H. T. WINSTON.

TRAFFIC SIGNAL.

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1,240,640. Patented Sept. 18, 1917.

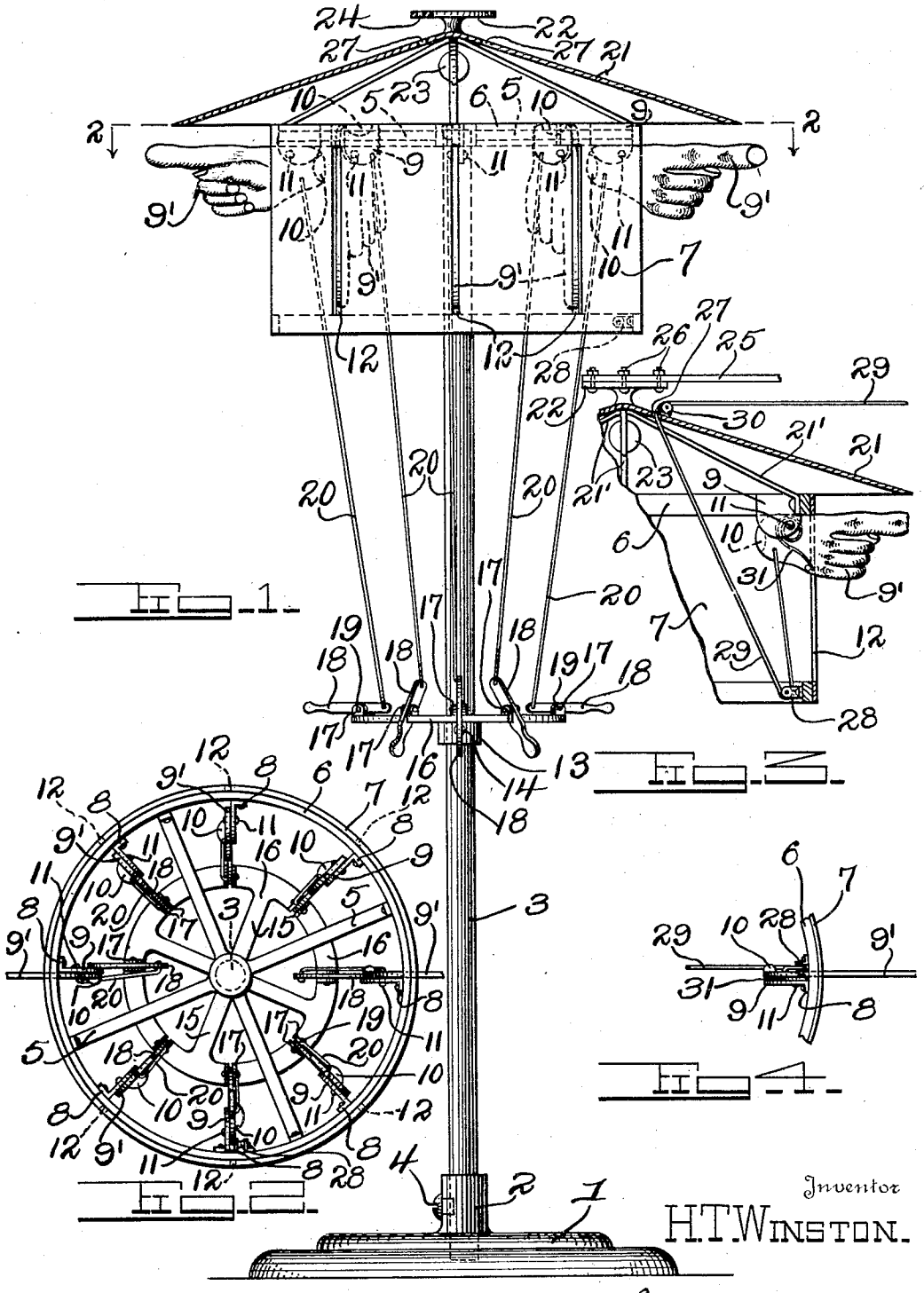


Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

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TRAFFIC-SIGNAL.

