Dec. 27, 1938. B. ARKELL ET AL 2,142,040

TRAFFIC REGULATING SYSTEM

Filed Nov. 20, 1936

Fig. 1.

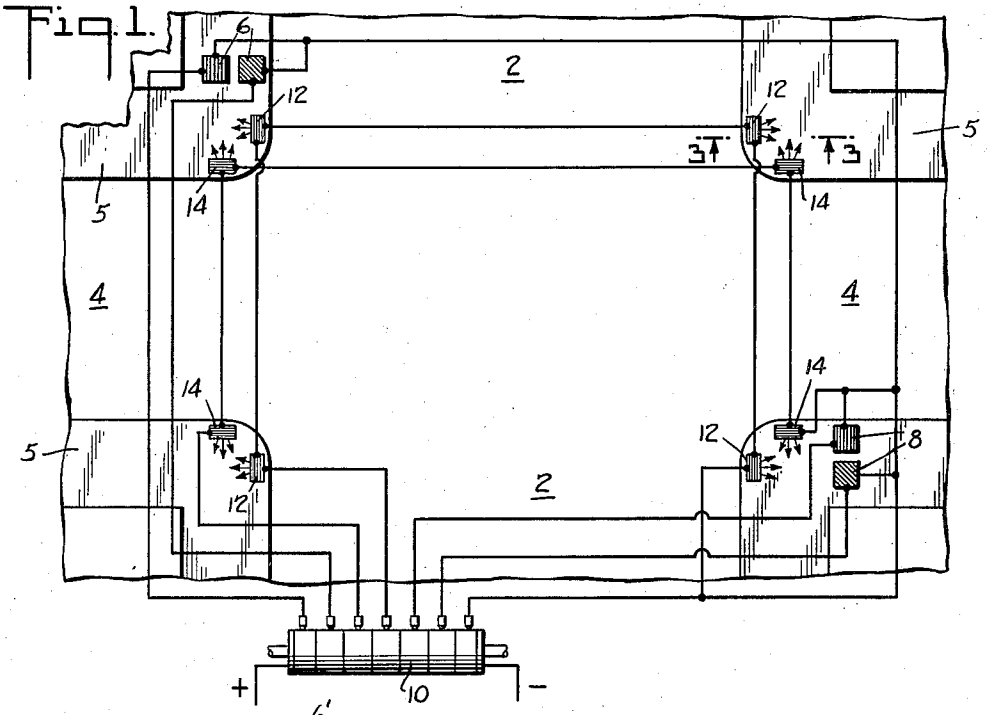


Fig. 2.

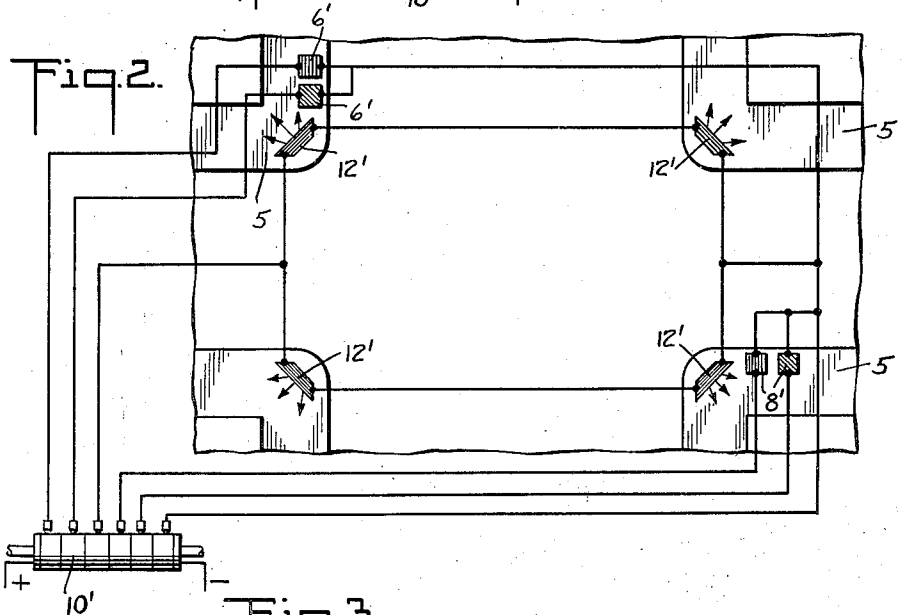
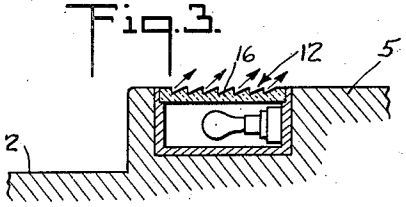


Fig. 3.



