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E. A. LIEUTARD
TRAFFIC SIGNAL

2,528,962

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Fig 1

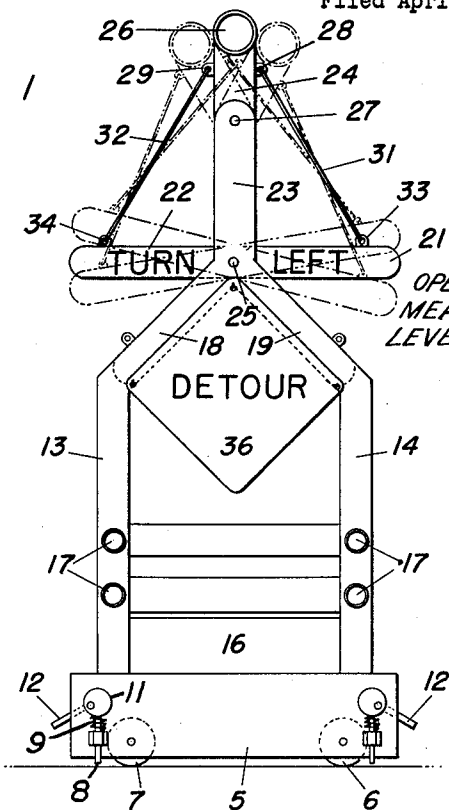


Fig 2

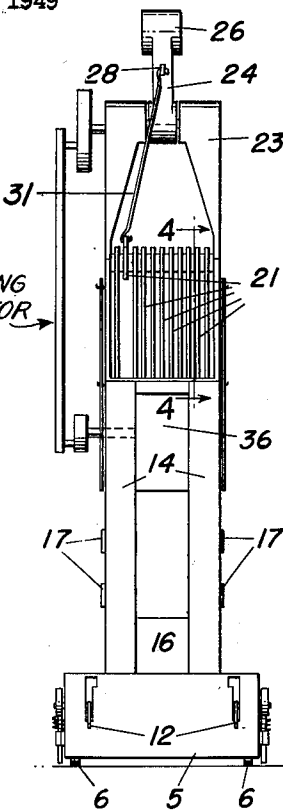


Fig 3

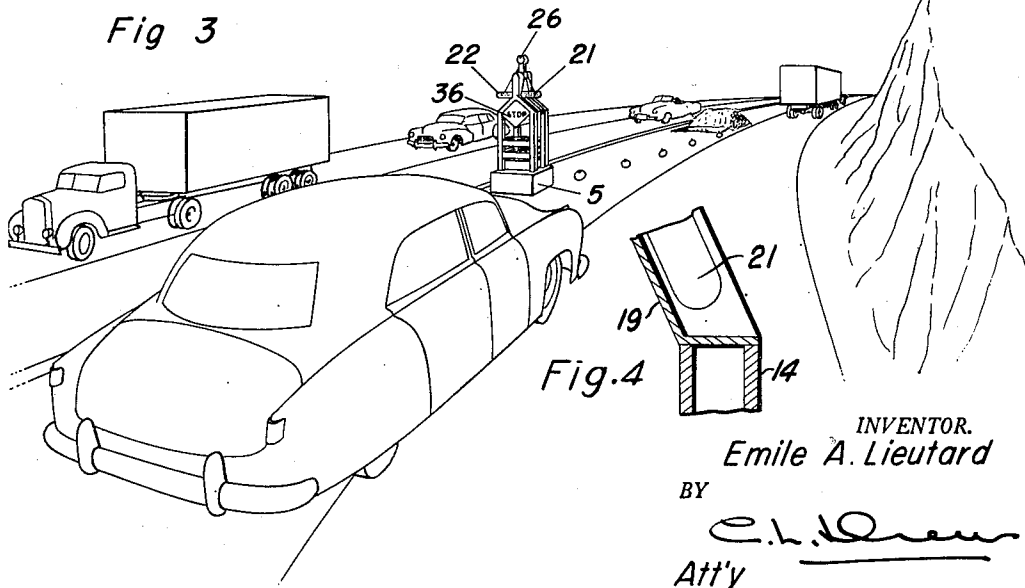
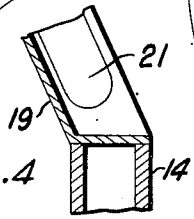


Fig.4



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TRAFFIC SIGNAL

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2 Claims. (Cl. 116—63)

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This invention relates to improvements in traffic signals and has particular reference to an eye-high mobile signal.

The principal object of this invention is to provide a signal unit which may be transported from place to place for use in directing highway traffic, particularly where detours or other obstacles necessitate the normal flow of traffic being diverted to one side or the other of the normal traffic flow in the area.

A further object is to provide means whereby the signal may indicate to a driver of the oncoming vehicle exactly the condition which is prevailing ahead, so that the driver of the vehicle approaching the signal will have time to execute the proper maneuver.

A still further object is to provide means for activating the signal so that it will attract the eye.

A still further object is to provide a signal which is of sturdy construction and one which is so positioned that it may be seen above the tops of automobiles which may be proceeding, one behind the other.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same,

Fig. 1 is a front elevation of my signal,

Fig. 2 is a side elevation of Fig. 1, and

Fig. 3 is a perspective view showing my signal, as the same would appear in use.

