J. F. & F. L. OHMER.

AUTOMOBILE SERVICE RECORDER.

APPLICATION FILED OCT. 6, 1916.

1,258,803.

Patented Mar. 12, 1918.

4 SHEETS—SHEET 1.

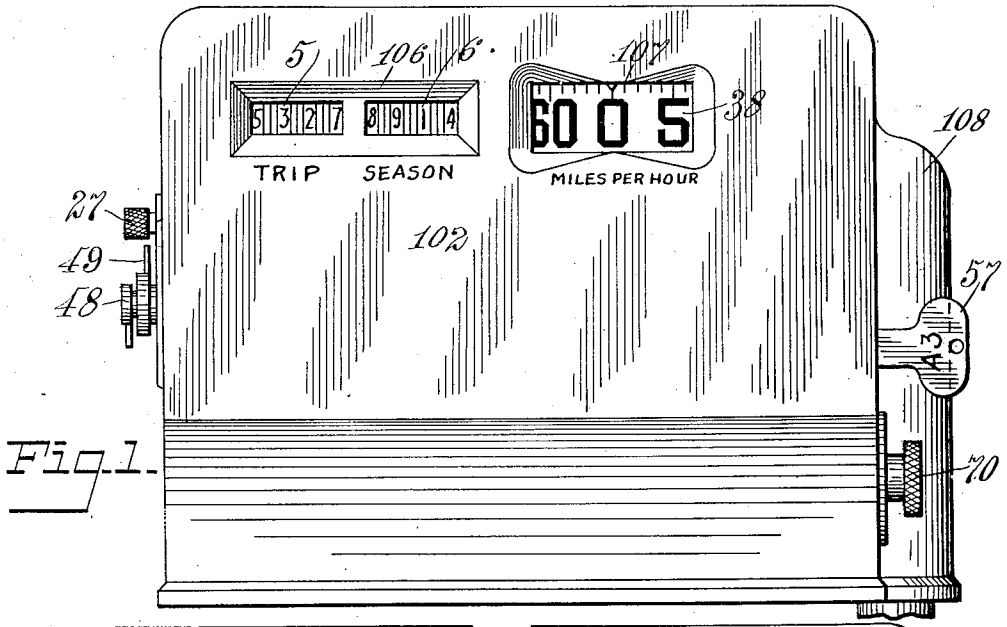


Fig. 1.

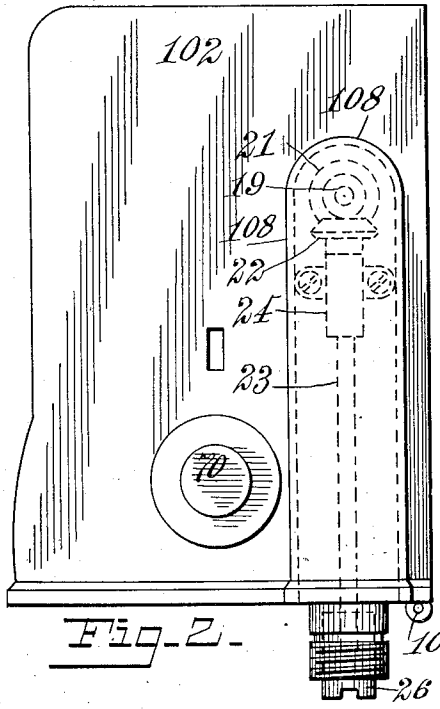


Fig. 2.

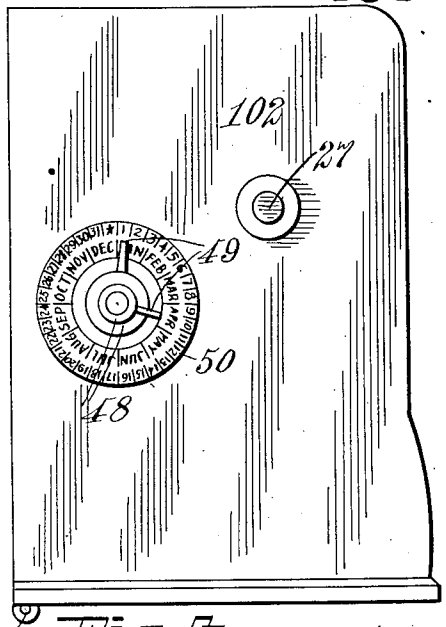


Fig. 3.

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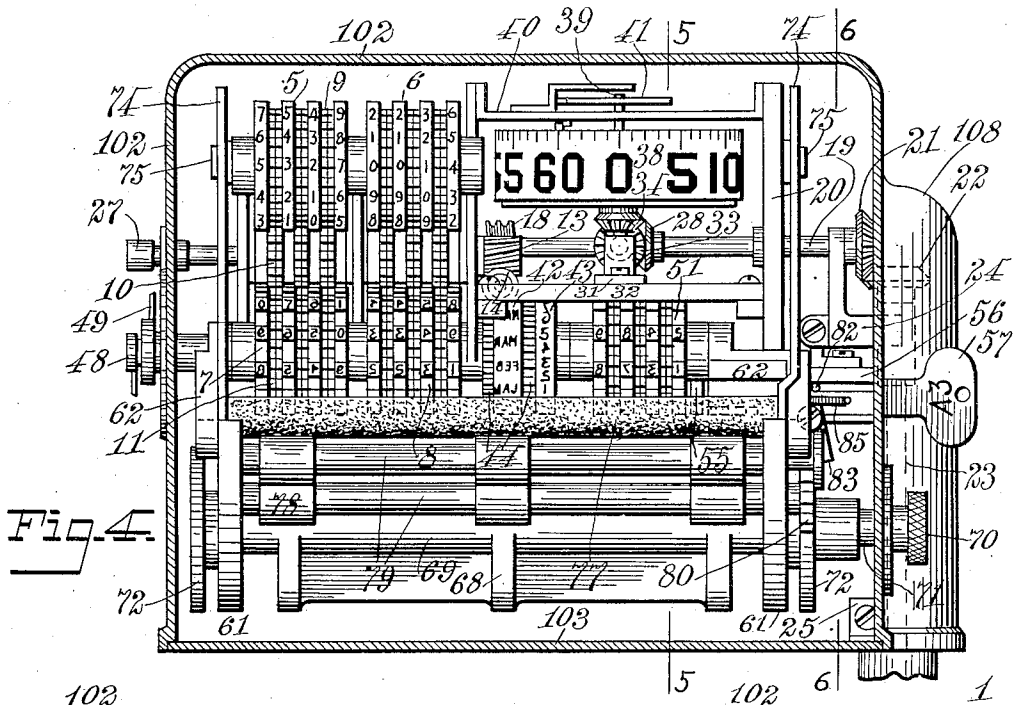


