

Dec. 29, 1925.

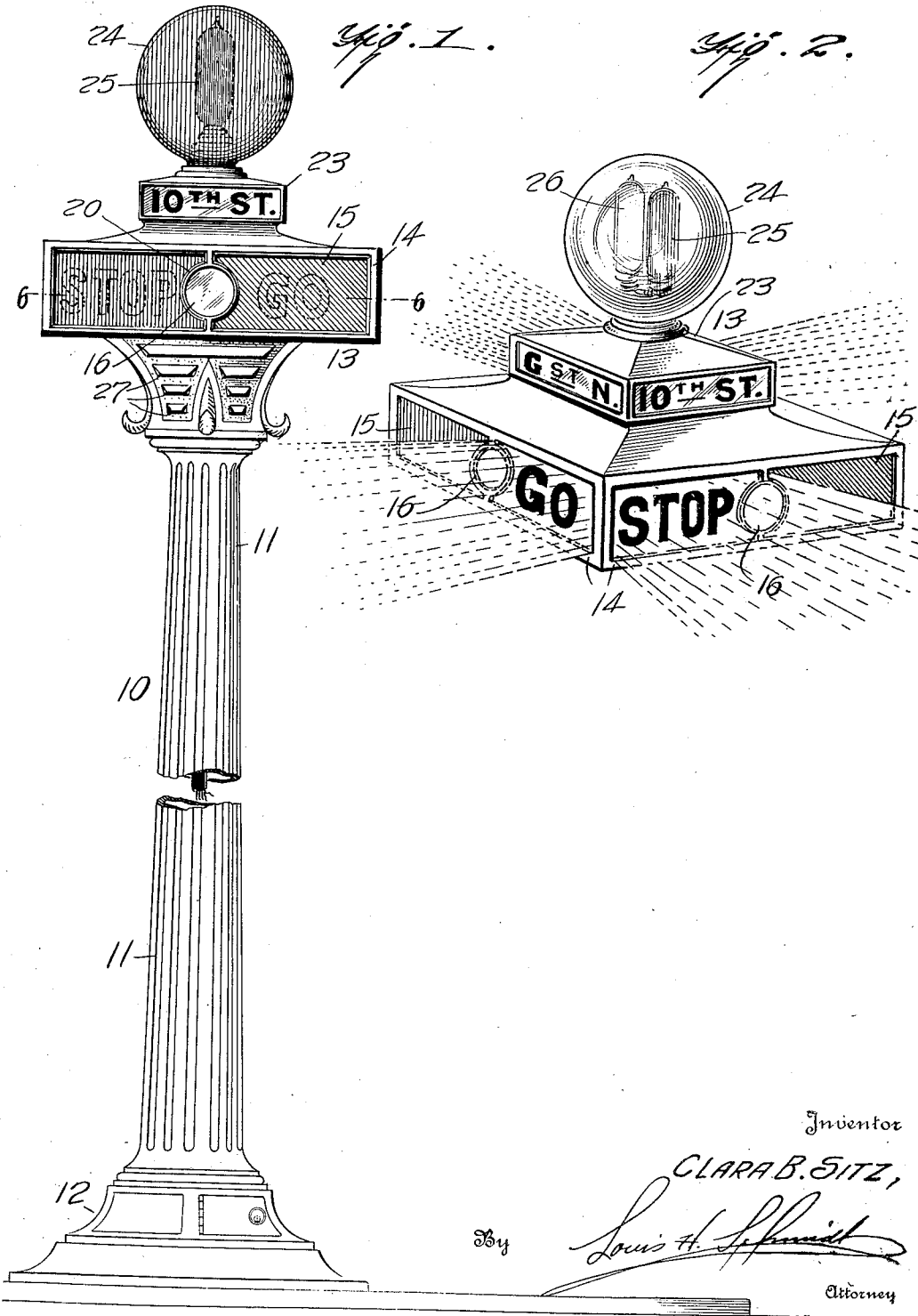
1,567,871

C. B. SITZ

TRAFFIC SIGNALING SYSTEM

Filed Jan. 23, 1923

2 Sheets-Sheet 1



Inventor

CLARA B. SITZ,

Louis H. Schmidt

By

Attorney

Dec. 29, 1925.

