No. 668,009. Patented Feb. 12, 1901.

B. E. DAKIN.

ATTACHMENT FOR MOTOR VEHICLES.

(No Model.) (Application filed June 5, 1900.)

2 Sheets—Sheet 1.

Fig. 2.

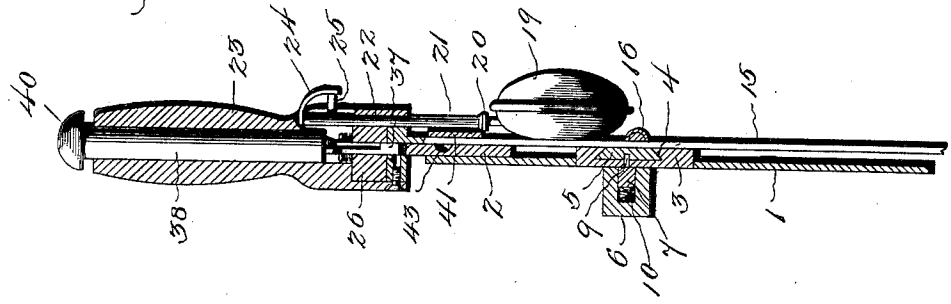
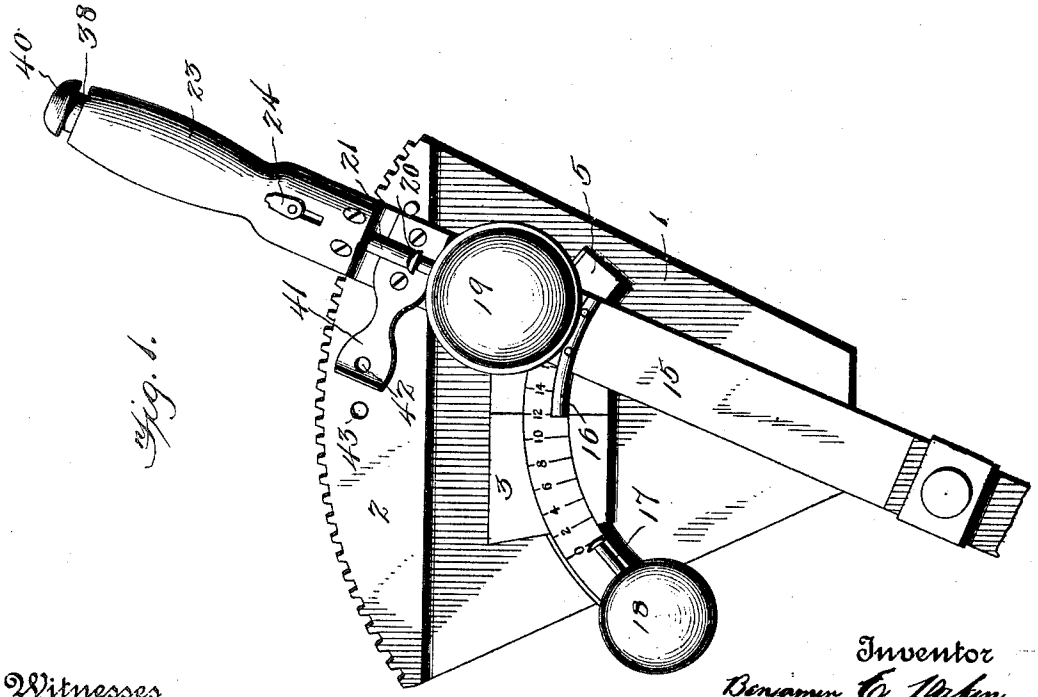


Fig. 1.



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Fig. 4.

