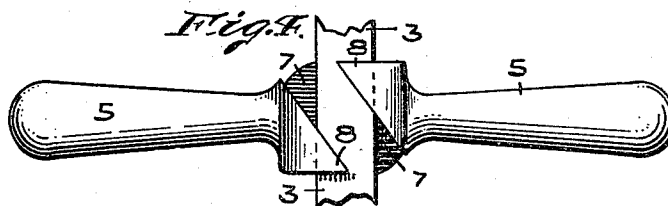
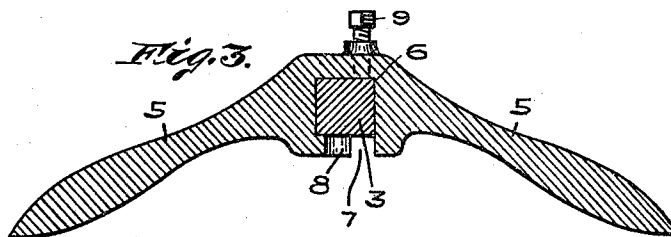
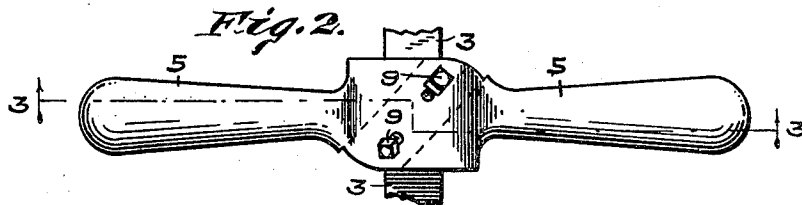
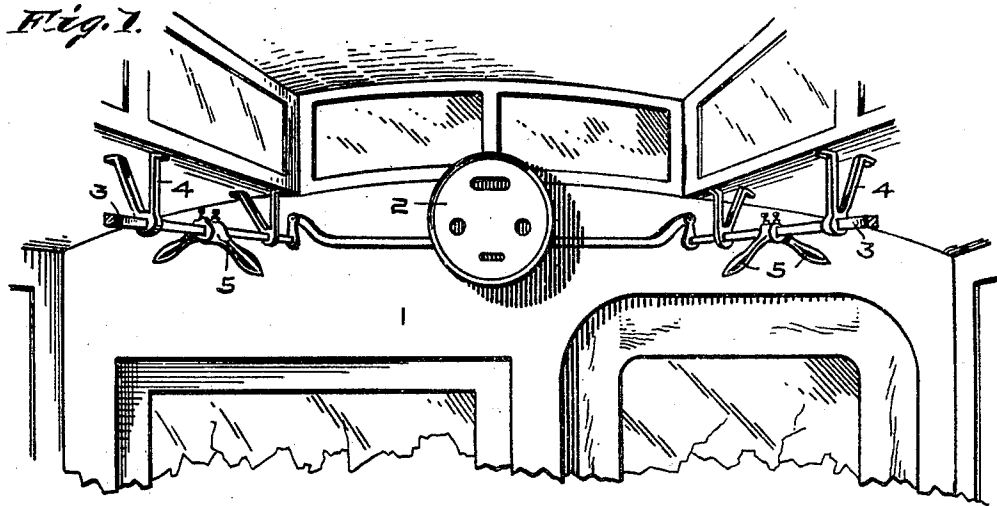


W. F. FRENZEL.
 REMOVABLE HANDLE FOR FARE REGISTER RODS.
 APPLICATION FILED FEB. 5, 1909.

960,877.

Patented June 7, 1910.



WITNESSES:
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UNITED STATES PATENT OFFICE.

WILLIAM F. FRENZEL, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-HALF TO
JOHN H. WESTON, OF INDIANAPOLIS, INDIANA.

REMOVABLE HANDLE FOR FARE-REGISTER RODS.

960,877.

Specification of Letters Patent.

Patented June 7, 1910.

Application filed February 5, 1909. Serial No. 476,257.

To all whom it may concern:

Be it known that I, WILLIAM F. FRENZEL, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Removable Handles for Fare-Register Rods, of which the following is a specification.

This invention relates to removably secured handles on operating rods for fare registers, employed in street cars, etc.

Much trouble is experienced in removing broken handles from the operating rods for the reason that the rods extend the entire length of the cars, and since the removal of said rods can be effected only from one end of the cars, the rods must generally be almost entirely removed before the broken handles can be replaced. These operating rods are supported in suitable brackets which become loose in time through the vibration of the cars, and when the rods are withdrawn the alinement of these brackets is disarranged so that the rods are replaced with much difficulty.

The object of this invention is to overcome these difficulties by providing handles which may be placed upon the rods or removed therefrom without the necessity of withdrawing the rods from their supporting brackets.

I accomplish the object of my invention by means of the handle illustrated in the accompanying drawings, forming a part hereof, in which—

Figure 1 is a fragmentary detail perspective view of a front portion of a street car showing the fare register, its operating rods, and the operating handles in working position. Fig. 2 is a top or plan view of one of the operating handles. Fig. 3 is a longitudinal sectional view on the line 3—3 in Fig. 2. Fig. 4 is an under side plan view of the construction shown in Fig. 2.

Referring to the drawings, 1 represents the body of an ordinary street car. 2 a fare register of a kind commonly in use upon the various traction lines.

3, 3, represent the operating rods which extend longitudinally on each side of the

fare register and near the top of the car. These rods are supported in the brackets 4 and are provided at intervals with the handles 5 so that the fare register can be actuated from any point within the length of the car. The handles 5 are provided with a centrally located transversely extending aperture 6 formed to correspond to the external formation of the operating rods 3. In other words the aperture may be made square to take over a square rod as shown in the drawings, or it may be made round if desired. The handle is provided with a channel 7 which is cut obliquely to and intersects the aperture 6.

It will be readily understood in examining Fig. 4 of the drawings that when it is desired to replace or remove one of the handles, the latter is moved into an oblique position with respect to the operating rod until the oblique channel 7 is brought into alinement with the operating rod 3 at which time the removal of said handle is made possible. The operation of replacing a handle is effected with an exact reverse operation. It will be noted that by cutting the channel 7 on an oblique plane, the prongs 8 are formed which project beneath the rod 3 from opposite sides and prevent separation between the handle and rod when said handle is made fast. After the handle is placed in operating position upon the rod, which position is at a right angle to said rod, the handle is readily secured to the rod by means of the set-screws 9.

By the above construction it will be seen that an extremely simple handle for the purposes intended can be produced, and one which can be easily removed or replaced from the operating rod.

Having thus fully described my said invention, what I desire to secure by Letters Patent, is—

1. A removable handle of the above specified class provided with a transversely extending aperture which is intersected by a diagonally extending slot cut from one side of said handle, and means for securing said handle in operative position.

2. The combination with a rod of a re-

movable handle provided with a transversely extending aperture which is intersected by a diagonally extending slot cut in one side of said handle, and means for securing said handle to said rod.

5 In witness whereof, I, have hereunto set my hand and seal at Indianapolis, Indiana,

this, 27th day of January, A. D. one thousand nine hundred and nine.

WILLIAM F. FRENZEL. [L. s.]

Witnesses:

F. W. WOERNER,

L. B. WOERNER.