

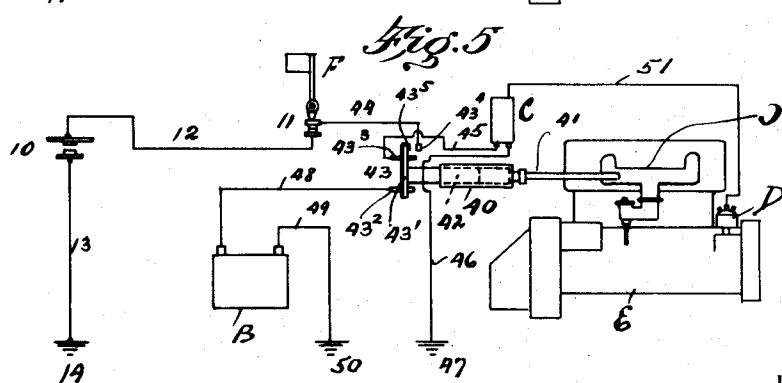
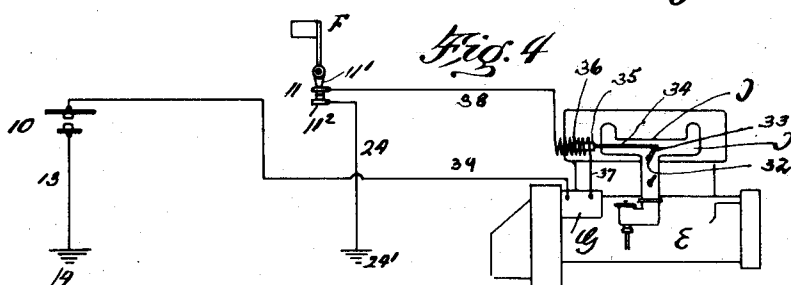
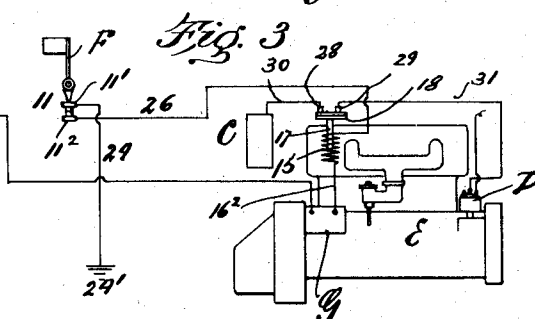
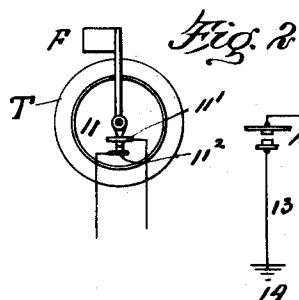
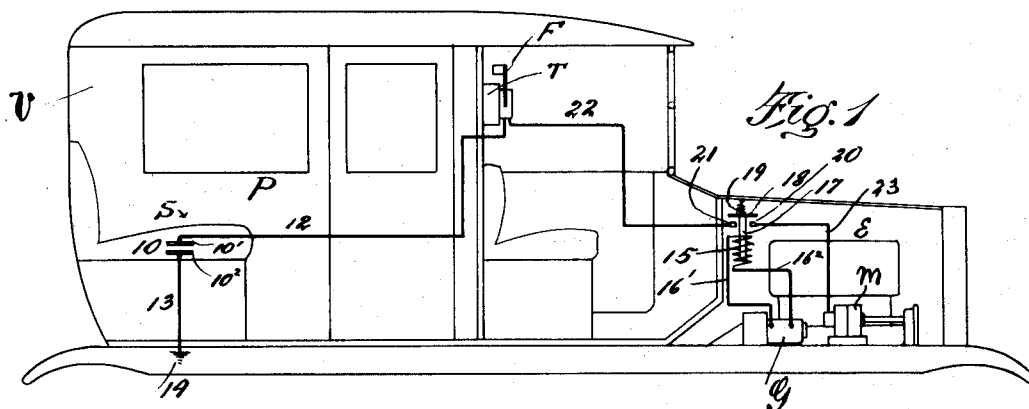
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A. WEISS

TAXIMETER VEHICLE

Filed July 28, 1924



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TAXIMETER VEHICLE.

