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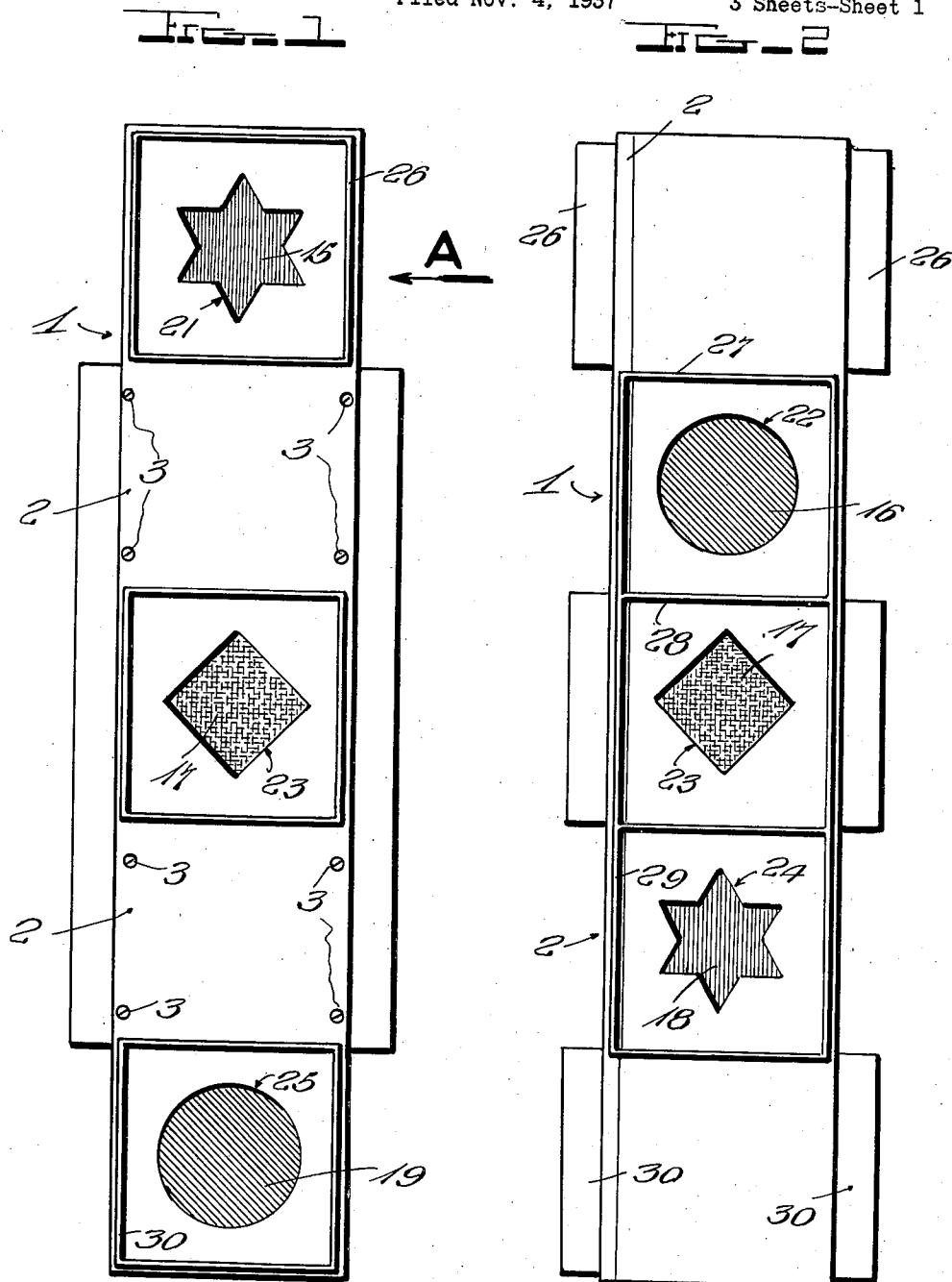
W. H. LEPPERT

2,228,835

TRAFFIC SIGNAL

Filed Nov. 4, 1937

3 Sheets-Sheet 1



Wm. H. Leppert
BY
James J. Sheehy & Co., ATTORNEYS.

INVENTOR.

ATTORNEYS.

