

J. F. OHMER & C. W. KETTEMAN.

FARE REGISTER.

APPLICATION FILED JULY 10, 1907.

905,218.

Patented Dec. 1, 1908.

5 SHEETS—SHEET 1.

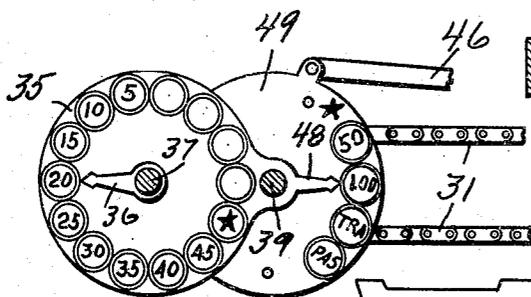
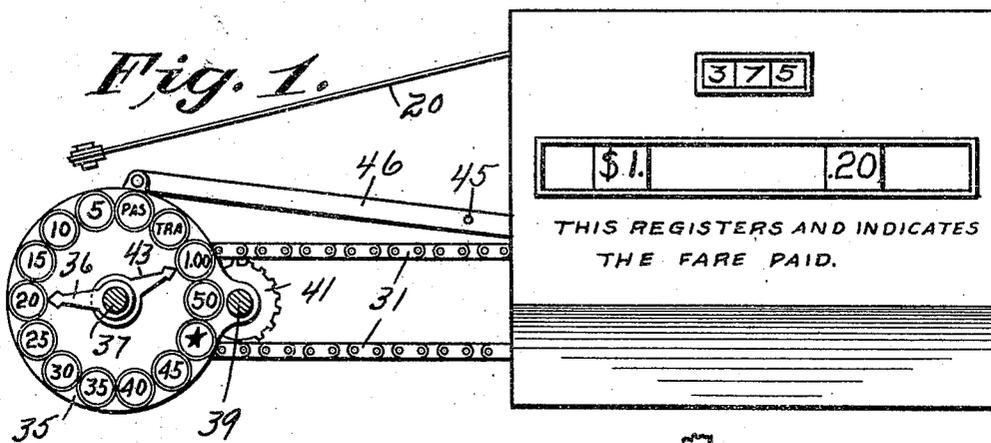


Fig. 7.

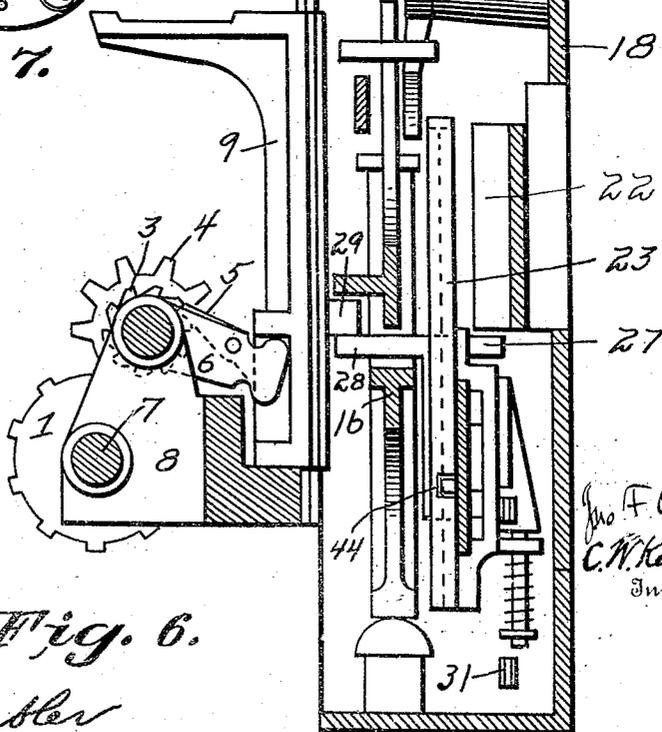


Fig. 6.