Fig. 4.

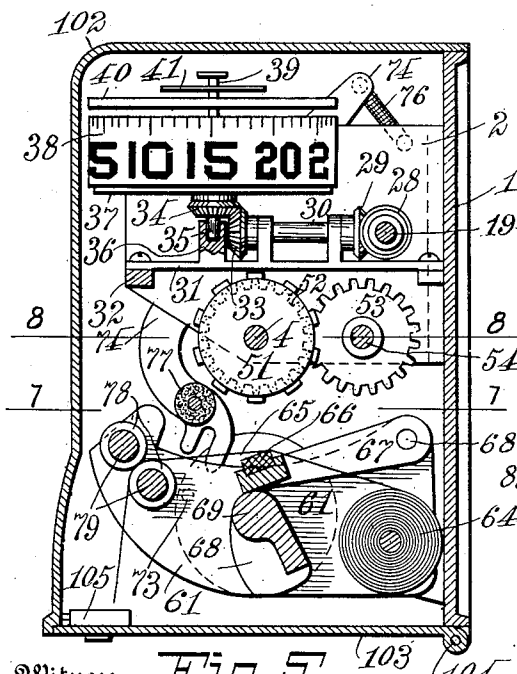


Fig. 5.

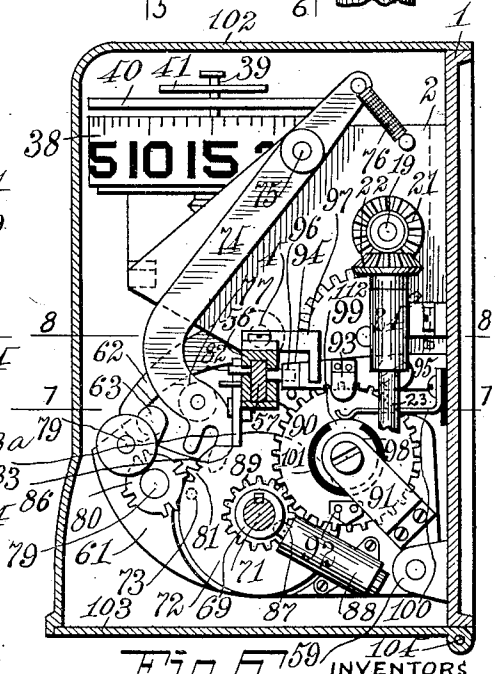


Fig. 6.

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4 SHEETS—SHEET 3.

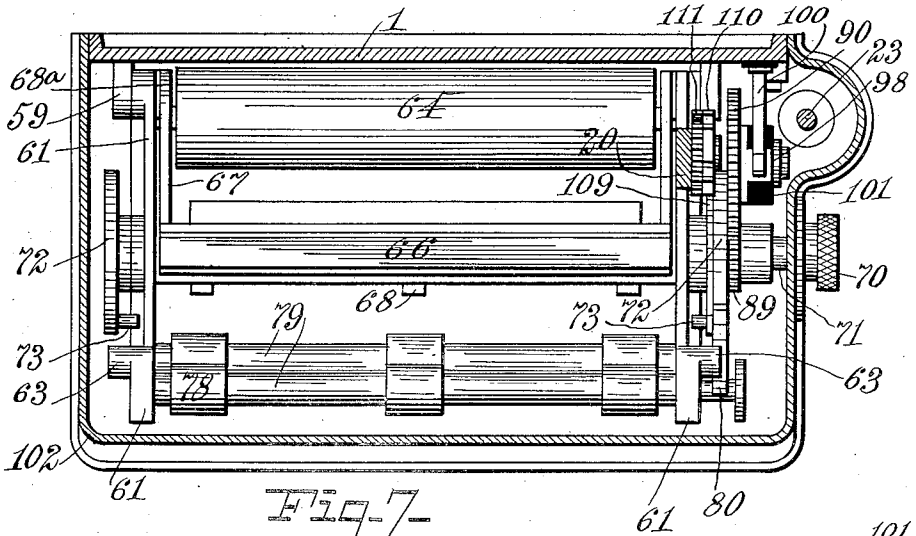


Fig. 7.

