

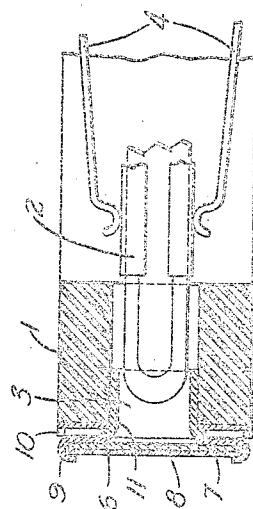
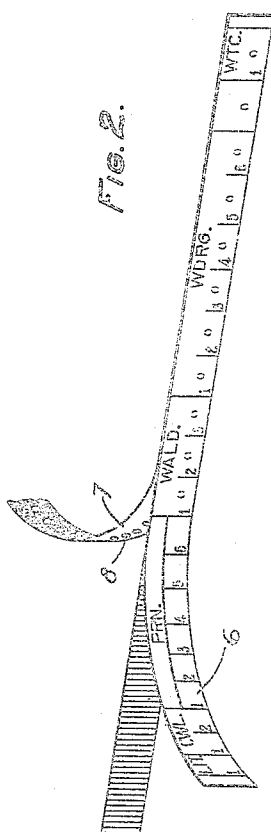
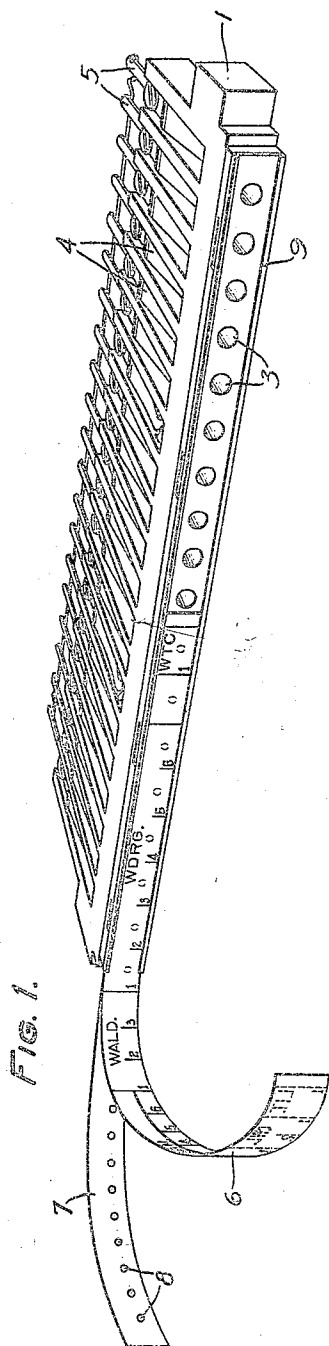
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DESIGNATION STRIP

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DESIGNATION STRIP

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This invention relates to improvements in telephone switchboard accessories and more particularly to what are known as combined designation and signal display strips which may be superposed over a row of signal lamps.

In toll switchboards, where the outgoing line jacks appear at a plurality of operators' positions, it has been proposed to associate with each appearance a busy lamp so connected that whenever a line is taken for use at one position all the associated lamps at the other appearances of the line will be lighted and remain lighted as long as the line is engaged.

In the case of a two-way line one appearance would also have a line lamp in addition to the busy lamp. Under these conditions it is desirable that there be as little confusion as possible between the busy lamps, a number of which are likely to be lighted for rather long periods, and the line lamps which act as call signals and demand the prompt attention of the operator.

An object of the invention therefore is to so distinguish the busy lamps that they will not divert the operator's attention from the line or call signal lamps.

Another object of the invention is to permit economies in current consumption by such busy lamps without lessening the effective visibility of the signals.

In accomplishing the foregoing objects, a feature of the invention resides in providing a designation strip which may be placed over a row of busy lamps which designation strip comprises an opaque mask having openings therein registering with but smaller than the openings in the lamp mounting, and a light diffusing material placed over said openings, whereby a spot of diffused light is made to show on the designation strip itself and the glaring of direct light rays is avoided.

