F. S. DAVIS.

CONTROLLING DEVICE FOR MOTOR VEHICLES.

APPLICATION FILED OCT. 14, 1905.

902,944. Patented Nov. 3, 1908.

Fig. 1.

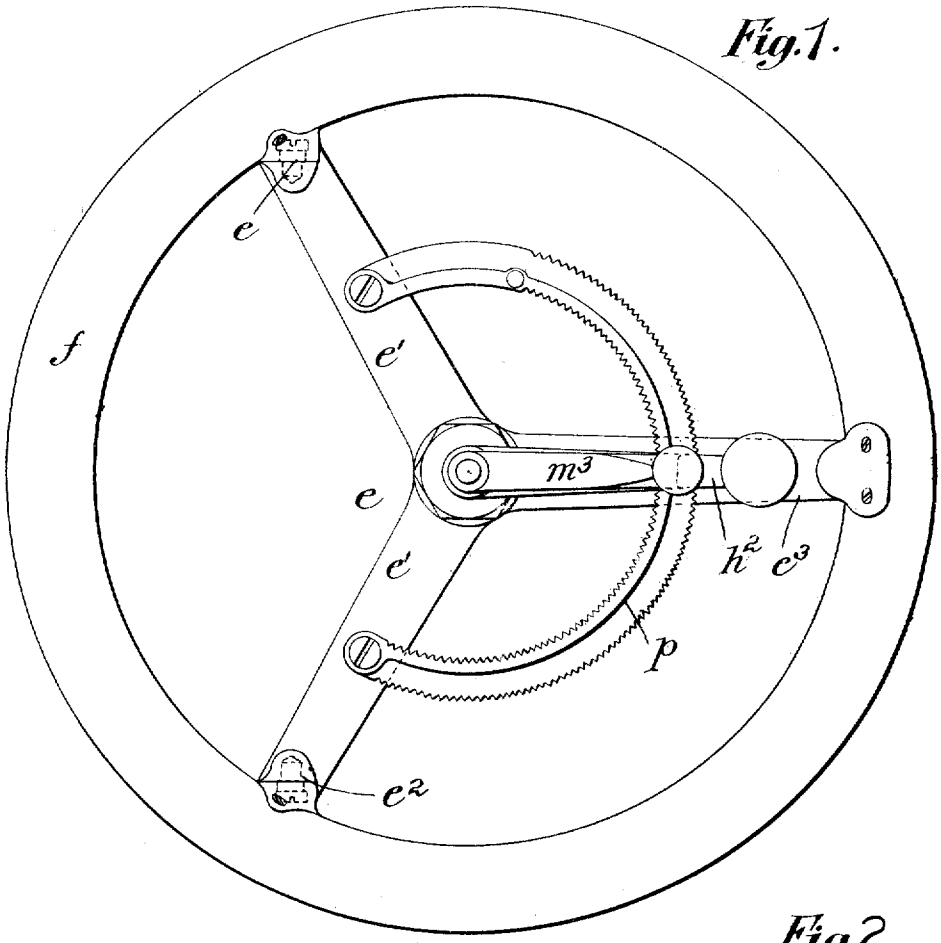
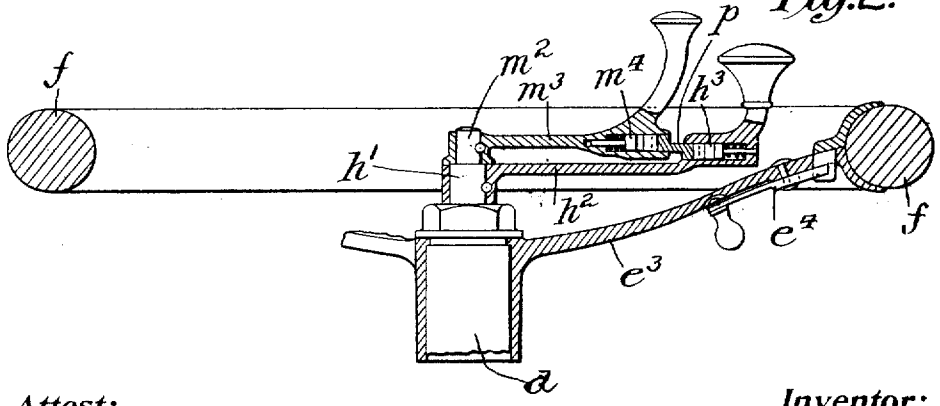


Fig. 2.



