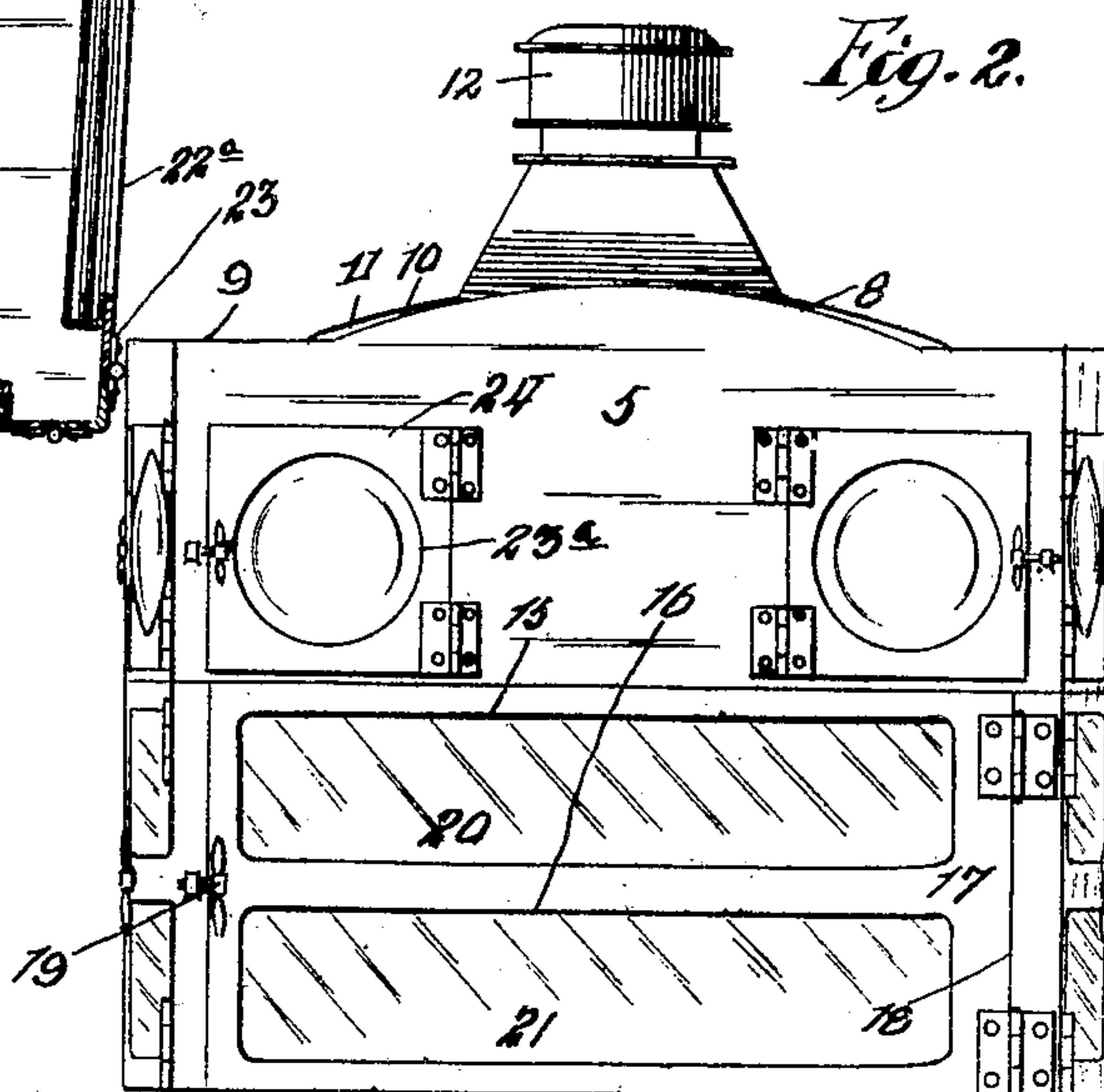


APPLICATION FILED SEPT. 14, 1908.

Patented June 15, 1909.



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UNITED STATES PATENT OFFICE.

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TRAIN-INDICATOR.

No. 925,164.

Specification of Letters Patent.

Patented June 15, 1909.

Application filed September 14, 1908. Serial No. 452,892.

To all whom it may concern:

Be it known that I, FRED EHRETSMAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Train-Indicators, of which the following is a specification.

The present practice among numerous railroads is to locate the headlight on the front of the smoke arch door, leaving the space on top of the boiler and immediately in front of the smoke arch clear. The indicator of the present invention is intended to occupy a space which, under the older practice, was occupied by the headlight; and the object of the invention is to provide means whereby both the number of the engine and the classification of the train drawn thereby will be revealed by suitable designating figures or letters, so that those charged with the reporting of trains, as well as the crews of opposing trains on single track with meet orders, will be enabled to positively determine the identity of the trains so indicated. This indicating is of primary importance in the despatching of trains and in the general operation of trains, and it is highly important that the indicator should be so located as to prevent fouling of the glass by the accumulation of mud, snow or other foreign substances. Under the present practice, lanterns are sometimes employed on the sides of the engines to indicate the nature of the train, and also indicating signs are employed in the cupola of a caboose, but such means are unsatisfactory in that the lanterns are often extinguished and the indicating signs in the caboose are frequently difficult of observation.

