

No. 869,740.

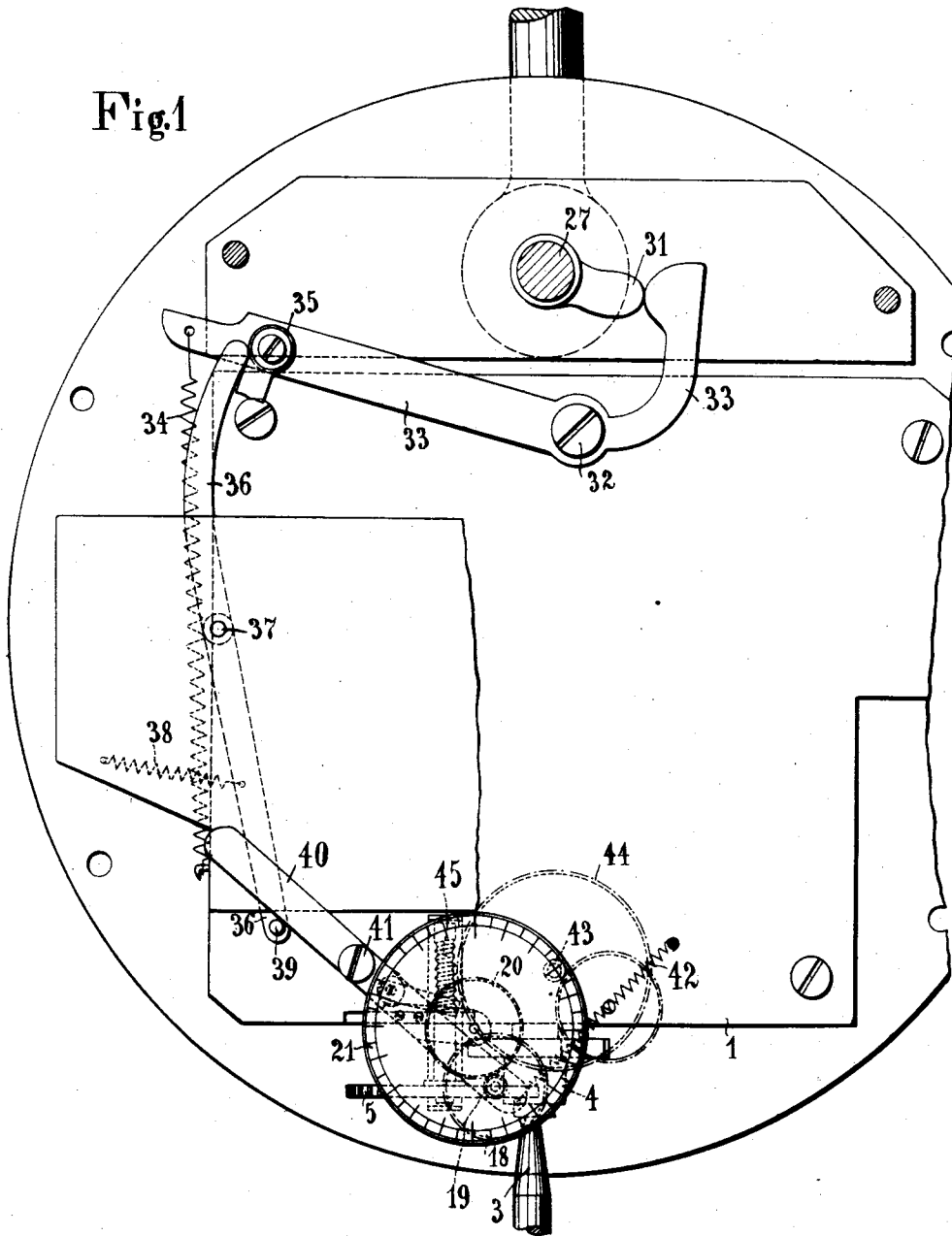
PATENTED OCT. 29, 1907.

B. SCHNEIDER.  
ODOMETER.

APPLICATION FILED MAY 23, 1907.

