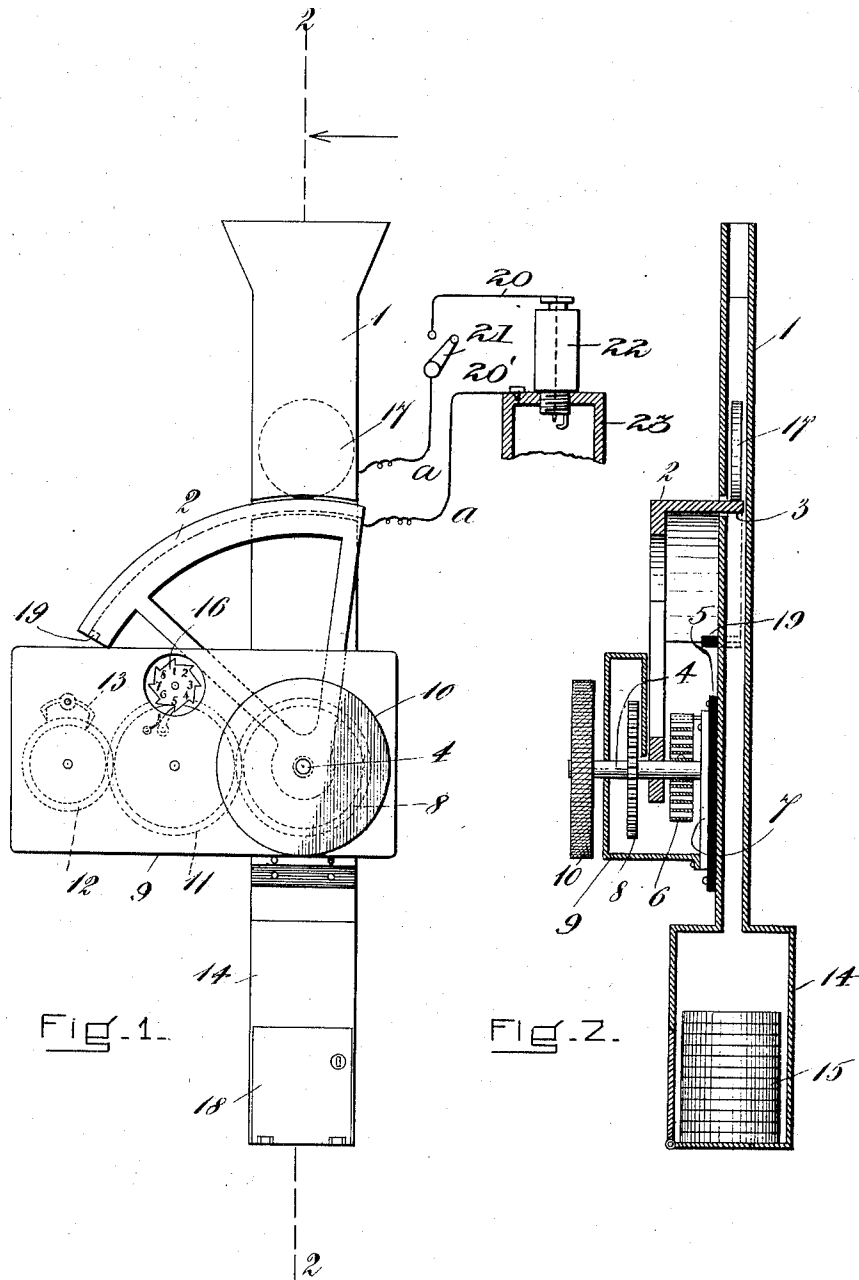


A. P. BROWNE.
 COIN CONTROL FOR MOTOR VEHICLES.
 APPLICATION FILED AUG. 28, 1909.

964,845.

Patented July 19, 1910.



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COIN CONTROL FOR MOTOR-VEHICLES.

964,845.

Specification of Letters Patent. Patented July 19, 1910.

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To all whom it may concern:

Be it known that I, ALEXANDER P. BROWNE, a citizen of the United States, and resident of Brookline, in the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Coin Control for Motor-Vehicles, of which the following is a specification.

My invention has for its object the providing of a device for use in connection with certain motor propelled vehicles or vessels, and particularly automobile carriages, whereby the operation thereof may be controlled in certain respects not attainable by the devices now in use.

In the drawings, Figure 1 represents, in front elevation, a structure embodying my invention and Fig. 2, a vertical section on the line 2—2 of Fig. 1.

1 indicates a coin-receiver such as a tube of suitable dimensions to receive a coin or token 17. As it is desired that the wall of this tube shall form part of an electrical circuit, the tube is preferably made of metal.