Witnesses

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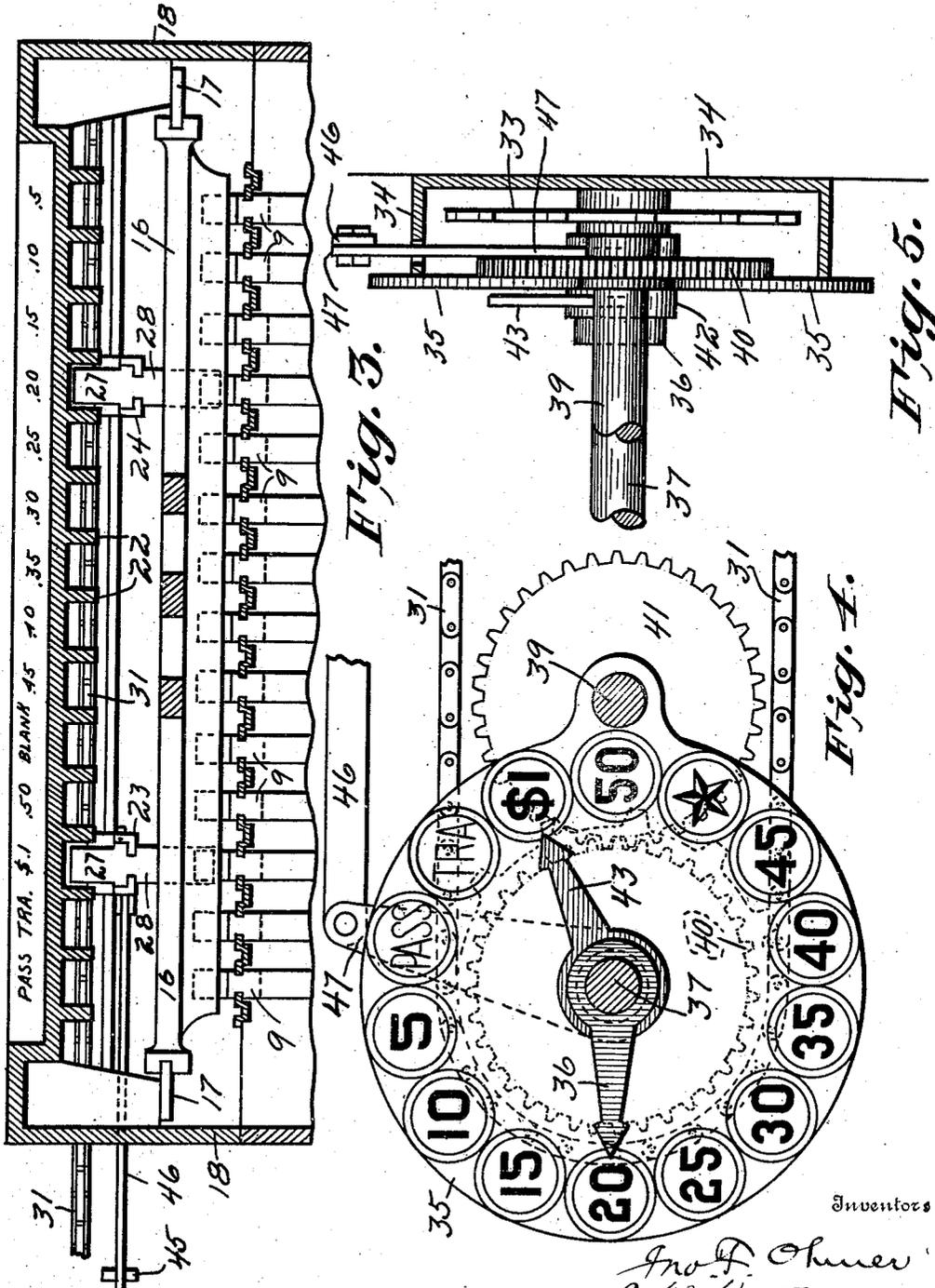
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5 SHEETS—SHEET 3.



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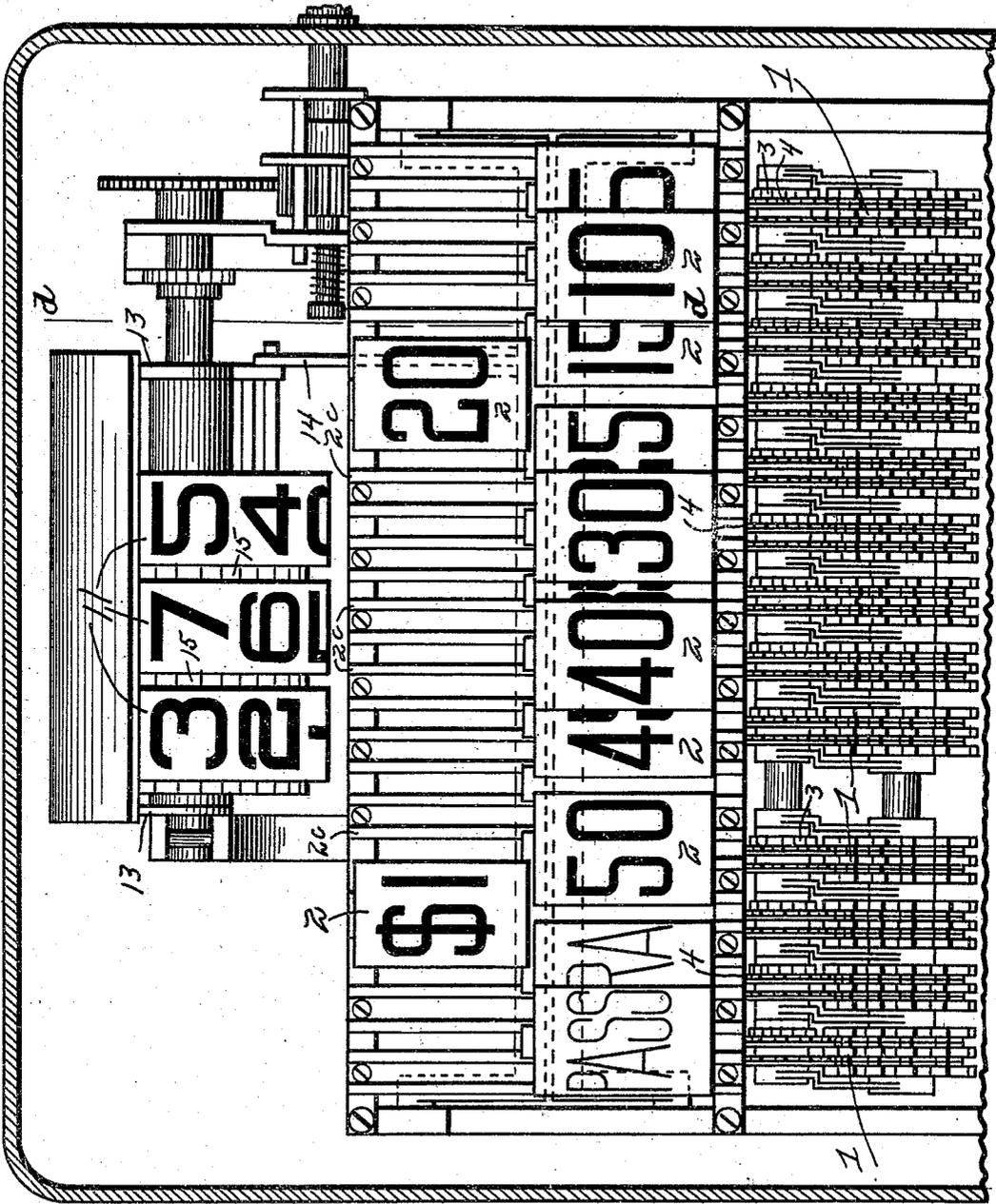
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5 SHEETS—SHEET 4.



