Nov. 10, 1931. J. M. DAPRON 1,830,784

PORTABLE TRAFFIC SIGNAL

Filed Jan. 26, 1931 2 Sheets-Sheet 1

Fig. 1.

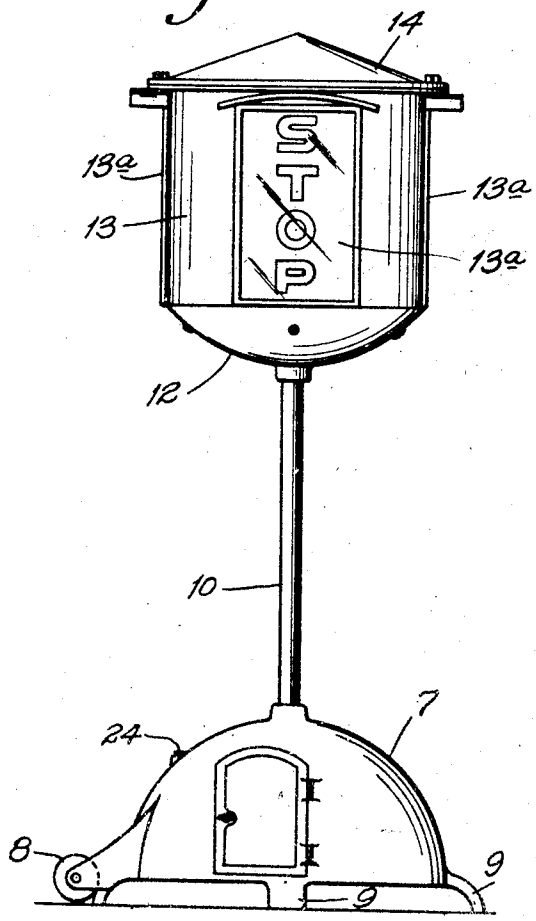


Fig. 2.

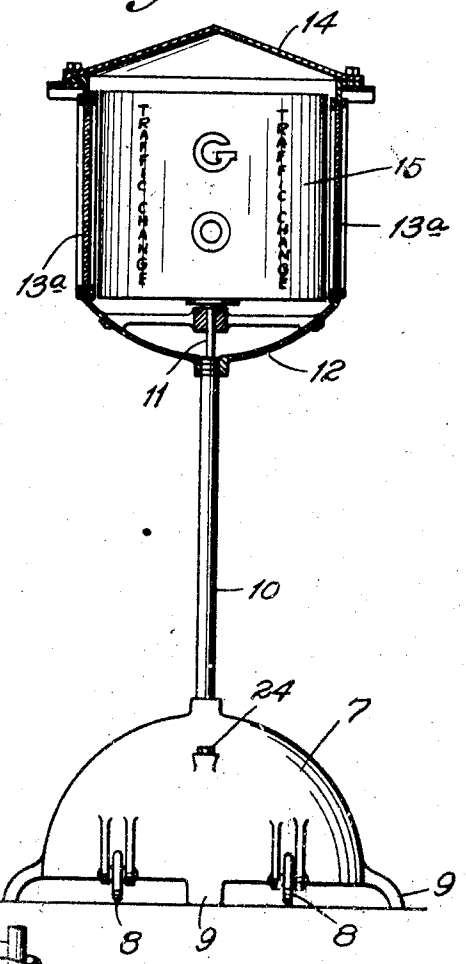
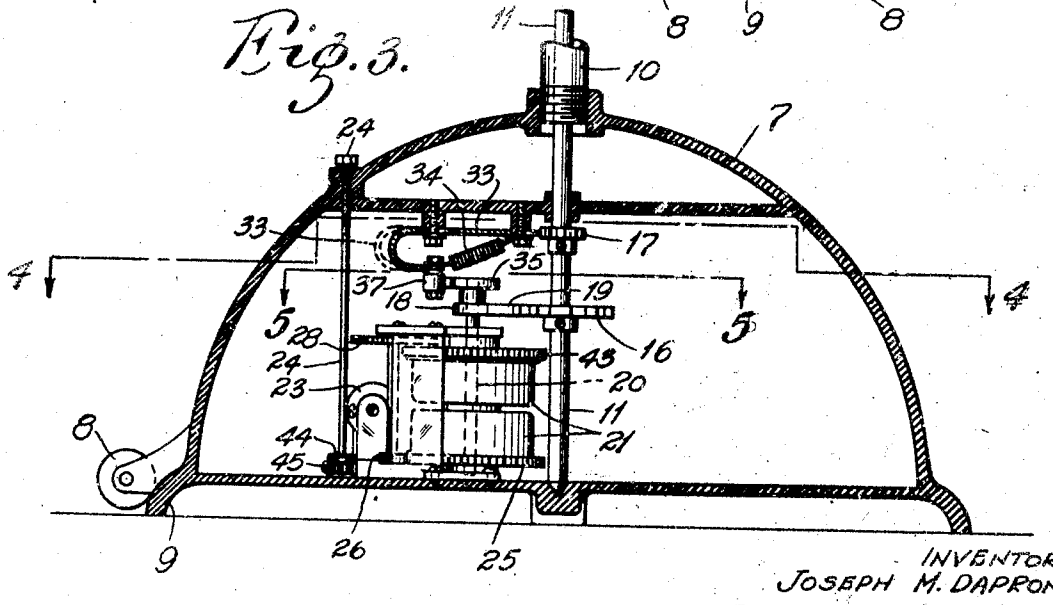


Fig. 3.