3 SHEETS—SHEET 1.

Fig.1



Witnesses:

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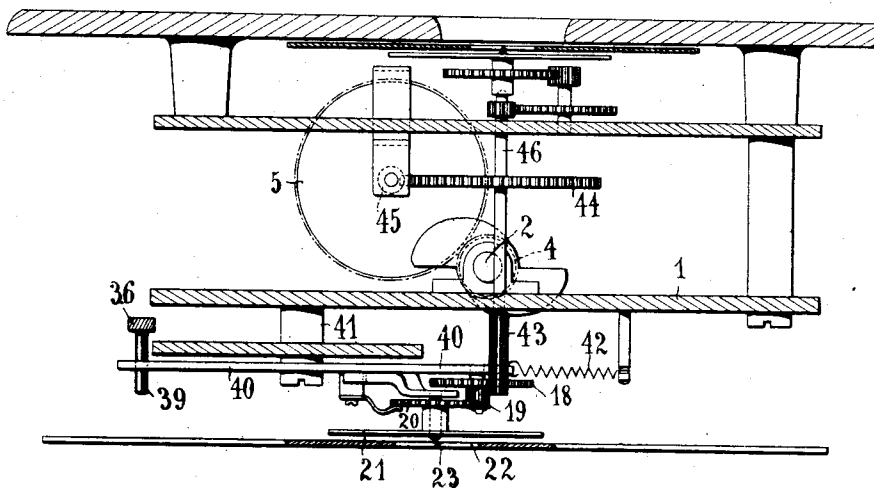
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B. SCHNEIDER.  
ODOMETER.

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3 SHEETS—SHEET 3.

Fig. 3



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# UNITED STATES PATENT OFFICE.

BERTHOLD SCHNEIDER, OF BERLIN, GERMANY.

## ODOMETER.

No. 869,740

Specification of Letters Patent.

Patented Oct. 29, 1907.

Application filed May 23, 1907. Serial No. 375,354.

*To all whom it may concern:*

Be it known that I, BERTHOLD SCHNEIDER, engineer, of 101-102 Bernauerstrasse, Berlin, Germany, have invented new and useful Improvements in an Odometer for Use in Connection with Fare-Indicators, of which the following is a clear and distinct description.

This invention relates to an odometer for use in connection with every description of fare-indicator, which is distinguished from devices of a similar character as heretofore constructed inasmuch as it indicates not only the total distance traversed by the vehicle, but also that portion of this distance wherein the vehicle has been occupied by a fare. From the difference between the total distance the vehicle has been driven and that wherein it has been occupied by a fare, the distance it has been driven empty can be ascertained, and the owner of the vehicle is consequently able accordingly to determine through what portion of this distance it has been unoccupied and occupied respectively. For this purpose there is provided in addition to the odometer heretofore used an auxiliary odometer which is thrown into and out of engagement when the fare-indicator moved to operative or inoperative position, so as to indicate the distance which the vehicle travels when carrying a passenger or passengers.

In the drawings which form a part of this specification, the apparatus is shown in connection with an actuating shaft for a fare indicator, the actuating shaft when operated in one direction throwing the auxiliary odometer into operation and when the shaft is shifted in the opposite direction it moves the auxiliary odometer to inoperative position. It is, however, obvious that the odometer may be thrown into or out of operation with any other suitable means.

In the drawings, wherein like reference characters denote corresponding parts throughout the several views—Figure 1 is a front view, the auxiliary odometer being shown as out of engagement with its actuating means; Fig. 2 is a similar view with the auxiliary odometer shown in engagement with its actuating means, and, Fig. 3 is a vertical sectional view through Fig. 2.

Referring to the drawings by reference characters 27 denotes a flag shaft to which is fixed a cam 31 adapted to engage a lever 33 oscillating upon a pin 32 secured to the bed-plate 1. The cam 31 is adapted to maintain the lever 33 in its normal position against the pull of a spring 34, the latter being connected at one end to the lever 33 and at its other end to the bed-plate 1. Carried by the lever 33, near that end to which the spring 34 is attached is a roller 35, which bears against a double-armed lever 36 and is adapted to shift said lever 36 when the lever 33 is released by the shifting of the cam 31 out of engagement with the said lever 33. When the cam 31 is shifted out of engagement with the

