

Apr. 10, 1923.

1,451,173

H. E. MIEBACH ET AL

TRANSMISSION CASE COVER

Original Filed Oct. 1, 1920

Fig. 1.

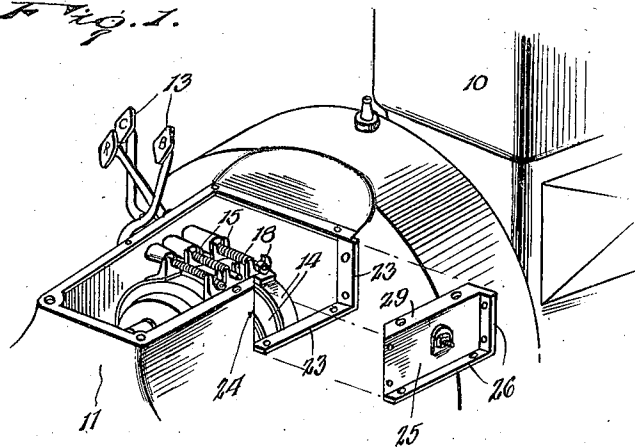


Fig. 2.

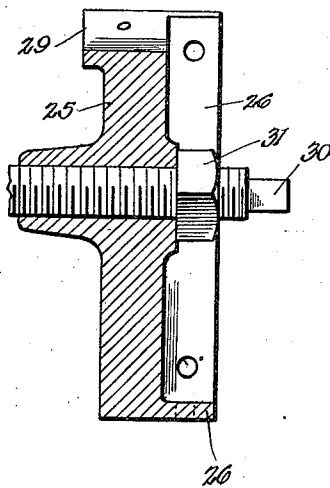
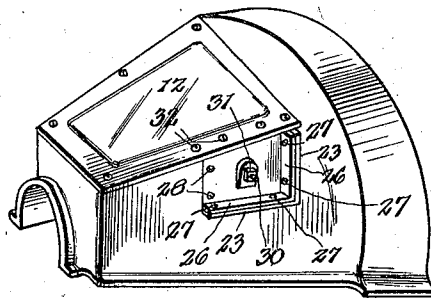


Fig. 3.



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HARRY E. MIEBACH AND ARNOTT S. CAUGHEY, OF LETHBRIDGE, ALBERTA, CANADA.

TRANSMISSION-CASE COVER.

Original application filed October 1, 1920, Serial No. 414,100. Divided and this application filed November 16, 1921. Serial No. 515,652.

To all whom it may concern:

Be it known that we, HARRY E. MIEBACH and ARNOTT S. CAUGHEY, citizens of the United States, residing at Lethbridge, in the Province of Alberta, Dominion of Canada, have invented certain new and useful Improvements in Transmission-Case Covers, of which the following is a specification.

15 This invention relates to an improved transmission case cover for motor vehicles, being a division of our pending application for transmission band and case cover, filed October 1, 1920, Serial No. 414,100.

20 The invention has as one of its principal objects to provide a transmission case cover of such construction that the vehicle transmission bands may be displaced without the necessity for removing the cover.

25 And the invention has as a further object to provide a construction wherein the transmission cover will be equipped with a door through which the transmission bands may be readily reached and removed.

Other and incidental objects will appear hereinafter.

In the drawing:

Figure 1 is a perspective view showing the cover of a transmission case embodying the present invention,

Figure 2 is a transverse section through the side door employed upon the cover, and

Figure 3 is a perspective view showing the cover in detail.

