

June 8, 1937.

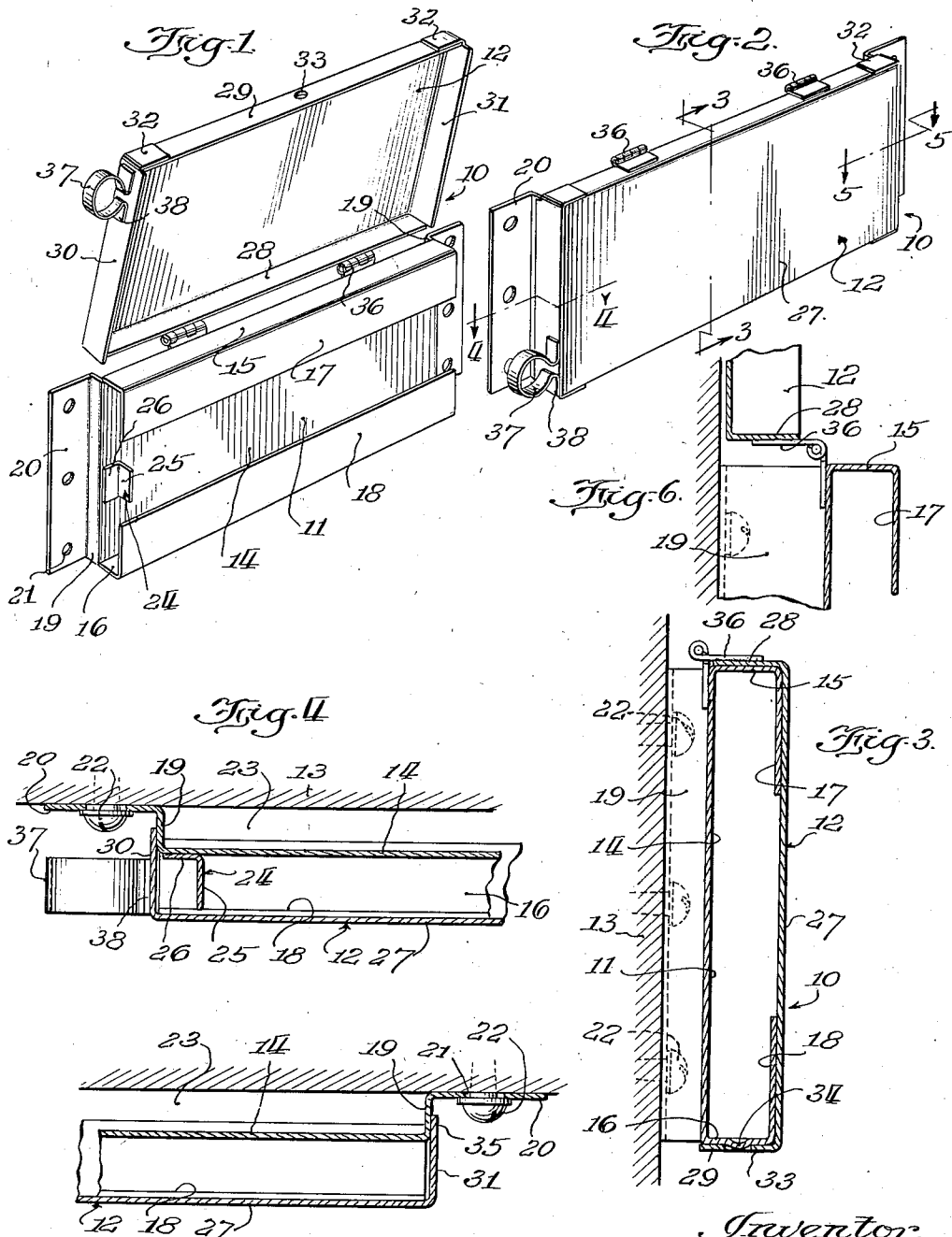
L. A. ROWE

2,083,403

RECORD CARD BOX FOR RAILWAY EQUIPMENT

Filed Aug. 10, 1936

2 Sheets-Sheet 1



Inventor:
Lawrence A. Rowe
By
Williams, Bradbury, & Co. & Hinkle
Attys.

