

Jan. 27, 1931.

L. S. NEEB

1,790,069

DESIGNATION LABEL

Filed Aug. 10, 1928

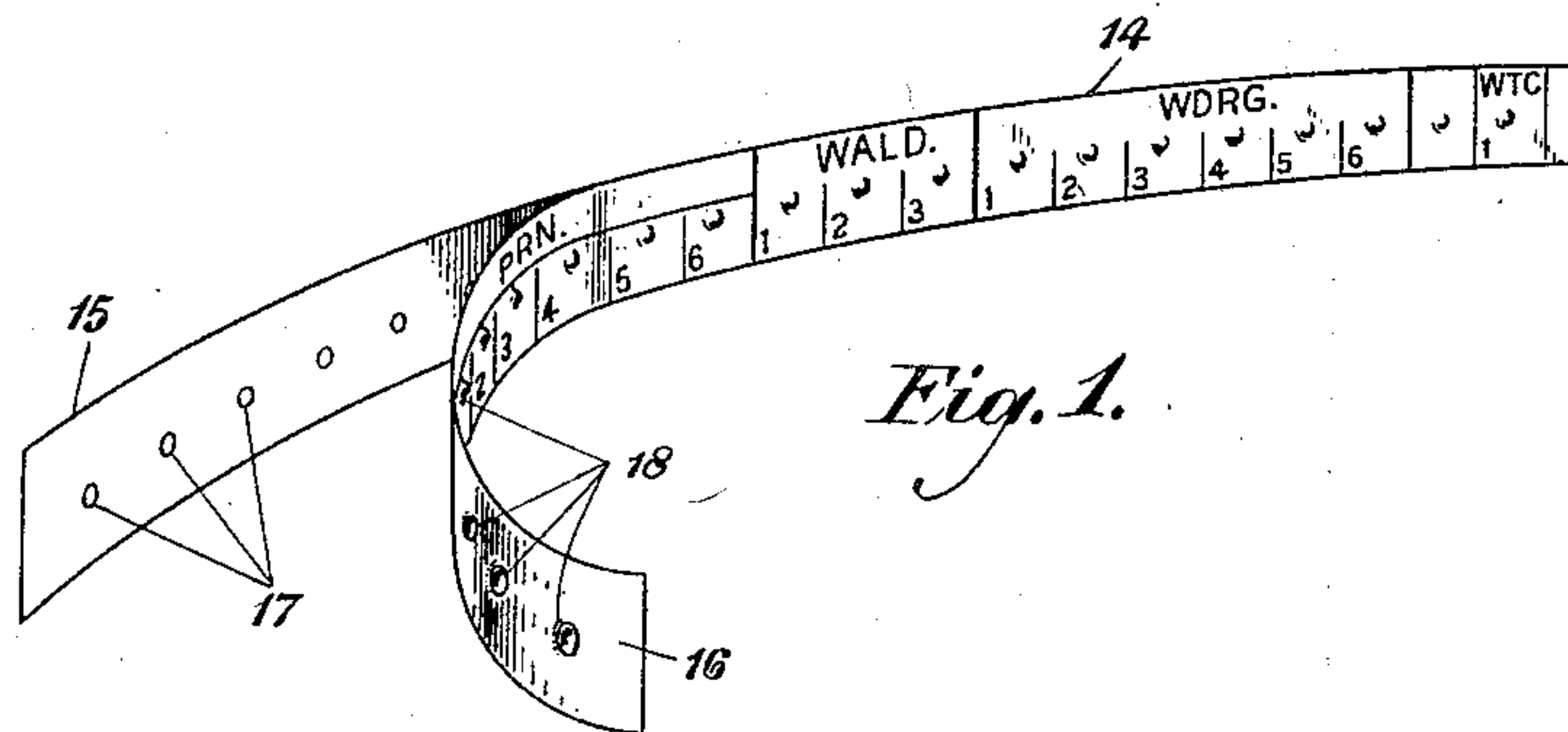


Fig. 1.