Witnesses  
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*Fig. 8.*

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6 SHEETS—SHEET 5.

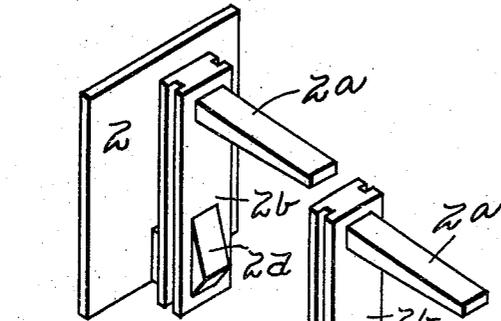
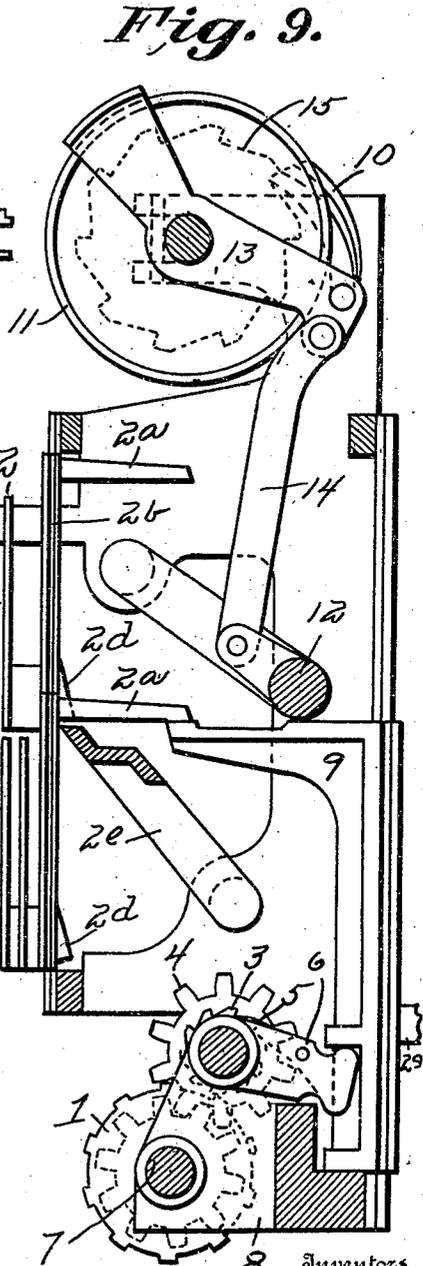
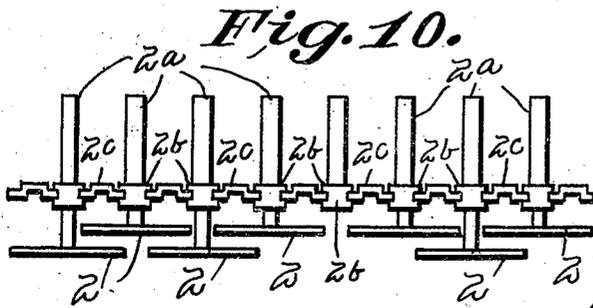


Fig. 11



Fig. 12

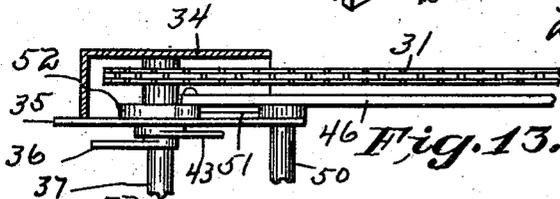


Fig. 13

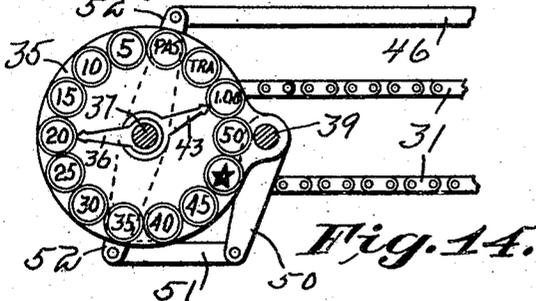


Fig. 14

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# UNITED STATES PATENT OFFICE.

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FARE REGISTER COMPANY, OF ROCHESTER, NEW YORK.

## FARE-REGISTER.

No. 905,218.

Specification of Letters Patent.

Patented Dec. 1, 1908.

Application filed July 10, 1907. Serial No. 382,974.

To all whom it may concern:

Be it known that we, JOHN F. OHMER and CHARLES W. KETTEMAN, citizens of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Fare-Registers; and we do declare the following to be a full, clear, and exact description of the invention, 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, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in fare registers.