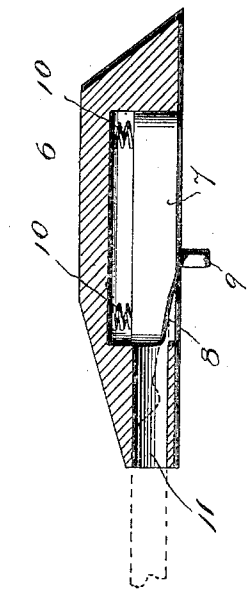


Fig. 5.

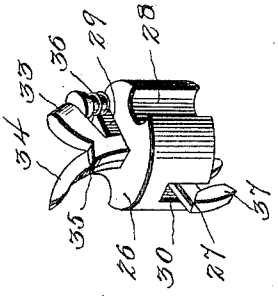


Fig. 6.

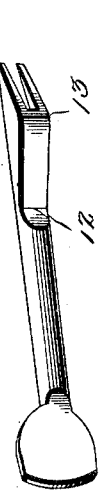
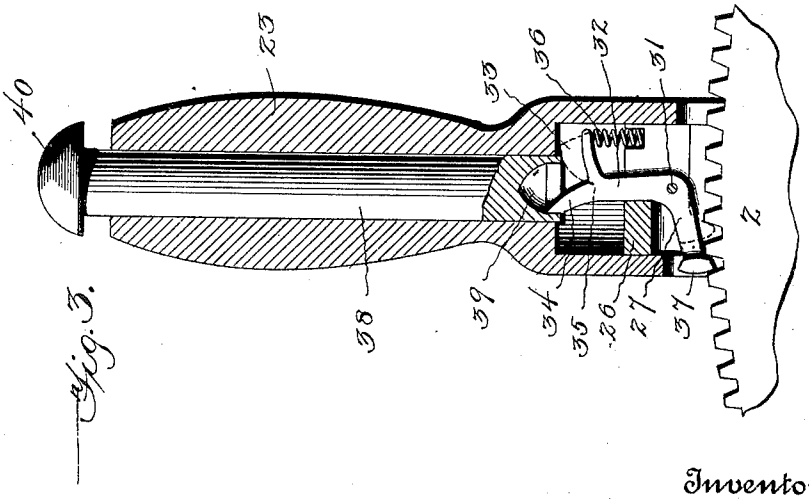


Fig. 7.



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UNITED STATES PATENT OFFICE.

BENJAMIN E. DAKIN, OF WASHINGTON, DISTRICT OF COLUMBIA.

ATTACHMENT FOR MOTOR-VEHICLES.

SPECIFICATION forming part of Letters Patent No. 668,009, dated February 12, 1901.

Application filed June 5, 1900. Serial No. 19,147. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN E. DAKIN, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Attachments for Motor-Vehicles; and I 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 figures of reference marked thereon, which form a part of this specification.

This invention relates to attachments for motor-vehicles; and its primary object is to provide mechanism adapted to be attached to the operating-lever of a motor-vehicle for locking and releasing said lever.

A further object of the invention is to provide means whereby the extent of movement of the operating-lever, and consequently the travel of the vehicle, may be regulated with reference to predetermined rates of speed.

A further object of the invention is to provide regulating or controlling mechanism adapted to be set to permit the vehicle to travel at a predetermined limit of speed and to lock the operating-lever against further movement when such limit of speed is reached.

A further object is to provide the operating-lever with an audible signal which may be conveniently operated by the same hand that moves the lever, whereby the signal may be sounded either simultaneously with the movement of the lever or while the lever is at rest.

The characteristic features of the invention and its details of construction will be fully described hereinafter in connection with the accompanying drawings, which form a part of this specification, and particularly pointed out in the appended claims.

In the drawings, Figure 1 is a side elevation of the upper portion of the operating-lever of a motor-vehicle provided with my regulating attachment. Fig. 2 is a longitudinal section of the same. Fig. 3 is a longitudinal section of the handle of the lever, taken on a plane at right angles to that of Fig. 2. Fig. 4 is a horizontal section of the device for locking the indicator of the attachment. Fig. 5 is a view in perspective of the mechanism arranged with the handle of the lever for locking and releasing the lever, and Fig. 6 is a perspective view of the key for unlocking the indicating device of the attachment.

