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CONTROLLER ATTACHMENT FOR AUTOMOBILES

Filed July 17, 1928

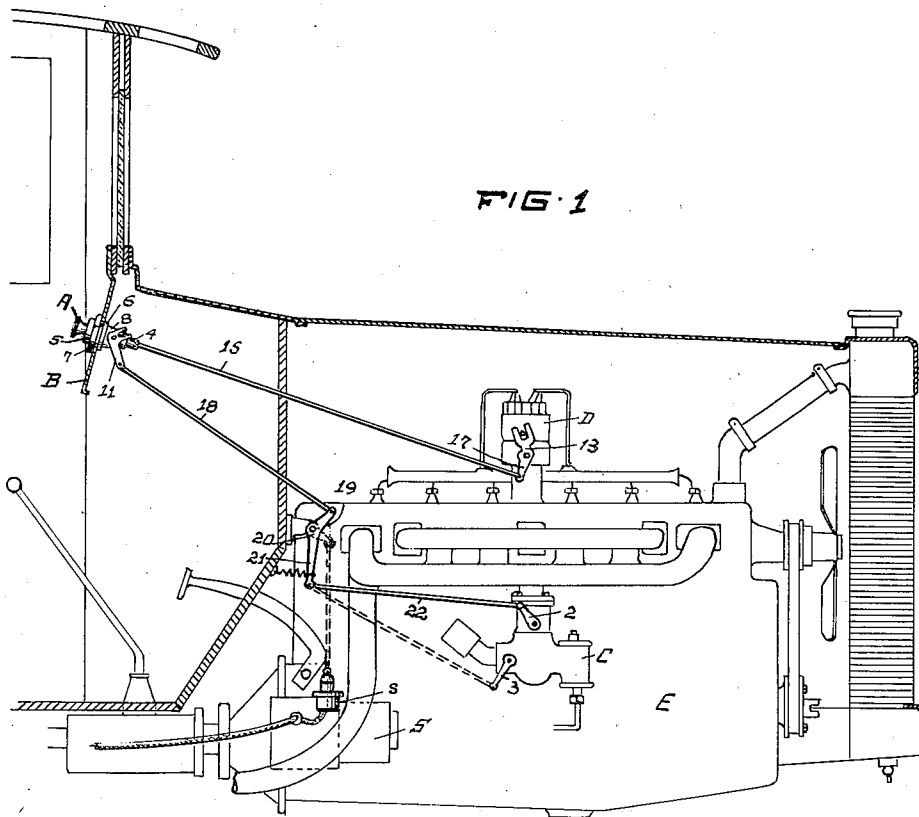


FIG. 1

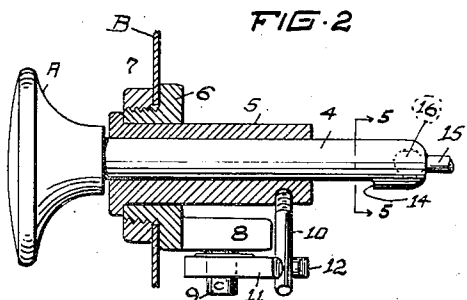


FIG. 2

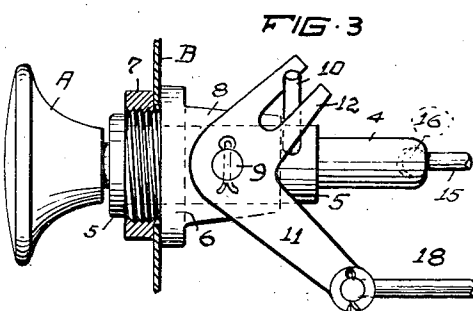


FIG. 3

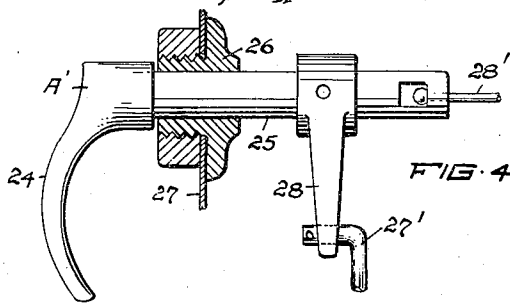


FIG. 4

FIG. 5



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CONTROLLER ATTACHMENT FOR AUTOMOBILES

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My invention appertains to controllers, and more particularly to a controller attachment for the instrument board of an automobile, wherewith independent or conjoint control of two motor appliances may be conveniently effected by one hand at a single point or spot on the instrument board. Heretofore the general practice has been to mount individual controls in spaced relation on the instrument board. My aim is to provide a single fitting or attachment for the instrument board, the construction of which is such that the operator may conveniently adjust and control two separate operating appliances or devices associated with the engine or motor. For example, the invention may be employed to adjust and control the spark retarder and throttle, singly or together as the operator may elect, or the device may be used in the same way in connection with the choke and throttle, or the engine starter and spark retarder. Not only does a single controller fitting or attachment of that kind facilitate and simplify adjustments and control of different engine appliances, but it also simplifies and reduces the cost of installation of such equipment compared with old practices.