The object of the invention is to increase the capacity for registering and indicating the fares in a machine of a given capacity and to thus greatly increase the utility of the machine without increasing the size thereof. In other words, by means of the present invention, we are able to register and indicate in a single machine thirty-two fares, in a machine heretofore limited to twelve fares. This is accomplished as before stated, without increasing the size of the machine and without adding any additional mechanism thereto.

In the machines as heretofore used, each bank of detail counters is adapted to register only a single denomination of fare and one bank has no coöperative relation with any other bank. Owing to this fact, it rendered necessary an increase in the size of the machine for each additional fare classification. For example, in order to register, say twenty-four distinct classes of fares, it was either necessary to place twenty-four banks of counters in a single casing which would increase the size of the machine beyond all practical purposes, or else two machines had to be utilized to obtain results desired, for example, such as is shown in our pending application Serial No. 352,085, filed January 14, 1907.

The present invention enables the registration and indication of fares greatly in excess as compared with the scope of the registers as heretofore used, or in other words, the capacity of a register with a given number of detail fare counters is increased from 150% to 200%. In accomplishing these results, the fare counters and the fare indi-

cators in the register coöperate with each other after a certain or definite unit of fare has been reached. As the invention is illustrated in the accompanying drawings, each bank of counters is utilized to register a single class of fares and each fare indicator at the register is utilized to indicate the corresponding fare of its counter as heretofore. For example, in registering and indicating fares from 5c. to 50c. inclusive, a single counter, a single setting device, and a single auxiliary dial are employed; also in registering a \$1.00 fare, a single counter, a single setting device, and a single auxiliary dial are utilized. In registering and indicating fares from 55c. to 95c. inclusive, and from \$1.05 to \$1.50 inclusive, two banks of counters, two setting devices, and two auxiliary dials are simultaneously operated. In obtaining these desired results, the auxiliary fare indications correspond in number and in sequence to the fare indications in the register, and in selecting the fares on the auxiliary indicator or indicators, a single setting device is used to select the fares to be registered and indicated at the machine up to a definite fare denomination, for example, for fares ranging from 5c. to 45c. or 50c. inclusive, and \$1.00. Fares from 55c. to 95c. and, from \$1.05 to \$1.50 inclusive, require the use of an additional setting device or two setting devices. An individual carriage and shiftable actuator are associated with each setting device by suitable connections; and these carriages are movable to their selected or predetermined positions in the rear of the register as will be hereinafter more particularly described. By thus employing two separate selective mechanisms, the individual or detail fare counters in the machine are operated singly or in relation with each other, and a given size of machine is greatly increased in capacity as hereinbefore specified.

Preceding a detail description of the invention, reference is made to the accompanying drawings, of which—

Figure 1, is a front elevation of the fare register heretofore having a capacity for registering and indicating twelve fares. Associated with this register is the mechanism by which the register is increased in capacity as hereinbefore specified. Fig. 2, is an elevation of the operating mechanism located at the rear of the machine as shown in Fig. 1.

Fig. 3, is a horizontal sectional view of the operating mechanism on the line *b b* of Fig. 2. Fig. 4, is an enlarged detail of the auxiliary indicator. Fig. 5, is a sectional view of the auxiliary indicator mechanism. Fig. 6, is a vertical sectional elevation of the selective and operating mechanism in the rear of the register, also a bank of fare counters and their individual actuating member. Fig. 7, is a modification of the auxiliary indicator as shown in Fig. 4. Fig. 8, is a front elevation of the register with parts broken away. Fig. 9, is a vertical sectional elevation of the register on the line *d d* of Fig. 8. Fig. 10, is a detail top plan view of the specific fare indicators at the machine. Figs. 11 and 12, are detached views in perspective of parts of Fig. 10. Figs. 13 and 14, are further modifications of the auxiliary fare indicator.

In a detail description of the invention, similar reference characters indicate corresponding parts.

Referring to Fig. 8, the mechanism therein shown is similar to that contained in many of our prior patents and contains space for fourteen banks of specific fare counters 1, each of such banks comprising three wheels for registering individually, fares from 5c. to 50c. and passes and transfers. It will be observed that there is one bank omitted from the organization as illustrated. It is essential that a blank space be thus provided by the omission of one bank of counters because in registering any of the fares from 5c. to 50c. or \$1.00, one of the shiftable actuators must be moved out of an operative position with any of the counters, thus insuring an operation of one bank of counters only.

Associated with each bank of counters is a specific fare indicator 2, and a cooperating ratchet wheel 3, toothed wheel 4, pawl 5 and pawl-carrying arm 6. The shaft 7 of the specific or detail fare counters 1 is mounted in a bearing 8 in the usual manner, and cooperating with each bank of counters 1 and its indicator 2 is an individual slide or actuating member 9 which moves in guides and all of which are of well-known construction and operation. Associated with the several banks of detail counters 1, is the well-known total counter 11 which is otherwise termed a trip register or a passenger indicator.

Referring to Fig. 9, 12 designates a transverse oscillating bar having its ends journaled in the frame-work and a connection with the pawl-carrying frame 13 by means of a link 14. The pawl-carrying frame 13 supports the ratchet pawls 10 which engage the ratchet wheels 15 of the total counters 11 to operate the latter.