June 8, 1937.

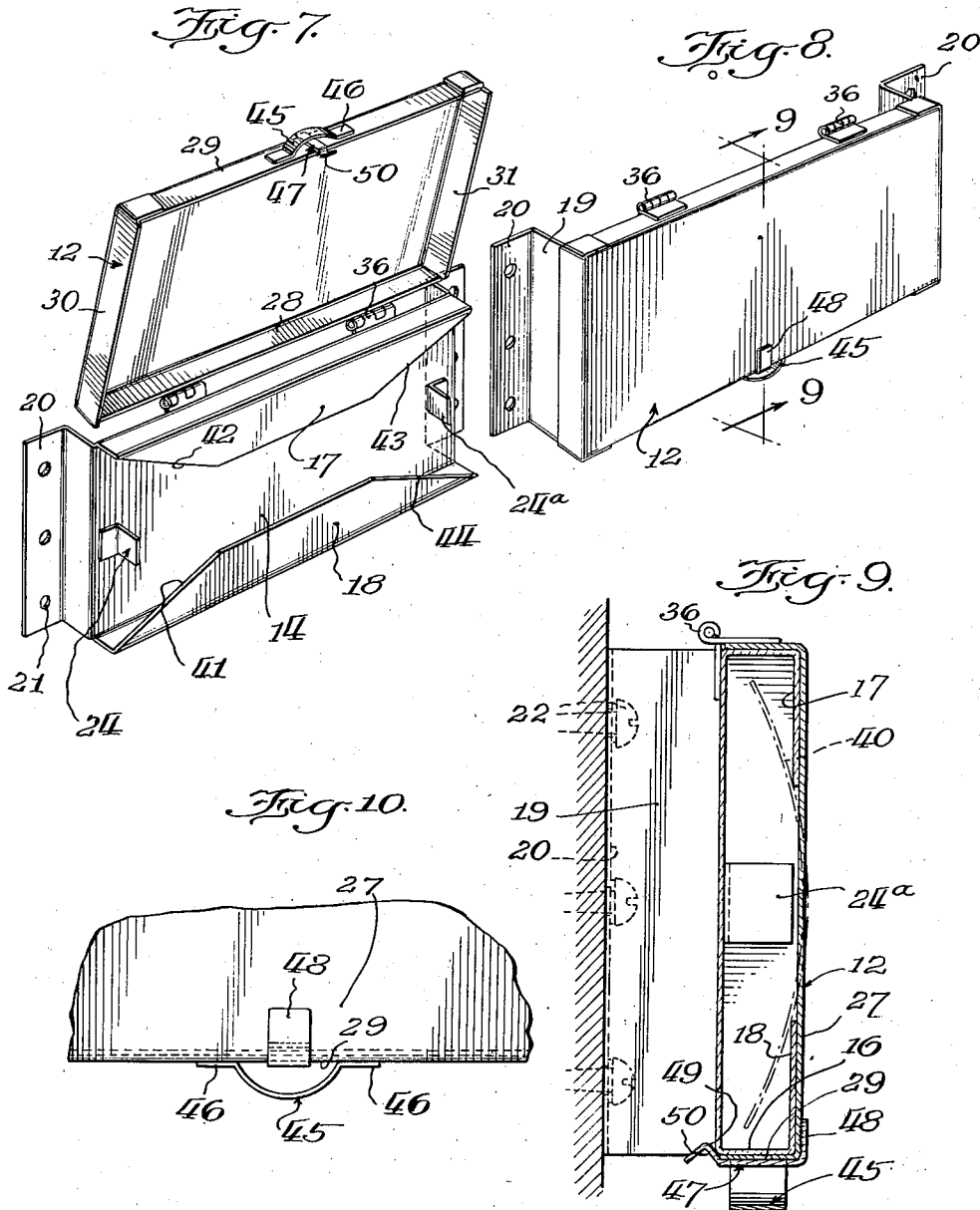
L. A. ROWE

2,083,403

RECORD CARD BOX FOR RAILWAY EQUIPMENT

Filed Aug. 10, 1936

2 Sheets-Sheet 2



Inventor:
Lawrence A. Rowe
By
Williams, Bradbury, McCaleb & Thibodeau
Attys.

