W. G. CHAUSSE.

DISTRIBUTER FOR VAPOR BURNERS.

APPLICATION FILED APR. 11, 1917.

1,298,891. Patented Apr. 1, 1919.

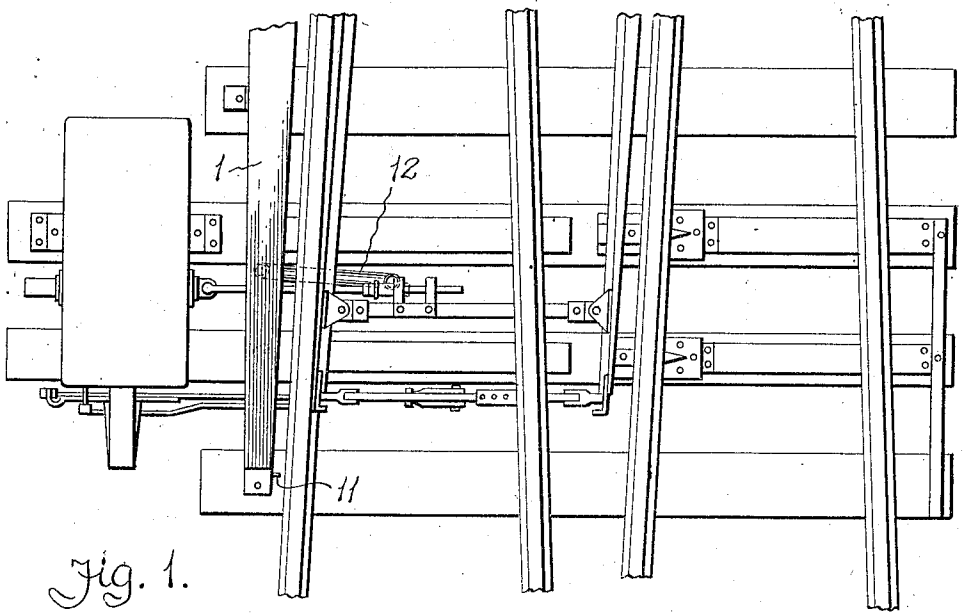


Fig. 1.

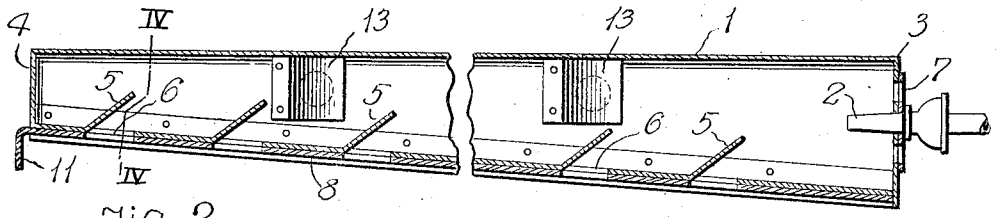


Fig. 2.

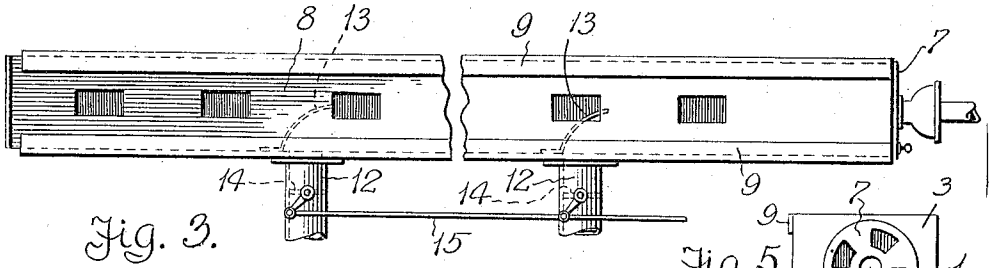


Fig. 3.

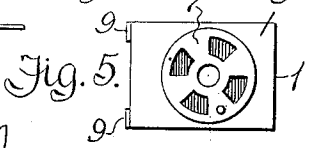


Fig. 5.

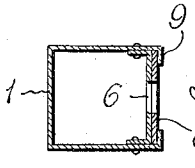


Fig. 4.

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DISTRIBUTER FOR VAPOR-BURNERS.

1,298,891. Specification of Letters Patent. Patented Apr. 1, 1919.

Application filed April 11, 1917. Serial No. 161,381.