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To all whom it may concern:

Be it known that I, HOLLIS T. WINSTON, a citizen of the United States, an officer in the United States Navy, residing at Washington, in the District of Columbia, have invented new and useful Improvements in Traffic-Signals, of which the following is a specification.

This invention comprises a signal, which although of general application, is especially adapted for use in the direction of street traffic and the like.

In structures of this type with which I am familiar, it has been customary to arrange two signals at approximately right angles to each other so placed as to present a different signal to each approach. Considerable difficulty has been experienced with signal devices of this character, for the reason that it is difficult for some people to read the directions thereon, to distinguish the colors thereof, or readily understand the meaning intended to be conveyed. In other words signals of this type instead of positively directing traffic in any one particular direction, may more properly be called negative directors of traffic.

A further difficulty is frequently encountered in situations where the streets cross each other at an acute angle or where the approach of the signal is on a curve. Here it is difficult to arrange a right angle signal in such a way that it can be readily seen and understood from the various points of approach, or the street arrangement may be such that it would be impractical to have a stand or the like placed on the street.

The principal object of the present invention is the production of a device of this character which will positively direct traffic in any one direction or plurality of directions and do it in such a way that there can be no misunderstanding of the signal; which will be capable of pointing directly in the direction of any angle desired or curvature; and which will, in a word, meet all the requirements of the present day traffic.

Another object of this invention is the perfection of a signal of this kind which may be quickly transformed into an overhead traffic director capable of being actuated from a point distant from the signal itself. This may be found advantageous in positions where the foot arrangement is such that a stand placed directly upon the street would be in the nature of an obstruction.

Other objects and advantages will in part be apparent and in part be brought out more clearly in the description which follows. A drawing illustrating an embodiment of the invention is hereto appended the following views being shown.

Figure 1 is a front elevation partly in section of one form of the device.

Fig. 2 is a sectional plan view on the lines 2—2 of Fig. 1.

Fig. 3 is a fragmentary view in sectional side elevation disclosing a detail of construction.

Fig. 4 is a fragmentary view in plan of another detail.

Referring specifically to the drawing numeral 1 designates a base member upstanding from which there is a sleeve 2 and in which a standard 3 is adapted to be placed and maintained in any desired adjustment as by means of a screw 4.

Upon the upper end of standard 3, there are mounted radial arms 5 which at their outer end support a ring 6 which in turn carries a drum or the like 7.

Upon the inner surface of ring 6 there is arranged a series of supporting members comprising an angulated portion 8 secured to the ring and supporting member 9. Upon each supporting member there is pivotally mounted a signal 9′ comprising in the present instance a representation of a hand, at its outer end and at its inner end having a weight member 10. The signal is pivoted as at 11 to the support at a point intermediate these two portions so as to maintain the proper balance on said support. In alinement with said signal members, there are a series of radially arranged slots 12 in the drum to permit the passing therethrough of said signals.

Means are also provided for actuating these signals and in the present instance they comprise a sleeve 13 adjustably mounted as by screw 14 upon the standard 3, said sleeve carrying supporting arms 15 which in turn are connected with a radial outstanding support 16.

Upon this member 16 there are upstanding studs 17 having eyes therethrough in approximate alinement and in which are mounted actuating arms 18 as by means of a pivot 19 passing through said eyes. These arms have at their outer end a handle and at their inner end are connected with an operating rod 20 which is at its opposite

end secured to the signal, preferably at a point eccentric of the pivotal point of said signal on said support.

The operating handles 18 are preferably placed in alinement with the signals 9′, this arrangement readily indicating to the operator what signals are set, and the direction in which they are facing.

At the upper portion of the apparatus there is a canopy 21 upon supports 21′. This may also be provided with a light 23 the arrangement being such that the underneath portion of the canopy acts as a reflector which may be utilized at night to reflect the light directly upon the signals. These signals are preferably painted red which according to usage are well-known stop indications, and are preferably in the form of a hand in order to positively direct traffic in the direction in which they point.

