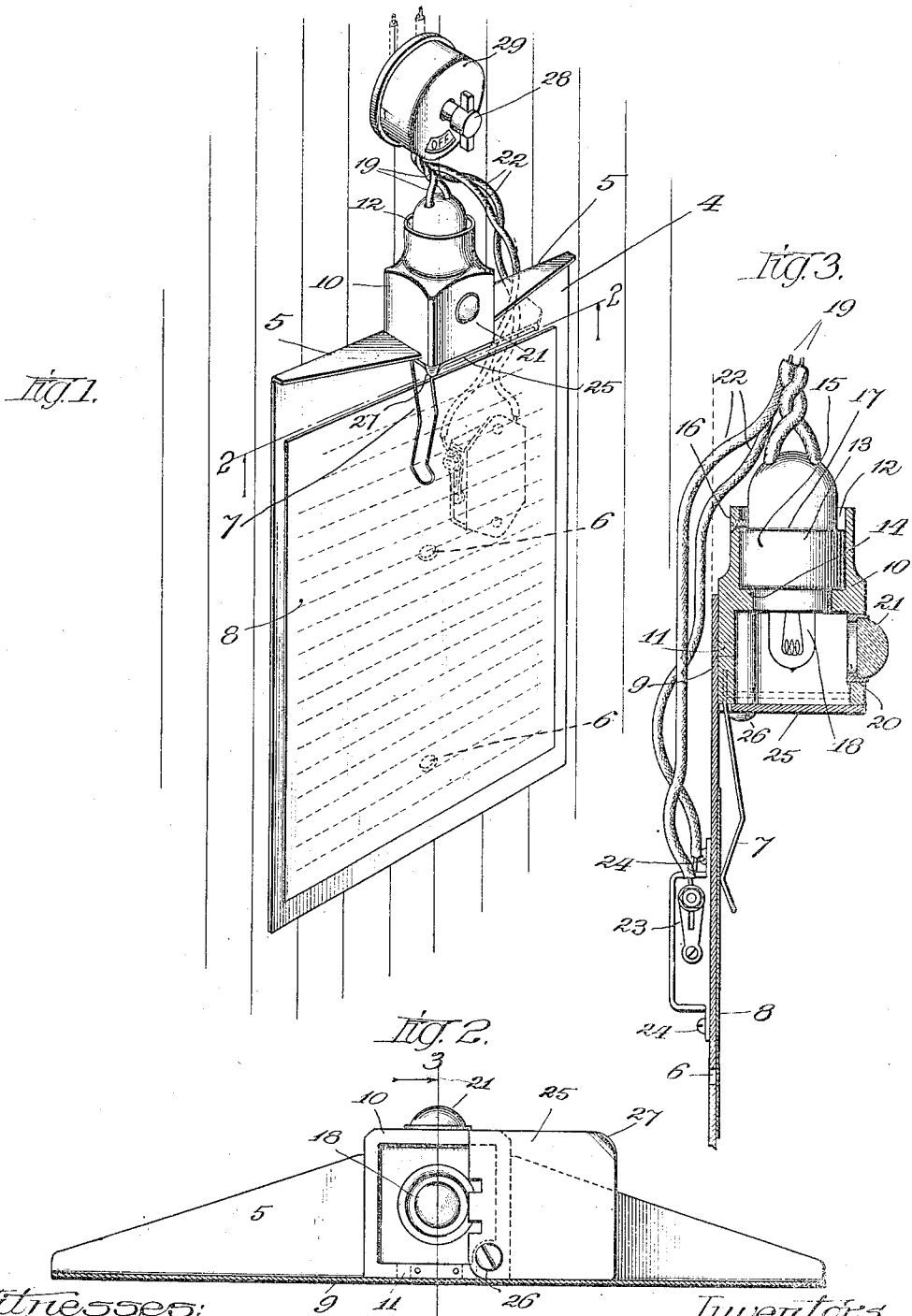


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SAFETY TRAIN ORDER HOLDER.
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UNITED STATES PATENT OFFICE.

BYRON E. MERWIN AND EDWARD P. DOYLE, OF WHEATON, ILLINOIS.

SAFETY TRAIN-ORDER HOLDER.

1,049,337.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, BYRON E. MERWIN and EDWARD P. DOYLE, citizens of the United States, residing at Wheaton, in the county of Dupage and State of Illinois, have invented new and useful Improvements in Safety Train-Order Holders, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

Our invention comprises certain new and useful improvements in safety train order holders, and has for its object the production of a device by means of which the orders received by an engineer or motorman on an electric car may be kept constantly before him and in such condition that the said engineer or motorman may at all times be reminded of the fact that there are unexecuted orders before him.

A further object is the production of a device in which the electric current is utilized to illuminate the order and at the same time give a visual signal to the operator that there is an order to be executed.

A further object is the production of a device in which the operator is kept advised by visual and audible signals that an unexecuted train order is before him.

A further object is the production of a simple and efficient device that can be placed within the cab or car, that will utilize little space, that is of simple construction, and not liable to get out of order.

These, and such other objects as may hereinafter appear, are attained by our device, an embodiment of which is illustrated in the accompanying drawing, in which—

Figure 1 represents a perspective view of our device in position within a cab or car; Fig. 2 represents a sectional view on the line 2—2 of Fig. 1, looking in the direction indicated by the arrows; and Fig. 3 represents a sectional view on the line 3—3 of Fig. 2, looking in the direction indicated by the arrows.

Like numerals of reference indicate like parts in the several figures of the drawing.