2 indicates a coin retaining and releasing device, preferably pivoted, as shown at 4, upon the tube 1 but electrically insulated therefrom, as shown at 5. This retaining and releasing device 2 (shown in the present instance as a segmental frame) is provided with a part 3 which, while the device is performing its retaining function, enters or lies within the slot or interior of the tube 1, but when performing its releasing function, passes out of said slot. Motion to the part 2, to set it at the point where its retaining function begins, may be given to it by hand, by means of the knurled knob 10 but motion in the opposite direction whereby, at the end of a predetermined period of time, the part 3 is withdrawn from the slot in the tube 1, is imparted automatically by means of the clock work train, 8, 11, 12 and escapement 13. This clock work train is actuated by a spring 6 one end of which is secured preferably to a plate 7 and the other to the pivot 4 of the coin retaining and releasing device 2. When so constructed, it will be obvious that the turning of the knob 10 will act to wind up the spring, under the action of which, when the knob is released, the retaining device 2 will be moved in the opposite direction during a period of time regulated by the train of gearing, until finally the part 3 is withdrawn, as before stated.

The tube 1, and the retaining and releasing device 2 are respectively connected electrically with the terminals *a, a*, of the ignition or other operating circuit of the vehicle or vessel in connection with which the device is intended to be operated but it will be seen, particularly in Fig. 2, that the tube 1 and the retainer and releaser 2 are electrically insulated from each other, except when the gap between them is closed by the introduction and retention in place, as shown in Fig. 1, of a coin or token which forms a gap closing piece.

In the present instance the operating circuit is shown as an ignition circuit at 20, 20' connected to the usual spark-plug 22 which enters the explosion cylinder 23 in the usual manner. This circuit is provided with the usual snap or other hand-operated switch such as is customarily mounted on the dashboard of a motor vehicle.

It is to be understood that the function of the coin or token 17, when held by the device 2 in contact with itself and with the tube 1, is to close a gap in the circuit by which the vehicle is to be operated but not to close such circuit itself.

When such a coin or token has been introduced and so long as the part 3 remains within the path of the coin or token 17, the latter will be retained and the gap in the circuit closed and hence the vehicle will be in condition to be operated by the closing of a switch or other suitable manually operated circuit closing device but when the part 3 is withdrawn and the coin released, the gap is restored and the vehicle is no longer operative.

As it is desirable to retain, in the order of their deposit, the various coins or tokens used for gap closing, a box 14 is provided at the bottom of the tube 1, having a lockable door 18 thereon. A pile of coins or tokens is received and stored in this box, as shown at 15 in Fig. 2.

For convenience, a counter, or indicator, of ordinary well known construction, shown at 16, may be provided to register each time that the coin retaining device is set into operative position. In order to prevent the coin retainer and releaser 2 from leaving the right hand side of the tube 1, I may provide the stop 19, of insulating material, secured to the extreme left hand side of the part 3 and arranged to strike the right hand wall

of the tube but to clear the left hand wall thereof.

The mode of operation of the device, when used in connection with an automobile cab for carrying passengers is as follows: As has been shown above, the cab is not operative except when the gap-closing piece is in place and the gap in the sparking circuit thereby closed. Ordinarily the gap-closing piece employed will be a coin deposited by the passenger at the outset of his hiring and after the time-operated retaining and releasing means has been set at its first operating position as shown. So long as said means continues to retain the coin in position to close the gap in the spark circuit the cab will be operative—and in this way the passenger, when depositing his coin, pays in advance for the operation of the cab for a certain predetermined length of time. After this time has elapsed, and the coin has been released, and the circuit gap thereby opened, the passenger, if he desires further operation of the cab, must deposit another coin—and so on. If however such further operation is not desired by the passenger, yet it may be necessary or desirable to further operate the cab although not under hire. For this purpose a gap-closing piece will be deposited by the driver, and such piece may be a token, as distinguished from a coin—the driver being supplied in advance with a suitable number of such tokens.

The various gap-closing pieces made use of, whether coins deposited by the passenger, or tokens deposited by the driver, will preferably be received and held in the locked receptacle in the order of their deposit. In this way not only will the money takings of the cab be preserved but also a complete and accurate record of the manner of its entire operation whether under hire or not.

In the case of a private automobile carriage, not operated for hire, my improved device will also be of value, because of this feature of recording the nature of the use of the vehicle, if any, when not under the eye of the owner. Ordinarily in the case of a private vehicle the device would be switched off or otherwise put out of action but when about to pass from the control of its owner to that of his chauffeur, if my improved device be put in circuit, the use of the gap-closing piece will furnish a record of the manner of operation of the carriage.