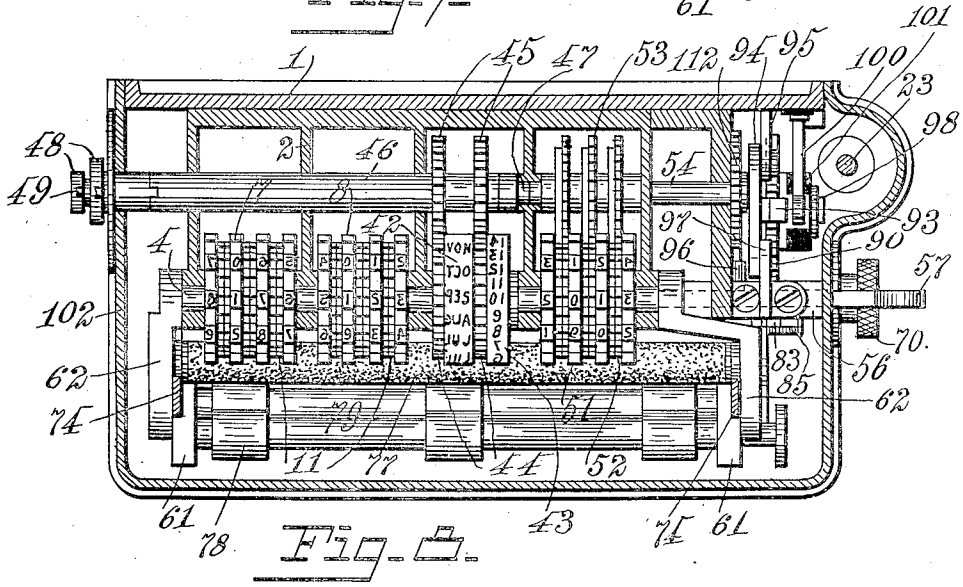


Fig. 8.

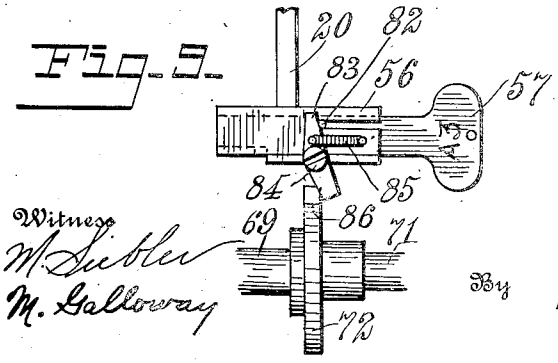


Fig. 9.

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AUTOMOBILE SERVICE RECORDER.

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4 SHEETS—SHEET 4.

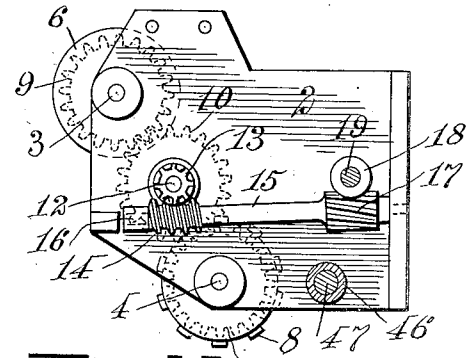


Fig. 10.

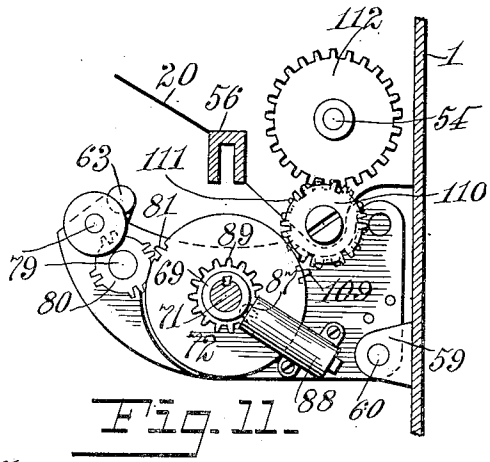


Fig. 11.

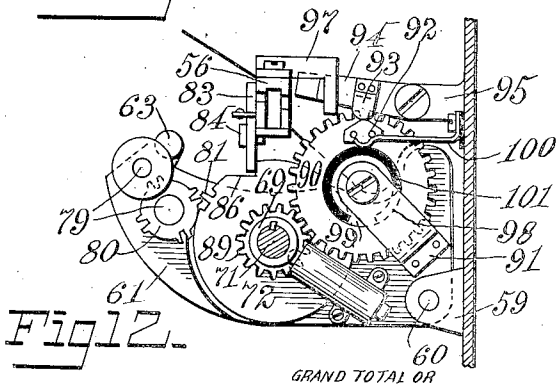


Fig. 12.

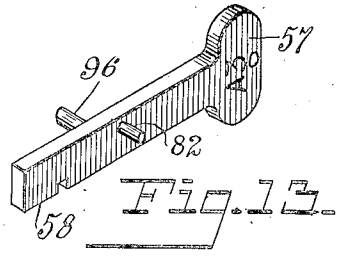


Fig. 13.

GRAND TOTAL OR
TRIP MILEAGE, SEASON MILEAGE, DATE, SERIAL NUMBER, IDENTIFICATION.

0 0 1 7 0	1 4 6	AUG 21	1 3 6	0 ⊏ B17
0 0 0 0 0	1 4 4	AUG 21	1 3 5	9 ⊏ B17
0 0 1 1 0	1 4 4	AUG 21	1 3 5	8 ⊏ D7
0 0 0 0 0	1 4 3	AUG 21	1 3 5	7 ⊏ D7
0 0 3 7 0	1 4 3	AUG 20	1 3 5	6 ⊏ B17
0 0 0 0 0	1 3 9	AUG 20	1 3 5	5 ⊏ B17
0 0 4 2 0	1 3 9	AUG 20	1 3 5	4 ⊏ F10
0 0 0 0 0	1 3 5	AUG 20	1 3 5	3 ⊏ F10
0 0 2 3 0	1 3 5	AUG 19	1 3 5	2 ⊏ C3
0 0 0 0 0	1 33	AUG 19	1 3 5	1 ⊏ C3

65

Fig. 14.