The individual actuating members 9 when elevated, raise the bar 12 uniformly and each of said actuating members lifts its own fare indicator tablet 2 by engaging the rearwardly extended arm 2<sup>a</sup> thereof. Each of

said actuating members 9 also operates its own specific fare counter by engaging the pawl-carrying arm 6. The foregoing parts thus briefly described are of well-known construction and operation and require no further description beyond incidental mention hereinafter.

Referring to Figs. 2 and 3, these illustrate the operating mechanism through means of which the individual actuating members 9 are operated when selected by the exterior setting mechanism to be hereinafter described. This operating mechanism is also of well-known construction and is illustrated and described in many of our former patents and will now be described in connection with the features comprising the present improvements. The transverse lifting bar 16 has its ends engaged by stationary guides or tracks 17 attached to the plate or frame 18 which lies immediately in the rear of the register and is secured thereto. This lifting bar 16 is actuated through either of two angular levers 19 which have connected to them pull ropes 20 which extend to suitable points on the interior of the car. Projecting from the inner face of the plate or frame 18, is a series of rigid vanes 22, each two of which inclose a space which is diametrically in line with one of the detail fare counters. It will be noted that the word "Blank" appears above one of these spaces in Fig. 2; this indicates that the counter is removed from the front of this space, and such counter is that which has been removed from Fig. 8 as hereinbefore stated.

23 and 24 indicate two carriages which are movable along a stationary track 25 immediately in the rear of the lifting bar 16. Each of these carriages supports an actuator 26 which has independent vertical movement therein which is imparted from the lifting bar 16. Each of the actuators 23 and 24 has a rearwardly extended lug 27 which is adapted to be brought to a position in line with the space between any two of the vanes 22, and the actuators cannot be operated until the carriages 23 and 24 are brought to such position. It will therefore be seen that the object and purpose of the vanes 22 is to prevent an operation of either of the actuators 26 until their respective carriages have been moved in line with one of the spaces between the vanes 22 or in line with a selected fare counter. Projecting from the front of each of the actuators 26 is an arm 28 which lies below a lug 29 projecting rearwardly from each of the actuating members 9, and when an actuator 26 is brought to the desired position to cause the operation of a selected fare counter and its indicator the operation of the lifting bar 16 likewise elevates the actuator 26 owing to the arm 28 of said actuator extending through the longitudinal slot 30 in said lifting bar. One of 130

the carriages of one of the actuators 26 is attached on each side to a sprocket chain 31 which passes around guide wheels 32 on the frame 18 and thence around a sprocket wheel 33 located within a housing 34 in the rear of the auxiliary indicator 35—see Figs. 3 and 4.

The sprocket wheel 33 is fixed to the setting rod 37 which projects through the axis of the dial and extends on the interior of the car. Fixed to the same setting rod 37 in the front of the dial 35 is a pointer 36 which has a range of movement extending from 5c. on the dial to 50c. This range of movement is equal to the distance from 5 to 50 as indicated in Fig. 2 of the drawings which is the limit of the movement of the carriage 24, said carriage being stopped at one limit of its movement by a pin 38 which projects from the carriage track 25, and at the other limit of its movement by the right hand end of the slot 30 in the lifting bar 16. It will be understood that in setting the carriage 24 to positions to register fares and to indicate the same at the register to the extent specified the pointer 36 is alone operated by turning the setting rod 37. In the setting movements of the two carriages 23 and 24 to register and indicate fares above 50c. an auxiliary setting rod 39 is employed which lies parallel with the setting rod 37 and is of the same length. This auxiliary setting rod 39 is geared to a spur wheel 40 which loosely surrounds the setting rod 37. 41 is a spur wheel fixed to the setting rod 39 and in mesh with said spur wheel 40; the latter spur wheel has a hub 42 which projects loosely through the axis of the indicator dial 35 and has fixed to it a pointer 43 which lies adjacent to the face of the dial.

The range of movement of the pointer 43 extends from the "pass" indication on the dial 35 to the blank indication on the dial which is indicated by a star adjacent to the 50c. indication. The carriage 23 cooperates with this pointer 43. The carriage 23 has a range of movement extending from the space between the vanes 22 which is indicated by the word "Blank" to the left hand limit of the slot 30 in the lifting bar 16. It will be observed that in this range of movement of the carriage 23, the said carriage has to pass the pin 26 which acts as one of the stops for the carriage 24; this, it is enabled to do by providing a recess or slot in the rear side of the carriage 23 as indicated at 44 in Fig. 6. The carriage 23 is limited in this direction of movement by a stop pin 45 on its actuating rod or bar 46, said pin 45 engaging the side of the frame 18 when the carriage 23 is moved inwardly to its limit. The connecting bar 46 through which the carriage 23 is actuated within the limits specified, extends parallel with the sprocket chain 31 and is linked to a crank arm 47 which is fixed to

the hub of the spur wheel 40 within the sprocket box or casing 34. It will thus be seen that each of the indicator hands 36 and 43 have independent movement within the ranges specified. The setting rods 37 and 39, as before stated, extend throughout the length of the car and at suitable points are provided with hand holds or grips (not shown) by which they are turned in the setting movements which concurrently bring the pointers to the proper positions to indicate the fare to be registered, and the carriages 23 and 24 to proper positions for the actuators 26 to engage the actuating members 9 of the counters.

