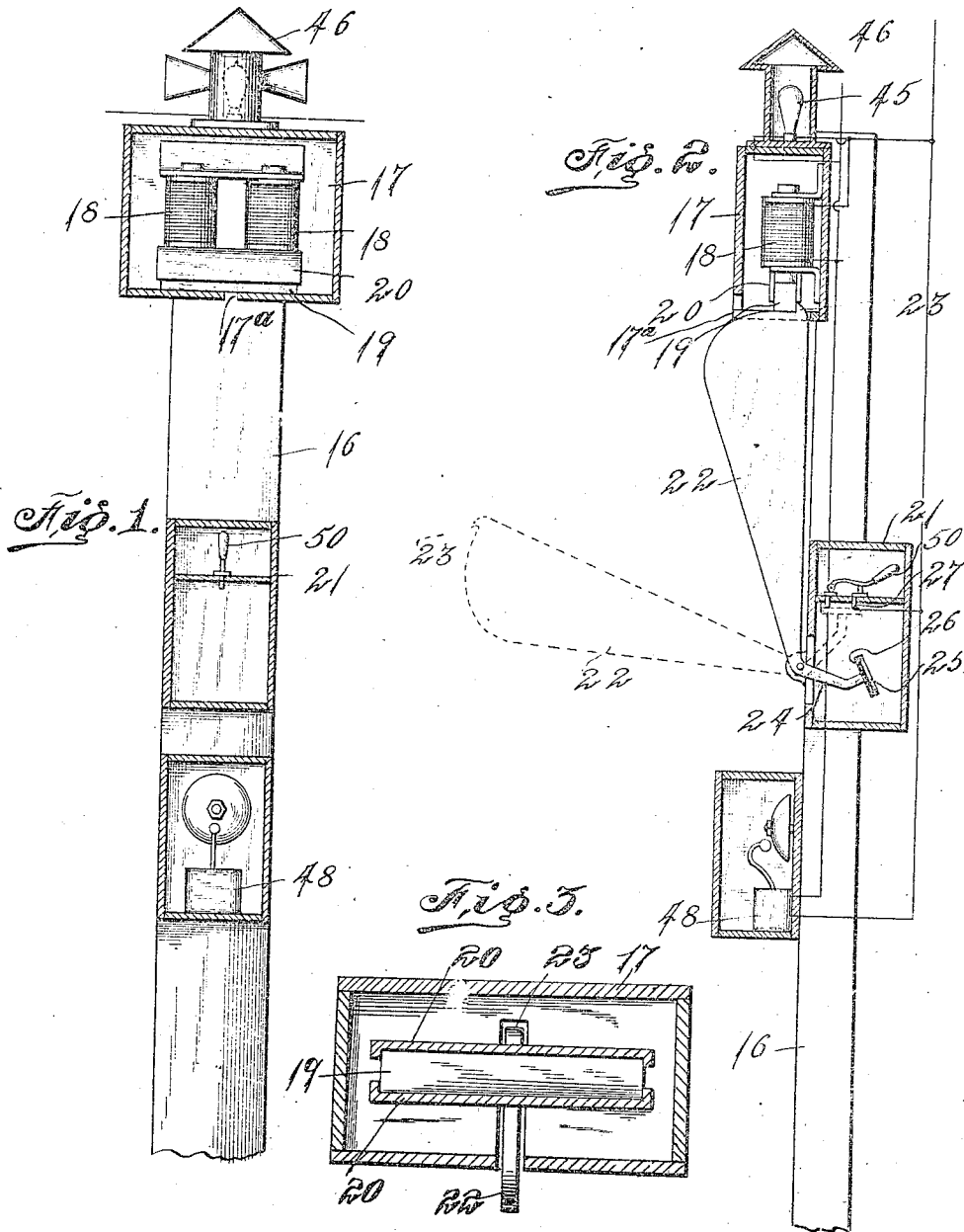


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 DESPATCHER'S TRAIN CONTROLLING DEVICE.  
 APPLICATION FILED JUNE 25, 1909.

1,055,530.