To all whom it may concern:

Be it known that I, WILFRID G. CHAUSSE, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Distributers for Vapor-Burners, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates especially to a distributer for vapor burners whereby the heat of the same may be directed to the switch points interlocking operating members and like parts of railway tracks and the like.

The invention consists in the matters hereinafter set forth and more particularly pointed out in the appended claims.

In the drawings,

Figure 1 is a plan view of a portion of a track and switch provided with a distributing nozzle or device that embodies features of the invention;

Fig. 2 is a view in longitudinal section through the device;

Fig. 3 is a view in side elevation and in detail, showing a control for side nozzles;

Fig. 4 is a view in cross section of the distributer, taken on or about line IV—IV of Fig. 2; and Fig. 5 is a view in detail of an air regulating damper used in the distributer.

As herein indicated, a casing 1, formed of sheet metal or like suitable material, is arranged to receive the nozzle 2 of a vapor burner at the larger apertured end portion 3 of said casing and the other end portion 4 of said casing is permanently closed and is slightly smaller than the burner end so that the casing tapers longitudinally.

A series of deflectors 5 are inbent from discharge openings 6 in one side wall so as to divert the heated current of gases and air produced by the nozzle 2 laterally from the casing. The amount of heat and the quantity or quality thereof are regulated by a suitable damper 7 at the large end portion 3 of the casing, said damper being of a conventional form adapted to be adjusted to regulate the passage of air into the large end portion of the casing 1. The side openings 6 are controlled by a single slide plate 8 that is longitudinally reciprocable in suitable guides 9 formed on the casing and the outer end of the slide is bent outwardly to afford a handle 11. There may be one or more nozzles 12 that extend from the underside of the casing and are bent to pass under the rails of a track and between the ties thereof, as indicated in Fig. 1, to direct jets of heated air and gas toward those portions of the switch operating members which are liable to be clogged by ice or snow. These nozzles are provided on the interior of the casing with curved deflector plates 13 and are also arranged with valves 14 that may be of the butterfly type controlled by a link 15 to regulate the exhaust of air and gases therethrough as desired.

As a result of this construction the heat from the vapor burner, which latter may be of any preferred type, is directed and applied to those portions of the track which it is desired to keep clear from ice and snow and to so locally direct the heat that the desired results are obtained without attention on the part of the track or section gang which is usually obliged to keep switches clear by the use of pick and shovel, the device obviating any necessity of such method of keeping the moving parts in working order.

Obviously, changes in the details of construction may be made without departing from the spirit of my invention and I do not care to limit myself to any particular form or arrangement of parts.

What I claim is:—

1. In a railway switch heater, the combination of a vapor burner, a casing adapted to receive a burner nozzle at one end and closed at the other end, the casing being provided with regulatable openings along one wall, means in said casing for deflecting heated gases through the openings of the casing wall, and means for controlling the inlet of air at the burner nozzle end of said casing.

2. In a switch heater, the combination of a burner, a casing closed at the outer end and provided at the inner end with an air damper and an opening for said burner, the side wall of the casing having openings therethrough, a ported closure reciprocable on the casing for controlling the wall openings, and means for directing heated gases from the casing through the wall openings thereof.

3. In a railway switch heater, the combination of a vapor burner, a casing closed at the outer end and having its inner end

fitted over the nozzle of said burner said casing having the side wall thereof provided with openings, a closure movable on the casing for closing the openings in the side wall of said casing, deflectors in the casing for projecting heated gases from the openings in the side wall of the casing, and auxiliary heat deflecting means extending from another wall of the casing.

4. In a railway switch heater, the combination of a vapor burner, a casing closed at the outer end adapted to have its inner end fit over the nozzle of said burner, a closure movable on the casing for controlling openings at intervals in the side wall of said casing; deflectors in the casing for projecting heated gases from the burner through the side wall openings of said casing, auxiliary heat deflecting means extending from another wall of said casing, and means to control the flow of heat through said auxiliary heat deflecting means.

5. In a railway switch heater, the combination of a vapor burner, a tapered casing closed at the smaller end and adapted to receive the burner at the larger end, an air admitting valve on the burner end of the casing, said casing having a series of openings in a wall thereof, a series of deflectors extending inwardly from the wall of the casing for directing heated gases projected from the burner through the openings of the casing wall, a closure on said wall for regulating the passage of heat through the openings of said casing, auxiliary heat distributing nozzles extending from another wall of said casing, means for deflecting heat from the burner into said distributing nozzles, and means for controlling the flow through said distributing nozzles.

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

WILFRID G. CHAUSSE.

Witnesses:

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G. E. MCGRANN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."