Application filed July 28, 1924. Serial No. 728,695.

To all whom it may concern:

Be it known that I, ABRAHAM WEISS, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Taximeter Vehicles, of which the following is a specification.

This application is a continuation in part of my copending application Serial No. 716,094, and the invention relates to taximeter vehicles having manually controlled fare registers.

The object of this improvement is to provide an attachment, whereby the driving of the vehicle, when occupied by a passenger, without setting the fare register into registering position, except with slow speed or only for a short distance, will be rendered impossible.

In this application, I make use of the electric or mechanical power developed while running the motor, as for instance, the electricity generated by the generator or the suction or pressure action in the engine to actuate means controlling the operation of the latter.

According to this invention, I employ an electric circuit, which as in the copending application leads either through the electric ignition system or through an electromagnet and which is on one hand controlled automatically by the occupant of the passenger compartment and by the manual control of the fare register and on the other hand by a switch independently controlled from the power developed through the operation of the motor, so that when a sufficient amount of such power has been developed during the operation, while both the passenger controlled switch and the register controlled switch are closed, the motor will stop.

A few embodiments of my invention are illustrated in the accompanying drawing, which forms part of this specification and in which Fig. 1 is a diagrammatic side view of a taximeter vehicle equipped with my novel attachment; Fig. 2 is a face view of the flag controlled switch and Figs. 3-5 are diagrams of different modifications of my attachment.

Referring first to the modification shown in Fig. 1, V denotes the vehicle, T the taximeter or fare register controlled by the usual handle or flag F, P the passenger com-

partment, S one of the seats therein, E the engine, M the ignition system, such as a magneto or the like, and G the generator.

In the passenger compartment under any one of the seats, such as under seat S, or under the floor, I provide an electric switch 10, of which one contact piece 10¹ is movable and is adapted to be acted upon by the weight of the occupant and the other 10² by a wire 13 is grounded, as at 14. The flag of the fare register T comprises a switch 11 whose one contact member by wire 12 is connected to the other contact member 10¹ of the switch 10 and whose other contact member 11² by wire 22 is connected to a contact point 21 of a switch 18, which at point 20 through wire 23 is connected to the magneto. The switch 18 is actuated by a spring 19 controlled by the armature 17 of an electro-magnet 15 energized from the generator G through the wires 16¹, 16².

With the understanding that the flag switch 11 is closed normally, i. e. when the fare register is not set into registering position, and that the switch 18 is open and by the spring 19 has the tendency to remain open, the operation is as follows:—

Let us assume that the passenger compartment is occupied and the driver attempts to drive the vehicle with the flag in "Vacant" position. By the occupancy of the passenger compartment, the switch 10 will be closed. But because the switch 18 is open, the motor can be started and the vehicle operated. When the generator has generated enough electricity to cause the electro-magnet to overcome the tension of the spring 19, the switch 18 will close. At that moment, the circuit flowing through the magneto will cause the latter to be grounded or shortcircuited and the motor will stop.

As soon, however, as the flag is set into registering position, the circuit affecting the magneto, because of the opening of the flag switch 11, will be opened and the operation of the vehicle can be continued.

In the modification shown in Fig. 3, the circuit affecting the ignition is led through the distributor D. Otherwise, the device is the same as in Fig. 1. In this case the electric connections are as follows:—

One of the contacts of the switch is grounded, at 14, by wire 13, as before, while the other contact by wire 25 is connected to one terminal of the generator G. One of

the contacts of the flag switch 11 is grounded by wire 24 at 24' and its other contact point is connected by wire 26 to one end of the coil of the electro-magnet 15, whose other end is connected by wire 16² to the other terminal of the generator G. The switch 18 actuated by the armature 17 is connected at 28 by wire 30 to the high tension coil of the distributor and at point 29 by wire 31 to the latter.