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UNITED STATES PATENT OFFICE.

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AUTOMOBILE-SERVICE RECORDER.

1,258,803. Specification of Letters Patent. Patented Mar. 12, 1918.

Application filed October 6, 1916. Serial No. 124,019.

To all whom it may concern:

Be it known that we, JOHN F. OHMER and FREDERICK L. OHMER, 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 Automobile-Service Recorders; 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 means whereby the owners of motor driven vehicles, such for example as automobiles, are enabled to keep informed as to the extent their machines are being used by others when the owners are not present when the cars are being run. It is well known to the owners of automobiles, especially those who employ chauffeurs or keep their machines at public garages, that the machines are used by persons having no authority or right to use them and all because the owners of the machines have no way of controlling their property when out of their immediate possession. The result is that much gasolene is consumed at the expense of the owners as well as tire expense and wear and tear of the machine. The primary object of the present invention is to provide means whereby the owner of an automobile may be informed at all times as to what person or persons are making an unauthorized use of the machine, as well as the distance or mileage traveled during such use and the time, that is, the date by day and month, in which the machine was so appropriated by persons having no right to use it. I am not aware that heretofore any means for avoiding this nuisance and imposition have been available to the owners of automobiles, therefore, in defining in detail the mechanism through means of which the above results are accomplished, I do not wish to be understod as inferring that no variation or modification of the means to be described may be made without departing from the underlying principles of my invention.

In carrying out the above objects and purposes, the invention provides means whereby the automobile may be locked so that unauthorized persons cannot use it and, in the case of those having authority to use it, for example, the chauffeur, a complete record is secured of the mileage traveled, the date the machine was in such use, and the identification of the operator or chauffeur. The machine also contains means for indicating the speed at which the vehicle is traveling and embodies locking and interlocking mechanisms necessary to prevent the improper manipulation of the machine. To the above ends the device is simple in construction and efficient in operation.

Referring to the accompanying drawings, of my improved automobile control and service recording machine, Figure 1 is a front elevation thereof; Fig. 2 is an elevation of the right end of the machine viewing the same from Fig. 1; Fig. 3 is an elevation of the left end of the machine when so viewed; Fig. 4 is a front elevation of the machine with the front portion of the casing broken away to disclose the mechanism; Fig. 5 is a section on the line 5—5 of Fig. 4; Fig. 6 is a section approximately on the line 6—6 of Fig. 4; Fig. 7 is a section approximately on the lines 7—7 of Figs. 5 and 6; Fig. 8 is a section approximately on the lines 8—8 of Figs. 5 and 6; Fig. 9 is a detail view of the locking means for the printing mechanism; Fig. 10 is a detail view of the driving means for the mileage counters; Fig. 11 is a detail view of the driving means for the serial numbering counter; Fig. 12 is a detail view of the electrical switch and its actuating means; Fig. 13 is a perspective view of the identification key; Fig. 14 is a view of a portion of the printed record taken from the machine.

Throughout the specification and drawings, similar reference characters indicate corresponding parts.

Mounted upon a rear plate 1 of the machine casing is a frame 2 which supports counter shafts 3 and 4 (Fig. 10). Mounted upon the shaft 3 is a trip mileage indicating counter 5 and a season mileage indicating counter 6, while shaft 4 supports a companion trip mileage printing counter 7, and a season or grand total mileage printing counter 8 (Fig. 4). The trip counters 5 and 7 are adapted to register the mileage by tenths, and all of said counters 5, 6, 7 and 8

are of any well known type and are, in the present instance, provided with a well known form of one tooth transfer gears 9, 10 and 11. Other printing or recording counters to be hereinafter described are also mounted on the counter shaft 4. The transfer gears 10 are the driving gears, are common to both the printing and the indicating or visual counters, and are mounted upon a shaft 12 (Fig. 10). The shaft 12 is the driving shaft for the counters and the same is provided with a worm gear 13 which meshes with a worm 14 on a shaft 15 journaled in a bearing 16 and the frame 2. The shaft 15 is provided with a worm gear 17 which meshes with a worm gear 18 on a shaft 19. The shaft 19 is journaled in the frame 2 and in a frame 20 attached to the rear plate 1. The shaft 19 is provided with a bevel gear 21 which meshes with a bevel gear 22 mounted upon a shaft 23. The shaft 23 is journaled in a bracket 24 and at its lower end in a bearing plate 25 attached to the rear plate 1 (Figs. 4 and 6). The lower end of the shaft 23 is provided with a head 26 and is connected to one of the wheels of a vehicle by a flexible shaft (not shown) in a manner well known to speedometers and odometers. Through the agency of the above train of mechanism the indicating and printing mileage counters described are driven by the vehicle and their rotation is commensurate with the distance the vehicle travels. The counters 5 and 7, which are adapted to indicate and record the trip mileage, as before specified, may be set to zero by any well known means such as a finger knob 27 (Fig. 1). The shaft 19, in addition to driving the mileage counters, also drives the speedometer which may be of any well known construction and is shown to be of a magnetic type in the present instance. As is illustrated in the present construction, the said shaft 19 is provided with a bevel gear 28 which is in mesh with a bevel gear 29 mounted on a shaft 30 journaled in a bracket 31, said bracket being supported by the rear plate 1 and a cross-member 32 supported by the frames 2 and 20 (Fig. 5). The shaft 30 is also provided with a bevel gear 33 which meshes with a bevel gear 34 mounted upon a vertical shaft 35 journaled in a boss 36 which is on bracket 31. The shaft 35 carries a rotating magnet 37 which revolves within an inverted cup 38 supported upon a shaft 39 (see Fig. 5). The shaft 39 is a pivot shaft and has bearing in a plate 40 and the upper end of the shaft 35. The cup 38 is provided with surface indications or characters which denote the speed at which the vehicle is traveling and is moved to a normal position by a spring 41. The rotation of the magnet 37 within said cup 38 and against the tension of the spring 41 partially revolves the cup 38 to indicate the speed at which the vehicle is traveling, in a well known manner. Mounted upon the counter shaft 4 adjacent to the printing grand total mileage counter 8, as seen from Fig. 4, are two printing wheels 42 and 43 which are instrumental in printing the dates on the records—months and days. The printing wheels 42 and 43 are provided with gears 44 which mesh with gears 45 mounted on telescopic shafts 46 and 47. The shafts 46 and 47 are journaled in the frame 2 and on their left hand ends, as seen from Fig. 8, they are provided with finger knobs 48 which are in turn provided with hands or pointers 49. The pointers 49 coöperate with a dial 50 having indications thereon denoting the month and days thereof, the same being used to determine the movement to be given the printing date wheels 42 and 43. By rotating the knobs 48, the date may be selected on the printing wheels 42 and 43. Also mounted on the counter shaft 4 adjacent to the date printing wheels 42 and 43 is a serial numbering or printing counter 51 of any well known type. In the present instance, it is of the one-tooth transfer type and is provided with transfer gears 52 and 53, the latter of which are the actuating gears and are mounted upon a shaft 54 journaled in the frames 2 and 20. The serial numbering counter is actuated from the printing mechanism to be hereinafter described. Extending a suitable distance from the frame 2 to the right of the serial numbering counter 51 is a stationary type member 55 which is adapted to print on the records taken from the machine from time to time the number of the machine, and near this stationary type member 55 is a key housing 56 which is supported by the frame 20, the same having a horizontal opening in which a key 57, shown in Fig. 13, may be inserted. The key 57 is provided with a type or printing end 58 which is adapted to print on the record a mark or number to identify on the records the operator or person in whose possession the key is placed. This identification printing key is also a locking key and is adapted to unlock the printing mechanism and the ignition system of the automobile, as will be hereinafter described.

