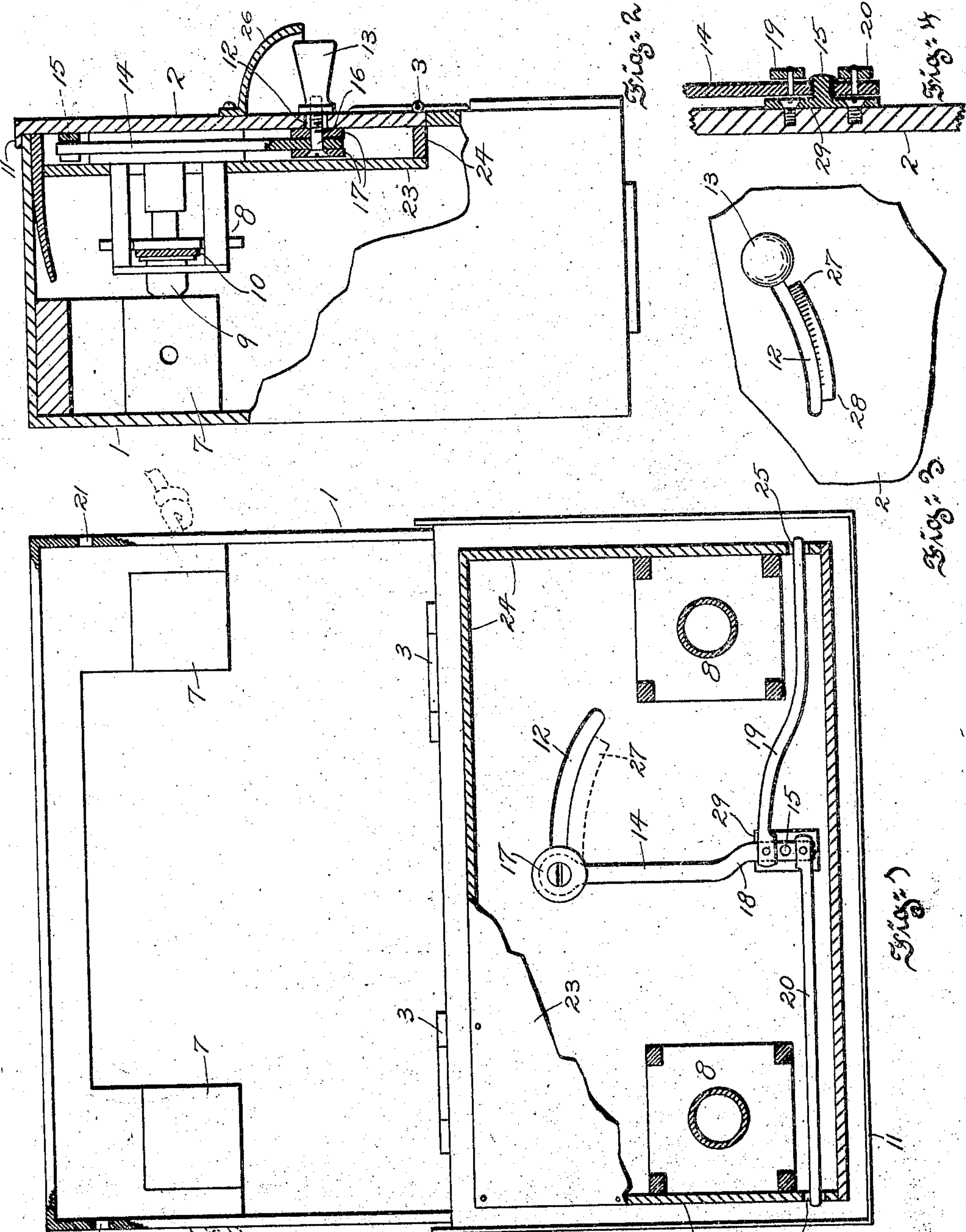


W. R. VANAMAN.
 LOCKING ATTACHMENT FOR FUSE BOXES.
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934,950.

Patented Sept. 21, 1909.



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LOCKING ATTACHMENT FOR FUSE-BOXES

934,950.

Specification of Letters Patent.

Patented Sept. 21, 1909.

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To all whom it may concern:

Be it known that I, WILLIS R. VANAMAN, a citizen of the United States, residing at Atlantic City, in the county of Atlantic and State of New Jersey, have invented a certain new and useful Locking Attachment for Fuse-Boxes, of which the following is a specification.

This invention relates to fuse boxes such as are used upon electric railway cars and has more particular relation to means for locking the box parts.

The principal object of the present invention may be said to reside in the providing of a system of levers carried by the movable cover of the box within the same and capable of being operated by a handle projected through a generally curved slot in the wall of the cover for readily locking and unlocking the cover to gain access to the box interior.

