920.

2 SHEETS—SHEET 1.

Fig. 1.

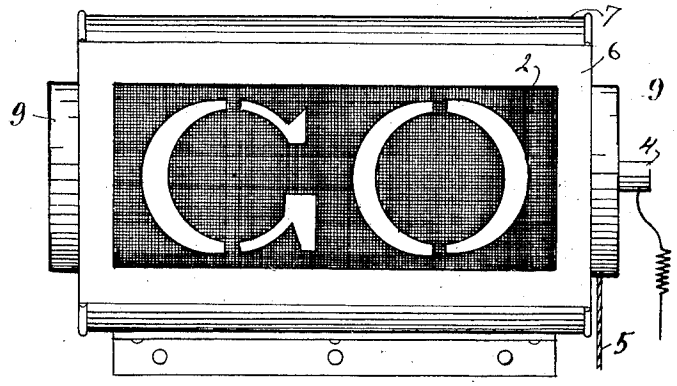


Fig. 2.

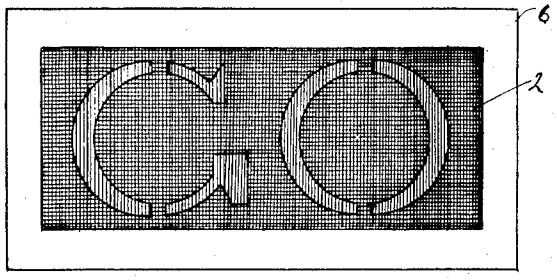
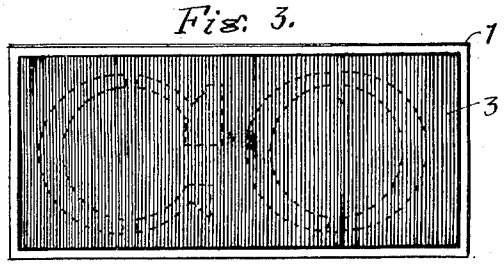


Fig. 3.



Inventor

Earl O. Cilley

Vrl I. Cilley

By Ithiel J. Cilley

Ithiel J. Cilley Attorney

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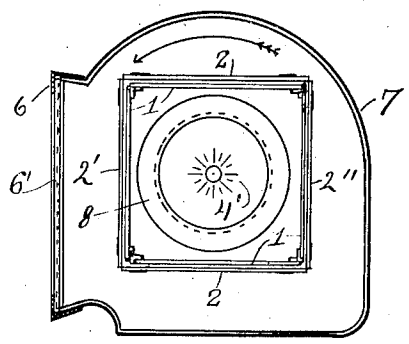


Fig. 4.

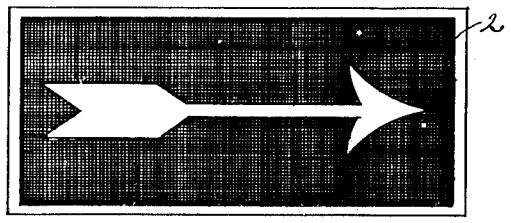


Fig. 5.

Inventor
Earl O. Cilley,
Vrl I. Cilley,
Ithiel I. Cilley,
By Ithiel J. Cilley
Attorney

UNITED STATES PATENT OFFICE.

EARL O. CILLEY, VRL I. CILLEY, AND ITHIEL J. CILLEY, OF GRAND RAPIDS, MICHIGAN.

PANEL FOR DIRECTION-INDICATORS.

1,357,273. Specification of Letters Patent. Patented Nov. 2, 1920.

Application filed October 13, 1919. Serial No. 330,471.

To all whom it may concern:

Be it known that we, EARL O. CILLEY, VRL I. CILLEY, and ITHIEL J. CILLEY, all citizens of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Panels for Direction-Indicators, of which the following is a specification.

Our invention relates to improvements in the preparation of panels for use upon the revoluble cylinders of automobile direction indicators, and for other purposes, and its objects are: first, to provide a means whereby all indicating signals upon a cylinder will show one color, preferably a pure white, and, second, to provide a means whereby the same signal symbols, or certain of them will show a different color, preferably red, by night when the inside of the cylinder, or the space back of the symbols is illuminated, and other of said symbols will show in their normal color, all under the influence of the same light, as an unobstructed electric light.

We attain these objects by the process shown in the accompanying drawing, in which Figure 1 is a front elevation of an automobile signal such as is secured by Letters Patent of the United States, numbered 1,253,040, issued January 8, 1918, to James Ingells, of Muskegon, Michigan, and assigned by him to the Auto Indicator Company, a corporation organized under the laws of the State of Michigan, in which corporation the applicants herein named are stockholders, and for which corporation this patent is to issue. Fig. 2 is an elevation of the front panel used in said indicator, showing the symbol in red behind a black panel. Fig. 3 shows the back of the symbol panel colored red to give the symbol this color when illuminated. Fig. 4 is an end elevation of an indicator with the end of the case removed to show the end of the revoluble cylinder, and Fig. 5 is an elevation of a panel showing an arrow symbol therein.

