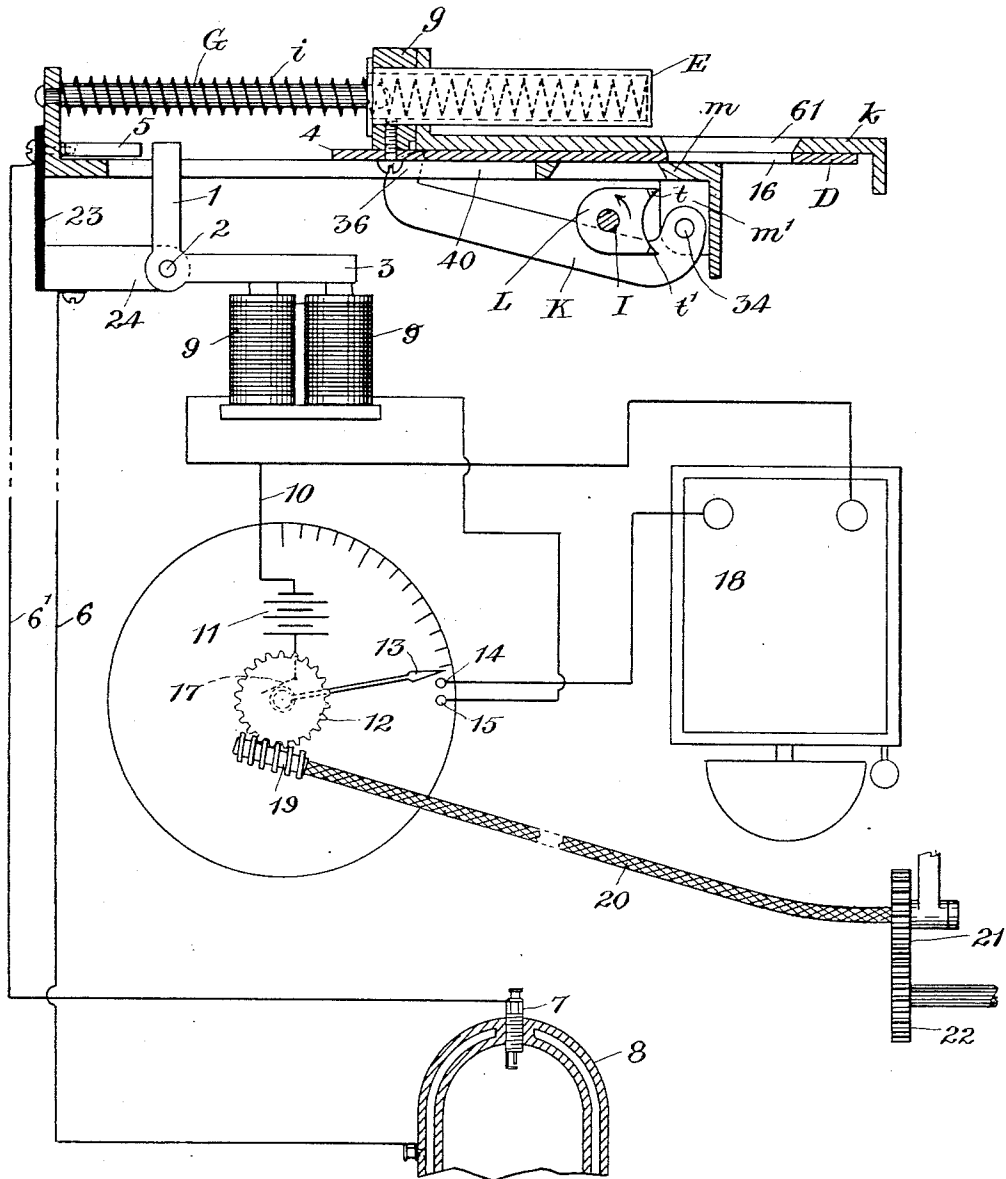


A. P. BROWNE.
 COIN CONTROL FOR MOTOR VEHICLES.
 APPLICATION FILED SEPT. 27, 1910.

1,056,147.

Patented Mar. 18, 1913.



WITNESSES.

Geo. H. Woodworth,
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ALEXANDER P. BROWNE, OF CAMBRIDGE, MASSACHUSETTS.

COIN CONTROL FOR MOTOR-VEHICLES.

1,056,147.

Specification of Letters Patent.

Patented Mar. 18, 1913.

Application filed September 27, 1910. Serial No. 584,049.

To all whom it may concern:

Be it known that I, ALEXANDER P. BROWNE, a citizen of the United States, and a resident of Cambridge, in the county of Middlesex 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 automobile carriages whereby the operation thereof may be controlled in certain respects not obtainable by the devices now in use.