UNITED STATES PATENT OFFICE

2,083,403

RECORD CARD BOX FOR RAILWAY
EQUIPMENTLawrence A. Rowe, Oak Park, Ill., assignor to
MacLean-Fogg Lock Nut Company, Chicago,
Ill., a corporation of Illinois

Application August 10, 1936, Serial No. 95,195

12 Claims. (Cl. 40-17)

The present invention relates to record card boxes for railway equipment, and is particularly concerned with an improved record card box which is adapted to be used on transverse floor supports of railway cars adjacent the ends of such transverse members.

One of the objects of the invention is the provision of an improved record card box which is adapted to provide access to the card in such position that some entries may be made on the card while the card is kept in the box, and which is adapted to protect the card against the elements in every respect.

Another object of the invention is the provision of an improved record card box which may be fabricated from a single piece of sheet metal and which is so arranged that the cover completely encloses the card holder and protects it against rain, dust, and the like.

Another object of the invention is the provision of an improved record card box which is adapted to be automatically kept in closed position and which tends to move to closed position when the cover is released so there is no possibility of leaving the card uncovered.

Other objects and advantages of the invention will be apparent from the following description and the accompanying drawings, in which similar characters of reference indicate similar parts throughout the several views.

Referring to the drawings,

Fig. 1 is a view in perspective of a record card box constructed according to the present invention, with the cover elevated;

Fig. 2 is a similar view, with the cover in closed position;

Fig. 3 is a vertical sectional view taken on the plane of the line 3-3 of Fig. 2, looking in the direction of the arrows, with the box installed on a transverse frame member of the railway car, of which a fragment is shown;

Fig. 4 is a fragmentary sectional view, taken on the plane of the line 4-4 of Fig. 2, looking in the direction of the arrows, showing the details of construction of the left end of the box;

Fig. 5 is a similar view, taken on the plane of the line 5-5 of Fig. 2, looking in the direction of the arrows, showing the details of construction of the other end of the box;

Fig. 6 is a modification in which the proportions of the supporting flanges 19 have been slightly changed to make room for the support of the cover in uppermost position;

Fig. 7 is a view in perspective of a modified form of the invention, with the box open;

Fig. 8 is another similar view, with the box closed;

Fig. 9 is a sectional view, taken on the plane of the line 9-9 of Fig. 8, looking in the direction of the arrows;

Fig. 10 is a fragmentary elevational view of the cover, handle and latch.

Referring to the drawings, 10 indicates in its entirety the record card box, which comprises the base 11 or card holder, and the cover 12. The box is preferably mounted upon a transverse frame member 13 of the railway car adjacent the end of the car, the frame member being one of the floor supports of the car. It is preferably so arranged that the hinges are uppermost and the box is at the right corner of each car when the operator is facing the end of the car.

The card holder 11 is preferably constructed of a single piece of sheet metal which is provided with a substantially rectangular flat body portion 14 slightly larger than the record cards, which are intended to be housed in the holder.

The body portion 14 has forwardly projecting flanges 15 and 16 at the top and bottom arranged at right angles to the body portion 14, and the flanges 15 and 16 carry the downwardly and upwardly extending guide flanges 17 and 18, which are parallel to the body portion 14, but spaced therefrom. At each end the body portion 14 has a backwardly extending supporting flange 19, carried by the securing flanges 20, the securing flanges extending parallel to the body portion 14 and being provided with apertures 21.