A further feature of the invention, whereby the second object is in part attained, resides in providing a light reflecting surface on the inner walls of the individual lamp sockets or mountings, whereby satisfactory

illumination is secured from lower wattage lamps than would be otherwise possible.

The invention will be understood from the following description when read in conjunction with the accompanying drawings, Fig. 1 of which is a perspective view of a lamp signal strip to which a designation strip in accordance with the present invention has been applied, Fig. 2 is a perspective view of the designation strip of the invention with which has been combined an intermediate strip of transparent colored material, and Fig. 3 is an enlarged view of a cross section taken at right angles to the designation strip of Fig. 1.

Referring to the drawings 1 is a mounting strip made in the state of material for 20 signal lamps 2 which are held in position in the circular openings 3 in the well known manner by springs 4 which terminate in lugs 5 to which the conductors may be attached.

The designation strip of the present invention comprises a strip 6 of translucent material such as cloudy or opalescent celluloid on the back of which is glued or otherwise fastened a strip 7 of opaque material such as black paper or the like in which are cut suitable spaced small openings 8 which are the same distance from center to center as the lamp openings 3 in the mounting strip 1.

Suitable inscriptions may be printed or lettered on the face of the celluloid strip 6 to indicate the character of the lines with which the signal lamps are associated.

The designation strip thus prepared may be slipped in a metal holder 9 mounted in a suitable manner on the face of the mounting strip 1, as for example by means of a rear plate 10 and split thimbles 11 which fit tightly into certain of the openings 3 in the mounting 1. Circular openings of substantially the same diameter as the lamp openings 3 and which align therewith are provided in the holder 9.

When the designation strip is in place in the holder 9 of the openings 8 in the opaque strip 7 are in substantial alignment with the centers of the lamp openings 3.

It will be observed that due to the opaque

character of strip 7 light emitted from any of the lamps 2 would only pass through the corresponding openings 8 and due to the translucent character of the celluloid facing strip 6 the light from any lamp will appear on the face of the switchboard as a diffused spot of light which may be readily seen by the operator and differentiated at a glance from the larger and more brilliantly illuminated line signals commonly used.

10 It may be desired to further differentiate between different strips of busy signals and therefore a modification of the invention consists in interposing a thin strip of transparent colored material, such as celluloid, between the opaque strip 7 and the facing strip 6. By using designation strips having different colored inner strips different classes of line groups may be indicated.

20 A further modification of the invention consists in coating the inner wall of the lamp openings 3, and if desired the inner wall of the thimbles 11, with some white substance such as paint or enamel thereby reflecting a considerable portion of the light emitted by the lamp that might otherwise be absorbed by the black surface of the material forming the mounting strip 1. By this expedient suitable illumination of the translucent spots on the face of the designation strip is secured from lamps of considerably lower wattage than would be otherwise possible.

25 Although black paper and translucent celluloid have been described as the materials from which the designation strips according to the present invention are formed, it should be understood that similar results may be secured by the combination of other materials, such as opaque paper and tracing cloth, etc., without departing from the spirit of the invention.

40 What is claimed is:

1. A designation strip comprising a base of opaque flexible material having a spaced plurality of small apertures cut therein and a light transmitting and diffusing surfacing material applied over the entire front thereof.

2. A designation strip comprising a base of opaque material having a spaced plurality of small apertures cut therein, a light diffusing surfacing material applied thereto and a sheet of transparent coloring material placed between said opaque material and said surfacing material.

3. A composite designation strip comprising a relatively long strip of translucent material and an opaque backing strip secured to the first mentioned strip and substantially coterminous therewith, said backing strip having a plurality of small apertures formed therethrough and arranged along the axis of the designation strip.

In witness whereof, I hereunto subscribe my name, this 16th day of November, 1928.

65 HENRY W. O'NEILL.