INVENTOR.
JOSEPH M. DAPRON.

By James L. Hopkins
ATTORNEY.

Nov. 10, 1931. J. M. DAPRON 1,830,784

PORTABLE TRAFFIC SIGNAL

Filed Jan. 26, 1931 2 Sheets-Sheet 2

Fig. 4.

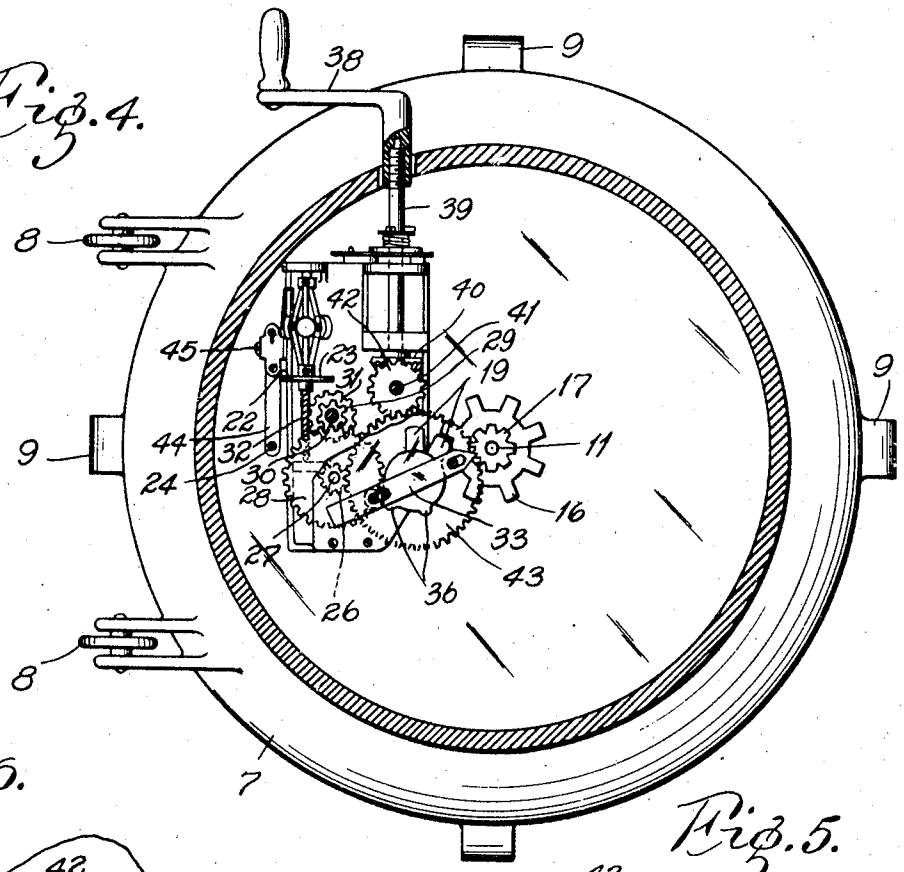


Fig. 6.

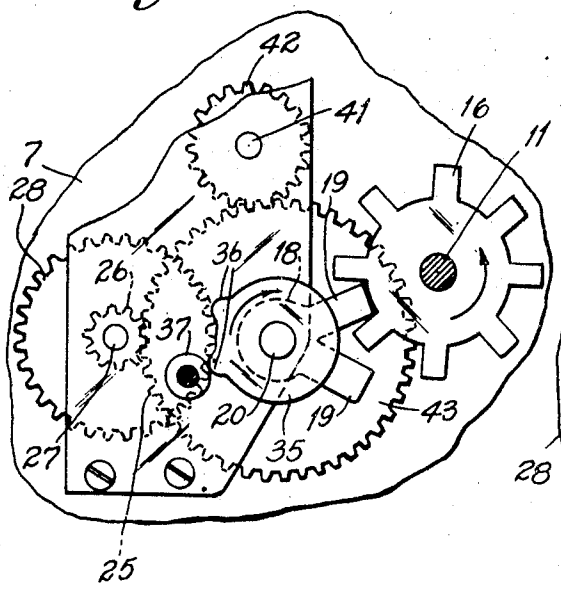
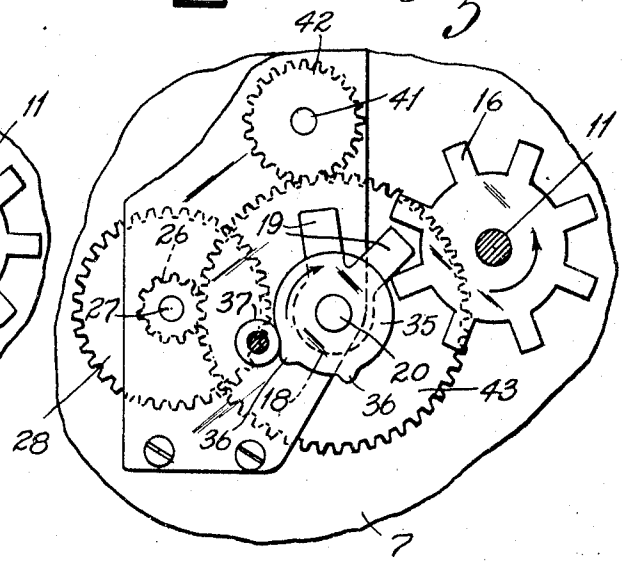


Fig. 5.