Patented Mar. 11, 1913.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JULIAN HENRI, OF SALIDA, COLORADO.

DESPATCHER'S TRAIN-CONTROLLING DEVICE.

1,055,530.

Specification of Letters Patent.

Patented Mar. 11, 1913.

Application filed June 25, 1909. Serial No. 504,344.

*To all whom it may concern:*

Be it known that I, JULIAN HENRI, a citizen of the United States, residing at Salida, in the county of Chaffee, State of Colorado, have invented certain new and useful Improvements in Dispatchers' Train-Controlling Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to signals for use on railroads, and has special reference to a signaling system to be used by train dispatchers to control trains passing over a track.

The principal object of the invention is to provide means whereby the train dispatcher may release a semaphore arm to permit it to fall to a position indicating that the train is to stop.

Another object of the invention is to provide a means for releasing the semaphore arm which consists of a minimum number of parts, is therefore simple in construction, and is cheap to manufacture.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction within the scope of the claims may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing: Figure 1 is a front elevation of one of the signal posts, the view being partly in section, Fig. 2 is a side elevation of the same, parts thereof being shown in section, and Fig. 3 is an enlarged detail of the semaphore lock.

Like reference numerals designate corresponding parts in all the figures of the drawing.

The sig. 1 is preferably mounted on a pole 16. Upon this pole is mounted a casing 17 wherein is held a pair of magnets 18 arranged to actuate an armature 19, which is held to slide between guides 20 mounted on the sides of the casing 17. Formed in the bottom of the casing is a centrally disposed transverse slot 17<sup>a</sup>. The armature 19 is in the form of a rectangular bar, and is so located in the casing that it extends in a direction substantially parallel to the railroad.

Below the casing 17 is a sectional casing 21, and mounted on the pole adjacent this casing is a semaphore 22, the blade of which is provided with an extension 23. This semaphore is so arranged that when raised the extension 23 lies behind the armature 19. The blade 22 is further provided with an arm 24 whereon is mounted a bar 25 of suitable conducting material, such as brass or copper, and this bar is insulated from the extension by suitable insulation 26 of vulcanite or hard rubber. Within the casing 21 are connected contacts 27, which are spaced apart and which lie in such position that when the semaphore arm 22 assumes the "stop" position or the position indicating that the train is not to pass, the bar 25 will lie across the contacts 27.

In operation, the semaphore arm is normally disposed in the position shown in full lines in Fig. 2. In this position, the upper end of the semaphore is disposed within the transverse slot 17<sup>a</sup> of the casing 17 and the armature 19 is disposed in advance of the extension 23 of said blade, and serves to lock said arm against downward movement. When it is desired to lower the arm 22, the electro-magnet 18 is energized from any suitable source of electrical energy, and as a result, the armature 19 will be elevated between the guides 20 to a distance sufficient to permit of the extension 23 sliding thereunder, the weight of the arm 22 being sufficient to cause said arm to assume its lowered position, as shown in dotted lines in Fig. 2. When the arm is in its lowered position, the circuit (not shown) will be closed between the contact 25 and the contacts 27.

Having thus described the invention, what is claimed as new, is:—

1. A signal system including in combination, a casing, an electro-magnet disposed within the casing, an armature loosely mounted upon the casing below the magnet, guides for the armature carried by the magnet, a support disposed below the casing, a semaphore arm pivoted to the support, a stop projecting from the arm for engagement behind the armature when said arm is up, and controlling means for said magnet.

2. A signal system including in combination, a casing including a bottom having a centrally disposed transverse slot formed therein, an electro-magnet disposed within

the casing above the slot, longitudinally disposed spaced guides depending from the magnet and disposed above and in spaced relation to the bottom of the casing, an armature loosely mounted upon the bottom of the casing below the magnet and between the guides and extending on either side of the slot of said casing, a semaphore arm pivoted to the support and adapted when up to have its outer end disposed within the slot of the

casing, a stop projecting from the arm for engagement behind the armature when said arm is up, and controlling means for said magnet.

In testimony whereof, I affix my signature, in presence of two witnesses.

JULIAN HENRI.

Witnesses:

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