Referring now to the drawing, 4 represents a plate or holder, preferably of sheet metal, turned inwardly at the top forming a flange 5. The device is secured in place against the walls of the cab or car by means of screws or fasteners passing through openings 6 in the body of the plate or in any

other desired manner. A wire clip 7 is secured at the top and designed to hold the order or orders 8 flat against the face of the plate 4. At the center of the flange or shoulder 5, a portion 9 is cut away and extended upwardly in line with the body of the plate, and to this is secured a hollow light containing casing 10, preferably by means of screws 11 passing through the upwardly projecting ear 9 into the wall of the casing. The casing 10 may be a brass casing or otherwise constructed and is of any desired shape but is provided with a circular opening 12, within which is fitted an incandescent lamp socket 13 preferably of porcelain, and of any standard construction. On the interior of the casing is preferably provided an annular flange 14, and the porcelain socket 13 has an enlarged peripheral portion 15 adapted to rest upon the shoulder formed by the top of the flange 14. A screw or pin 16 extends through the top of the casing and strikes the top shoulder 17 of the enlarged portion 15, thereby securing the socket within the casing.

A lamp 18 preferably of about two candle-power is screwed into the base of the socket, and conducting wires 19 connect the lamp in circuit. An opening 20 is formed in the outer face of the lower portion of the casing opposite the lamp 18; and a lens 21 is fitted therein, formed preferably from red glass. Wires 22 extending from the connecting wires 19 connect a small buzzer or annunciator 23 in shunt with the lamp 18. This is preferably placed at the back of the plate and secured thereon in any well known manner, as by screws 24. A cover plate 25 is pivotally mounted on the base of the casing by means of a pivot 26 and one corner of this plate is preferably turned downwardly, as shown at 27 to permit the operator to engage and swing the plate about the pivot 26, thus preventing the light from the lamp 18 from shining through the bottom of the casing in the event that the operator does not require the same. The current, by means of which the lamp and buzzer are actuated, is controlled by an ordinary snap switch 28, located in any convenient position with reference to the device and covered by an ordinary cover 29.

Referring now to the operation of our device, let us suppose the device is permanently installed within the cab of a motor-man or engineer. A train order is handed

to the operator and is at once placed on the holding plate 4 and held thereon by means of the spring clip 7. At the same time the switch is turned, throwing the current on and lighting the lamp 18. By throwing the shield 25 to one side, the light shines down on the order, making it a very simple matter to read the same. Not only is the light directed downwardly by the casing, but the flange 5 serves as a reflector for this purpose. While the lamp 18 is small enough and the direction of its rays sufficiently confined not to light up the cab as a whole, it ordinarily being desired to keep the cab dark, there is sufficient light thrown upon the order to enable it to be readily read by the motorman. At the same time, the red light shines through the lens 21, and while not strong enough to light up the cab or to irritate the eyes of the motorman, it serves as a reminder of the presence of the order. If, for any reason, the operator does not care to read the order at once, or if from the circumstances of the case the same is not to be executed for some time and it is desired to shut out all extra light within the cab or car, the shield 25 is turned into position, as shown in Fig. 1, shutting off entirely the light from the bottom of the casing, leaving the order in darkness. At the same time, however, the light shines through the red lens 21. As this, however, is very small and preferably of thick glass, the light therefrom is very slight, serving simply as an indication to the operator that there is an unexecuted order on the holder. As the time approaches for the carrying of the order into effect, or any portion of it, the operator simply has to place his thumb or finger on the corner of the shield 25 and throw it to one side, thereby permitting the light to shine fully on the order and permitting him to read the same. When the order is fully executed, the current is shut off by means of the switch 28, thus extinguishing the lamp, and the order may be removed and filed in its proper place. The fact that there is no red light indicates to the operator the absence of any orders on the holder.

In connection with the lamp we may, as above described, provide the small buzzer that operates while the current is on. This buzzer or annunciator may be of any desired character so that the intensity of sound may be regulated to suit the wishes

of the operator. Ordinarily, it should produce only a low buzzing sound. In any event, if it be used, an audible sound of some kind is kept up during the entire time that the current is on and an unexecuted order remains on the order holder.

We have thus provided a simple and efficient means whereby the operator is furnished with a visual and, if desired, an audible and visual reminder of the fact that he has orders to execute, and such reminder is always before him until such order is fully executed.

While we have shown certain methods of mechanical and electrical construction, it is to be understood that we do not limit ourselves to such process and construction, but any equivalent means by which an operator within the cab or car is kept advised of an unexecuted train order comes within the scope of our invention.

We claim:

In a train order holder, the combination with a supporting plate constructed to be conveniently attached to a wall or other support and affording a supporting back for a train order sheet, of a spring clamp on said plate to clamp and hold the train order in position thereon and to permit the same to be readily removed from said plate or placed thereon, an electric lamp socket at the upper edge of said plate adapted to receive an electric lamp bulb and having a casing surrounding the bulb, the lower end of said casing having an opening therein to permit the light to shine directly upon the face of said board to illuminate the train order and permit it to be readily seen, a shutter for said opening to enable the light to be shut off from the face of said board when desired and without turning out the light, a second opening in the front of said casing, a colored glass or equivalent filling for said opening to cause the light shining therefrom to give a distinctive visual signal to advise the operator of the presence of an order on the said board.

In witness whereof, we have hereunto subscribed our names in the presence of two witnesses.

BYRON E. MERWIN.
EDWARD P. DOYLE.

Witnesses:

W. C. RITTER,
L. L. HUNTOON.