INVENTOR:
JOSEPH M. DAPRON
By James L. Hopkins.
ATTORNEY.

Patented Nov. 10, 1931

1,830,784

UNITED STATES PATENT OFFICE

JOSEPH M. DAPRON, OF ST. LOUIS, MISSOURI

PORTABLE TRAFFIC SIGNAL

Application filed January 26, 1931. Serial No. 511,193.

My invention relates to an improvement in traffic signals and has for its object to provide a portable street or highway signal, having a self-contained motor for energizing the stop-and-go or like sign, and particularly adapted for temporary emplacement and operation in the vicinity of hospitals, schools, or auditoriums during selected hours of the day or days of the week, and so designed as to weight and bulk as to be readily emplaced when desired or handily removed for storage and the like when not in use.

The contained sign may be illuminated or non-illuminated, according to the requirements of the location where it is to be used.

To the end of employing the signal where electric power for its operation is not available, I have illustrated a clock-work motor especially adapted to the purposes of my signal.

Other incidents of my invention will appear in the course of the following description.

In the drawings—

Fig. 1 is a front elevation of a device embodying my invention with the "stop" sign displayed.

Fig. 2 is an end view of the same device with the "go" sign displayed.

Fig. 3 is a transverse sectional view of the signal supporting base, illustrating its contained spring motor.

Fig. 4 is a transverse sectional view taken on the line 4—4 of Fig. 3.

Fig. 5 is an enlarged view of the motor-driven gear actuating the signal, on line 5—5 of Fig. 3.

Fig. 6 is the same view as Fig. 5 with the gear in moved position.

Description

In the embodiment of my invention illustrated in the drawings, I have shown a semi-globular base 7 made portable by means of castors 8 and claw-legs 9. Surmounting the base 7, I provide the tubular sleeve 10 within which the shaft 11 is rotatably mounted; the sleeve 10 being surmounted by the dished cap 12, surmounted by the housing 13, which housing is provided with four windows 13*a*, above which the roof 14 is suitably secured. Upon the shaft 11 is mounted the rotatable sign 15 bearing the stop-and-go or other suitable traffic signals, which may be illuminated when desired by any suitable means, not shown. Within the base 7, the shaft 11 is provided with the driven gear 16, and the locking gear 17. Gear 16 is driven intermittently by disc 18, having bifurcated extensions 19—19. Said disc is fast on motor shaft 20. The spring housing is indicated by 21. The speed of the motor is regulated by the brake 22 bearing on the governor disc 23. The brake 22 is regulated by the screw 24. The speed regulation is as follows:

Gear 25 on shaft 20 drives gear 26 on stud 27 which also carries gear 28. Gear 28 meshes with gear 29 on stud 30. Stud 30 also carries worm gear 31 which drives worm shaft 32 to which governor disc is made fast.

Shaft 11 is held stationary by plunger 33 and the coil spring 34. The shaft 20 also carries the disc 35 with protrusions 36 which unlock the plunger 33 at intervals by bearing against the roller 37 mounted on the under side of the plunger 33—this allows the shaft 11 to be turned 45 degrees by the extension 19. The spring motor is wound by turning the handle 38 actuating the shaft 39, the bevel gears 40 on shaft 39 and the stud 41, gear 42 also on stud 41, and the gear 43 on the shaft 20. The screw 24 moves the arm 44 vertically about its pivot 45. The arm 44 carries the brake 22.

Obviously, any desired motor may be employed which is sufficiently compact to be self contained within the signal apparatus, and if desired, may be located within the upper portion of the device and directly beneath or above the sign 14.

I have illustrated a spring motor and its detailed mechanism as the preferred embodiment of my invention in localities where electric current is not available and where use of a traffic signal is desired.

Various modifications of the device as above described may be effected without departure from my invention as defined by the appended claims.

I claim:—

1. A device of the class described comprising a semi-globular base; a vertical shaft extending from said base; a rotatable sign mounted upon said shaft; a spring motor mounted in said base and arranged to impart periodical impulses to said shaft by means of a mutilated gear, and a spring-actuated plunger arranged to lock said shaft against rotation.

2. A device of the class described comprising a traffic signal element and actuating means therefor including a hollow base, a spring motor contained in said base to actuate the signal element, and a locking means comprising a locking gear and a plunger cooperating therewith, arranged to hold the signal at display temporarily.

In testimony whereof I have hereunto affixed my signature.

JOSEPH M. DAPRON.