

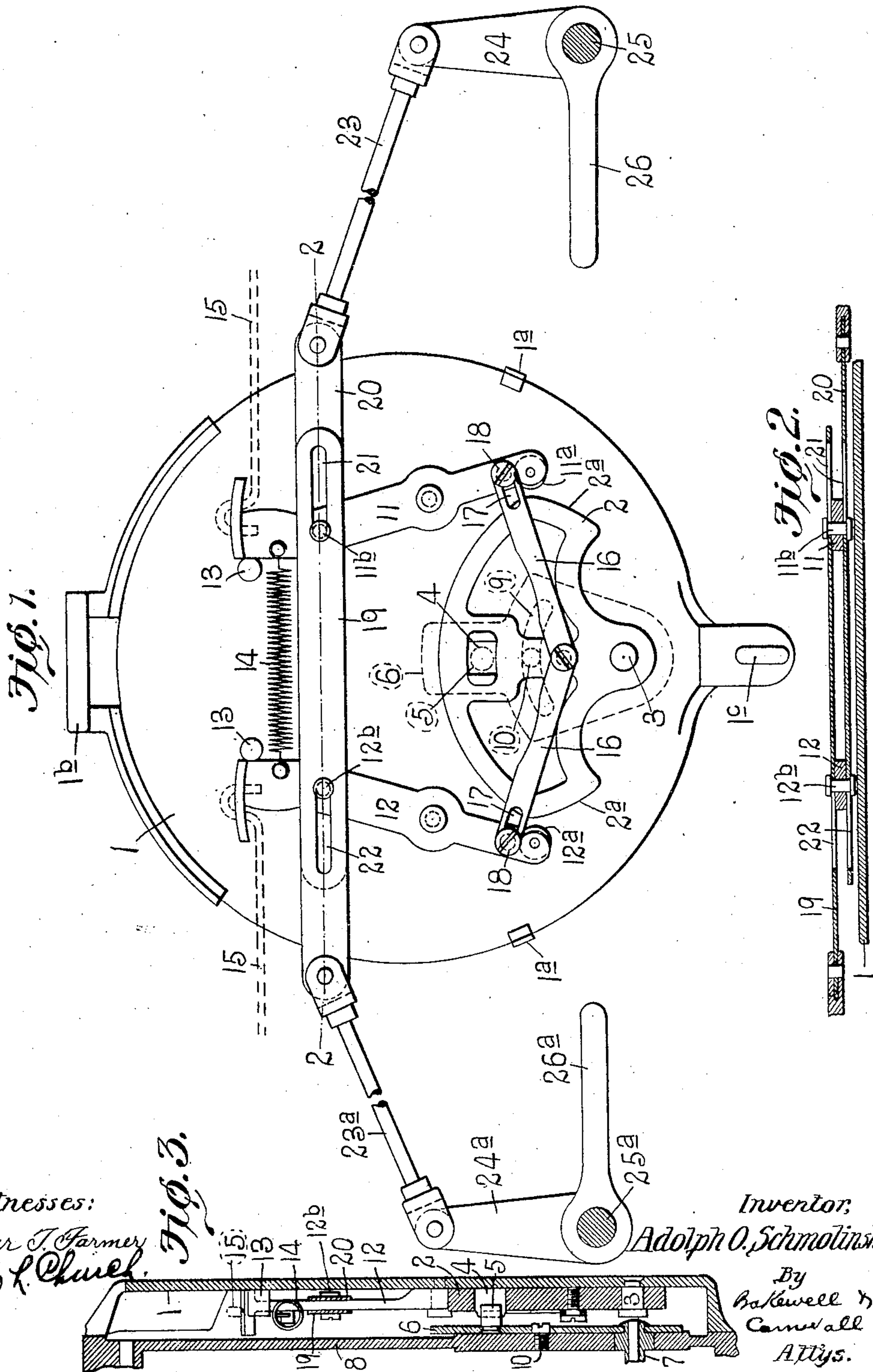
No. 844,692.

PATENTED FEB. 19, 1907.

A. O. SCHMOLINSKI.  
FARE REGISTER ACTUATING MECHANISM.

APPLICATION FILED JULY 18, 1906.

2 SHEETS—SHEET 1.



Witnesses:

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Nels L. Church.