The card holder may thus be secured to the frame member 13 by bolts or wood screws 22 passing through the apertures 21, and by virtue of the flanges 19 the body portion 14 of the holder is supported in spaced relation to the frame member 13 so that any water running down the frame member goes behind the holder 11 in the space 23.

The holder 11 is also preferably provided with a stop member 24, which may consist of a small sheet metal member having two flanges at right angles to each other. The flange 25 projects at right angles to the base 14 and is substantially as long as the flanges 15 and 16 are wide. The flange 26 may be welded or otherwise secured to the base 14 at one end of the box. The card, which is inserted from the right end of the holder 11, is thus adapted to engage the flange 25, which determines the final position of the card and assures that it will not be projecting to be damaged by the cover 12 when the cover is pulled down.

Referring to Fig. 3, the cover 12 comprises a substantially rectangular body portion 27, which is bordered by the four side flanges 28, 29, 30, 31, which preferably form an integral part of the body 27 and are bent at right angles thereto. The end flanges 30, 31 are preferably provided with the laterally projecting securing flanges 32, which overlap the side flanges 28 and 29 and are secured thereto by riveting, welding, or other convenient fastening means.

The side flange 29 is provided with an aperture 33, which registers with a recessed protuberance 34 formed in the lower flange 16 of the holder. The resiliency of the sides 28-31 is such that the lower flange 29 may be sprung over the protuberance 34 and latched in place when the projection 34 engages in the aperture 33.

The side flanges 29, 28 are preferably of substantially the same width as the flanges 15, 16, but the end flanges 30, 31 are preferably wider than the flanges 15, 16 so that at the point 35 the end flange 31 overlaps the flange 19, as shown in Fig. 5. This assures a complete closure of the ends of the holder and prevents ingress of water or dust at that point.

The cover 12 is pivotally secured to the holder 11 by two or more sheet metal hinges 36 which have their plates welded or otherwise secured to the body 14 of the card holder and the outside of the upper flange 28 of the cover.

The left end flange 30 of the cover preferably supports a looped handle 37 comprising a strip of metal bent to partially cylindrical form and provided with attaching flanges 38 which are spot-welded, riveted, or otherwise secured to the end flange 30 adjacent its lower end. This handle 37 is thus in position to be engaged by the finger of the left hand to lift the cover 12, while the operator removes the card or writes upon it with his right hand.

It will thus be observed that I have invented an improved record card holder for railway equipment, which may be constructed at a very low cost, since it utilizes a minimum number of pieces of metal, and the various parts thereof lend themselves readily to stamping operations.

The present card holder is adapted to hold the card in spaced relation to the frame member or wall of the car so that any drainage along the wall does not strike the card holder.

Referring to Fig. 6, in this embodiment of the invention the spacing flanges 19 have been made wide enough so that there is room between the card holder and the car for the cover 12. In such case, the cover will stay in open position when once it is placed in the position of Fig. 6, which may be an additional advantage in certain embodiments of the invention. In other embodiments of the invention it may be preferred to have the cover so arranged that it will always swing downward and cannot stay open so that there will be no danger of damage to the card.

Referring to Figs. 7 to 10, this is a modification embodying additional features, as follows: In this embodiment the box has been provided with a stop member 24 and 24A at each end of the record box so that the card will have to be arched slightly, as shown at dotted lines 40 in Fig. 9, to remove the card. To facilitate this removal, the ends of the flanges 17, 18 may also be beveled at 41 to 44 so that the card may be bent out as shown in Fig. 9 to pass either one of the stop members 24 or 24A in removing the record card. Either embodiment of the invention may be provided with the improved centrally located handle

45 shown at Fig. 10, which comprises an arched strip of metal having outwardly projecting flanges 46 welded or riveted to the cover. It may also have an improved or alternative form of latching member 47 comprising a resilient strip of metal having an outwardly projecting flange 48 which is secured to the outer wall 27 of the cover 12.