A further object of the present invention is to protect the system of levers by a casing of insulating material carried by the cover of the fuse box.

The nature, characteristic features, and scope of the invention will be more fully understood from the following description taken in connection with the accompanying drawing forming part hereof and in which:

Figure 1, is a view in elevation of a fuse box provided with a locking attachment of the invention, Fig. 2, is a view in cross section of the same and illustrating the lid or cover in closed position, and Figs. 3, and 4, are detail views, hereinafter referred to.

Referring to the drawings the fuse box is made up or constructed of non-conductive fireproof material and is shown as comprising two parts hinged together as at 3, whereof the part 1, constitutes the box and 2, the lid or cover. The fuse box is provided with terminal blocks 7, adapted for the reception of conducting-leads. Carried by the lid or cover 2, are cushioned fuse clamping devices which generally stated comprise cage-like frames 8, equipped with yielding contact blocks 9, for engaging the terminal blocks 7, the said contact blocks 9, being suitably connected by means of a fuse 10. These parts are fully described and claimed in my application for Letters Patent, Serial No. 437,653, of which the present case is a division. It will be understood that in order to protect the above described parts the box must be rendered watertight and

dust proof and at the same time provision must be made for quickly locking and unlocking the cover 2. Means is also necessary for protecting this locking mechanism from being attacked by any are that may be present within the box. The lid or cover 2, is provided with marginal extensions 11, for extending or lapping over the meeting edges of the lid and box in order to render the said box water-tight and dust proof. As clearly illustrated in Fig. 3, this lid or cover is shown as being slotted as at 12, and provided with a member inclined from 28 to 27, the said slot being formed upon an arc of a circle and is adapted to accommodate the travel therethrough of a lock handle 13, and the said member is adapted for locking the handle when in the position shown in said figure. This lock handle is operatively connected with a system of levers adapted to lock and unlock the lid 2, with respect to the box 1. As shown this mechanism comprises a lever 14, fulcrumed as at 15, to the lid or cover 2, the point 15, being an extension of a plate 29, see Fig. 4, the free end of said lever being connected with the lock handle 13, by means of a screw 16, washers 17, being present as shown in Fig. 2.

The end of the lever 14, adjacent its fulcrumed point 15, is slightly bent as at 18, as shown in Fig. 1, and is provided upon each side of the fulcrum point 14, with pivotally arranged lock bars 19, and 20, adapted to cooperate with and engage openings 21, and 22, in the side walls of the box 1. Upon the inner side of the lid or cover 2, and arranged to cover practically the entire area thereof is a plate of non-conducting material 23, supported by non-conducting walls 24, which serves to protect the system of levers above described from being attacked by any are that may be present within the box and at the same time serves to prevent such are from escaping through the slot 12. In this connection it may be remarked that the walls 24, of this protecting casing are apertured at 25, for the passage therethrough of the working ends of the lock bars 19, and 20.

As clearly illustrated in Fig. 2, there is provided adjacent the slot 12, upon the cover or lid a hood 26, that serves to prevent water from gaining access to the box interior and also serves to prevent the handle 13, from being accidentally moved or misplaced.

By the above described locking attach-

ment it is merely necessary to move the lock handle 13, either to the left or the right in order to unlock or lock the box parts. In a box of this character this is important for the reason that the attendants in charge of a trolley or other car are usually in a hurry and should the fuse 10, blow out and it become necessary to insert a new fuse a slight movement of the handle 13, will suffice to release the cover and gain immediate access to the box interior. Aside from this fact a box of the character described is unprotected in winter from sleet and other elements the locking parts thus being apt to freeze up, and to be able to lock and unlock the box parts readily is essential. By the above described parts which are all protected from the elements this may be readily accomplished.

20 What I claim is:

1. In combination a fuse box provided with bar receiving openings, a cover hinged to the box said cover being equipped with a slot formed upon an arc of a circle, a lever 25 fulcrumed at one end to the cover and carrying at its free end a handle projected through said slot, lock bars having piv-

otal relation with the fulcrumed end of said lever for engaging the bar receiving openings of the fuse box and a casing arranged 30 upon the cover for protecting the lever and lock bars.

2. In combination a fuse box provided with bar receiving openings, a cover hinged adjacent the lower part of the box said cover 35 being equipped with a slot formed upon an arc of a circle, a lever fulcrumed at one end to the inner side of said cover and having secured to its other end a handle projected and workable through said slot, a 40 pair of outwardly extending lock bars pivoted to said lever adjacent the point of fulcrum for engaging the bar receiving openings of the box, a casing arranged upon the cover interior for protecting the lever and 45 lock bars from electric arcs and a hood upon the lid exterior above the said slot and handle.

In testimony whereof I have hereunto signed my name.

WILLIS R. VANAMAN.

Witnesses:

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