The operation will be as follows:—

Assuming the same conditions as before, except that the switch 18 is normally closed, there will be no current flowing through the circuit controlled by the seat and flag switches, as long as the generator is not working or does not generate enough electricity.

By the occupancy of the passenger compartment, the circuit feeding the electro-magnet, when the motor is started will, while the flag remains in "Vacant" position, be grounded and, therefore, the distributor not affected. But when sufficient electricity is generated by the generator, it will have the effect to open the switch 18 as a consequence whereof, the circuit fed through the high tension coil C to the distributor D will be broken and the operation of the motor will stop.

In the modification shown in Fig. 4, the electricity generated by the generator is utilized to excite an electro-magnet, which operates a throttle valve 32 controlling the feed of the fuel into the manifold. In this case, the switch in the passenger compartment has the same connections to the generator through wire 39 and to the ground 14 through wire 13, as in the preceding modification. The flag controlled switch has one of its contacts grounded at 24' through wire 24 and its other contact point connected by wire 38 to one terminal of the coil of the electro-magnet 36 whose other terminal is connected through wire 37 to the opposite pole of the generator. The armature 35 of this electro-magnet through a rod 34 and lever 33 is connected to the throttle valve 32.

The mode of operation is as follows:—

While the flag is in "Vacant" position, the car occupied and the motor is running, the generator G upon generating sufficient electricity will excite the electro-magnet 36 as a consequence of which the armature 35 thereof will operate the throttle 32 through rod 34 and lever 33 and cut off the feed of the fuel, thereby stopping the motor. When on the other hand, the flag is thrown into registering position, the circuit of the generator G feeding the electro-magnet will be opened and the throttle 32 will not be affected.

In the modification according to Fig. 5, the suction or pressure developed in the motor, when the latter is operated, is utilized for operating a switch controlling the circuit

feeding the ignition system, such as the distributor. In this case, one of the contact pieces of the switch 10 in the passenger compartment is grounded by wire 13 and 14, as before, and the other contact piece is connected by wire 12 to one of the contact pieces of the flag controlled switch 11. The second contact piece of the flag controlled switch is connected by wire 44, to a contact piece 43⁴ of a third switch 43 actuated by a plunger 42 working in a suction or compression chamber 40 that through a pipe 41 leads into the intake manifold I. The plunger operated switch 43 comprises a slide 43' movable on contact members 43², 43³, of which one 43² is connected by wire 48 to one pole of an electric source, such as battery B, the other pole of which by wire 49 is grounded at 50. The other contact member 43³ of the switch 43 is connected to one terminal 45 of the high tension coil C whose other terminal by wire 46 is grounded at 47. The secondary of said coil by wire 51 is connected to the distributor D. In alignment with the contact point 43⁴ is a second contact point 43⁵ on which the slide 43' normally bears.

In operation, when the passenger compartment is occupied, while the flag is in "Vacant" position, the motor M can be started, the circuit feeding the high tension coil C flowing from the battery B through wire 48, contact member 43², slide 43', contact member 43³, wire 45, to high tension coil C and through wire 46 to the ground and back to the battery through wire 49. When the speed of the motor is such as to produce sufficient suction (or pressure), the plunger 42 will move the slide to bring it into contact with contact point 43⁴. If the flag is still in "Vacant" position, the battery circuit will flow through said flag switch 11, seat switch 10 and the ground, and as a result thereof be grounded in consequence of which there will be no current flowing through the high tension coil and the motor will stop.