Fig. 4 is a section on the line 4—4 of Fig. 2.

Many traffic accidents, particularly rear-end collisions, are caused by highway construction work or other traffic hazards which are only temporary and which must be avoided by vehicles travelling over the highway. Ordinarily, these traffic hazards are blocked off by a saw horse, on which is positioned a sign, "Detour." This type of blockade is so low that it is invisible to one car behind another and, therefore, when the first car approaches the barricade, sudden application of the brakes causes the car behind to become involved in a rear-end collision. This type of accident often results in quite a procession of cars becoming involved in the accident, with the resultant damage to the cars, as well as bodily harm.

Applicant has, therefore, devised a signal which may be placed upon a highway and moved from place to place, which signal will have a plurality of semaphore-like arms which are activated by

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a wig-wag signal, thereby attracting attention, these wig-wag arms being elevated to a point where they will be visible to all of the cars in the line of traffic so that each driver will have equal opportunity and will be forewarned that he must slow down, as a traffic hazard is being approached.

Referring to the accompanying drawings wherein, for the purpose of illustration, is shown a preferred embodiment of my invention, the numeral 5 designates a hollow base, within which is mounted a plurality of wheels, as shown at 6 and 7.

In order to raise the base so that the wheels are inoperative, I provide a plurality of road-engaging pins 8, which are normally retracted by springs 9, and which have their upper ends bearing against cams 11, actuated by a handle 12. This engagement enables the entire device to be wheeled to any desired position and then locked against further movement.

Mounted upon the base 5, is a plurality of spaced tubular standards, as shown at 13 and 14.

A battery box is shown at 16.

Within the standards 13 and 14, are positioned reflectors 17, which will function, should, for any reason, the electrical equipment fail.

The upper end of the standards 13 and 14 serve to support diverging trays 18 and 19, in which are stored a plurality of semaphore arms 21 and 22 respectively. These arms are all carried upon a common pivot 25.

Extending upwardly from the apex formed by the trays is a standard 23, upon which is pivoted an arm 24 having an illuminated signal 26, upon its upper end. The pivotal point of this arm is shown at 27.

Ears 28 and 29 are formed upon the opposite sides of the arm 24, and through the medium of these ears, links 31 and 32 may be engaged with ears 33 and 34, formed upon the semaphore arms 21 and 22 respectively.

A diamond-shaped case 36 forms a suitable housing for any desired type of driving gear for actuating the arm 24, and the connected semaphore arms 21 and 22, the type of drive being immaterial to my invention.

When a signal is constructed in accordance with my invention, the same may be wheeled on to location and then, by actuating the lever 12 and cam 11, the pins 8 may be forced downwardly to take the load of the whole device off of the wheels 6 and 7.

By now turning on the current which may be furnished by cable or which may be from bat-

teries located in the battery box 16, the operating mechanism will function to cause the arm 24 to move through the arc, as shown by the arrows at the top of Fig. 1. This same movement will, in turn, be transmitted through the links 31 and 32, to the arms 21 and 22, and they will, in turn, move as indicated by the arrows adjacent these last-mentioned arms.

As the radius from the pivotal point 25 to the ear 33, or the ear 34, is greater than the radius from the pivotal point 27, to the ears 28 or 29, it will be observed that, as the arm 24 oscillates, the movement transmitted to the arms will be relatively less and, consequently, the arms 21 and 22, while moving in the same sequence, will move at a slower speed than the arm 24. Therefore, any matter printed on the arms can be easily read, even though the arms are moving.

By unhooking the link 31 or the link 32, any one of the arms within the trays may be selected to conform with the information that is to be conveyed to the driver of the approaching vehicle.

It will thus be seen that my signal will accomplish all the objects above set forth.

It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same and that various changes relative to the material, size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, I claim:

1. In a traffic signal, a base, supports extending upwardly from said base at each side thereof, trays each having a lower end supported by the supports at a respective side of the base, said trays extending convergingly upwards to a common apex, a shaft extending transversely of said trays at the convergent ends thereof, a series of

semaphore signal arms in each tray and having their upper ends pivoted on said shaft, said arms each having a specific signal indication impressed thereon for indicating different signals upon selective exposure of said arms, spaced standards extending upwardly from the apical junction of said trays, an oscillatory arm pivoted at its lower end between said standards and extending upwardly therefrom, links pivoted each at one end to a respective side of said oscillating arm, and coacting means on said semaphore arms and the remaining ends of said link selectively connecting a semaphore arm from each tray with a respective link.

2. In a traffic signal, a base, supports extending upwardly from said base at each side thereof, trays each having a lower end supported by the supports at a respective side of the base, said trays extending convergingly upwards to a common apex, a shaft extending transversely of said trays at the convergent ends thereof, a series of semaphore signal arms in each tray and having their upper ends pivoted on said shaft, said arms each having a specific signal indication impressed thereon for indicating different signals upon selective exposure of said arms, and means to selectively support a semaphore arm from each tray and oscillate the supported arms through horizontally alined positions.

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