Inventor:

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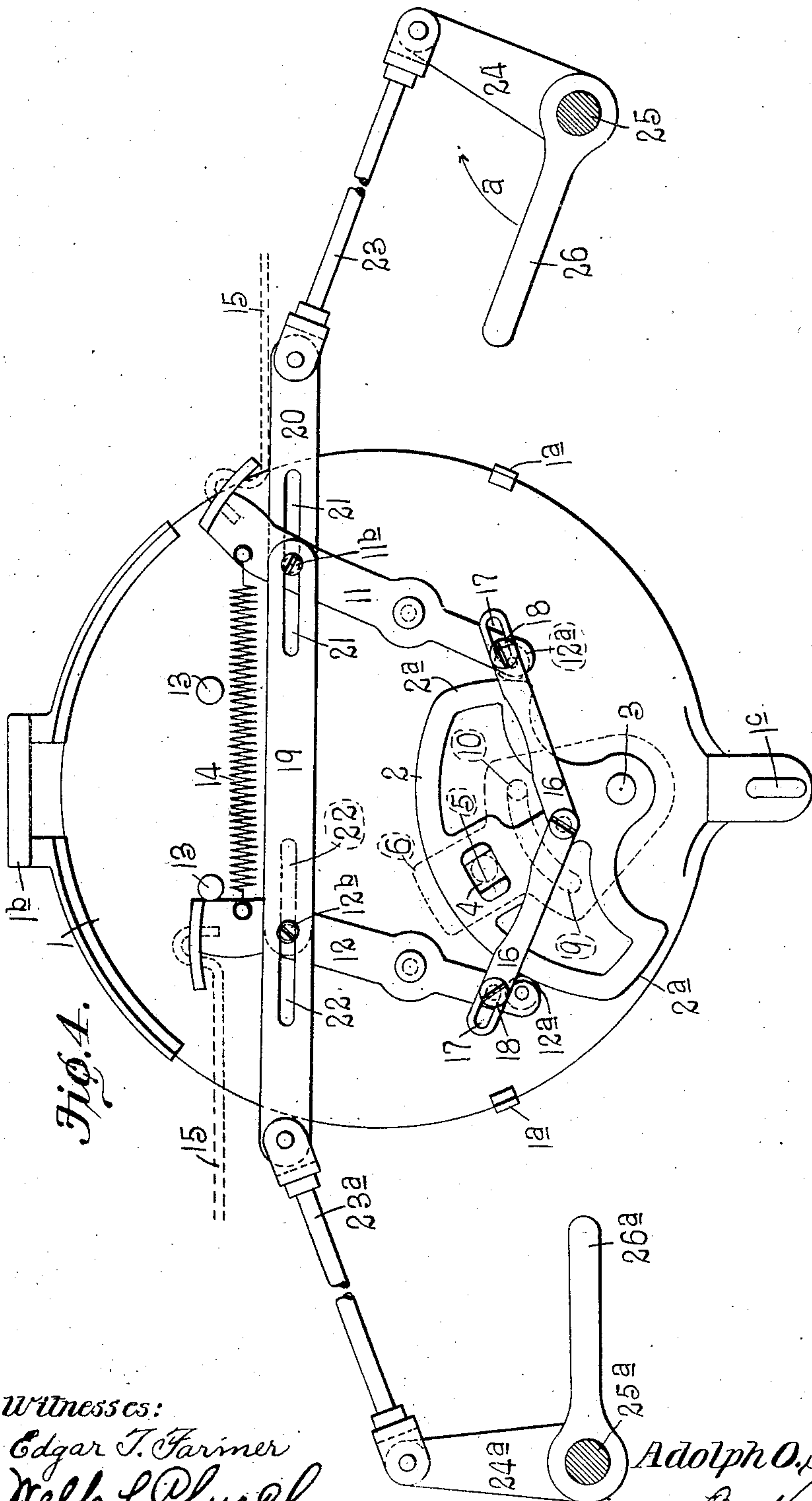
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# UNITED STATES PATENT OFFICE.

ADOLPH O. SCHMOLINSKI, OF ST. LOUIS, MISSOURI, ASSIGNOR TO SECURITY REGISTER & MANUFACTURING COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF MISSOURI.

## FARE-REGISTER-ACTUATING MECHANISM.

No. 844,692.

Specification of Letters Patent.

Patented Feb. 19, 1907.

Application filed July 16, 1906. Serial No. 326,420.

*To all whom it may concern:*

Be it known that I, ADOLPH O. SCHMOLINSKI, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Fare-Register-Actuating Mechanisms, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an elevation of mechanism embodying the features of my invention, showing the parts in normal position. Fig. 2 is a horizontal sectional view, taken on the line 2-2 of Fig. 1. Fig. 3 is a vertical sectional view taken through approximately the center of Fig. 1, showing the mechanism which forms my present invention in operative position on a fare-register; and Fig. 4 is a view similar to Fig. 1, showing some of the parts in a different position.

This invention relates to fare-registers, and particularly to those which are used in street-cars for registering different classes of fares—such, for example, as cash fares and transfers.