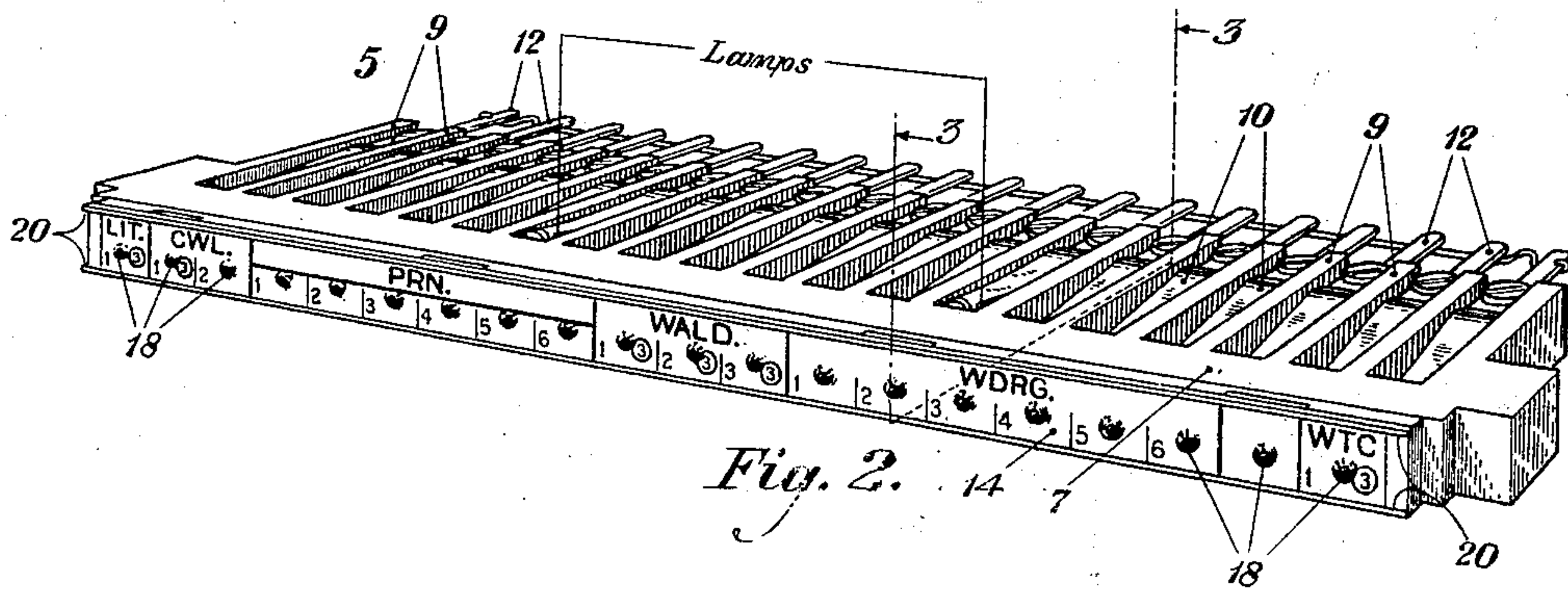


Fig. 2.