Similar numerals indicate similar parts throughout the several views.

In the construction of this indicator the inner cylinder is made up with four panels, one on each side of the cylinder, and each of these panels, as 2, is provided with openings to represent the indicator symbol that is to indicate the next movement of the automobile, as, for instance, the word "Go" indicates that it is safe for the automobile following to proceed, and this symbol is formed in the panel that is exposed when the cylinder is in its normal position as at 2'. The second panel should have a symbol indicating stop, as, for instance, the word "Stop" and the third and fourth panels should have a symbol in each indicating which direction the automobile is to turn, as, for instance, a right indicating arrow and a left indicating arrow, respectively. These panels are, preferably, made of sheet metal and are enameled black to produce the greatest possible contrast with the panel 1, which is made, preferably, of some extremely white material, as a translucent white celluloid, a properly prepared translucent white paper, or other kindred material, placed snugly against the back surface of the panel 2 so that whether the symbols are to be viewed by daylight without illumination, or by night with illumination, they will show absolutely white in an absolutely black frame.

As this indicator is designed to take the place of a tail-light it is necessary to have one or more of the symbols shown in color at night, and in white by day, and we prefer that all but the first panel be made to show white from the same light that shows the first panel signal in color, and to bring about this result we either coat the back of one of the translucent panels 3'' with a translucent stain or paint, or place a sheet of transparent colored celluloid back of the panel, as indicated at 3, so that as light passes through the panel the symbol will be shown in the desired color, though the face or exposed side of the panel shows a pure white when not illuminated. Thus, to illustrate, if the word "Go" is located at 2' in Fig. 4, and is illuminated by a light within the cylinder, as at 4', this symbol will show red, as in Fig. 2, but if the cylinder is revolved to bring any of the other symbols, as "Stop" or an arrow into view, they will show their normal color, as in Fig. 5.

We have shown the electric bulb stem at 4, the cable with which the cylinder is made to revolve, at 5, the case front at 6 and the case at 7, all for the purpose of properly identifying the class of indicator for which this arrangement of the symbol panels is prepared.

It will be readily understood that by this arrangement we are able to exhibit four pure white symbols by day, when not illuminated, and one red and three white sym-

bols by night when illuminated. One of the principal advantages gained by this arrangement is that any change of color of the symbols by night, when illuminated, will be much more quickly noticed than if all symbols were of the same color, and will attract attention even though the party to be signaled to may be looking far to one side of the signal when the symbols are changed.

The case 7 may be made any color, to correspond with the color of the car upon which it is to be used, and is provided with a transparent panel 6′ through which the symbols may be seen. This, however, has no bearing upon our invention, which lies entirely in the treatment of the several panels 1—2 in the cylinder 8, to bring about the desired results.

What we claim as new in the art, is:

1. In combination with an inclosing case having a transparent panel therein, and a cylinder revolubly mounted within the case, opaque panels forming the sides of the cylinder, said panels having indicating symbols therethrough, a translucent panel back of each opaque panel said translucent panels so treated that all will show the same color when illuminated from without the cylinder, and that some will show the same color and others will show a distinctive color when illuminated from within the cylinder.

2. In a direction indicator for automobiles, a cylinder having black metallic panels with indicating symbols formed therethrough, translucent panels back of the cylinder panels, said translucent panels treated to show all white when illuminated from without, and one a distinctive color and the others white when illuminated from within the cylinder, all from the same source of illumination.

3. In an indicator signal, a cylinder having opaque panels with indicating symbols formed therethrough and arranged to show one color by daylight when not illuminated, with one symbol colored to form a tail light at night when illuminated with the other symbols of normal color all from the same source of illumination.

4. In a direction indicator for automobiles, a cylinder having several opaque metallic panels surrounding it, with indicating symbols formed therethrough, a translucent panel within the cylinder bearing upon the inner surface of each opaque panel, and arranged to show all white indicating symbols by daylight when not illuminated from within the cylinder, one of the translucent panels colored upon its inner surface and the other translucent panels left normal so they may be operated to expose one danger tail light signal for general use and several safety indicating symbols for temporary use at night when the cylinder is illuminated within, all from the same source of illumination.

Signed at Grand Rapids, Michigan, October 4th, 1919.

EARL O. CILLEY.
VRL I. CILLEY.
ITHIEL J. CILLEY.