The reference-numeral 1 designates a plate, preferably of approximately triangular shape, adapted to be secured to the frame or body of the vehicle and having secured to its upper edge a segmental rack 2. On one side of the plate 1 is formed or secured a projecting block 3, having a segmental dovetail groove 4 formed on one side thereof, adapted to receive a curved or segmental slide 5, the outer face of which bears numerals or other characters constituting an indicator for the device. The opposite side of the block 3 is provided with a housing or casing 6, within which is arranged a bolt 7, beveled at one end, as shown at 8, and having a lug or pin 9 projecting therefrom, adapted to enter perforations in the inner side of the slide 5 to lock the latter against movement. Between the ends of the bolt 8 and the wall of the housing 6 coil-springs 10 are interposed, said springs serving to normally hold the pin 9 in engagement with the slide 5.

A special form of key (shown in Fig. 6) is required to release the bolt and unlock the slide. This key is adapted to enter the open end 11 of the housing and is formed with beveled shoulders 12 and 13 to adapt it to the beveled bolt. The end 14 of the key is forked or bifurcated to adapt it to straddle the pin 9.

15 designates the operating-lever of the vehicle, suitably fulcrumed to move in the circular plane described by the segmental rack 2 and carrying an arm 16, curved on the arc of a circle described by the segmental slide 5. This arm is adapted to contact with a push-rod 17, projecting from an alarm-bell 18, secured to the end of the slide 5, and to serve as a stop to limit the movement of the lever 15, as will be referred to again hereinafter.

19 designates a signal-bell secured upon the lever 15 above the arm 16 and provided with a push-button 20, adapted to be operated by a push-rod 21, which extends through an opening 22, formed in the handle 23 of the lever. This rod 21 is depressed by means of a finger-piece 24, comprising a bent strip of

spring metal secured at its upper end to the upper end of the rod 21 and having a pin 25 projecting from its lower end into a beveled recess formed in the side of the push-rod.

Pressure upon the finger-piece 24 imparts a sufficient downward movement to the rod 21 through the pin 25 to depress the push-button 20 and ring the bell. The rod 21 is caused to retract by the slight upward movement of the pin which projects through the bell 19 or by other suitable means when the pressure on the finger-piece is relieved.

The handle 23 is hollow and slotted at one side for the accommodation of the finger-piece 24. Within the hollow lower end of the handle 23 is arranged means for locking the operating-lever to the segmental rack, comprising a disk 26, Fig. 5, and a dog 27. The disk 26 is formed with a semicircular recess 28 to permit of the passage therethrough of the push-rod 21 and is slotted on both its upper and under sides, as shown at 29 and 30, to receive the dog 27. This dog is in the form of a bell-crank lever fulcrumed upon a cross-pin 31, and its upper arm 32 is formed with diverging arms 33 and 34 and a shoulder 35. A coil-spring 36 is seated in the disk 26 below the arm 33, said spring serving to normally hold the catch 37 of the dog in engagement with the teeth of the rack 2.

The peculiar form of the upper end of the bell-crank lever or dog is to prevent the disengagement of the dog except by a device specially designed for the purpose and here shown as a removable pin 38, formed at its lower end with a cup-shaped depression 39 and at its upper end with a head or cap 40. This pin 38 is adapted to be inserted into the hollow handle 23 and forced downward to tilt the bell-crank lever, and this disengages the catch 37 thereof from the rack, the spring 36 thereof acting as the retracting means. Obviously the dog 27 might be weighted instead of provided with the retracting-spring.

Projecting from the lever 15 below the handle thereof is a spring-arm 41, provided with an indentation 42, adapted to engage a corresponding projection 43 on the rack 2 for the purpose hereinafter explained.