lever 33 the action of the spring 34 lowers one end of the lever 33, or in other words the lever 33 is caused to shift upon the pin 32. The lever 36 oscillates upon a pin 37 which is carried by the bed-plate 1 and one arm of said lever has connected thereto a spring 38, the function of which is to shift said lever 36 upon its pivot, but the shifting movement of said lever is arrested through the medium of the roller 35. The spring 38 maintains the upper portion of the lever 36 in engagement with the roller 35. The lower end of the lever 36 has secured thereto a pin 39 which is adapted to bear against the under side of a double-armed lever 40 oscillating upon a pivot 41 and having one end influenced by a spring 42 which is attached to the said end. That end of the lever 40 to which the spring 42 is attached carries the gear wheels 18 and 20 and a pinion 19, as well as the indicating disk 21 for the auxiliary odometer. When the lever 41 oscillates upon its pivot the toothed wheel 18 is brought into engagement with the pinion 43 carried by the shaft 46 for actuating the main odometer. The shaft 46 carries a toothed wheel 44 which engages with a worm 45 having attached thereto a spur wheel 5 which is rotated from the wheel of the vehicle in a manner as hereinafter set forth. The spring 42 acting upon the lever 40 tends to turn the lever in such a manner that the wheels 18 and 43 mesh with each other, while the pin 39 is adapted to act on the other end of the lever 40 so as to turn the latter back or shift it in an opposite direction to which it is shifted by the spring 42.

The reference character 2 denotes a shaft rigidly connected with a flexible shaft 3 actuated from the wheel of the vehicle, the shaft 2 being suitably mounted on the bed-plate 1 and has keyed thereon a pinion 4, which engages with the spur wheel 5. From such an arrangement it is evident that when the spur wheel 5 is actuated motion will be imparted to the worm 45, the latter in turn rotating the toothed wheel 44 and actuating the shaft 46, thereby operating the main odometer. During the operation of the main odometer it is evident that if the toothed wheel 18 engages the pinion 43 the auxiliary odometer will be operated. It is evident from the foregoing operation that the main odometer will register the total distance traveled by the vehicle and that the auxiliary odometer will register the distance traveled by the vehicle when carrying a passenger or passengers.

The manner in which the mechanism is operated is as follows: The shaft 27 being shifted in one direction so as to actuate the fare indicator, it will be evident that the cam 31 will be moved from the position shown in Fig. 1 to the position shown in Fig. 2—that is to say, the cam 31 will be moved out of engagement with the lever 33. The latter, through the action of the spring 34, is shifted upon its pivot 32, and owing to the shifting of the roller 35 from the position shown in Fig. 1 it is evi-

dent that the spring 38 will shift the lever 36 upon its pivot and during such movement of the lever 36 the pin 39 is moved to the left so that the spring 42 can elevate the lever 40, carrying the auxiliary odometer and bringing the toothed wheel 18 in engagement with the pinion 43 of the main odometer. By such arrangement it is evident that during the travel of the carriage both odometers are in action.

It is obvious that the arrangement may be such that the auxiliary odometer will indicate only the distance traversed by the vehicle without a fare—that is to say, the auxiliary odometer being thrown into engagement when the fare indicator is in its inoperative position and vice versa.

What I claim is—

1. An indicator for traveling vehicles comprising a fare indicator a main odometer operated from the moving part of the vehicle, an auxiliary odometer, shiftable means for actuating a fare indicator, and mechanism actuated when said means is shifted in one direction for operatively connecting the auxiliary odometer with the main odometer.

2. An indicator for traveling vehicles, comprising a main odometer operated from a moving part of the vehicle, an auxiliary odometer, a shiftable operating mechanism for said auxiliary odometer, said mechanism carrying said auxiliary odometer, and means for shifting said mechanism to operative engagement with said main odometer, causing thereby the simultaneous operation of the two odometers.

3. A device of the character described comprising a shaft, a main odometer operated from a moving part of the vehicle, an auxiliary odometer, a lever mechanism for moving said auxiliary odometer to operative engagement with said main odometer causing thereby the simultaneous operation of the two odometers, and means carried by said shaft and adapted when the shaft is shifted in one direction, to engage said lever mechanism, thereby shifting it in one direction and causing the moving of the auxiliary odometer out of operative engagement with the main odometer.

4. A device of the character described comprising a main odometer operated from a moving part of the vehicle, an auxiliary odometer, a shiftable lever mechanism carrying said auxiliary odometer and adapted when shifted in one direction to move said auxiliary odometer to operative engagement with said main odometer, causing thereby the simultaneous operation of the two odometers, retaining means engaging with said lever mechanism and adapted to shift it in the opposite direction, causing thereby the disconnecting of the auxiliary odometer from the main odometer, and means for automatically shifting the lever mechanism in the opposite direction, when said retaining means is moved clear of the lever mechanism, causing thereby an operative connection between the two odometers.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

BERTHOLD SCHNEIDER.

Witnesses:

HENRY HASPER,  
WOLDEMAR HAUPT.