Upon the upper portion of this canopy there is a member 22 provided with openings 24 which may be utilized as an external light support if necessary but which is especially adapted for use as a securing means for sustaining the entire upper portion of the apparatus from any suitable support such as a cable or the like 25 as by bolts 26 see Fig. 3.

The parts are arranged so as to be easily disassembled, the standard 3 sitting in a socket at the point of intersection of the arms 5 as seen in Fig. 1. This permits the entire upper portion of the apparatus to be hung from a support above the street level, in order that the actuation of the signals may be accomplished from a distance. For this purpose there is also provided in the upper portion of the canopy and preferably under the flanged portion of the member 22, openings 27. Under each signal member and preferably in alinement therewith, there is arranged on the inner surface of the drum, a pulley 28. Passing over the pulley there is a signal actuating member 29 which may be a rope or wire, secured at one end to the signal, passing through openings 27 and over another pulley 30 which may be suitably secured on the surface of the canopy.

When used in this manner, the cable 29 may be carried to any suitable location and connected directly to the ends of actuating levers 18, which together with the lower portion of the standard may be utilized for this purpose.

A spring or the like 31 may also be utilized as an additional means for normally retaining the signal in lowered or shut position especially when used in connection with a cable or the like as an overhead signal.

The operation of the device will be apparent. It is merely necessary to press down upon any of the handles arranged around the radial support 16 whereupon the signal members connected therewith pass out through the openings or slots in the drum and point out definitely the direction in which it is determined the traffic shall take. The arrangement of several of these members around the drum in such a manner that they may be utilized to direct traffic on streets which come together at an acute angle is an advantageous feature of this structure. To traffic approaching the signal in the direction right angles to the signal as shown in Fig. 1 it will be apparent the traffic is open in the opposite direction. In other words the signal always points out positively the direction of open traffic.

This simplifies considerably the operation of devices of this kind and while I have disclosed my invention in the embodiment herein presented, it will be understood that I do not wish to limit myself to the precise form of this construction as many changes may be made without departing from the spirit of the invention or sacrificing the chief advantages.

What I claim is:—

1. A traffic signal comprising a base member; a standard mounted thereon; supporting members mounted on said standard; a drum carried by said supporting members; bracket members secured to said drum; a signal device disposed on each of said brackets; and means for operating said signal.

2. A traffic signal comprising a base member; a standard mounted thereon; a plurality of supporting members mounted on said standard; a drum carried by said supporting members; bracket members secured to said drum; signals disposed on said bracket members; means for actuating said signals; and means for returning said signals to their initial position.

3. A traffic signal comprising a base member; a standard mounted thereon; a plurality of supporting members mounted on said standard; a drum carried by said supporting members; bracket members secured to said drum; signal devices carried by said bracket; a secondary support mounted on said standard; arms pivotally mounted thereon; and members connecting said arms and said signals.

4. A traffic signal comprising a base member; a standard mounted thereon; a plurality of supporting members mounted on said standard; a ring member carried by said arm; a drum provided with a plurality of slots disposed on said ring member; a bracket member secured to said drum in alinement with each slot; a signal member carried by each bracket and adapted to pass through each slot; a secondary supporting member; upstanding lugs disposed thereon; arms pivotally mounted intermediate their ends in said lugs; and means connecting said arms and said signal.

5. A traffic signal comprising a base member; a standard secured thereon; a plural-

ity of supporting arms mounted on said standard; a ring secured thereto; a drum member carried by said ring; said drum being also provided with a plurality of openings therein; a plurality of bracket members having an angulated portion secured to said ring; and an extended portion in approximate alinement with each slot; a signal member mounted intermediate its ends on each of said bracket members; a counterweight disposed on one end of each signal; a secondary supporting member disposed on said standard; a plurality of signal actuating arms pivotally mounted thereon; members connecting said arms and said signal; and a cover instrumentality disposed on said arms on the upper end of said standard.

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Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."