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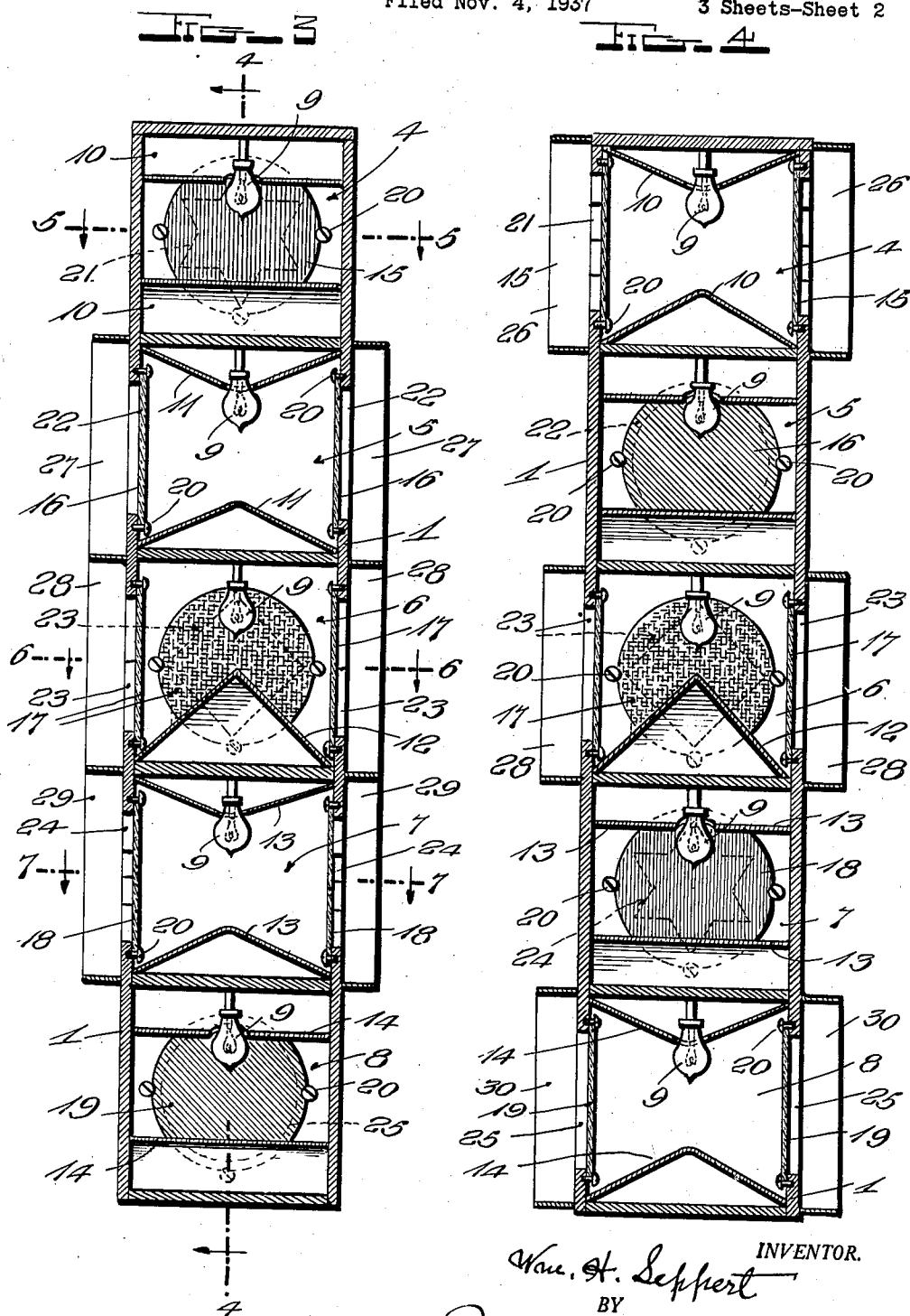
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3 Sheets-Sheet 2