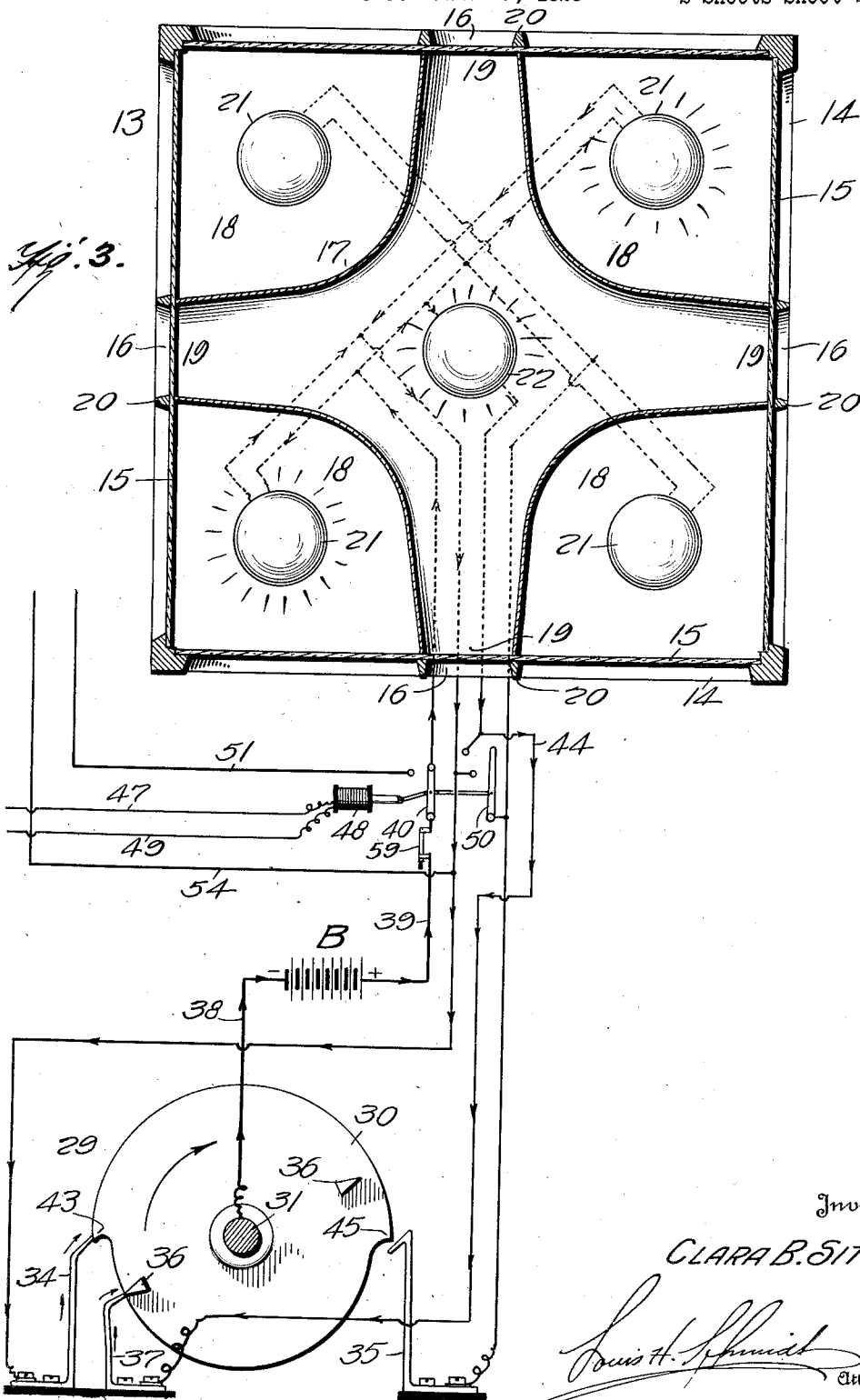
1,567,871

C. B. SITZ

TRAFFIC SIGNALING SYSTEM

Filed Jan. 23, 1923

2 Sheets-Sheet 2



Inventor

CLARA B. SITZ,

Louis H. Schmidt
Attorney

Patented Dec. 29, 1925.

1,567,871

UNITED STATES PATENT OFFICE.