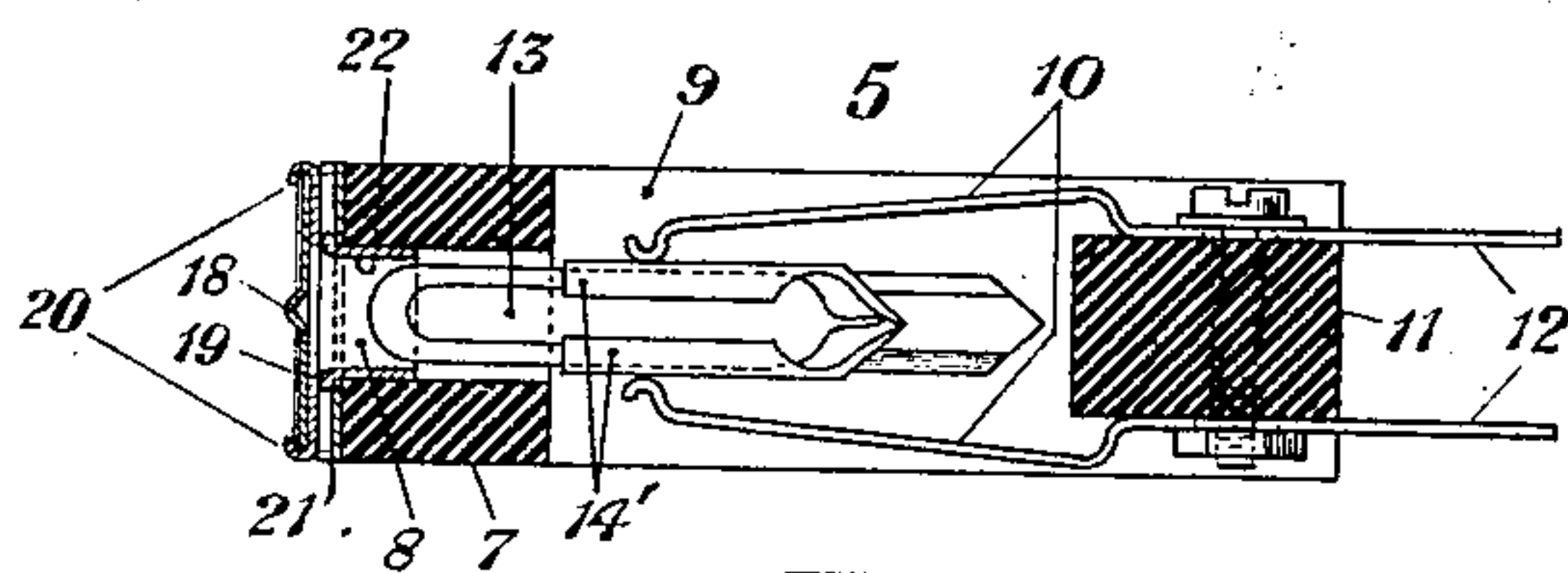


Fig. 3.

INVENTOR
L. S. Neeb
BY *g r f o n*
ATTORNEY

UNITED STATES PATENT OFFICE

LAWRENCE S. NEEB, OF BLOOMFIELD, NEW JERSEY, ASSIGNOR TO AMERICAN TELEPHONE AND TELEGRAPH COMPANY, A CORPORATION OF NEW YORK

DESIGNATION LABEL

Application filed August 10, 1928. Serial No. 298,727.

This invention relates to designation labels which may be advantageously employed in a variety of connections, and which have special utility in marking faces of telephone switchboards to indicate the character of telephone lines terminating thereat.

It has been customary, heretofore, to provide on the faces of telephone switchboards a series of horizontally arranged rows of signal lamps or indicators and corresponding rows of designation strips placed above or below said rows of lamps or indicators to show what they represent. For each of such rows of signal lamps and designation strips there is also a corresponding strip in which jacks are mounted. The jacks are adapted to receive the usual plugs associated with an operator's cord equipment. The space on the face of the switchboard in which the horizontal rows of designation strips, signal lamps and jack strips are mounted is necessarily limited in height to permit the operator to plainly see the designation strips and signal lamps and also reach the jacks to insert the plugs of the cord equipment. It is, therefore, important that the height of each of these rows be restricted as far as may be consistent with good practice.

Accordingly, it is one of the objects of this invention to provide a designation strip which may be mounted over the space occupied by a row of signal lamps, the strip being so constructed to enable the glowing of the lamps to be perceived therethrough, said strip also being provided with the usual legends for identifying the lamps. By this construction, economy of space is effected by reason of the fact that the designation strip and row of lamps occupy the same space upon the face of the switchboard.

Another object consists in the provision of a designation strip which is simple and comparatively inexpensive.

These and further objects will be apparent from the following description, when considered in connection with the accompanying drawing, in which one embodiment of the invention is illustrated.

Referring to the drawing, Fig. 1 is a perspective view of the improved designation

strip. Fig. 2 is a perspective view of a row or strip of signal lamps with the improved designation strip applied thereto in accordance with the provisions of this invention, and Fig. 3 is a cross-sectional view, taken on the line 3—3 of Fig. 2.

Referring to Figs. 2 and 3 of the drawing, the reference character 5 designates a lamp strip or section of a well-known character and comprises the usual insulating portions in which the contact springs are mounted. The insulated portions consist of a front panel strip 7 which extends longitudinally on the face of the switchboard and circular openings 8 provided at suitable spaced intervals throughout the strip. A series of partitions 9 extend laterally from the front strip 7, and pairs of spring clips 10 are positioned between said partitions. The spring clips 10 are mounted on a rear strip 11 by means of short bolts which pass therethrough, and rigidly secure the clips on the top and bottom sides of said rear strip. Each clip is provided with the usual lug extensions 12 to which electrical conductors are attached.

A signal lamp 13 is positioned in each space between the partitions 9, and held in place by tension exerted thereon by the forward ends of the clips 10. The lamps 13 are provided with arcuate shaped metal plates 14 which may be made from aluminum, brass, or the like, and are placed on the lamps in opposite relation to each other. The forward ends of the clips engage these plates, and form therewith an electrical connection by means of which the filaments of the lamps are lighted by current furnished over electrical conductors connected to lugs 12 of the clips. The ends of the lamps 13 extend a sufficient distance into the openings 8 to permit the light emitted from the said lamps to be readily observed through said openings.