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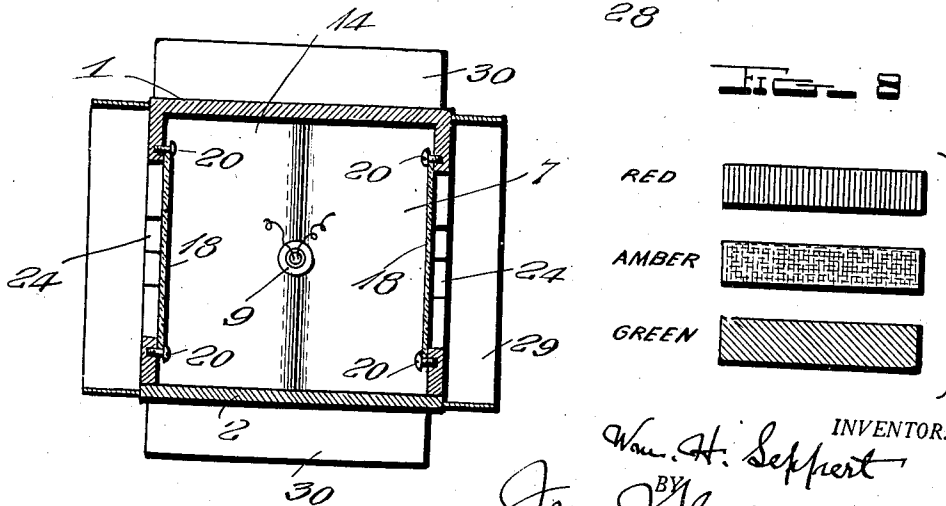
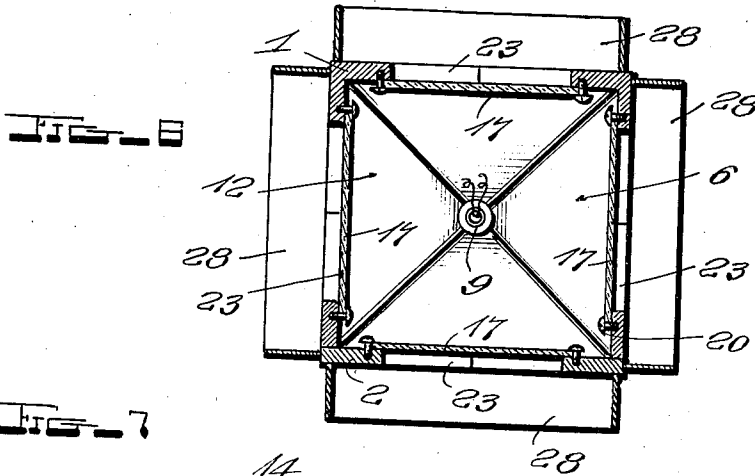
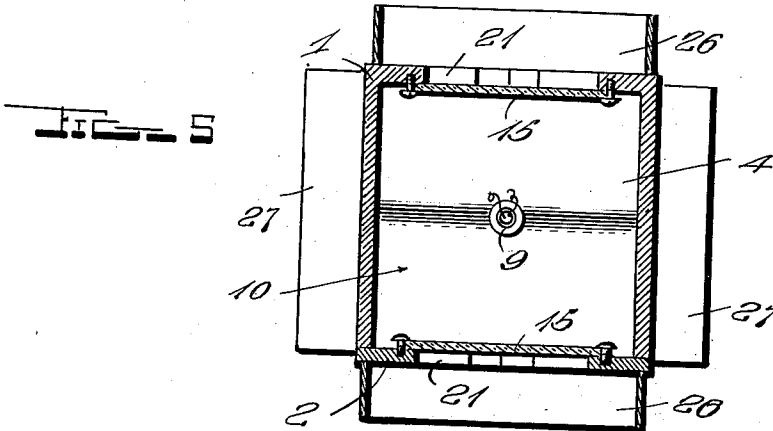
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3 Sheets-Sheet 3



UNITED STATES PATENT OFFICE

2,228,835

TRAFFIC SIGNAL

William H. Leppert, New Orleans, La.

Application November 4, 1937, Serial No. 172,857

3 Claims. (Cl. 177—329)

My present invention pertains to traffic signals and it contemplates the provision in a traffic signal of distinctive motifs or designs that at once, arrest the attention of a motorist and consequently materially control the safe driving of motor vehicles at traffic light controlled crossings.

It might be well to state, at this point that many motorists, by actual test, are color blind and consequently the usual red, amber and green disks now in use in traffic signals are very often confused by such persons thereby bringing about a very hazardous condition where such signals are installed and with my distinctive signal in addition to the colors generally in use, I employ unusual and what might be termed startling designs of disks that are readily discernable to persons suffering from color blindness.

The invention further contemplates the provision of a traffic signal that reduces materially the number of light bulbs necessary for the successful operation of the signal and consequently the cost of operation will be materially reduced. In addition, by my novel arrangement the amber light is shown in all directions when in operation and consequently a motorist at all points will be warned of the change of lights and the direction of movement.

Other objects of the invention will be fully understood from the following description and claims when the same are read in connection with the drawings, forming part of this specification in which,

Figure 1 is a front elevation of my novel traffic signal.

Figure 2 is an end view of the signal looking in the direction of the arrow A.

Figure 3 is a longitudinal central vertical view of the device and showing the arrangement of the bulbs within the device as well as the interior of the reflecting means.

Figure 4 is a transverse vertical section taken in the plane indicated by the line 4—4 of Figure 3 and in the direction of the arrows.

Figure 5 is a horizontal view taken in the plane indicated by the line 5—5 of Figure 3 and looking in the direction of the arrows.