CLARA B. SITZ, OF WASHINGTON, DISTRICT OF COLUMBIA.

TRAFFIC-SIGNALING SYSTEM.

Application filed January 23, 1923. Serial No. 614,457.

To all whom it may concern:

Be it known that I, CLARA B. SITZ, residing at Washington, in the District of Columbia, a citizen of the United States, have invented certain new and useful Improvements in Traffic-Signaling Systems, of which the following is a specification.

A great deal of concern is given and anxiety felt, especially by city officials on account of the ever increasing number of accidents or fatalities primarily caused by the augmentative number of automobiles on the city streets, and more particularly in the congested sections or rather street intersections. In the congested streets of cities, traffic officers are generally required at each intersection over a considerable area, and as it is apparently physically impossible for each officer to give the signal for the traffic to move in the proper direction at the same time at the several intersecting streets, confusion oftentimes results. When an alarm of fire is turned in, necessitating the fire apparatus to travel through the congested traffic, a great deal of difficulty is experienced by not only the firemen, but by the traffic officers and automobile drivers in clearing the streets sufficiently for their passage. The speed attained by the modern fire apparatus is such as to ordinarily cause a great deal of confusion among automobilists and pedestrians in an effort to seek a place of safety. Due to the city noises, the warnings of the approaching fire apparatus, by the time it is distinctive to traffic and pedestrians, renders their safe movements very difficult.

In an effort to overcome these and other objections, I have provided a system for automatically regulating movements of traffic for use at street crossings, whereby any number of crossings or intersections are automatically operated from a central station. As is hereinafter more fully described, each unit or signaling tower, which is preferably located in the center of intersecting streets, is provided with means that will permit one pair of signals to allow the traffic to move in one of the streets, while the other pair simultaneously indicates the traffic to stop in the cross street. By arranging the signaling towers so that each intersection will be alternately set, it will necessitate traffic to maintain a predetermined or safe speed between the intersecting streets, for it is between the inter-

secting streets that the greatest danger to pedestrians lies. With this arrangement, were the motorist to speed up between crossings, he would necessarily have to wait at the next intersection until that signal indicated a clear passage.

A further object of my invention is to provide a third signal which will indicate, especially to pedestrians, that a change for the direction of traffic is about to appear, which will give the pedestrian sufficient time to cross in safety.

The contemplated route of fire apparatus when traversing congested traffic may be very conveniently and predeterminedly set by the fire department so that ample and timely warning may be given, which will enable traffic to clear the way. This, I propose to accomplish by aural and visible means.

It is to be understood that I do not limit myself merely to the details of construction as shown, but that the scope of my invention extends to whatever construction may be defined by or included within the terms or language of the appended claims.

In the drawings

Figure 1, is a side elevation of my signaling tower,

Figure 2, is a view in perspective of the upper portion thereof,

Figure 3, is an enlarged horizontal section on the line 3-3 of Figure 1, showing more clearly the interior arrangement of the illuminating head together with a partial wiring diagram illustrating another action of my apparatus.

My invention, in the form or embodiment shown in the drawings and briefly described, comprises a plurality of signaling posts 10, which are preferably placed in the center of intersecting streets or highways, and a unitary or central operating or controlling station from which any number of the signaling devices 10 are automatically operated. The signaling devices may be arranged in groups or zones where-by a central operating station would, of course, be required for each respective zone.

The signaling devices 10 comprise a tubular column 11, of any desired form or configuration, a base 12, and a head portion 13.

Referring to the embodiment shown in Figures 1 to 3, the head portion 13 is substantially square in cross section and com-

prises rectangular frames 14, for the reception of colored glasses or panels 15, which form the lighting chamber. On the inner sides of each panel is painted or otherwise formed certain well known indicia for regulating traffic such as "Stop" and "Go". I prefer to have this lettering placed on the inner sides of the glasses or panels so that it will be visible only when that particular signal is given, during which period the opposite signal would, of course, be invisible. The glass in the central portion of each panel, as indicated at 16, is preferably left white, or it may be colored yellow, for reasons which will hereinafter be explained.