I claim:—

1. The combination in a coin-controlled mechanism for automatically controlling the operation of motor-propelled vehicles or vessels, of a sparking or other operating circuit provided with a gap arranged to be closed by a coin or token, a coin-retaining-and-releasing device having electrical connection with one terminal of said circuit, a member arranged to be contacted by the coin and

having electrical connection with the other terminal of said circuit, and means operating independently of said circuit for maintaining said coin-retaining-and-releasing device in coin-retaining position for a relatively long predetermined period.

2. The combination in a coin-controlled mechanism for automatically controlling the operation of motor-propelled vehicles or vessels, of a sparking or other operating circuit provided with a gap arranged to be closed by a coin or token, a coin-retaining-and-releasing device having electrical connection with one terminal of said circuit, a member arranged to be contacted by the coin and having electrical connection with the other terminal of said circuit and clock-work mechanism actuating said coin-retaining-and-releasing device, said clock-work mechanism being constructed and arranged to maintain said coin-retaining-and-releasing device in coin-retaining position for a relatively long predetermined period.

3. The combination in a coin-controlled mechanism for automatically controlling the operation of motor-propelled vehicles or vessels, of a sparking or other operating circuit provided with a gap arranged to be closed by a coin or token, a coin-retaining-and-releasing device having electrical connection with one terminal of said circuit, a coin-receiver having electrical connection with the other terminal of said circuit, and means operating independently of said circuit for maintaining said coin-retaining-and-releasing device in coin-retaining position for a relatively long predetermined period.

4. The combination in a coin-controlled mechanism for automatically controlling the operation of motor-propelled vehicles or vessels, of a sparking or other operating circuit provided with a gap arranged to be closed by a coin or token, a coin-retaining-and-releasing device having electrical connection with one terminal of said circuit, a coin-receiver having electrical connection with the other terminal of said circuit, and clock-work mechanism actuating said coin-retaining-and-releasing device, said clock-work mechanism being constructed and arranged to maintain said coin-retaining-and-releasing device in coin-retaining position for a relatively long predetermined period.

5. The combination in a coin-controlled mechanism for automatically controlling the operation of motor-propelled vehicles or vessels, of a sparking or other operating circuit provided with a gap, two members each connected with a different one of the terminals of said circuit, the gap in said circuit between said members being adapted to be closed by a coin or token when inserted therein, one of said members being adapted to support and retain such coin or token in its gap-closing position, and means oper-

ating independently of said circuit for maintaining the last mentioned member in coin-retaining position for a relatively long predetermined period.

5 6. The combination in a coin-controlled mechanism for automatically controlling the operation of motor-propelled vehicles or vessels, of a sparking or other operating circuit provided with a gap, two members
10 each connected with a different one of the terminals of said circuit, the gap in said circuit between said members being adapted to be closed by a coin or token when inserted therein, one of said members being
15 adapted to support or retain such coin or token in its gap-closing position, and clock-work mechanism actuating the last mentioned member, said clock-work mechanism being constructed and arranged to maintain
20 said member in coin-retaining position for a relatively long predetermined period.

7. The combination in a coin-controlled mechanism for automatically controlling the operation of motor-propelled vehicles or
25 vessels, of a sparking or other operating circuit, a coin-receiver having a transverse aperture, a coin-retaining-and-releasing device entering said aperture, said coin-retaining-and-releasing device comprising a seg-
30 mental frame, a rod to which said device is secured, means for manually rotating said rod to bring said device to coin-retaining position, and means independent of said circuit for rotating said rod to bring said de-
35 vice to coin-releasing position after a definite predetermined period.

8. The combination in a coin-controlled mechanism for automatically controlling the operation of motor-propelled vehicles of ves-
40 sels, of a sparking or other operating circuit, a coin-receiver having a transverse aperture,

a coin-retaining-and-releasing device enter-
ing said aperture, said coin-retaining-and-releasing device comprising a segmental
45 frame, a rod to which said device is secured, means for manually rotating said rod to bring said device to coin-retaining position and clock-work mechanism for rotating said rod to bring said device to coin-releasing
50 position after a definite predetermined period.

9. The combination in a coin-controlled mechanism for automatically controlling the operation of motor-propelled vehicles or
55 vessels, of a sparking or other operating circuit provided with a gap arranged to be closed by a coin or token, a coin-retaining-and-releasing device, and clock-work mechanism actuating said coin-retaining-and-releasing device, said clock-work mechanism
60 being constructed and arranged to maintain said coin-retaining-and-releasing device in coin-retaining position for a definite predetermined period.

10. The combination in a coin-controlled mechanism for automatically controlling the
65 operation of motor-propelled vehicles or vessels, of a sparking or other operating circuit provided with a gap arranged to be closed by a coin or token, and clock-work mechanism constructed and arranged to
70 maintain a coin or token in gap-closing position for a relatively long predetermined period.

In testimony whereof, I have hereunto
75 subscribed my name this 27th day of August 1909.

ALEXANDER P. BROWNE.

Witnesses:

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