What I claim is:—

1. In a motor vehicle having a manually controlled fare register, the combination with the motor controlling means, of a passenger controlled means, a register controlled means and means intervening between said first named means and said other two means, such that when the vehicle is occupied and the register is not set for occupancy, said intervening means will affect the motor when the latter attains a certain speed.

2. In a motor vehicle having a manually controlled fare register, the combination with the motor controlling means, of a passenger controlled means, a register controlled means and electric means intervening between said first named means and said other two means, such that when the vehicle

cle is occupied and the register is not set for occupancy, said electric means will affect the motor, when the latter attains a certain speed.

5 3. In a motor vehicle having a manually controlled fare register, the combination with the motor controlling means, of a passenger controlled switch, a register controlled means and means intervening between
10 said first named means, said switch and last named means, such that when the vehicle is occupied and the register is not set for occupancy, said intervening means will affect the motor when the latter attains a
15 certain speed.

4. In a motor vehicle having a manually controlled fare register, the combination with the motor controlling means, of a passenger controlled means, a register controlled
20 switch and means intervening between said two first named means and said switch, such that when the vehicle is occupied and the register is not set for occupancy, said intervening means will affect the motor
25 when the latter attains a certain speed.

5. In a motor vehicle having a manually controlled fare register, the combination with the motor controlling means, of a passenger controlled switch, a register controlled
30 switch and means intervening between said first named means and said switches such that when the vehicle is occupied and the register is not set for occupancy, said intervening means will affect the motor
35 when the latter attains a certain speed.

6. In a motor vehicle having a manually controlled fare register, the combination with the electric generator and motor controlling means, of a passenger controlled
40 switch, a register controlled switch and electric means intervening between said motor controlling means and said switches and actuated by said generator, such that when the vehicle is occupied and the register is
45 not set for occupancy, while the motor is running, said electric means will be actuated by said generator to affect the motor.

7. In a motor vehicle having a manually controlled fare register, the combination with the electric generator and motor controlling means, of a passenger controlled switch, a register controlled switch and an electro-magnetically actuated switch controlled from said generator and intervening
50 between said motor controlling means and said other switches and controlled from said generator, such that when the vehicle is occupied and the register is not set for oc-
55

cupancy, while the motor is running, said intervening means will be actuated by said generator to affect the motor. 60

8. In a motor vehicle having a flag controlled fare register, the combination with the motor ignition system and electric generator, of an electric circuit through the
65 ground and said ignition system, said circuit including a passenger controlled switch, a flag controlled switch and a switch controlled from said electric generator, such that
70 when the vehicle is occupied and the flag not set into registering position, the ignition system will be shortcircuited after a certain speed of the motor is attained.

9. In a motor vehicle having a flag controlled fare register, the combination with the motor ignition system and electric generator, of an electric circuit through the
75 ground and said ignition system, said circuit including a passenger controlled switch, a flag controlled switch and an electro-magnetically actuated switch controlled from
80 said electric generator, such that when the vehicle is occupied and the flag not set into registering position, the ignition system will be shortcircuited after a certain speed
85 of the motor is obtained.

10. In a motor vehicle, having a fare register, the combination with the motor and its ignition system, of an electric circuit including means controlled by the actions of
90 said motor, a passenger controlled switch and a register controlled switch, such that when the passenger compartment is occupied and the register is in "Vacant" position,
95 said ignition system will be shortcircuited as soon as enough power has been developed by said motor to control said first named means.

11. In a motor vehicle, having a fare register, the combination with the motor and its ignition system, of an electric circuit including a switch controlled by the actions of the pistons of said motor, a passenger controlled switch and a register controlled
100 switch, such that when the passenger compartment is occupied and the register is in "Vacant" position, said ignition system will be shortcircuited as soon as enough power has been developed by said pistons
105 to control said first named switch.

In testimony whereof I affix my signature in presence of two witnesses.

ABRAHAM WEISS.

Witnesses:

JOSEPH T. McMAHON,
MAX D. ORDMANN.