The invention herein described consists of what I term a "primary actuating mechanism" for a fare-register—namely, the mechanism which imparts movement to the main shaft or part from which the various elements of the register derive their movement; and one object of my invention is to provide a mechanism of the character described which comprises few parts and is of simple construction.

Another object of my invention is to provide a member adapted to be connected to the back of a fare-register and having mounted thereon mechanism which coöperates with the main shaft of the register for actuating same; and still another object of my invention is to provide a primary actuating mechanism for a fare-register in combination with means adapted to be operated from one side of the car in which the register is located for imparting movement to the primary actuating mechanism to register either class of fares. Preferably means is arranged at each side of the car for imparting move-

ment to the primary actuating mechanism, and said means are so constructed that the movement of one will not affect or actuate the other, thereby reducing the amount of power required to operate the register.

Some of the features of the invention herein shown—namely, the primary actuating mechanism—is shown, but not claimed in my pending application, Serial No. 319,616, filed May 31, 1906.

Referring to the drawings which represent the preferred form of my invention, I designate a member which I will hereinafter refer to as the "back-plate." A rocking member 2 is mounted on a stud 3 on the back-plate, and said rocking member is provided at its upper end with an opening 4, which receives a pin or projection 5, carried by a rock-arm 6, secured to the main shaft 7 of the register or the part from which the various elements of the register derive their movement, said shaft being mounted in the base-plate 8 of the register, as shown in Fig. 3. The rock-arm 6 is provided with an elongated slot 9, and a pin 10 on the base-plate 8 projects into said slot for controlling the limits of movement of said rock-arm. The rocking member 2 is actuated by means of levers 11 and 12, pivotally mounted on the back-plate 1 and provided at their lower ends with rollers 11<sup>a</sup> and 12<sup>a</sup>, which engage the rocking member and actuate it when every one of said levers is operated, the lever 11 moving the rocking member to the left to cause a fare of one kind to be registered and the lever 12 moving the rocking member to the right to cause a different kind of fare to be registered. The upper ends of the levers 11 and 12 are held normally in engagement with fixed stops 13 on the back-plate 1 by means of a spring 14, connected to the upper ends of said levers, and, if desired, said levers may be actuated by cords or ropes 15, connected to the upper ends thereof, as shown in dotted lines in Fig. 1. I prefer, however, to actuate said levers by means hereinafter described, which forms one of the novel features of my present invention.

The rocking member 2 is held in its normal position midway between the lower ends of the levers 11 and 12 by means of links 16 connected thereto and to the levers, said links being provided with elongated



slots 17, through which studs 18 on the levers 11 and 12 extend to connect the links and levers together. The upper edge of the rocking member 2 is formed on the arc of a circle, so that when said member is actuated by one of the levers said upper edge will travel past the roll on the lower end of the other lever without imparting any movement to said lever, said rocking member being so arranged that the rolls on the lower ends of the levers 11 and 12 engage the side faces 2<sup>a</sup> of said member whenever said levers are actuated. Preferably the back-plate, which carries the primary actuating mechanism, is detachably connected to the back of the register, so that the complete primary actuating mechanism can be removed from one register and applied to another, the back-plate being provided with lugs 1<sup>a</sup>, which hold it spaced away from the back of the register, with a yoke or strap 1<sup>b</sup>, which extends over a projection on the register, and with a staple 1<sup>c</sup>, which extends through a hasp on the register to receive a suitable locking device.

The means which I have herein shown for actuating the levers 11 and 12 consist of two bars 19 and 20, arranged on opposite sides of said levers, as shown clearly in Fig. 2, each of said bars being provided with slots 21 and 22, through which pins 11<sup>b</sup> and 12<sup>b</sup> on the levers 11 and 12, respectively, project. The bar 20 is connected by a link 23 to an arm 24, fastened to a shaft 25, which extends longitudinally along one side of the car in which the fare-register is located, said shaft being provided with one or more handles 26, which may be grasped to oscillate the shaft 25. The bar 19 is also connected by a link 23<sup>a</sup> to an arm 24<sup>a</sup> on a shaft 25<sup>a</sup>, arranged at the opposite side of the car and provided with one or more handles 26<sup>a</sup>.