The printing counters 7, 8 and 51, the type wheels 42 and 43, the stationary type 55, and the identification printing type 58 are in printing alinement and a series of impressions, shown in Fig. 14, are taken therefrom. Referring to this record in detail, the lowermost impression shows the trip mileage counters to be at zero, for example, when the automobile is taken possession of by one having a key 57. This key is inserted and the printing mechanism is unlocked by such insertion. The printing mechanism is then operated by turning the finger

piece 70 which operation places the automobile in a condition for service, as will hereinafter be more apparent. The first impression "0000" reveals the position of the trip mileage counters, "0133" an impression from the season or grand total mileage counters, "Aug. 19" the date the first impression was made, "1351" the impression from the serial numbering printing device, "17" the impression from the machine number printing device, and "C3" the number of the key which identifies the holder of that key. After the trip is completed, another or second impression must be made before the key can be withdrawn and the automobile locked. On the record, the second impression "0023" from the trip counters shows that the car was driven two and three-tenths miles "0135" being the impression from the grand total printing counter, "Aug. 19" showing that the trip was finished on the same day, and the impressions from the serial numbering printer, machine printer and identification key being the same as shown by the first impression. It will, therefore, be seen that the operation of printing a record at the beginning and ending of each trip is necessary before the car can again be placed in a condition for use. The first operation unlocks the car, and the subsequent operation locks the car and until another record is taken from the counters, etc.

The records are taken by the following means:—Extending from the inner face of the rear plate 1 are lugs 59 to which are pivoted at 60 side plates 61 of the printing mechanism (Figs. 11 and 12). The pivots 60 support the side plates 61 at their rear portions, said plates 61 being supported at their forward portions by hook members 62 which are attached to the shaft 4 and the hooked portions of which engage lugs 63 extending from the plates 61 (Figs. 7 and 8). This construction is provided in order to permit the printing mechanism to be lowered to allow of the insertion of a roll of paper 64 (Fig. 5) and for the insertion of the paper strip 65 upon which subsequently appears the printed records shown in Fig. 14. Mounted below the type members hereinbefore described is a platen 66 supported on arms 67 which are pivoted at 68* to the side plates 61. The platen 66 is adapted to press the paper strip 65 against the printing members to secure an impression. In this operation it is elevated by cams or eccentric portions 68 of a shaft 69 which is journaled in the side plates 61. The shaft 69 is rotated by the finger knob 70 secured upon a shaft 71. The said shaft 71 is connected to the right hand end of the shaft 69 and may be disconnected therefrom when it is desired to lower the printing mechanism.

In addition to operating the platen 66, the shaft 69 also initially actuates an inking mechanism as follows:

The said shaft 69 is provided with disks 72 having pins 73 thereon. The pins 73 are adapted to engage the lower ends of levers 74 which support an inking roller 77. The levers 74 are pivoted at 75 and such levers are controlled by springs 76. During the initial movement of the shaft 69, the inking roller 77 is carried under the type to ink the same. The pins 73 release the levers 74 and permit the inking roller 77 to be moved out of the path of the platen 66, before the cams 68 elevate said platen. After an impression has been secured on the record strip 65, the said strip is fed forward by feed rollers 78 between which the record strip 65 is caught. The feed rollers 78 are mounted on shafts 79 which are journaled in the side plates 61. The lower shaft 79 is the actuating shaft of the pair and on its right end is provided with a Swiss gear 80 which is adapted to be partially moved at each operation of the shaft 69 by a tooth 81 on one of the disks 72. This operation takes place at the very end of the movement of the shaft 69. The shaft 54 of the consecutive numbering counter 51 is actuated from the printing mechanism by the following means and in the following manner:

Attached to the inner side of the right hand disk 72 (Fig. 11) is a one-tooth gear 109 which intermittently meshes with a Swiss gear 110 pivoted to the frame 20. Attached to the side of the Swiss gear 110 is a pinion 111 which meshes with a gear 112 mounted upon the shaft 54. Near the end of the operation of the shaft 69 the tooth of the gear 109 will partially rotate the shaft 54 and actuate the counter 51. It will be noted that two serial numbers will appear on the record for each service of an operator, that is to say, at the beginning and the end of each trip as shown in the two top and two lower impressions on the record sheet (Fig. 14) where it is shown that "C3" took the car out and returned it in one instance, the serial numbers being "1351" and "1352." And, in the other instance "B17" took the car out and returned it, under serial numbers "1359" and "1360." It is to be understood that the first number will be the controlling number for any one particular service or operator.

