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P. RIEGGER
FARE INDICATOR

Filed Nov. 11, 1924

X

Fig. 1

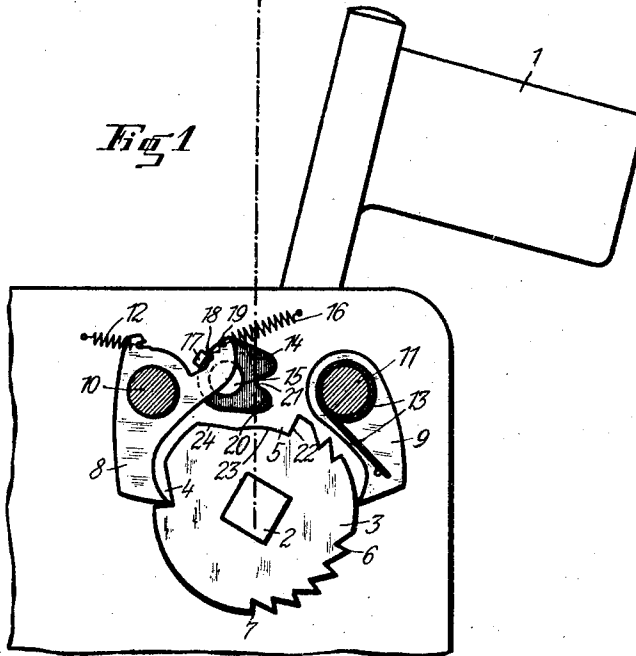


Fig. 2

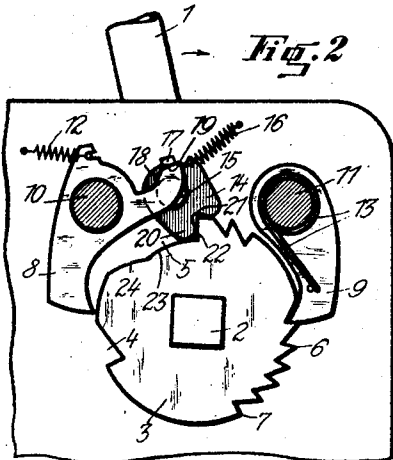
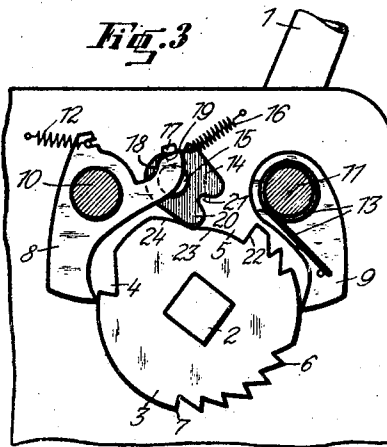


Fig. 3



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FARE INDICATOR.

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My invention relates to improvements in fare indicators, and more particularly in fare indicators of the type in which means are provided for preventing immediate operation of the setting lever or wing from the last service position through the out-of-service position into a new service position, which would enable the driver to set the mechanism into the new service position before the registering wheels have been reset. The object of the improvements is to provide mechanism of this kind which is simple in construction and reliable in operation, and which operates in a novel manner to efficiently prevent unintended and unlawful operation of the fare indicator. Other more specific objects will appear from the description hereinafter and the features of novelty will be pointed out in the claims.

For the purpose of explaining the invention an example embodying the same has been shown in the accompanying drawing in which the same reference characters have been used in all the views to indicate corresponding parts. In said drawing, Fig. 1, is an elevation showing the setting lever and the mechanism for preventing abnormal operation thereof, and Figs. 2 and 3, are similar elevations showing the said mechanism in different positions.

In the figures the lever 1 for setting the fare indicator in the different positions is secured to a shaft 2 carrying a disk 3 provided at its circumference with notches 4, 5, 6 and 7. At opposite sides of the disk 3 pawls 8 and 9 are mounted on pins 10 and 11 respectively, which are acted upon by springs 12 and 13 tending to hold the same in engagement with the circumference of the disk 3. At the rear of the pawl 8 a controlling member 14 is rockingly mounted on a pin 15, which member is normally held in the position shown in Fig. 1 by a spring 16. The said member is formed with a nose 17 projecting forwardly therefrom and above an arm 18 of the pawl 8. The said arm shows a straight end face 19. Further the disk 14 shows a lug 20 and a notch 21 adjacent thereto.