35 The present invention is particularly designed for use in connection with vehicles of Ford design and in Figure 1 of the drawing, an engine of this type of vehicle is indicated at 10. In the rear of the engine is the transmission enclosed by a transmission case including a cover 11. This cover as now produced is provided with a top door 12 secured by a plurality of cap screws. As is well known, the transmission includes a plurality of drums about which are arranged transmission bands, three bands in all being employed. These bands are tightened about the drums by foot pedals 13, one pedal operating each band. From each pedal extends a pedal shaft through one side wall of the transmission cover and at their inner end portions these shafts are operatively coupled with the transmission bands. For this purpose, said bands are each, in accordance with present practice, equipped

at their ends with a pair of ear irons through which the pedal shafts freely extend. These ear irons are riveted to the bands and when the bands are being removed, prevent the bands from being pulled endwise from around the drums. It accordingly becomes necessary, under present conditions, to remove the transmission cover in order to effect displacement of the bands. In accordance with the improvements shown in our prior application, of which the present application is a division, we provide transmission bands 14 carrying permanent ear irons 15 and detachable ear irons 18. Since the manner in which the ear irons 18 are removably secured to the bands does not concern the present invention, these features are not brought out, it being sufficient for a proper understanding of the present invention to state that the ear irons 18 may be readily detached. The ear irons 15 and 18, are, of course, formed to coact with the shafts of the pedals 13 so that when the transmission bands are in place, the pedals may be operated in the usual manner for contracting the bands.

At the side thereof opposite the pedals 13, the transmission cover 11 is formed with a door opening about one side and the bottom of which are formed outwardly directed flanges 23. At the opposite side of said opening is a beveled wall 24 and normally closing the opening is a side door 25. As best shown in Figure 2 of the drawing, this door is formed at one side and along its lower edge with flanges 26 mating with the flanges 23 and engaging through said flanges are pairs of cap screws 27. At its opposite side, the door is formed with a beveled edge mating with the beveled wall 24 of the door opening and engaging through the adjacent margin of the door and through said wall is a pair of cap screws 28. A gasket is preferably arranged between the flanges 23 and 26 as well as between the beveled edge of the door and the wall 24 so that, as will be seen, the pair of cap screws 28 may be adjusted for shifting the door to tightly bind against the gasket, the openings in the lowermost of the door flanges as well as the openings in the door for the cap screws 28 being slightly elongated to permit of lateral shifting of the door. At its upper edge the door is formed with a flange 29 mating with the usual flange upon the transmission cover for

the top door 12 so that after the door 25 has been secured in place, the door 12 may be applied. Threaded through the door 25 is the usual low speed adjusting screw 30 carrying the customary lock nut 31.

As will now be readily understood in view of the preceding description, the door 12 may be displaced when, by removing the door 25, access may be readily had to the ear irons 18. Then, by removing the nuts, washers and springs upon the pedal shafts, the ear irons may be detached. This done, the transmission bands may simply be drawn endwise from around the drums of the transmission through the side door opening of the transmission cover. We accordingly provide an arrangement whereby, as will be seen, the transmission bands may be easily and quickly removed and, of course, the bands may as easily be again applied. Further, removal and replacement of the transmission bands may be accomplished without displacing the transmission cover. Threaded into the upper edge of the side door 25 through the top door 12, are spaced cap screws 32 for additionally bracing the side door.

Having thus described the invention, what is claimed as new is:

1. In a transmission cover having a top door opening, and a top door normally closing said opening, a side door opening in the cover merging at its top in the side of the top door opening, the cover being provided with flanges on the bottom and rear side wall of the side door opening, a side door closing

the side door opening and having outwardly projecting flanges mating with the flanges on the bottom and rear side wall of the side door opening, means engaged through said flanges securing the side door in position, the side door being provided at its top edge with an inwardly projecting flange engaging under the edge of the top door, the side door and side door opening having mating transversely beveled front edges, fastening means inserted in the mating beveled edges of the side door and side door opening to effect binding of the bottom and rear side flanges of the side door upon the mating flanges of the side door opening, and fastening means inserted through the top door into the inwardly projecting top flange of the side door.

2. In a transmission cover having a top door opening, and a top door normally closing said opening, a side door opening in the cover having a beveled side wall, a side door normally closing the latter opening and provided with a beveled end edge to coact with said wall, and means connecting the side door with the cover and adjustable to ride the beveled edge of the cover against said beveled wall whereby to bind the opposite end edge and the bottom of the side door closed against the mating side wall and bottom of the side door opening.

In testimony whereof they affix their signatures.

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