The operation of the printing mechanism and the rotation of the shaft 69 are controlled by the identification key 57. When the said key is removed from its housing 56, the printing mechanism will be locked, and upon the insertion of said key it is unlocked. The key 57 is provided with a pin 82 adapted to engage a dog 83, as is shown in detail in Fig. 9. The dog 83 is pivoted at 84 to the key housing and is under the influence of a

spring 85 likewise attached to the key housing. The lower end of said dog is adapted to engage a shoulder 86 on one of the disks 72, to-wit, the one nearest the key housing (Fig. 4). When said lower end of the dog 83 is in engagement with the said shoulder 86, the rotation of the impression shaft 69 is prevented and the printing mechanism is locked. When the key 57 is inserted, the dog 83 is shifted to bring the lower end thereof out of the path of the shoulder 86 on disk 72, and when the key is removed, the spring 85 will return said dog into the path of said shoulder 86 thereby locking the printing mechanism. The impression shaft 69 is held in a normal position by a spring-controlled pawl 87 mounted on a housing 88 and which enters a suitable recess in the shaft in a well known manner (see Figs. 6 and 11).

When the said key is inserted, it cannot be removed unless two impressions are taken by the printing mechanism, the first impression being taken, as hereinbefore stated, when a person takes charge of the automobile, and the second impression being taken at the end of that particular service or trip. This is accomplished by the following means:

The impression shaft 69 is provided with a pinion 89 in mesh with a gear 90 (Figs. 6 and 8), the ratio of the pinion to the gear being one to two. The gear 90 is supported by a bracket 91 attached to one of the side plates 61 which supports the printing devices, as shown in Fig. 5. The gear 90 is provided with a projection 92 adapted to engage a projection 93 extending from a pawl 94 pivoted to a lug 95 extending from the rear plate 1 (Fig. 12). The projection 92 holds the pawl 94 in an elevated position when the machine is in a normal condition, the key 57 being removed and the automobile out of use. When the key is inserted and the printing mechanism has been given its first operation by turning the finger piece 70, the gear 90 (owing as before stated to the actuating pinion 89 being half the diameter thereof) is given a half revolution and the projection 92 releases the projection 93 and thereby permits the pawl 94 to fall in front of a pin 96 extending from the key 57 (Fig. 13) which, as we have seen, has been previously inserted in its housing. The pawl 94, lying in the path of the pin 96, serves to prevent the key being withdrawn until the projection 92 again elevates the pawl 94 which it does upon the second operation of the printing mechanism. The pawl 94 is braced against any movement of the pin 96, when it is attempted to erroneously remove the key, by a bracket 97 which extends from the key housing 56.

The printing mechanism controls the ignition device through an electrical switch which is part of the ignition system of the automobile.

Mounted upon the gear 90 is a drum 98 having a contact surface 99. The drum 98 is in contact with an electrical brush 100 suitably mounted upon the rear plate 1 (Fig. 12). One terminal of the ignition system may be connected to the brush while the other terminal may be grounded to the machine, as will be readily understood without the need of illustrations. The position of the contact point 99 is such that when the machine is in the normal position, for example, the automobile is out of use, the brush 100 will be in engagement with the insulated portions 101 of the drum 98 but will contact with said brush after the first impression has been taken from the recording wheels and devices. When the second impression has been taken, the insulated portion 101 will be moved into contact with the brush 100 thereby opening the ignition circuit and placing the machine out of use. I have illustrated an open circuit principle of rendering the ignition system of an automobile inoperative such as is generally used with low tension systems, but it will be understood that the well known principle of a closed circuit may be used in case it is desired to use the machine in connection with a high tension ignition system. Other changes may be effected without departing from the underlying principles of my invention which includes means for primarily and directly controlling the taking of a statement or record from the recording mileage or other printing devices and which record must be taken before the car can be placed in and out of service by manipulating an automobile lock which, in the present instance, is the switch but which may be of any other well known forms.

The machine is inclosed in a casing 102 which is attached to the rear plate 1. The bottom of the machine is inclosed by a swinging door 103 hinged at 104 and provided with any suitable lock 105. These features may be selected and arranged to suit installation. The casing 102 is provided with side openings 106 through which the trip and grand total indicating counters 5 and 6 are viewable, and with a side opening 107 through which the indications on the speedometer member 38 may be seen. The casing 102 is further provided with an offset portion 108 which houses the bevel gear 22 and the shaft 23, there being structural necessities that may be varied in any given case as expedients may require.

Having described our invention, we claim:—

1. In a machine of the character specified, the combination of mileage recording counters, printing devices coöperating therewith in taking a record from said counters show-

ing the mileage for any given period in which a car was in service, means controlling the operative relation between said counters and said printing devices, and means for placing the said car in a condition so that it cannot be operated, said last named means being subject to the control of the means which controls the printing devices.