As is well known, the limit of speed of automobiles, locomobiles, or other motor-vehicles is regulated in cities and towns by municipal laws, and it is therefore desirable in order to comply with such laws that the vehicles be so controlled that the prescribed limit of speed cannot be exceeded. Again, it is desirable on the part of owners of this class of vehicles to place some restriction as to speed upon persons hiring or using the vehicles. A further important desideratum in connection with motor-vehicles is that they should be protected from being tampered with, when left standing, by children or other irresponsible or unauthorized persons. All of these purposes are accomplished by my invention, as will be clear from the following explanation of its operation.

By moving the segmental slide 5 the push-rod 17 of the alarm-bell 18 is arranged with relation to the speed desired or allowed, and when the operating-lever is turned sufficiently to propel the vehicle at the predetermined speed the arm 16 will strike the rod 17, preventing further movement of the lever and ringing the alarm-bell, thus notifying the operator that the limit of speed has been reached. By means of the locking device shown in Fig. 4 the slide 5 can be locked at any predetermined adjustment, and if the key is not in the possession of the occupant of the vehicle it will be impossible for him to force the vehicle to a higher speed than is permitted by the location of the slide. The spring-arm 41 and its engaging projection 43 are provided as a supplemental stop device for the lever in case a less speed is permissible at certain points (as at street-crossings) than at others. The engagement of the arm 41 with the projection 43 will restrict the speed to the lesser limit at such points. When the occupant of the vehicle desires to alight and leave it unattended, he withdraws the pin 38 from the handle, thus locking the lever against movement and effectively preventing the operation of the vehicle by unauthorized persons.

The location of the signal-operating finger-piece on the handle of the lever is an important feature of the invention, as it permits the signal to be sounded by pressure of a finger at the same time that the pin 38 is pressed down by the thumb, thus enabling the lever and signal to be operated at the same time by one hand.

While the construction herein shown and described is practical and operative, it is obvious that many changes and modifications in the details of the mechanism employed might be resorted to without departing from the spirit of the invention, and I would therefore have it understood that I reserve the right to make all such changes, variations, and modifications as may properly fall within the terms and scope of the following claims.

I claim—

1. An attachment for motor-vehicles, comprising an operating-lever, means located within the lever and carried thereby for locking said lever against movement; and a device constituting a part of the lever and removably attached thereto for operating the locking device.

2. An attachment for motor-vehicles, comprising an operating-lever, means carried thereby for locking said lever against movement; and a device adapted for removal within the handle of the lever and normally part thereof for operating the locking device.

3. An attachment for motor-vehicles, comprising an operating-lever, means carried thereby for locking said lever against movement; and a readily-removable device inserted into the end of the lever and normally a part thereof to release the locking means.

4. An attachment for motor-vehicles, com-

prising an operating-lever, means for locking said lever against movement, and means normally carried by the lever and removable therefrom whereby the locking means is operated to unlock the lever when pressure is applied thereto and to lock said lever when pressure is relieved.

5. An attachment for motor-vehicles, comprising a fixed plate having the usual teeth and a supplemental stop; an operating-lever arranged adjacent thereto; and a device carried by the lever and adapted to engage said supplemental stop for arresting the movement of the said lever at an intermediate position.

6. An attachment for motor-vehicles comprising an operating-lever, means carried thereby for locking said lever against movement; and a device removably attached to the lever and normally part thereof for operating the locking device.

7. An attachment for motor-vehicles, comprising an operating-lever, means carried thereby for locking said lever against movement; and a device adapted to be inserted into the end of the lever to release the locking means.

8. An attachment for motor-vehicles, comprising an operating-lever; means carried thereby for locking the lever against movement; and a device for releasing the locking means, consisting of a pin or rod extending into the end of the lever and removable therefrom.

9. An attachment for motor-vehicles, comprising an operating-lever; a locking device carried by the lever; and a removable pin or rod inserted into the upper end of the lever and adapted to be depressed to release the locking device.

