

No. 824,815.

PATENTED JULY 3, 1906.

W. B. PROUTY.
SLEEPING CAR.

APPLICATION FILED MAY 8, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

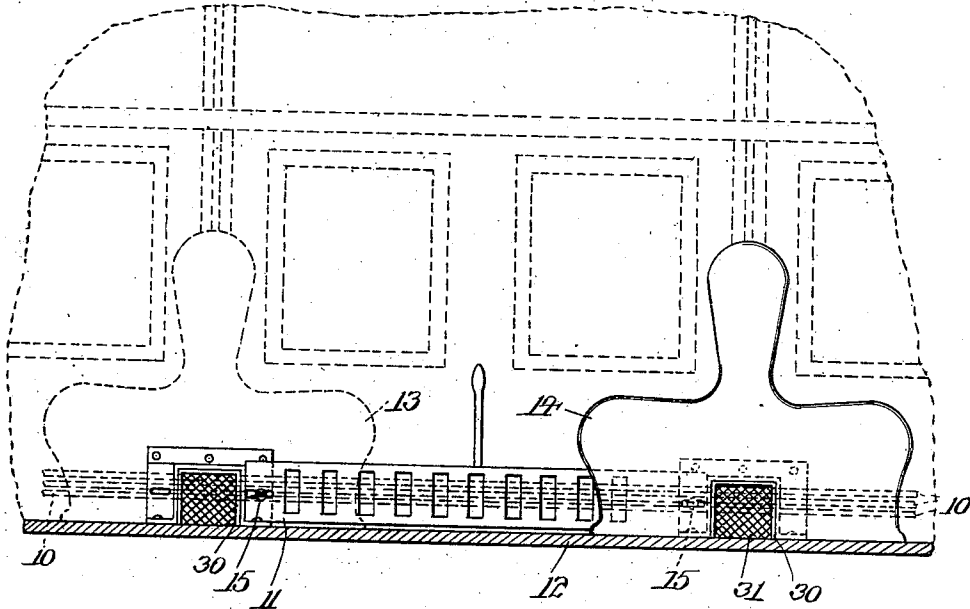
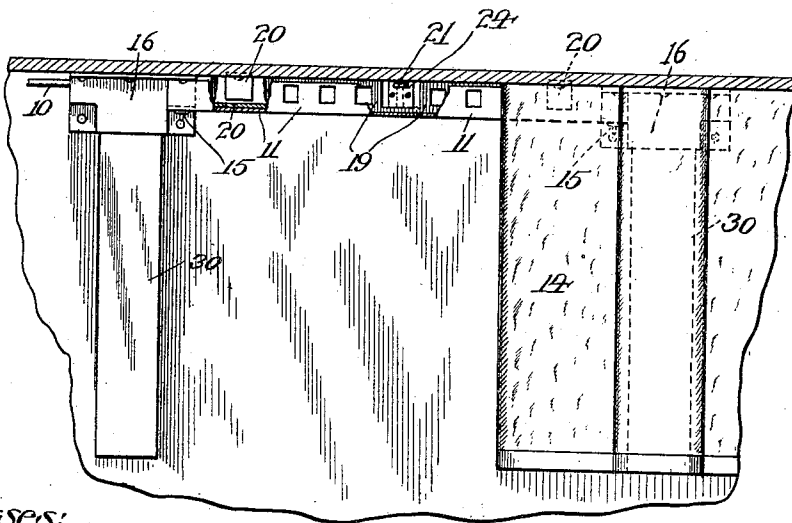


Fig. 2.



Witnesses:

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Inventor:

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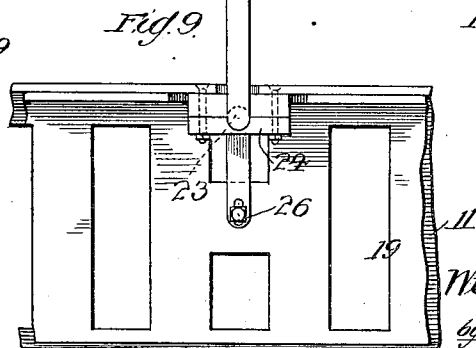
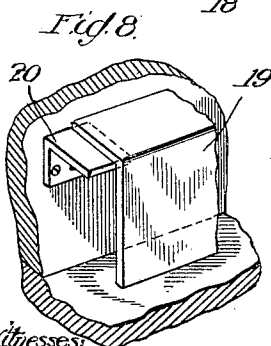
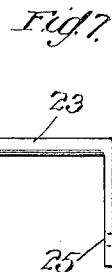
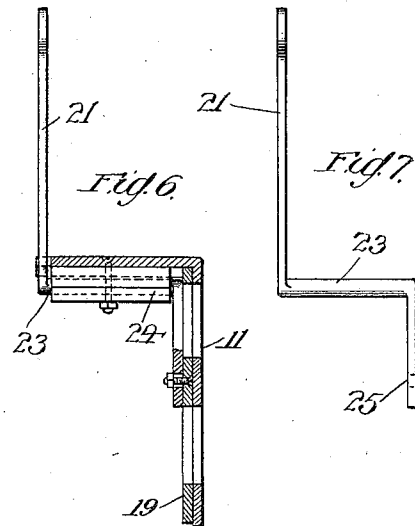
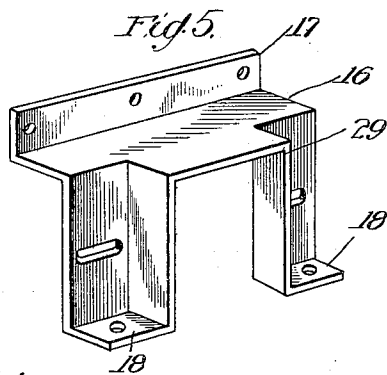
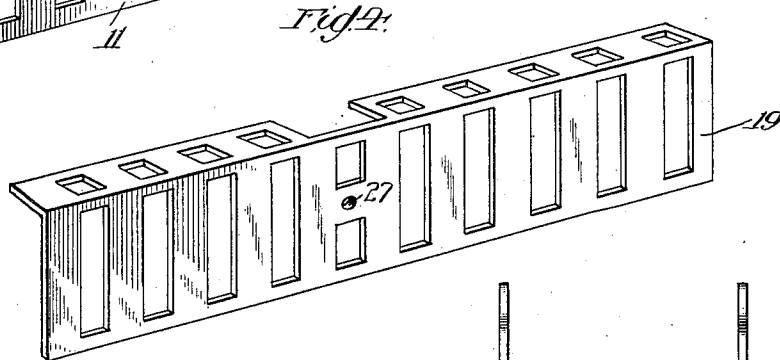
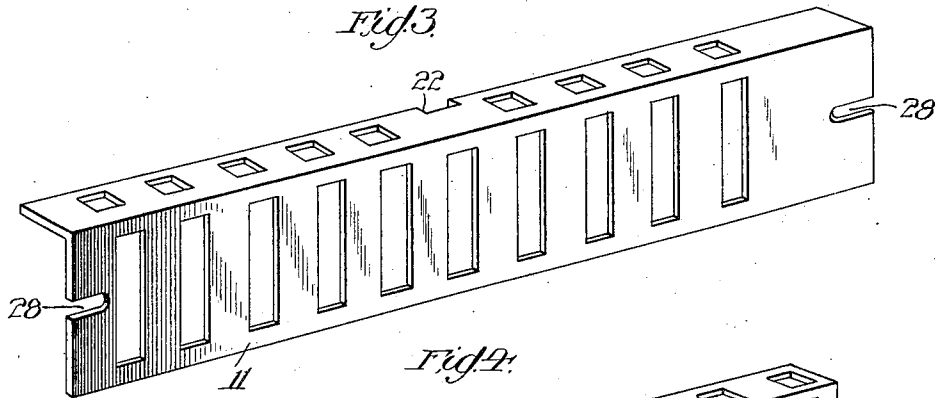
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2 SHEETS—SHEET 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM B. PROUTY, OF OMAHA, NEBRASKA.

SLEEPING-CAR.

No. 824,815.

Specification of Letters Patent.

Patented July 3, 1906.

Application filed May 8, 1905. Serial No. 259,300.

To all whom it may concern:

Be it known that I, WILLIAM B. PROUTY, a citizen of the United States, and a resident of Omaha, county of Douglas, and State of Nebraska, have invented certain new and useful Improvements in Sleeping-Cars, of which the following is a specification and which are illustrated in the accompanying drawings, forming a part thereof.

The invention relates to means for distributing heat in sleeping-cars, its purpose being to provide for such control of the heat-distributing apparatus that the center of the car may be heated while the heat is cut off from the sleeping-sections.

A feature of the invention provides that the apparatus employed for distributing the heat within the car is portable in form and is removably attached to the car-body, so that it may be disconnected and carried out of the way every time the car is to be cleaned.

In the accompanying drawings, Figure 1 is a detail side elevation of the inner wall of a sleeping-car and some of the seats, shown mainly in dotted lines. Fig. 2 is a detail plan section of the same, and Figs. 3, 4, 5, 6, 7, 8, and 9 are details of parts of the regulating mechanism.

It has been found in practice exceedingly difficult to regulate the heat in all parts of a sleeping-car during the night-time. Such cars are usually heated by means of a piping system, generally a hot-water system, the pipes being arranged along the side walls and near the floor and without other covering than a mere rail above them, intended in part to hide them from view and to prevent clothing, &c., from coming in contact with them.

The sleeping-berths are closed in by means of curtains reaching to the floor, and hence when these curtains are in place the heat is confined almost exclusively to the sleeping-berths and is applied particularly to the space below the lower berth. As a result the lower berth is apt to become too hot, while the upper berth, and particularly the aisle-space, may be uncomfortably cold. Efforts have been made to obviate the difficulty by folding up the bottoms of the curtains after the occupants of the berth have retired in order that the heated air may escape from below the berth into the aisle of the car; but this arrangement has been found unsatisfactory for several reasons and is not relied upon. When an attempt is made to keep down the tem-

perature within the berths by cutting off the steam-supply which heats the water in the circulating system, the pipes below the car are in danger of freezing, and great annoyance and expense is thus entailed.