As the auxiliary indicator is illustrated in Fig. 4 and as the actuator carriages are shown in Fig. 2, the register is set to register and indicate \$1.20. Assuming that the next registration and indication is a \$1.05 fare, the pointer 43 is not disturbed, but the pointer 36 is moved to the 5c. indication on the dial by turning the setting rod 37. If the next fare to be registered and indicated is—say a 20c. fare, the pointer 36 is moved to the 20c. indication and the pointer 43 is moved to the neutral point indicated by the star. In the operation of the lifting bar 16 when one or the other of the pointers 36 or 43 is in line with the blank space on the dial, there is no actuation of a counter or a specific fare indicator by the elevation of the carriage which is thus placed out of an operative position, owing to the bank of counters being omitted and the specific fare indicator be omitted at that particular point. In Fig. 12, it will be observed the indicator is omitted from one of the indicator slides; this is the slide which moves concurrently with the carriage which is moved to the inoperative position. Reverting to Fig. 4 of the drawings for further illustrations if it is desired to register and indicate a 50c. fare, the pointer 43 is set to indicate 50 and the pointer 36 is moved to the blank space upon the dial; this would move the carriage 23 in line with the 50c. counter and the carriage 24 in line with the blank position as shown in Fig. 2. It will be understood that the total counters 11 are actuated in each operation of the machine whether one detail counter is moved at a time or two detail counters are moved at a time, the said total counters counting each time a single fare regardless of its value, or a passenger.

While we have shown in Fig. 4 one means of utilizing a single auxiliary indicator to increase the capacity thereof to an extent far in excess of any single indication thereon, we do not wish to be limited to this specific means as it is evident modifications may be devised, for example, in Fig. 7, we provide a stationary pointer 48 and a disk 49 which rotates to the limited extent on the auxiliary setting rod 39. This disk 49 is connected

with the bar 46 and has upon it the four indications to which the pointer 43 is movable on the indicator dial 35 as shown in Fig. 4. It will be understood that the disk 49 has the same extent of movement relatively to the fixed pointer 48, that the movable pointer 43 has to the fixed dial 35.

Fig. 14 indicates a further modification in the setting mechanism now being described, and consists of a series of levers 50—51 and 52, the former of which is fixed to the auxiliary setting rod 39, and the latter lever, to-wit—52 is fulcrumed on the setting rod 37 and has a movable pointer 43 connected therewith by means of a hub or sleeve extension. The upper end of the lever 52 is pivoted to the bar 46 which as before stated, is connected with one of the carriages, to-wit—carriage 23. The setting rod 37 has fixed to it the pointer 36 which is movable over the face of the dial 35 to the same extent that the pointer 36 in Fig. 4 is movable, and the pointer 43 in Fig. 14, is movable to the same extent as the pointer 43 in Fig. 4.

Referring more particularly to the fare indicators in the register, these consist of the usual individual tablets upon which the fares of the counters are inscribed. Each of such tablets is mounted upon its supporting slide 2<sup>b</sup> movable in guides 2<sup>c</sup> attached to the frame-work of the machine. On the rear of each of said slides 2<sup>b</sup> there is a cam or incline block 2<sup>d</sup> which performs the double function of supporting an elevated indicator and of permitting an indicator which has previously been elevated to drop to the lower position.

2<sup>e</sup> is a yoke extending across the machine and normally maintained yieldingly in a position to engage the lower side of one of the incline blocks 2<sup>d</sup> to hold each indicator in its elevated position until said yoke 2<sup>e</sup> is moved rearwardly to release the lug or incline block 2<sup>d</sup> which is being held thereby. This movement of the yoke 2<sup>e</sup> takes place when the next succeeding indicator support 2<sup>b</sup> is being elevated. In such elevation of each of the indicator supports, the incline surface of the block 2<sup>d</sup> engages the transverse portion of the yoke 2<sup>e</sup> and moves it rearwardly to release the previously held indicator and to permit a completion of an elevation of the next succeeding indicator to a position to be supported by said yoke, after which said yoke is moved to its normal position to support such indicator.

It will be noted from Fig. 10, that one of the indicator supporting slides 2<sup>b</sup> is minus the indicator tablet 2; this has been referred to hereinbefore as the parts which operate in connection with the blank space in the machine. The indicator support referred to is utilized merely to operate the indicator retaining yoke 2<sup>e</sup> to permit said yoke to release a previously maintained tablet which

is done by the cam block 2<sup>d</sup>. It will be understood that the indicator support as shown in Fig. 12 is operated whenever one or the other of the carriages 23 or 24 is moved to the blank position as indicated on the auxiliary indicator 35, and that when said supporting slide 2<sup>b</sup> is elevated it is essential that the yoke 2<sup>e</sup> which retains the indicators in their elevated position, be actuated to release the previously held indicator, hence, the employment of the incline block 2<sup>d</sup> upon this indicator supporting slide 2<sup>b</sup> which is minus the indicator tablet 2.

From the foregoing description, it will be seen that the capacity of the machine is greatly increased by providing means for actuating two detail counters at one registration to register fares above a given denomination. The fares from 5c. to 50c. inclusive, are registered and indicated in the operation of a single bank of detail counters at a time, also the \$1.00 bank of counters is provided singly. For all fares above the latter denomination and for fares from 55c. to 95c. inclusive, two banks of counters are operated simultaneously, a setting operation has placed the setting devices in operative relation therewith.

We claim:

1. In a fare register, a series of banks of specific fare counters mounted upon a common axis of rotation and separated into two divisions by an intervening space, an individual actuating member associated with each of said banks of counters, a shiftable actuator adapted to be placed in operative relation with the individual actuating members of less than the entire series of said banks of counters, another shiftable actuator adapted to be placed in operative relation with the individual actuating members of the remaining banks of said series of specific fare counters, and either of said shiftable actuators being adapted to be placed in a position opposite said intervening space to render it inoperative.