This strip 47 extends downward and backward, lying against the lower flange 29 of the cover, and it may be provided with a diagonally and upwardly extending portion 49 and a diagonally and downwardly extending portion 50. The part 49 is adapted to cam the latch 47 downward when the handle 45 is pulled to the right in Fig. 9, the latch sliding over the flange 16 of the record box. When the box is closed, the camming portion 50 engages the forward corner of the flange 16, camming the latching member backward until it moves into the position of Fig. 9.

While I have illustrated a preferred embodiment of my invention, many modifications may be made without departing from the spirit of the invention, and I do not wish to be limited to the precise details of construction set forth, but desire to avail myself of all changes within the scope of the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is:

1. In a record card holder for railway equipment or the like, a card holding member comprising a sheet metal frame having a body flange carried by spacing flanges, securing flanges carried by the spacing flanges adapted to be secured to the railway equipment, with the body flange spaced therefrom, guide flanges carried by the body flange spaced sufficiently to receive a card record, and a cover member adapted to enclose said card record when used in conjunction with said body flange, said cover member being hingedly mounted on said body flange and comprising a sheet metal body provided with integral flanges extending at right angles thereto and secured to each other at the corners thereof.

2. In a record card holder for railway equipment or the like, a card holding member comprising a sheet metal frame having a body flange carried by spacing flanges, securing flanges carried by the spacing flanges adapted to be secured to the railway equipment, with the body flange spaced therefrom, guide flanges carried by the body flange spaced sufficiently to receive a card record, and a cover member adapted to enclose said card record when used in conjunction with said body flange, said cover member being hingedly mounted on said body flange and comprising a sheet metal body provided with integral flanges extending at right angles thereto and secured to each other at the corners thereof, the integral flanges of said cover which are disposed at the ends thereof being of greater width and adapted to overlap said spacing flanges on said card holder to effect a complete closure of the ends of said card holder.

3. In a record card holder for railway equipment or the like, a card holding member comprising a sheet metal frame having a body flange carried by spacing flanges, securing flanges carried by the spacing flanges adapted to be secured to the railway equipment, with the body flange spaced therefrom, guide flanges carried by the body flange spaced sufficiently to receive a card record, and a cover member adapted to enclose said card record when used in conjunction

with said body flange, said cover member being hingedly mounted on said body flange and comprising a sheet metal body provided with integral flanges extending at right angles thereto and secured to each other at the corners thereof, the integral flanges of said cover which are disposed at the ends thereof being of greater width and adapted to overlap said spacing flanges on said card holder to effect a complete closure of the ends of said card holder, said card holder having a pressed protuberance in one of its sides opposite to the hinges, and said cover having an aperture for receiving said protuberance to latch the cover in closed position.

4. In a record card holder for railway equipment or the like, a card holding member comprising a sheet metal frame having a body flange carried by spacing flanges, securing flanges carried by the spacing flanges adapted to be secured to the railway equipment, with the body flange spaced therefrom, guide flanges carried by the body flange spaced sufficiently to receive a card record, and a cover member adapted to enclose said card record when used in conjunction with said body flange, said cover member being hingedly mounted on said body flange and comprising a sheet metal body provided with integral flanges extending at right angles thereto and secured to each other at the corners thereof, the integral flanges of said cover which are disposed at the ends thereof being of greater width and adapted to overlap said spacing flanges on said card holder to effect a complete closure of the ends of said card holder, and a stop member carried by the body flange of said card holder and adapted to determine the position of the card in said card holder.

5. A record card holder for railway equipment comprising a sheet metal member formed with a body flange, said body flange carrying at each end a transversely extending spacing flange to space the body from a support, and each spacing flange carrying an outwardly extending securing flange, forwardly projecting guide flanges carried by the other sides of said body flange, and a pair of guide flanges carried by said first-mentioned guide flanges and extending parallel to said body flange, a stop member located between said latter guide flanges on said body flange, a cover member comprising a main body of sheet metal of substantially rectangular form and having at its borders enclosing flanges extending at right angles to the body of said cover and adapted to embrace the guide flanges and spacing flanges of said card holder, said cover being hingedly mounted on said card holder, and latching means for securing said cover in closed position.