The object of the present invention is to overcome the difficulties above noted by so constructing and locating the indicator that it will be visible both from the front and the side of the train.

Further objects will appear from a detailed description of the invention, which consists in the features of construction and combination of parts hereinafter described and claimed.

In the drawings, Figure 1 is an elevation of the front portion of a locomotive, showing the indicator in position; Fig. 2, a front elevation of the indicator; Fig. 3, a side elevation of the same; Fig. 4 a top or plan view, partly sectioned away to show the interior arrangement, and Fig. 5 a view of one of the indicating stencil plates, 3.

The indicator, as a whole, is in the form of a box, having a front wall 5, a rear wall 6, of a greater width than the front wall and side walls 7, which converge slightly toward the front to facilitate an inspection of the sides of the indicator. The box is provided with rounded top 8, having straight side edges 9 of forwardly converging formation and curved front and rear edges 10 and 11, respectively. The top of the roof is provided in its center with a ventilator 12, and the rear wall has secured thereto a concave reflector 13, which occupies a position immediately behind the center of the lamp flame, which point is indicated at 14. The front wall of the indicator is provided with upper and lower rectangular openings 15 and 16, respectively, which extend from side to side, across the lower half of the front of the indicator box. This portion of the indicator box is provided with a door 17, hinged at its edge 18, and provided at its opposite edge with a catch 19 of any suitable construction. The door is provided with upper and lower openings 20 and 21, which are slightly smaller than the openings in the wall of the indicator box, with which they register and the openings in the door are surrounded on the inner side by double grooves 22, which surround the door opening at top and bottom, and at the end adjacent to the hinge, the slots being opened at the swinging end of the door to permit the insertion of suitable stencil plates of the character shown in Fig. 5, which stencils are adapted to be slipped in endwise when the door is opened and thereafter held in place against withdrawal from the open end of the slot when the door is closed. The outer of the double grooves serves for the retention of a pane of glass which constitutes a window for protecting the light within the indicator box against being extinguished. The side walls of the indicator box are likewise provided with doors 22^a, which are hinged at their front ends 23, and are similar in all respects to the front door, and are adapted to receive stencil plates or other indicating devices in the same manner. The front of the indicator box, above the lower slots or holes, is provided with a pair of bull's eye openings 23^a, which are closed by means of hinged doors 24, which are provided with slots, or channels, the outer of which is adapted to receive a section of clear glass, and the inner of which is adapted to receive a section of colored glass for indicating or

signaling purposes. The side walls of the indicator box are provided with similar doors 25, for the same purpose.

In use, the number of the engine, as, for instance, 1048, will be displayed at the front and sides of the indicator box by inserting in the doors stencil plates having cut therein the number 1048. The classification of the train drawn by such engine, as, for example, the first section of regular train 64, will be indicated by stencils slipped into the upper openings of the front and side doors, and having cut therein "1st. 64." Other indications can be given by displaying different colors in the bull's eyes at the front and sides of the indicator box, so that the signals and lights can be varied to indicate trains of every possible description, whether regular or extra, work extra, and whether running in one or more sections. The location of the indicator box, on top of the smoke arch and forward of the smoke stack, is one which prevents the accumulation of frost and ice or snow on the glass, by reason of the warmth of the boiler and smoke stack, and the height of the indicator box above the track prevents fouling of the glass by mud or dirt, so that the indicator will always be in proper condition to display the designating marks or signals.

In order that the engineman and fireman may be able to readily ascertain if the lamp within the indicator box should be extinguished, glass covered peep holes 26 are provided in the rear wall of the box, near the up-

per side edges thereof and in a position easy of inspection from the engine cab.

The side doors are hinged near the front edge of the indicator box so that the engineman, approaching the indicator box from the cab, will be able to readily open the doors and insert the indicating stencil plates without difficulty.

The forwardly convergent formation of the side walls of the box exposes the side walls partially to view, even when standing directly in front of the indicator, and this formation of the box facilitates a reading of the indicating signs in cases where it is not possible to obtain an inspection of the box directly in front of the engine.

What I regard as new, and desire to secure by Letters Patent is:

An indicator for locomotives, comprising a box-like casing, the lower part of the front and side walls of said casing having elongated openings therein, doors adapted to register with said openings, the upper and lower portion of said doors having elongated openings therein, a double row of grooves surrounding said openings, plates having indicating characters stenciled thereon and adapted to be slipped into said grooves, and vari-colored signals carried by doors located in the upper portion of the front and side walls, substantially as described.

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Witnesses:

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