2. In a fare register, a series of banks of specific fare counters upon which fares of the lowest denomination to a higher denomination are registrable, a second series of banks of specific fare counters which cooperate with the first named series of banks of counters in registering fares of a still higher denomination, both series of counters being mounted upon a common axis of rotation and separated by an intervening space, an individual actuating member associated with each bank of counters of both series, a carriage supporting an actuator adapted to be shifted into an operative position with any of the individual actuating members of the first named series of banks of counters, another carriage supporting an actuator adapted to be shifted into an operative position with any of the individual

actuating members of the second series of banks of counters, either of said shiftable actuators being adapted to be placed in a position opposite said intervening space  
 5 whereby the actuator so placed is rendered inoperative, an auxiliary indicator, and selective devices connecting said carriages with the auxiliary indicator and whereby the selected fare is indicated upon said auxiliary indicator and the counters corresponding to such fare are selected.

3. In a fare register, a series of banks of specific fare counters upon which are registrable fares from the lowest denomination  
 15 to a higher denomination, a second series of banks of specific fare counters cooperating with the first-named series to register fares of still higher denominations, an actuating member for each bank of counters, an auxiliary fare indicator, and selective devices interposed between said auxiliary indicator  
 20 and the actuating members of the counters and whereby a selected fare to be registered is indicated on the auxiliary indicator and the counter or counters are selected for registration of said indicated fare.

4. In a fare register, a plurality of banks of specific fare counters mounted upon a common axis of rotation and separated into  
 30 two divisions by an intervening space, an individual actuating member for each bank of counters, two carriages each one of which supports an actuator for the individual actuating members of the counters, said carriages being adapted to be moved to a position to bring the actuator therein in operative relation with the individual actuating member of any selected counter, either of  
 35 said shiftable actuators being adapted to be placed in a position opposite said intervening space whereby the actuator so placed is rendered inoperative, and means for shifting one or both of said carriages to positions to bring the actuator therein into such cooperative relation with the individual actuating member or members of selected counters.

5. In a fare register, a series of counters to register major values, a series of counters to register minor values, both series of counters mounted upon a common axis of rotation and separated into two divisions by an intervening space, an individual actuating member for each of said counters, a carriage supporting an actuator for the individual actuating members of each series of counters,  
 55 either of said carriages being adapted to be placed in a position opposite said intervening space to render the actuator therein inoperative, a setting device for each of said carriages, and an auxiliary dial cooperating with said setting devices to indicate the selected counter or counters to be actuated through one or both of the actuators on said carriage or carriages.

65 6. In a fare register, a series of counters

to register fares of minor values, a series of counters cooperating with those upon which the fares of minor values are registered to register fares of major values, said counters being mounted upon a common axis of rotation and separated into two divisions by an  
 70 intervening space, indicators cooperating with both series of counters to indicate the fares of minor or major values, a movable actuator for each series of counters, either  
 75 of said movable actuators adapted to be placed in a position opposite said intervening space to render it inoperative, selective mechanism cooperating with each of said actuators to select the counter or counters to  
 80 be operated, and an auxiliary indicator cooperating with said selective devices to indicate the fare to be registered on the counters of minor values or those of major values.

7. In a fare register, a series of banks of  
 85 specific fare counters for registering fares of minor values, a series of banks of counters for registering fares of major values in conjunction with the counters upon which the fares of minor values may be registered,  
 90 said counters mounted upon a common axis of rotation and separated into two divisions by an intervening space, a totalizing counter to register the fares of both minor and major values, an individual actuating member associated with each bank of counters, a movable actuator associated with the individual actuating members of each series of counters,  
 95 either of said movable actuators being adapted to be placed in a position opposite said intervening space to render it inoperative, and setting mechanism comprising exterior unitary indicator upon which the fares of minor or major values are indicated in the operations of selecting the fares to be  
 100 registered, a setting rod connected with each of the movable actuators with means thereon for indicating upon the exterior indicator the fare to be registered or the counter to be placed in operative relation with one or both  
 105 of the movable actuators.

8. In a fare register, two series of banks of fare counters for registering fares of major and minor values, both series of counters being utilized in registering the fares of  
 115 major values, a single auxiliary dial upon which the fares of both series of counters are indicated, and individual setting mechanism cooperating with said auxiliary dial in selecting the fares to be registered on  
 120 either series of counters.

9. In a fare register, two series of fare counters mounted upon a common axis of rotation and separated by an intervening space, one series being adapted to register  
 125 fares of minor values, and both series being adapted to register fares of major values, two setting rods arranged substantially as described, an auxiliary indicator cooperating with said setting rods to indicate the fares  
 130

to be registered on one or both series of counters, a movable actuator adapted to be placed in operative relation with a selected fare counter of one or both series, said movable actuator being adapted to be placed in a position opposite said intervening space between the counters to render it inoperative, and suitable connections between each of the setting rods and a respective movable actuator.

10. In a fare register, a series of banks of counters, an individual actuator for each bank of said series, a second series of banks of counters, an individual actuator for each bank of said series, both series of banks of counters being mounted upon a common axis of rotation and separated by an intervening space, a movable actuator adapted to be moved in operative relation with each bank of counters of the first named series, a movable actuator adapted to be brought into operative relation with each bank of counters of the second series, either of said movable actuators being adapted to be placed in a position opposite said intervening space to render it inoperative, an operating member to impart operative movements to each of said actuators in operating the counters, a carriage upon which each actuator is mounted, two setting rods, one of which is connected to the carriage supporting the actuator of the first series of counters, and the other of which is connected to the carriage supporting the actuator of the last named series of counters, an auxiliary indicator, and pointers movable to the indications on said auxiliary indicator, said pointers being connected with one of the setting rods.