6. A record card holder for railway equipment comprising a sheet metal member formed with a body flange, said body flange carrying at each end a transversely extending spacing flange to space the body from a support and each spacing flange carrying an outwardly extending securing flange, forwardly projecting guide flanges carried by the other sides of said body flange, and a pair of guide flanges carried by said first-mentioned guide flanges and extending parallel to said body flange, a stop member located between said latter guide flanges on said body flange, a cover member comprising a main body of sheet metal of substantially rectangular form and having, at its borders, enclosing flanges extending at right angles to the body of said cover and adapted to embrace the guide flanges and spacing flanges of said card holder, said cover being hingedly

mounted on said card holder, and latching means for securing said cover in closed position, said cover having its end-enclosing flanges of greater width than its side enclosing flanges whereby the end-enclosing flanges overlap said spacing flanges.

7. In a record card box, the combination of a record supporting member comprising a metallic body formed with attaching flanges, forwardly extending spacing flanges, a body flange, and with guide flanges for guiding a card, stop members for each of the open ends of said record supporting member whereby the card must be arched in the box to pass either of the stop members, said guide flanges being cut away at their ends adjacent said stop members to facilitate removal of the cards.

8. In a record card box, the combination of a record supporting member comprising a metallic body formed with attaching flanges, forwardly extending spacing flanges, a body flange, and with guide flanges for guiding a card, stop members for each of the open ends of said record supporting member whereby the card must be arched in the box to pass either of the stop members, said guide flanges being cut away at their ends adjacent said stop members to facilitate removal of the cards, and a cover for closing said record supporting member, said cover extending downward over said spacing flanges to effect a complete closure of the same.

9. A record card holder for railway equipment comprising a card holding member having a sheet metal frame with a body flange carried by spacing flanges, securing flanges carried by the spacing flanges and adapted to be secured to the railway equipment, with the body flange spaced therefrom, guide flanges carried by said body flange and spaced sufficiently to receive a card record, and a cover member adapted to enclose said card record when used in conjunction with said body flange, said spacing flanges being of greater width than the depth of said cover whereby the cover is adapted to be moved into open position against the car wall and retained in such position by gravity.

10. In a record card holder for railway equipment or the like, a card holding member comprising a sheet metal frame having a body flange carried by spacing flanges, securing flanges carried by the spacing flanges adapted to be secured to the railway equipment, with the body flange spaced therefrom, guide flanges carried by the body flange spaced sufficiently to receive a card record, and a cover member adapted to enclose said card record when used in conjunction with said body flange, said body flange having a stop member located at one end between said guide flanges to predetermine the position of a card placed in said card holder.

11. In a record card holder for railway equipment or the like, a card holding member comprising a sheet metal frame having a body flange carried by spacing flanges, securing flanges carried by the spacing flanges adapted to be secured to the railway equipment, with the body flange spaced therefrom, guide flanges carried by the body flange spaced sufficiently to receive a card record, and a cover member adapted to enclose said card record when used in conjunction with said body flange, said body flange having a stop member located at one end between said guide flanges to predetermine the position of a card placed in said card holder, and having a similar stop member at the other end of

said body flange between said guide flanges whereby a card must be arched in said guide flanges to pass one of said stop members when the card is inserted or removed.

- 5 12. In a record card holder for railway equipment or the like, a card holding member comprising a sheet metal frame having a body flange carried by spacing flanges, securing flanges carried by the spacing flanges adapted to be secured to
10 the railway equipment, with the body flange

spaced therefrom, guide flanges carried by the body flange spaced sufficiently to receive a card record, and a cover member adapted to enclose said card record when used in conjunction with said body flange, said cover member being of sufficient depth to enclose open ends of said guide flanges, and having extensions on its end flanges overlapping said spacing flanges to assure a complete closure.

LAWRENCE A. ROWE. 10