The general object of the improvement is to so combine the propelling apparatus of a motor vehicle with a mechanism controlled by the deposit of a coin by the passenger that after such deposit the vehicle is adapted to be driven in the ordinary manner for a certain predetermined distance, while after transportation for such distance has been furnished, the vehicle is automatically rendered inoperative until another coin is inserted.

The drawing represents a diagrammatical outline of a structure embodying my invention, the coin slide being shown partly in section.

The coin-receiving apparatus is of well known construction and is substantially identical with that described in the patent to Romans and Grover, 625,123, dated May 16, 1899, to which reference may be had for a more detailed description than need be set forth herein. The coin is placed in the aperture 16 in the coin-slide D which is immediately below the plate *k* provided with the bevel-edged opening 61, and the plunger E, secured to the coin-slide by the bracket *g*, is shoved forward against the tension of the spring *i* which surrounds the rod G. The forward movement of the slide D, by mechanism fully shown in the Romans & Grover patent, causes the segment L which is secured to the rod I to rotate in the direction of the arrow so that the projection *t* comes in rolling contact with the coin, and thereby the free end of the lever K which is pivoted to the frame *m'* at 34 is depressed, whereupon the outer end 36 of said lever is withdrawn from its engagement with the coin-slide. Further forward movement of the coin-slide causes the projection *t'* to engage the coin and produces a similar movement

of the lever K, so that if a proper coin be employed, the slide D can be pushed in to the extreme limit of its inward movement, whereupon the coin will drop out through an opening 40 in the plate *m* into the money-drawer (not shown).

The inward movement of the slide D will cause the forward end thereof to strike the upright arm 1 of a bell-crank-lever and force it into engagement with the spring-clip 5 which will elastically hold the same when the plunger E returns to its normal position. In this manner the circuit of the spark-plug 7 of the cylinder 8 is closed through the conductors 6 6', the spring-clip 5, the bell-crank-lever, and the bracket 24, to which the latter is pivoted at 2, said bracket being secured to the frame which carries said clip, by the insulating member 23.

If no coin is placed in the aperture 16, the forward movement of the plunger and coin-slide will not be effective for releasing the hooked end 36 of the lever K from said slide, and the movement of the latter will not be sufficient to effect the closure of the circuit of the spark-plug.

The contact member 13 is secured to and rotates with the pinion 12 which meshes with the screw 19 and motion is communicated to the latter from the axle of the motor vehicle, in any suitable manner, as by the gears 21, 22 and the flexible shaft 20. When the vehicle has traveled a predetermined distance, the circuit of the bell 18 will be closed and the bell energized by the battery 11 by way of the brush 17, contact-maker 13, contact-point 14, bell 18, and return conductor 10. In this manner an alarm is given to the operator that the transportation paid for by the coin has almost terminated, so that another coin may be inserted to pay for additional travel; but if such coin be not inserted, a short additional travel will cause the contact-maker to close the circuit of the magnets 9, through the battery 11, by way of the brush 17, contact-maker 13, contact-point 15, magnets 9, and return conductor 10, whereupon the horizontal arm 3 of the bell-crank is attracted by said magnets to the position shown in the drawings and the circuit of the spark-plug thereby opened.

The underlying principle of my improved device is analogous to that shown in United

States Letters Patent No. 964845, granted to me July 19, 1910, wherein the pre-payment principle is so applied as to obtain the service of the vehicle for a predetermined length
5 of time. In the present case, as has been pointed out, pre-payment is made and service obtained for a predetermined distance over which the passenger is to be transported in return for the coin deposited by him.
10 As was pointed out in my prior patent, the driver of the vehicle should be supplied in advance with a suitable number of tokens in order to enable him to operate the vehicle when not under hire by a passenger. It will
15 further be seen that other details of operation as pointed out in said prior patent, are equally applicable to the device herein set forth.

I claim:

- 20 1. The combination in an apparatus for automatically controlling the operation of a

motor-propelled vehicle, of a sparking or other operating circuit provided with a closable gap and means operated by the vehicle axle for opening said gap after said vehicle
25 has traveled a predetermined distance.

2. The combination in an apparatus for automatically controlling the operation of a motor-propelled vehicle, of a sparking or other operating circuit provided with a closable gap, means operated by the vehicle axle
30 for opening said gap after said vehicle has traveled a predetermined distance, and means for giving an alarm shortly before such distance has been traveled. 35

In testimony whereof, I have hereunto subscribed my name this 19th day of July 1910.

ALEXANDER P. BROWNE.

Witnesses:

GEO. K. WOODWORTH,
E. B. TOMLINSON.