Fig. 1 shows the parts which constitute the primary actuating mechanism and the means for operating same in normal position. When it is desired to ring up one class of fares—for example, cash fares—the shaft 25 can be oscillated in the direction of the arrow *a* in Fig. 4, thereby causing the inner end of the slot 21 in bar 20 to engage the pin 11<sup>b</sup> on lever 11 and move it from the position shown in Fig. 1 into the position shown in Fig. 4, the roll on the lower end of said lever engaging the side face of the rocking member 2 and moving said member to the left, so as to impart movement to the main shaft 7 of the register, which is connected to said rocking member by the arm 6, as previously described. By referring to Fig. 4 it will be seen that the movement of the shaft 25 and the bar 20 has not affected the lever 12, bar 19, and shaft 25<sup>a</sup>, which operates said bar, this being due to the fact that the slot 22 in bar 20 is equal in length to the distance which the bar 20 is moved

outwardly, the stud 12<sup>b</sup> on the lever 12 normally occupying the inner end of the slot 22. If it is desired to register a different class of fares—for example, transfers—the shaft 25 is oscillated in the direction opposite to the arrow *a* in Fig. 1 by pulling downwardly on the handle 26, and such movement of the shaft will cause the bar 20 to be moved inwardly, so that the inner end of the slot 22 will engage the stud 12<sup>b</sup> on lever 12 and actuate it to rock the member 2 to the right, the slot 21 in bar 20 being of such length that its outer end will not come in contact with the pin 11<sup>b</sup> on lever 11.

From the foregoing description it will be clearly understood that the shaft 25<sup>a</sup> at the opposite side of the car can be oscillated in either direction for ringing up either class of fares, the shaft 25 and the lever 11, which it actuates, remaining idle. This idea of having the shaft at one side of the car and the lever which it actuates remain idle when the shaft at the other side of the car is operated forms one of the important points of my present invention and is a very desirable feature in a fare-register-operating mechanism, as it enables the register to be operated with very little energy.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In combination with a fare-register having a main shaft which extends through the base-plate of the register and is provided with a rock-arm arranged on the outside of said base-plate, a back-plate connected to the register, a device mounted on said back-plate for coöperating with said rock-arm to oscillate the main shaft of the register in opposite directions to cause different classes of fares to be registered, and means for actuating said device; substantially as described.

2. A device of the character described, comprising a segmentally-shaped rocking member for imparting movement to an element of a fare-register, and a lever arranged on each side of said member for actuating it in opposite directions; substantially as described.

3. A device of the character described, comprising a rocking member for imparting movement to an element of a fare-register, a lever arranged on each side of said rocking member for imparting movement thereto, and connections between said levers and said rocking member for holding said member normally midway of said levers; substantially as described.

4. A device of the character described, comprising a rocking member for imparting movement to an element of a fare-register, a lever arranged on each side of said rocking member for imparting movement thereto, and links fastened to said member and provided with slots through which studs on the



levers extend whereby said member is held normally midway of said levers; substantially as described.

5 5. A device of the class described, comprising a rocking member for imparting movement to an element of a fare-register, said rocking member having its upper edge formed on the arc of a circle, and a lever arranged on each side of said member for engaging the side edges thereof to actuate said member; substantially as described.

15 6. A device of the class described, comprising two levers and an actuating member pivotally mounted between the lower ends of said levers and being so formed that when it is operated by one lever the other lever will remain at rest, a returning-spring connecting the upper ends of said levers together, and means for determining the normal positions  
20 of said levers; substantially as described.

7. In combination with a fare-register having a main operating-shaft that is adapted to be oscillated in opposite directions for registering different classes of fares, a member  
25 connected to said shaft, levers for imparting movement to said member to register different classes of fares, a rod arranged in the car in which the fare-register is located, and connections between said rod and both of said  
30 levers whereby the rod can be oscillated in one direction for actuating one lever and in the opposite direction for actuating the other lever; substantially as described.

35 8. A primary actuating mechanism for a fare-register, comprising an actuating member, levers for imparting movement to said member to register different classes of fares, a shaft arranged in the car in which the fare-register is located, a bar provided with elongated slots through which studs on said levers

40 extend, and a connection between said bar and said shaft whereby the shaft may be oscillated in one direction for imparting movement to one lever and in the opposite direction for imparting movement to the other lever; substantially as described.

9. A fare-register-operating mechanism, comprising an actuating member, levers for operating said member to cause different classes of fares to be registered, shafts arranged along each side of the car in which the register is located, and means for connecting both of said shafts to both of the levers, said means being so constructed that either shaft may be actuated without causing the other shaft to be moved; substantially as described.

10. A fare-register-operating mechanism, comprising a rocking member for imparting movement to the main shaft of the register, a lever arranged at each side of said member for actuating same, a spring connected to said levers for returning them to normal position, bars arranged on each side of said levers and provided with elongated slots, studs on said levers which project through the slots in both bars, shafts arranged at each side of the car in which the register is located, a link connecting one bar to one of said shafts, and a link connecting the other bar to the other shaft; substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 11th day of July, 1906.

ADOLPH O. SCHMOLINSKI.

Witnesses:

WELLS L. CHURCH,  
CORA BADGER.