11. In a fare register, two series of banks of fare counters, mounted upon a common axis of rotation and separated by an intervening space, an individual actuating member for each bank of each series, an actuator adapted to be set to a position to operate the individual actuator member of any bank of one series of counters, an actuator adapted to be set to a position to operate the individual actuating member of any bank of counters of the last named series, either of said actuators adapted to be placed in a position opposite said intervening space to render it inoperative, an operating member to operate both actuators simultaneously, an auxiliary dial, setting mechanism for the actuator of each series of counters, an auxiliary indicator containing indications corresponding to the fare values of the banks of counters of both series, and a neutral indication on said auxiliary indicator to indicate the position of either setting mechanism when it is desired to register on one selected bank of counters only of either series.

12. In a fare register, two series of banks of fare counters, a fare-selective mechanism for each bank of each series, an auxiliary

dial cooperating with the fare-selective mechanism of both series of counters and whereby the minor fare values of one series of counters and the major fare values of both series of counters are indicated in the setting movements of one selective mechanism and in the setting movements of both selective mechanisms.

13. In a register, a plurality of banks of counters, so mounted as to provide an unoccupied space between two of said banks of counters, an individual-actuating member for each bank of counters, two shiftable-actuators, one of which is adapted to be placed in operative relation with a predetermined bank of counters, while the other shiftable actuator is simultaneously moved to an inoperative position in alinement with the unoccupied space between the counters.

14. In a register, a series of specific indications mounted in alinement and separated into two groups by an intervening space, an individual actuating member associated with each indicator, two shiftable actuators, each of which is adapted to be placed in operative relation with a predetermined specific indicator, either of said shiftable actuators being adapted to be placed in a position opposite said intervening space to render it inoperative, and means for simultaneously shifting said shiftable actuators.

15. In a fare register, a series of banks of counters mounted upon a common axis of rotation and separated into two groups by an intervening space, a series of specific indicators, one for each counter, an individual actuating member associated with each bank of counters and each indicator, two shiftable actuators each of which is adapted to be placed in operative relation with a predetermined bank of specific counters and its respective indicator, and either of said shiftable actuators being adapted to be placed in a position opposite said intervening space to render it inoperative.

16. In a fare register, a plurality of specific indicators mounted in alinement and separated into two groups by an intervening space, an individual actuating member for each indicator, two carriages, each of which supports an actuator for the individual actuating members of the indicators, said carriages being adapted to be moved to a position to bring an actuator therein in operative relation with the individual actuating member of a selected indicator, means for shifting said carriages to positions to bring the actuators therein into cooperative relation with the individual actuating members of selected indicators, and either of said shiftable actuators being adapted to be placed in a position opposite said intervening space to render it inoperative.

17. In a register, a plurality of banks of counters mounted upon a common axis of

rotation and separated into two groups by an intervening space, a plurality of specific indicators therefor, an individual actuating member for each bank of counters and indicators, two carriages, each of which supports an actuator for the individual actuating members of the counters and indicators, said carriages being adapted to be moved into a position to bring the actuator therein in operative relation with the individual actuating member of any selected counter and indicator, means for shifting one or both of said carriages to positions to bring the actuator therein to engage an individual actuating member or members of selected counters and their respective indicators, and either of said carriages being adapted to be placed in a position opposite said intervening space to render it inoperative.

18. In a fare register, a plurality of banks of counters mounted in alinement and separated into two groups by an intervening space, a plurality of auxiliary indicators, an individual actuating member for each bank of counters, two shiftable actuators, either of which is adapted to be placed in a position opposite said intervening space to render it inoperative, means for shifting said actuators into cooperative relation with the individual actuating members of the counters, and to simultaneously indicate the fare of the counters on the auxiliary indicators.

19. In a fare register, a plurality of banks of specific fare counters mounted on a common axis and separated into two groups by an intervening space, a plurality of fare indicators and a plurality of auxiliary indicators, all of said indicators being adapted to individualize each specific counter, an

individual actuating member for each bank of counters, two shiftable actuators, means for moving the actuators to positions to register and indicate specific fares and to indicate the corresponding fare on the auxiliary indicators, and either of said shiftable actuators being adapted to be placed in a position opposite said intervening space to render it inoperative.

20. In a registering machine, a series of banks of counters for registering fares of a lower order, an individual actuating member for each bank of said series of banks of counters, a series of banks of counters for registering fares of a higher order, an individual actuating member for each bank of said series of banks, a shiftable actuator adapted to be moved into operative relation with the individual actuating members of the series of banks of counters for the fares of the lowest order, a shiftable actuator adapted to be moved into operative relation with the individual actuating members of the series of banks of counters for the fares of the higher order, and means whereby the shiftable actuator of the series of banks of counters for the fares of the lower order is enabled to be placed in operative relation with any of the individual actuating members of the series of banks of counters for the fares of the higher order.

In testimony whereof we affix our signatures, in presence of two witnesses.

JOHN F. OHMER.  
CHARLES W. KETTEMAN.

Witnesses:

IDA F. LUTZ,  
W. J. KUHN.