The improved designation strip 14, which is adapted to be applied to the lamp strip, as will presently appear, preferably consists of two sheets which are bonded together. One of these sheets comprises a back mounting of bristol board 15, or the like, provided with a back black face and a front white face. The other or front sheet 16 is preferably com-

posed of celluloid having a dull or frosted surface. The back sheet 15 is perforated at suitably spaced intervals, as indicated by the reference character 17. These perforations correspond to the distance between the openings 8 provided in the insulating strip 7. The perforations are preferably of comparatively small diameter, and are so arranged on strip 15 that their axes will substantially coincide with the axes of the openings 8. The front sheet 16 has inscribed thereon suitable legends to designate the character of the signal lamps 13. When the sheets 15 and 16 have been thus prepared, wood alcohol may be employed for the purpose of slightly dissolving the front celluloid sheet 16 into a sort of a jelly mass so that it may be quickly fused with the back sheet 15. Heat and pressure may be then applied to the two sheets to fuse them together. After this process has been performed, a die is employed for raising the surface of the celluloid sheet 16 at points 18 therein. The distance between these points corresponds to the distance between the perforations in the back sheet 15 so that they coincide with each other. The die applies pressure at the points 18 to cause them to protrude from the flat surface of the sheet and provide embossed portions in the form of domes. These domes are translucent and the rest of the strip is opaque. The light emitted from the signal lamps 13, therefore, will be diffused through the domes. The frosted character of such domes will eliminate any direct glare of light upon the face of the operator. The light thus emitted from the domes, however, will be readily perceived from a distance directly in front of the domes and also on either side.

The designation strip 14 may be mounted in a retaining plate 19 which is made of relatively thin sheet metal. The retaining plate 19 has a flat wall which is provided with turned-over flanges 20 in which the upper and lower edges of the strip 14 register. The plate 19 may be clamped or otherwise secured to the rear plate 21. The plates 19 and 21 have coinciding openings which agree approximately in size to the openings 8 in the insulating panel 7, and, when said plates are in position, each of the openings of these elements will be in alinement and provide an unobstructed circular space through which the light from the lamps 13 is emitted so that it may in turn be observed through the domes 18. Thimbles 22 may be attached to the rear plate 21 at cut-away sections provided in the rear plate. These thimbles have enlarged heads of greater diameter than the holes through the plate 21 so that they are prevented from being displaced in the rearward direction thereby and said heads rest against the flat wall of the retaining plate 19. These thimbles are of resilient character and firmly engage the openings in the strip 7

without interfering with the emission of light from the lamps 13.

What is claimed is:

1. A designation label comprising two cohesively united sheets, one of said sheets being of bristol board and the other sheet being of celluloid, said label being opaque for its major portion, the first mentioned sheet having perforations spaced longitudinally thereof, embossed portions on said second sheet in the form of domes, said domes being positioned to coincide with said perforations to permit light to be diffused therethrough, and legends for each of said domes.

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 translucent embossed portions provided in the surfacing material registering with said apertures.

3. 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 translucent embossed portions in the form of domes provided in the surfacing material, said embossed portions registering with said apertures.

4. A designation strip comprising two cohesively united sheets, one of said sheets being opaque and the other sheet being translucent, said opaque sheet having a spaced plurality of small apertures cut therein, and embossed portions in the translucent sheet registering with said apertures.

5. In combination with a designation strip holder having a plurality of apertures therein, a designation strip comprising an opaque mask, said mask being composed of two cohesively united sheets, one of said sheets having a spaced plurality of apertures therein of a size smaller than the apertures in said holder, and translucent embossed portions on the other sheet registering with the apertures in its companion sheet.

6. In combination with a strip of lamp socket mountings having openings therein adapted to receive switchboard lamps, a designation strip holder having a plurality of apertures registering with said openings, an opaque designation strip carried by said holder, and translucent embossed portions on said strip registering with said openings and apertures.

7. In combination with a strip of lamp socket mountings having apertures therein adapted to receive switchboard lamps, a designation strip holder having a plurality of apertures registering with the apertures in the socket mountings, a designation strip comprising a base of opaque material carried by said holder, said designation strip having small apertures cut therein registering with the apertures in said socket mount-

ings and said designation strip holder, a surfacing material applied to said base, and translucent embossed portions formed in the surfacing material and registering with the apertures in each of the associated elements.

5 8. In combination with a strip of lamp socket mountings having apertures therein adapted to receive switchboard lamps, a designation strip holder having a plurality of
10 apertures registering with the apertures in the socket mountings, a designation strip carried by said holder comprising two cohesively united sheets, said strip being opaque for its major portion, one of said sheets having a
15 spaced plurality of small apertures cut therein, and the other sheet having embossed translucent portions in the form of domes, the apertures and domes in said designation strip coinciding with each other and with the ap-
20 ertures in said socket mountings and said strip holder, whereby light from said switchboard lamps is diffused through said domes.

In testimony whereof, I have signed my name to this specification this 8th day of
25 August, 1928.

LAWRENCE S. NEEB.

30

35

40

45

50

55

60

65