10. An attachment for motor-vehicles, comprising an operating-lever, provided with a hollow handle; a locking device arranged within the handle; and a rod or pin removably seated within the hollow handle for releasing the locking device.

11. An attachment for motor-vehicles comprising an operating-lever; means carried thereby for locking said lever against movement; a device removably secured to said lever for releasing the locking means; an alarm or signal carried by the lever; and a finger-piece for said alarm or signal.

12. An attachment for motor-vehicles comprising an operating-lever having a hollow handle; a locking device arranged within the handle; a removable rod or pin within the handle for releasing the locking device; and a signal-operating device carried by said handle, whereby the locking device may be released and the signal sounded simultaneously by the use of one hand.

13. An attachment for motor-vehicles comprising a fixed plate; a segmental rack secured thereto; an operating-lever arranged adjacent to said plate; locking means carried by the lever for engaging said rack; a device also carried by the lever for releasing the locking means; and a device adjustably secured to said plate for limiting the movement of the lever.

14. An attachment for motor-vehicles comprising a fixed plate; a segmental rack secured to the upper edge of the plate; an operating-lever arranged adjacent to said plate and carrying a locking device adapted to engage said rack; an adjustable device secured to said plate and an arm projecting from said lever and adapted to contact with the adjustable device on the plate to limit the movement of the lever.

15. An attachment for motor-vehicles comprising a fixed plate provided with a segmental rack; a segmental slide adjustably secured to said plate; an alarm-bell on said slide; a projection on said lever for operating the bell; and means for locking the slide in any position to which it may be adjusted.

16. An attachment for motor-vehicles comprising a fixed plate; an operating-lever; an adjustable slide secured to said plate; a lock for securing said slide at different adjustments; and a stop device for limiting the movement of the lever.

17. An attachment for motor-vehicles comprising a fixed plate; an operating-lever; and means carried by said plate for limiting the movement of said lever, consisting of a stop device adjustably secured to the plate, and a device for locking the stop device at different adjustments.

18. An attachment for motor-vehicles comprising a fixed plate; an operating-lever arranged adjacent thereto; means for limiting the movement of said lever comprising an indicator-slide adjustably secured to said plate, and provided with a stop against which the lever is adapted to contact, and means for locking said slide.

19. An attachment for motor-vehicles comprising a fixed plate; an operating-lever arranged adjacent thereto; and means for limiting the movement of said lever, consisting of an indicator-slide adjustably secured to said plate; means for locking said slide at different adjustments; and an alarm and stop device against which the lever is adapted to contact.

20. An attachment for motor-vehicles, comprising a fixed plate; a segmental rack secured thereto; an operating-lever; means carried by said lever for engaging said rack; and means for limiting the throw of said lever comprising a segmental indicator, an alarm and stop device adjustably supported on said plate; and means for locking said slide at different adjustments.

21. An attachment for motor-vehicles, comprising a fixed plate; a segmental rack secured thereto; an operating-lever arranged adjacent to said rack and having a hollow upper end or handle; a locking device within said handle to engage said rack; a removable device carried by said lever to release the locking de-

vice; an alarm or signal carried by said lever and means on said plate for limiting the throw of said lever.

22. An attachment for motor-vehicles, comprising a fixed plate; an operating-lever arranged adjacent thereto; and a device for arresting the movement of the lever consisting of a resilient arm projecting from said lever and adapted to engage said plate.

23. The combination with the operating-lever of a motor-vehicle, of an alarm or signal bell secured to the lever and provided with a push-button; and means for depressing said push-button to ring the bell, comprising a push-rod supported on the handle of the lever, and bearing against said push-button; and a finger-piece for depressing said push-rod.

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

BENJAMIN E. DAKIN.

Witnesses:
ALBERT POPKINS,
JAS. L. SKIDMORE.