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TRAFFIC REGULATING SYSTEM

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2 Claims. (Cl. 177—337)

The present invention relates to traffic regulating systems and has for its object to provide a system having novel and improved means, operating in timed relation to vehicle traffic signals, for regulating the crossing of streets by pedestrians.

The preferred form of the invention is illustrated in the accompanying drawing, in which:

Figure 1 is a diagrammatical view of the system;

Fig. 2 is a similar view of a modification; and

Fig. 3 is a detail sectional view taken on the line 3—3 of Fig. 1.

The system is illustrated in the drawing as used on the corners of intersecting streets 2 and 4 having sidewalks 5. The system is provided with vehicle traffic regulating signals which may consist of the usual red and green lights 6 for regulating the vehicle traffic on the street 2, and red and green lights 8 for regulating the traffic on the street 4. These lights may be operated in any well known manner as for example by means of a rotary switch 10 for controlling the light circuit.

In accordance with the present invention signals 12 and 14 are arranged at each corner. These signals may consist of lights set into the sidewalks with the lens 16 of each light flush with the sidewalk. As shown, each lens is formed to diffuse the light away from the street so as to cause the lights at each corner to be visible to pedestrians standing at the corner but obstructed from the view of the drivers of the vehicles. The circuit for the lights 12 and 14 may be controlled by the switch 10 in such a manner that at a predetermined interval of time before the vehicle signals are operated to direct the traffic on the street 2 to proceed, the lights 12 are turned on and stay on until the vehicle signals direct the thus moving traffic to stop, whereupon said lights 12 are turned off. In the same manner, at a predetermined interval of time before the vehicle signals are operated to direct the traffic on street 4 to move, the lights 14 are turned on and stay on until the vehicle signals direct the thus moving traffic to stop, whereupon said lights 14 are turned off.

As shown the lights 12 and 14 are respectively arranged near the curbs of the streets 2 and 4. The lights 12 when turned on serve to warn the pedestrians not to cross the street 2, and the lights 14 when turned on serve to warn the pedestrians not to cross the street 14.

The time interval above described between the turning on of the pedestrian lights 12 and 14 and the changing of the traffic lights to signal the traffic to proceed on the respective streets is of such length as to warn the pedestrians they have not sufficient time to cross before the traffic changes. For example, if twenty seconds would be required by the ordinary person to walk across the wider street 2, the lights 12 are turned on twenty seconds or slightly more than twenty seconds before the traffic moves on said street. If ten seconds are required to walk across the narrower street 4, the lights are turned on ten seconds or slightly more than ten seconds before the traffic moves on that street. The lights 12 and 14 preferably remain on until the traffic on the respective streets stop.

By the operation of the lights 12 and 14 as described, a pedestrian is able to tell whether it is safe or unsafe for him to cross, and there is no danger of his being caught by a change of vehicle traffic when he is only part way across the street.

With the use of the improved system it is unnecessary for the pedestrian to watch the vehicle traffic lights which is difficult in the case of persons who are nearsighted or color blind, especially where the traffic lights are several blocks apart.

As the pedestrian lights are obstructed from the view of the drivers of the vehicles, the drivers will not try to beat the lights, or to use the pedestrian lights as starting signals, which would be the tendency if they were visible to the drivers.

In some instances to save expense a single pedestrian light 12' may be used at each corner. In such cases the lights may be connected in series as illustrated in Fig. 3, so as to be turned on and off simultaneously by the circuit switch 10'. These lights 12' are turned on a predetermined interval of time before the vehicle traffic lights 6' and 8' direct the traffic to proceed on either street, and are turned off when the traffic stops on the other street. This arrangement also insures against change of traffic while the pedestrian is only part way across the street.

As will be evident to those skilled in the art, our invention permits various modifications without departing from the spirit thereof or the scope of the appended claims.

What we claim is:

1. In a traffic regulating system comprising vehicle traffic signals and pedestrian traffic signals for a street having sidewalks, and means for operating the two sets of signals in timed relation, the improvement which consists in said pedestrian signals comprising lights mounted in recesses in the sidewalks and provided with illu-

minated tread surfaces arranged substantially flush with the surfaces of the walks and in proximity to the outer edges of the walks.

2. In a traffic regulating system comprising vehicle traffic signals and pedestrian traffic signals for a street having sidewalks, and means for operating the two sets of signals in timed relation, the improvement which consists in said pedestrian signals comprising lights mounted in the sidewalks in proximity to the outer edges of the walks and substantially flush with the surfaces of the walks, and provided with means for directing the light rays away from the street.

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