Figure 6 is a view similar to Figure 5 and taken in the plane indicated by the line 6—6 of Figure 3.

Figure 7 is a horizontal view taken in the plane indicated by the line 7—7 and looking in the direction of the arrows.

Figure 8 merely for the purpose of clarity illustrates the various color symbols.

Similar numerals of reference designate corresponding parts in all the views of the drawings.

My novel device is illustrated as a whole by 1 and comprises a casing that is adapted to be suspended from a cable in the center of an intersection or where desired, may be positioned on standards at each corner of the intersection and the said casing comprises the cabinets or frames 2 and access to the interior of the cabinets may be obtained by loosening the fastening screws 3 thereof.

The housing or signal 1 is divided into five compartments designated 4, 5, 6, 7 and 8, but I would have it understood that more or less of these compartments may be employed without departure from the scope of my invention. Arranged in each of the compartments and illustrated are light elements 9 secured in light outlets diagrammatically illustrated.

Each of the compartments is provided with a series of deflectors 10, 11, 12, 13 and 14 for obvious purposes, and these compartments are also provided with the lens 15, 16, 17, 18 and 19 and, I wish it distinctly understood that these lenses are of various shapes and designs and form a very important feature of my invention and in this connection for the purpose of illustration I have shown the red lens in the shape of a star, 15; the amber lens in the shape of a diamond 17 and the green lens in the shape of a circular disk 16 but I would distinctly have it understood that any distinctive shape or motif, for instance a cross or the like may be substituted for the shapes illustrated as it is my purpose to employ a startling and easily remembered design that will be readily understandable to motorist regardless of the color of the lens. These lenses are secured within the compartments by the fastening means 20. Manifestly the shape of the openings 21, 22, 23, 24, and 25 of the compartments will control the shape of the lenses.

By reference to Figures 3 and 4, it will be noted that in my novel device I employ but five light elements whereas it is customary in the usual signal to employ, at the very least two and generally four and more light elements or bulbs for each signal and this is due to the fact that frequently each standard or traffic signal comprises north, south, east, west and caution signals that are operated independently according to the flow of traffic. By using the few lighting elements and because of the construction of my device, cost of manufacture is initially reduced and maintenance is consequently brought down to a minimum and the advantages in this respect of my device over present signals will be appreciated from the following detailed statement as to operation.

In the practical use of my device, we will assume, that the signal is positioned on a hanger or standard in the manner illustrated in Figure 1 and that we consider Figure 1 as controlling north and south bound traffic. Of course, the motifs or signals will be duplicated on the north and south bound face of the signal and we also assume that Figure 2 illustrates the east and west bound traffic signal. If the motorist approaches from the north or south, the signal will not only indicate by its color exactly what course the motorist should take but also distinctively indicates this course to color blind motorists. This is also true of east and west bound traffic. It will be seen that one lighting element indicates north and south bound traffic directions for each compartment and also one lighting element for each east and west bound traffic compartment. Further, it will be noted that the amber compartment is provided with a lens on all four sides and that the lighting elements in the amber compartment will indicate to all motorists, regardless to position that a change in the flow of traffic is about to take place. Naturally the amber light only glows during the change of traffic and consequently but a single lighting element will be necessary.

The provision of the distinctive hoods is a step forward in the art because under the old practice with the arcuate hood confusion arises both to motorists and pedestrians because too wide an angle and diffusion of rays is permitted and generally do not restrict the rays from an exposed green light for instance from facing an approaching motorist or others.

What I claim is:

1. A traffic signal comprising a housing having a series of five compartments disposed in end to

end relation, one of said compartments having distinctive light transmitting signal means visible from all sides of said compartment, two of said compartments having a second distinctive light transmitting signal means visible from two opposite sides thereof and the remaining two compartments having a third distinctive light transmitting signal means visible from two opposite sides thereof and on alternate sides from the signal means of the first named pair of compartments.

2. A traffic signal comprising a housing having a series of compartments, one of said compartments having distinctive light transmitting signal means visible from all sides of said compartment, a pair of said compartments having a second distinctive light transmitting signal means visible from two opposite sides thereof and a second pair of compartments having a third distinctive light transmitting signal means visible from two opposite sides thereof and on alternate sides from the signal means of the first named pair of compartments.

3. A traffic signal comprising a housing, a central compartment in said housing, said compartment having distinctive light transmitting signal means visible from all sides thereof, a second compartment in said housing below said central compartment and having a second distinctive light transmitting signal means visible from two opposite sides thereof, and a third compartment in said housing above said central compartment and having a third distinctive light transmitting signal means visible from two opposite sides thereof and on alternate sides from the signal means of the second mentioned compartment.

WILLIAM H. LEPPERT.