Attest:

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UNITED STATES PATENT OFFICE.

FRANK S. DAVIS, OF TOLEDO, OHIO, ASSIGNOR TO POPE MANUFACTURING COMPANY, OF JERSEY CITY, NEW JERSEY, AND HARTFORD, CONNECTICUT, A CORPORATION OF NEW JERSEY.

CONTROLLING DEVICE FOR MOTOR-VEHICLES.

No. 902,944. Specification of Letters Patent. Patented Nov. 3, 1908.

Application filed October 14, 1905. Serial No. 282,714.

To all whom it may concern:

Be it known that I, FRANK S. DAVIS, a citizen of the United States, residing at 2613 Maplewood, Toledo, Ohio, have invented certain new and useful Improvements in Controlling Devices for Motor-Vehicles, of which the following is a specification, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to the device mounted upon the steering wheel whereby the driver is enabled to control the motor. Heretofore the frame of the steering wheel has been provided with a segment having ratchet teeth on its upper surface and the controlling levers, oscillating about the axis of the wheel, are held down upon the segment and in engagement therewith by their own spring tension, a nut at the axis providing for adjustment. This arrangement is unsatisfactory because it is unreliable unless the levers are held down firmly and because, in this case, an undesirable amount of force is required to move them. It is the object of this invention to provide means whereby the engagement of the levers with the segment shall be uniform at all times, shall be properly regulated so as to insure certainty in action without requiring too great force to move the levers and shall be independent of the stiffness or elasticity of the levers.

The invention will be more fully explained hereinafter with reference to the accompanying drawings, in which,

Figure 1 is a top view of the steering wheel with the controlling levers. Fig. 2 is a view in central section of the parts shown in Fig. 1.

At its upper end the steering shaft or pillar d has secured to it a spider e, which preferably has two arms e' for the pivotal support, as at e^2, of the hand-wheel f, and a third arm e^3 which carries a latch e^4 to engage the hand-wheel f and retain it in operative position. The steering shaft or pillar d is rotatable in its bearings as usual to effect the steering of the vehicle and is tubular in order that it may receive connections of the controlling devices.

The controlling levers h^2 and m^3, which may be the throttle lever and the spark lever respectively, are mounted upon the steering shaft or pillar to oscillate about the axis thereof, being operatively connected with the throttle and the spark adjuster through devices not necessary to be described herein.

The throttle lever h^2 is provided with an inwardly acting spring detent h^3, of ordinary construction, and the spark lever m^3 is similarly provided with an outwardly acting spring detent m^4, and both of such detents engage the respective lateral toothed or ratcheted edges of a common sector p which is mounted concentrically with the axis of the wheel, being preferably secured to the arms e' of the spider e, so that the two levers are held from accidental displacement relatively to each other.

It will be seen that the engagement of the levers with the sector or segment p depends, not upon the spring tension of the levers themselves, but upon the action of the spring detents which remains always uniform, is reliable under all conditions, and is capable of being overcome, without requiring great force, whenever it is desired to shift the levers.

I claim as my invention:

The combination with a steering wheel for a motor vehicle of a sector mounted concentrically with the axis of the wheel and having its inner and outer lateral edges toothed or ratcheted controlling levers pivoted concentrically with the sector and a spring detent for each lever in the plane of the sector to engage the corresponding lateral edge thereof.

This specification signed and witnessed this 9th day of October, 1905.

FRANK S. DAVIS.

Signed in the presence of—

E. L. CLAPP,

R. O. LAW.