In Fig. 1 the lever 1 is shown in an intermediate position in which it is automatically locked when attempting to set the same into a new service position immediately after rocking the same into the out-of-service position indicated by the broken line $x-x$ in Fig. 1. Fig. 3 shows the parts in a service position. For setting the fare indicator into out-of-service position the lever 1 is rocked into the position indicated in Fig. 1 by the aforesaid broken line $x-x$, and it should remain in the said position a short time until the registering wheels have been reset. Therefore, in order to prevent the driver from immediately rocking the lever back into a service position the pawl 8 is provided which engages the shoulder of the notch 4 thus locking the disk 3 as against rotation in clockwise direction, as is shown in Fig. 1. Therefore, the driver must first rock the lever in anti-clockwise direction and into the position shown in Fig. 2, in which a tooth 22 adjacent to the notch 5 acts against the lug 20 thus rocking the controlling member 14 around the pin 15. Simultaneously the tooth 22 engages the stop notch 21 so that the movement of the number 14, upon which the notch is formed, is limited. When thus rocking the member 14 the nose 17 engages the arm 18, so that the pawl 8 is rocked in clockwise direction and into the position shown in Fig. 2 in which the nose bears on the straight portion 19 and the pawl 8 is out of engagement with the circumference of the disk 3. The movement of the lever 1 from the position shown in Fig. 1 into that shown in Fig. 2 is limited by the pawl 9 engaging in the notch 6 whereby injury to the disk 14 by the tooth 22 is prevented. The engagement of the tooth 22 in the stop notch 21 also assists in preventing backward movement of the lever 1 beyond the position illustrated in Fig. 2.

If now the lever 1 is rocked in clockwise direction, the face 23 of the disk 3 following the notch 5 and disposed concentrically of the pin 2 passes below the lug 20, whereupon a sloping portion 24 engages the said lug and rocks the member 14 against the action of the spring 16 into its initial position so that the nose 17 slides away from the straight face 19. When the disk 3 is in the position in which its sloping face 24 engages the member 14 the pawl 8, which is released by the nose 17, is rocked by the spring 12, so that the locking nose of said pawl engages a concentric

part of the disk 3 in front of the notch 4, as is shown in Fig. 3. Therefore the lever 1 can be further rocked into the service position. Throughout the range of movement of the lever 1, from approximately the 270° position to the out of service position, the series of notches 6—7 serve to prevent backward rotation or retrograde movement of the disk 3.

While in describing the invention reference has been made to a particular example embodying the same I wish it to be understood that my invention is not limited to the construction shown in the drawing, and that various changes may be made in the general arrangement of the apparatus and the construction of its parts without departing from the invention.

I claim:

1. In a fare indicator, the combination with a setting member for setting the indicator mechanism into and out of service position, of an operating member connected with said setting member and provided with a plurality of peripheral projections, a locking member, co-operating with one of the projections to lock said operating member against movement into service position, and a controlling member co-operating with said locking member to adjust the latter to an inoperative position and to fix it therein, said controlling member being provided with a stop-notch co-operating with another of said peripheral projections to operate said controlling member.

2. In a fare indicator, the combination with a setting member for setting the indicator mechanism into and out of service position, of an operating member connected with said setting member and provided with a peripheral notch and a peripheral tooth, a two-armed locking member, one arm of which co-operates with said notch to lock said operating member against movement into service position, and a controlling member co-operating with the other arm of said locking member to adjust the latter to an

inoperative position out of said notch and to fix it in said inoperative position, said controlling member being provided with a stop notch co-operating with said tooth to operate said controlling member.

3. In a fare indicator, the combination with a setting member for setting the indicator mechanism into and out of service position, of a pivoted locking pawl having two arms projecting in opposite directions from its pivot, an operating disk connected with said setting member and having a notch in position for locking engagement with one arm of said locking pawl when said setting member is in a position intermediate the service and out of service positions, a controlling member co-operating with the other arm of said pawl to adjust the latter to an inoperative position out of said notch and to fix it in said inoperative position, and means connected with said operating disk and directly engaging said controlling member for operating same.

4. In a fare indicator, the combination with a setting member for setting the indicator mechanism into and out of service position, of a pivoted locking pawl having two arms projecting in opposite directions from its pivot, an operating disk connected with said setting member and having a notch in position for locking engagement with one arm of said locking pawl when said setting member is in a position intermediate the service and out of service positions, a controlling member co-operating with the other arm of said pawl, a cam face on said disk for actuating said controlling member to swing one arm of said pawl in one direction and its other arm in the opposite direction to thereby adjust said pawl to an inoperative position and to fix it therein, and another cam face on said disk for operating said controlling member to release said pawl.

In testimony whereof I hereunto affix my signature.

PAUL RIEGGER.