Within the head 12, I provide a substantially cross-shaped tubular member 17, preferably constructed of sheet metal for the purpose of forming partitions whereby the head is formed into five separate lighting compartments. The central lighting compartment 18, comprising the interior of the cross-shaped member 17, extends to the central portions of each one of the panels 15, and terminates in substantially circular ends 19. I preferably form the central portion of the panel 14 immediately in front of and aligning with the end portions 19, with a circular frame or rim 20. This not only strengthens the frame but gives it a much neater appearance. Thus, it will be seen, each panel is provided with three shades or colors, such as "red" and "green" for the "Stop" and "Go" signals and the central or circular signal may be "yellow", or left white or clear, as desired.

By arranging the lamps or lights in the novel form, as is illustrated in Figure 3, but five lamps may be utilized to carry out all of the desired signaling. A lamp 21, is placed in each corner of the lighting chamber 13, and due to the alternating arrangement of the colored panels, each of the opposite signals, such as red and green, are displayed at the same time, these, of course, being arranged at an angle of 90°, or indicating a signal for traffic for both intersecting streets. At each opposite diagonal corner the same signal, of course, is indicated at the same time, which may be clearly seen from the wiring diagram.

A lamp 22, is located within the center of the lighting chamber, which, also, is the center of the cross-shaped member 17, and furnishes light for the centrally located signals 16, on each side of the head portion 13.

Although I show the head portion 13, as integrally formed, it is, of course, to be understood that it may be built up of sheet metal or assembled in various ways. To render the signals more plainly visible, the glass may be ribbed or roughened, as desired, and reflectors (not shown) may be utilized.

Immediately above the head portion 13,

I provide a substantially square head portion 23, of a greatly reduced diameter than the head 13, for the purpose of indicating the names of the streets or thoroughfares. This may be painted or otherwise marked on glass, and held in suitable panels so that it may be illuminated, to be made more clearly visible when desired.

At the upper end of the reduced head portion 23, I provide suitable means for supporting and mounting an enlarged globe 24, which is preferably formed of white frosted glass. Within the globe 24, I suitably mount a red light or bulb 25, and a clear light 26.

Below the head portion 13, I provide a compartment with openings 27, through its outer sides in the form of a ventilator or louver, for the purpose of housing a suitable audible signal device 28. The openings 27 are, of course, of sufficient size to render the audible signal device 28 clearly and distinctly heard above the city noises which will enable traffic to seek shelter, as in the case of an alarm of fire, or for the clear passage of ambulances.

As is illustrated in the several views of the accompanying drawings, the lead wire 38, is grounded to the switch operating device 29, and passes to the negative side of the battery B, the positive lead wire 39 having connection with and feeding the several electrical devices.

For ordinary traffic signaling purposes my improved system operates, by the electrical energy passing through the lead wire 39, the pivoted switch member 40, and the wire 41, through one of the diametrically opposite pairs of lamps 21, returning through the wire 42, connected with the contacting member 34, from which it is conducted through the negative terminal of the battery B by means of the disc 30.

When an alarm of fire is turned in and the passage or route of the apparatus has been ascertained, it may be found desirable to clear certain intersections of heavy traffic, whereupon a switch or key 46, which is provided for each intersection, is thrown into contact.

Referring now to Figure 3, the current from the local battery *b* passes through the wire 47, to the solenoid 48, thence returning to the battery by means of the wire 49. When the solenoid 48 has been energized the pivoted switch blades 40 and 50, are thrown, which now permits the current from the battery B to pass through the switch 40, and be conducted along the wires 51 and 52, returning through the wires 53 and 54, thence to the battery B by means of the wire 42.

I claim:

1. In a traffic signal, a casing having a plurality of sides, a plurality of compart-

ments, one at each corner of the casing, each including a portion of two of said sides and containing "Stop" indicia on one of said sides and "Go" indicia on the other of said sides and a lamp for rendering said indicia visible.

2. A traffic signal comprising a casing having four sides, a plurality of compartments one at each corner of the casing, each including a portion of two of said sides and containing stop indicia on one of said sides and go indicia on the adjacent side, and

means for rendering said indicia visible, and a central cross-shaped compartment terminating in openings on each side of the compartment and arranged between adjacent pairs of said first named compartments and containing traffic-change indicia in each of said openings and means for rendering said indicia visible.

In testimony whereof I hereunto affix my signature.

CLARA B. SITZ.