2. In a machine of the character specified, the combination of mileage recording counters, means for controlling ignition devices, printing devices coöperating with said counters in taking records therefrom showing the mileage a car has traveled, means controlling the operations of said printing devices, and means for operating said printing devices during which the means for controlling the ignition devices are rendered operative or inoperative.

3. In a machine of the character specified, the combination of mileage recording counters, printing devices coöperating therewith in taking records from said counters, controlling means governing the operative and inoperative conditions of ignition devices, and common means which directly controls the operations of the printing devices and the operative and the inoperative conditions of the ignition devices.

4. In a machine of the character specified, the combination of mileage recording counters, printing devices coöperating therewith in taking records from said counters, an electric switch in circuit with ignition devices, a key controlling said printing devices, and means for actuating said printing devices when released by said key and during which a switch is manipulated to open and close the ignition circuit.

5. In a machine of the character specified, the combination of mileage recording counters, impression devices coöperating therewith in taking records from said counters, a key controlling the operative relation between said counters and impression devices, said key having means thereon for identifying with said records the person or persons to whom such keys are assigned, and means for operating said impression devices when unlocked and whereby a switch is actuated to close the ignition circuit until another impression or record is taken.

6. In a machine of the character specified, an electrical switch having an open and a closed position, printing mechanism adapted in its alternate operations to move said switch to one of its positions and on its intermediate operation to move said switch to the other of its positions, and a key by which said printing mechanism is operated.

7. In a machine of the character specified, an electrical switch having an open and a closed position, printing mechanism adapted in its alternate operations to move said switch to one of its positions and in its intermediate operation to move said switch to the other of its positions, an identifying key by which said printing mechanism is operated, and means adapted to lock said key in a printing position, said locking means being released upon the intermediate operation of said printing mechanism.

8. In a machine of the character specified, the combination with a power driven vehicle including an electrical circuit, of a switch adapted to be shifted to positions to open and close said circuit, printing mechanism adapted in one of its operations to open said switch and thereby open said circuit and in its alternate operation to close said switch and thereby close said circuit, a device adapted to lock said printing mechanism against operation, an identifying printing member by means of which the person operating said printing mechanism is identified with the record made thereby, and means actuated by said printing mechanism, when operated, to lock said identifying printing member in a printing position.

9. In a machine of the character specified, a recording mileage counter, printing mechanism coöperating therewith in making records from said counter, an electrical switch having open and closed operative positions, the printing mechanism being adapted in its alternate operations to move said switch to the open and closed positions, an identifying printing key adapted to lock and unlock said printing mechanism, and means for retaining said key in a position to print the identifying character therefrom, said retaining means being released upon the intermediate operation of the printing mechanism.

10. In a machine of the character specified, electrical switch devices adapted to be operated to open and closed positions, a rotating member upon which one member of said switch devices is mounted, a rotating member in engagement with the first named rotating member, said first and second named rotating members having a ratio of substantially one to two, printing mechanism adapted to actuate the second named rotating member to operate the switch devices, and means for operating said printing mechanism.

11. In a machine of the character specified, a recording mileage counter, means for taking records from said mileage counter, an identifying member serving to lock and unlock said means for taking a record from said counter and to identify the person taking such record therewith, an electrical switch having open and closed positions, a rotating member upon which an element of said switch is carried, a second rotating

member engaging said first named rotating member, said second rotating member being actuated during the operations of the printing mechanism to open or close said switch.

12. In a machine of the character specified, a recording mileage counter, means for taking records from said mileage counter, a member adapted to lock and unlock said record-taking means, said member being also adapted to print an identifying mark on said records of the person or persons taking the same, an electrical switch having an open and a closed position, and means interposed between said record-taking means and said switch whereby the alternate operations of said record-taking means will open and close said switch.

13. In a machine of the character specified, an electrical switch having open and closed positions, a gear upon which an element of said switch is mounted, a pinion in mesh with said gear said pinion and gear having a ratio of substantially one to two, printing mechanism adapted to actuate said pinion, a key adapted to lock and unlock said printing mechanism, and means for locking said key actuated by said gear.

14. In a machine of the character specified, an electrical switch having an open and a closed position, a gear upon which a part of said switch is mounted, a pinion in mesh with said gear, printing mechanism adapted to actuate said pinion, a printing key adapted to lock and unlock said printing mechanism, a lock for said key, and a projection carried by said gear and adapted to actuate said lock.

15. In a machine of the character specified, an electrical switch having an open and a closed position, a gear upon which said switch is mounted, a pinion in mesh with said gear, said pinion and gear having a ratio of one to two, printing mechanism adapted to actuate said pinion, a disk mounted upon said printing mechanism, a latch adapted to engage said disk to lock said printing mechanism, a printing key having projections thereon one of which is adapted to engage said latch to unlock said printing mechanism, a second latch adapted to lie in the path of the other projection on said key thereby locking said key in a printing position, and a projection carried by said key and adapted to elevate said second named latch to permit said key to be removed.

16. In a machine of the character specified, a mileage printing counter, means for actuating said counter from the wheels of a vehicle, printing mechanism coöperating with said counter in taking records therefrom, a printing key controlling the operations of said printing mechanism, and an electrical switch controlled by said printing mechanism and adapted to render said vehicle inoperative upon alternative operations of said printing mechanism.

17. In a machine of the character specified, a mileage printing counter, means for actuating said counter from the wheels of a vehicle, printing mechanism coöperating with said counter in taking records therefrom, an identification printing key controlling the operations of said printing mechanism, an electrical switch actuated by said printing mechanism and adapted to render said vehicle inoperative, and means for locking said key in a printing position, said means being under the control of the printing mechanism.