In the present invention the circulating system heretofore in use is employed, there being shown in the drawings a number of pipes 10 leading along the side walls of the car near the floor. These pipes are closed in by means of apertured angle-plates 11, one leaf of each of which is above the pipes and the other projects downwardly in front of them to the floor 12 of the car. These plates are of slightly less length than the distance between the centers of adjacent double seats 13 14, and their ends are detachably secured by means of suitable nuts and bolts, as shown at 15, to casings 16, located under and at the middle of each double seat-section. These casings 16 have similar top and side walls for inclosing the pipes and also a wall-plate 17 and foot-flanges 18, having screw-holes and providing means for permanently attaching the casings to the wall and floor of the car.

In sliding engagement with the inner surfaces of the angle-plate 11 is a shutter-plate 19 of the same contour and similarly apertured, this plate being carried by bracket-plates 20, secured to the wall of the car and being slidable to bring its apertures into and out of register with the apertures of the plates 11. The shutter-plate 19 is controlled by any suitable means, as by a hand-lever 21, projecting upwardly through an aperture 22 at the inner edge of the upper leaf of the angle-plate 11 and having a fulcrum-section 23, journaled in a box 24, formed on or secured to the under face of the upper leaf of the angle-plate 11 and also having a crank-arm 25 pivoted to the vertical leaf of the shutter-plate 19 by means of a suitable pin or bolt 26, sitting through a slot in the crank-arm of the lever and through an aperture 27 in the shutter-plate. The angle-plates 11 are preferably provided with longitudinal slots 28 for the accommodation of the screw-bolts 15, thereby adapting the plates to cars having various measurements between seats and also allowing for expansion and contraction of the plates.

The front wall of the casing 16 is apertured, and its aperture is inclosed by an outstanding flange 29, which engages and holds in place a flue 30, extending forwardly under the seats and through the aisle-wall

thereof. The outer end of this flue may be covered by a suitable grill, as 31.

When the shutter-plate is open—that is to say, when it is so thrown as to bring its apertures in register with the apertures of the angle-plate 11—the heat may find free escape from the inclosed pipes into the space occupied by the sleeping-section, and it may also escape into the aisle through the seat-flues. Should the occupant of any section find the temperature too high, he may close the shutter or damper under his control and entirely cut off the direct application of heat to his section. During the night occupants of the car may keep their berths quite cool by shutting off the heat from their individual section, and although the heat is thus cut off from most of the sections a comfortable temperature for passengers who do no wish to retire may still be maintained in the rest of the car by the discharge of heated air into the aisle through the flues 30 and into the sections in which the berths are not made through the shutter-plates of those sections. The lever for controlling the shutter may be quite thin and lie close against the wall of the car, so that it will not interfere with the bedding or be in the way of the occupant of the berth, although convenient to his hand should he desire to use it. Obviously by loosening the bolts 15 the pipe-covering 11, together with the shutter-plate 19 and the controlling-lever 21, may be removed, so that the space which they inclose may be thoroughly cleaned. The flue 30 being fitted within the flange 29 of the casing 16 and not otherwise attached may be removed for the purpose of cleaning the space which it covers by drawing it out bodily into the aisle of the car.

I claim as my invention—

1. In combination, a car-body; seats located therein adjacent the side walls of the body; heating-pipes located along the side walls of the body and adjacent its floor; a casing located below a seat and covering the pipes and being secured to the car-body and having an aperture in its front wall; a flue

removably fitted to the casing and leading from the aperture in its front wall toward the center of the car-body; an apertured angle-plate detachably secured to the casing and projecting laterally therefrom and inclosing the pipes; and a shutter-plate in sliding engagement with the angle-plate.

2. In combination, a car-body; seats located therein adjacent the side walls of the body; heating-pipes located along the side walls of the body and adjacent its floor; a casing located below a seat and covering the pipes and being secured to the car-body and having an aperture in its front wall; a flue removably fitted to the casing and leading from the aperture in its front wall toward the center of the car-body; an apertured angle-plate detachably secured to the casing and projecting laterally therefrom and inclosing the pipes; a shutter-plate in sliding engagement with the angle-plate; and a lever for controlling the shutter-plate having a bearing on the angle-plate.

3. In a sleeping-car, in combination, a car-body; series of permanent seats arranged in pairs to form sleeping-compartments; heating-pipes located along the side wall of the body adjacent its floor; an openable cover for the pipes within each compartment; means controllable within the compartment for controlling such cover therein; and flues leading from the cover beneath and opening at the outer end of the seats and being independent of the cover-controlling means.

4. In a railway-car having a plurality of seats arranged adjacent its side wall and heating-pipes located along the wall, the combination with such parts of a covering for the pipes having a set of openings between each pair of adjacent seats, a shutter for independently controlling each set of openings, and flues leading laterally from the covering below the seats.

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Witnesses:

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