18. In a machine of the character specified, a mileage printing counter, means for actuating said counter from the wheels of a vehicle, printing mechanism for said counter, an identification printing key controlling the operations of said printing mechanism, an electrical switch actuated by said printing mechanism to render said vehicle inoperative, means for locking said key in a printing position, said means being under the control of the printing mechanism, and a serial numbering counter actuated by said printing mechanism.

19. In a machine of the character specified, a mileage printing counter, means for actuating said counter from a rotating part of a vehicle, printing mechanism for said counter, a printing key controlling the operations of said printing mechanism, an electrical switch adapted to render said vehicle inoperative, said switch being actuated by said printing mechanism.

20. In a machine of the character specified, a mileage printing counter, means for actuating said counter from a rotating part of a vehicle, printing mechanism coöperating with said counter, a printing key controlling the operations of said printing mechanism, an electrical switch controlled by said printing mechanism and adapted to render said vehicle inoperative, a serial numbering printing counter actuated by said printing mechanism, and means for printing dates upon the records taken from said mileage counter.

21. In a machine of the type specified, a mileage printing counter, means for actuating said counter from the wheels of a vehicle, date printing members, a serial numbering printing counter, a printing member denoting the number of the machine, impression mechanism coöperating with said printing counter and members in taking records therefrom, a key controlling the operations of said impression mechanism, and an electrical switch adapted to render said vehicle inoperative and actuated by said impression mechanism.

22. In a machine of the character specified, a mileage printing counter, means for

actuating said counter from the wheels of a vehicle, date printing members, a serial numbering printing counter, a printing member denoting the number of the machine, impression mechanism coöperating with said printing counters and members said impression devices being adapted to actuate said serial numbering counter, a printing key controlling the operations of said impression mechanism, an electrical switch controlled by said impression mechanism and adapted to render said vehicle inoperative, and a lock by means of which said key is locked in a printing position, said lock being under the control of said impression mechanism.

23. In a machine of the character specified, a trip mileage printing counter, a season mileage printing counter, means for actuating said counters from the wheels of a vehicle, date printing wheels, a serial numbering printing counter, impression mechanism coöperating with said printing counters and members and adapted to actuate said serial numbering printing counter, a printing member adapted to denote the number of the machine, an identification printing key controlling the operations of said printing mechanism, and an electrical switch adapted to render said vehicle inoperative, said switch being under the control of said impression mechanism.

24. In a machine of the character specified, a trip mileage printing counter, a season mileage printing counter, visual indicating mileage counters corresponding to said printing mileage counters, means for actuating said counters from the wheels of a vehicle, date printing wheels, a serial numbering printing counter, impression mechanism coöperating with said printing counters and members and adapted to actuate said serial numbering printing counter, a printing member adapted to denote the number of the machine, an identification printing key controlling the movement of said printing mechanism, and an electrical switch adapted to render said vehicle inoperative, said switch being controlled by said printing mechanism.

25. In a machine of the character specified, a trip mileage printing counter, a season mileage printing counter, actuating means for said counters driven from a moving part of a vehicle, impression mechanism coöperating with said printing counters, an identification printing key controlling the operation of said impression mechanism, and an electrical switch actuated by said impression mechanism and adapted to render said vehicle inoperative at the completion of certain operations of said impression mechanism.

26. In a machine of the character specified, a trip mileage printing counter, and a season mileage printing counter, actuating means for said counters driven from a rotating part of a vehicle, impression mechanism coöperating with said printing counters, an identification printing key controlling the operations of said impression mechanism, an electrical switch actuated by said impression mechanism and adapted to render said vehicle inoperative, and a locking device adapted to hold said key in a printing position, said lock being actuated by said impression mechanism.

27. In a machine of the character specified, a mileage printing counter driving means for said counter actuated from a rotating part of a vehicle, impression mechanism coöperating with said printing counter, an identification printing key for locking and unlocking said impression mechanism, and an electrical switch actuated by said printing mechanism and adapted to render said vehicle inoperative at times.

28. In a machine of the character specified, a mileage printing counter, means for driving said counter from a rotating part of a vehicle, impression mechanism for said printing counter, an identification printing key controlling the operations of said printing mechanism, an electrical switch actuated by said impression mechanism and adapted to render said vehicle inoperative at times, and a lock adapted to hold said printing key in a printing position, said lock being also under the control of said printing mechanism.

29. In a machine of the character specified, a mileage printing counter, actuating means for said counter adapted to be driven from a rotating part of a vehicle, impression mechanism, a serial number printing counter actuated by said impression mechanism, a printing identification key controlling the operations of said printing mechanism, an electrical switch adapted to render said vehicle inoperative and actuated by said printing mechanism, and a lock adapted to hold said key in the printing position, said lock being controlled by said impression mechanism.

30. In combination with a mileage printing counter attached to a vehicle, driving means for said counter actuated from a rotating part of said vehicle, impression mechanism coöperating with said printing counter, an identification printing device for controlling said impression mechanism, and an electrical switch controlled by said printing mechanism and adapted to render said vehicle operative.

31. In a machine of the character described, a switch having an open and a closed position and controlling an electric circuit, printing devices including a mileage recording counter, said printing devices also including means whereby the switch is

moved to its effective positions upon the alternate operations of the printing mechanism.

32. In a machine of the character specified, a mileage recording counter, means for actuating said counter operated from a moving part of a vehicle upon which said counter is carried, impression devices cooperating with said counter in taking records therefrom, an identification member adapted to unlock said impression devices and to give an impression on the records of the person possessing said identification member, and an electric switch adapted to be moved to open and closed positions to open and close an electric circuit through the operations of said impression devices.

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

JOHN F. OHMER.
FREDERICK L. OHMER.

Witnesses:
MELLIE GALLOWAY,
MATTHEW SIEBLER.