In the accompanying drawings, Fig. 1 is a sectional view of a portion of an automobile showing my improved controller installed therein and connected to the distributor or spark-retarding device and to the engine throttle or carburetor. Fig. 2 is a sectional view, in plan and enlarged, of the controller attached to the instrument board, and Fig. 3 is a side view of the device. Fig. 4 is a sectional view of a modified form of the invention. Fig. 5 is a cross section on line 5-5 of Fig. 2.

The invention is particularly applicable to an automobile in which an internal combustion engine E is used and wherein an instrument board B is provided in front of the driver's seat, for example, as exemplified in Fig. 1. In this case, the engine is equipped as usual with a carburetor C having a throttle valve adapted to be opened and closed by a rotatable arm 2. A second arm 3 is also provided as customarily to operate the choke

valve. As delineated the engine is also equipped with a manually adjustable distributor or spark timing device D, together with an electric starter S having a starting switch s. Attached to the instrument board B, is a single handle or member A constructed and designed to facilitate the adjustment and control of any two of the enumerated devices associated with the engine. To exemplify one working combination, I show in Figs. 2 and 3, a control member A which consists of a knob attached to or forming an integral part of a round flat-sided stem 4. This stem is relatively long and slidably confined within a rotatable sleeve or barrel 5 which extends through and has bearing within a flanged support or ring-shaped mounting 6 clamping tightly to board B by a nut 7. Mounting 6 may be of any suitable kind or character but as shown it is flanged and formed with a screw-threaded extension of sufficient length to project through an opening in board B to permit nut 7 to be affixed to it at one side of the board. A projection 8 extends rearwardly from the flanged part of mounting 6, and a round stud 9 projects laterally from projection 8.

A pin or arm 10 is affixed to or forms a part of rotatable sleeve 5 adjacent the end edge of projection 8, and a bell crank or lever 11 having a slotted arm 12 is pivotally mounted upon stud 9 in operating connection with the pin or arm 10, whereby an oscillatory movement may be imparted to the bell crank or lever 11 by rotating control member A. A sliding reciprocable movement may also be given to this control member either independently of the rotatable movement, or conjointly therewith. The limit of the pull movement of control member A outwardly is fixed by a stop shoulder 14 at the inner end of stem 4, and a link, rod or wire 15 is attached by a swivel or ball connection 16 to the inner end of the control member, thereby permitting the pull movement to be transmitted to a remote point, say for instance, to an arm 17 on a pivoted crank or lever 13 such as commonly employed to operate the rotatable distributor, timer or spark retarding device D for engine E. The bell crank or lever 11 at the side

of control member A is connected by a rod or link 18 to another point on the engine, and as shown the link 18 connects with an arm or lever 19 attached to a rock shaft 20 having a second arm or lever 21 which is connected by a rod or link 22 with the operating arm 2 for the throttle in carburetor C. Obviously link 22 may be connected to arm 3 which operates the choke valve in the carburetor as indicated in dotted lines in Fig. 1, or in lieu of connecting link 22 with either the choke or throttle, it may be attached to the electric switch *s* for the engine starter S, as also indicated in dotted lines in Fig. 1. Thus it will be seen that the single control member A may be readily connected to two different operating devices or appliances associated with the engine and having to do with its starting or running operations, thereby permitting either appliance to be operated independently or both appliances jointly. That is, control member A can be either rotated or pulled to operate the two appliances separately, and successively, or the rotative and pull movements can be combined to operate both appliances co-incidentally.

In Fig. 4, I show a modified form of controller A', which comprises a handle 24 having an elongated stem 25 rotatably and slidably supported within a flanged thimble or escutcheon member 26 mounted upon instrument board 27. An arm 28 is pinned or otherwise affixed to stem 25 a short distance rearwardly of mounting 26, and a link 27' is connected to the free end of this arm. A second link or wire 28' is swiveled to the inner end of stem 25, and these two links 27' and 28', respectively, are connected separately to the throttle and distributor of the engine, or to any two devices or appliances associated with the engine for controlling the operation thereof.

What I claim, is:

1. A controller attachment for the instrument board of a motor driven vehicle, including a mounting, a reciprocable controller member supported rotatably upon said mounting, shiftable means supported on said mounting and power-transmitting connections between said controller member, said shiftable means and motor controlling appliances for the vehicle.

2. A controller attachment for the instrument board of a motor driven vehicle, comprising a single fitting, embodying a combined rotatable and reciprocable control member, shiftable means supported by said fitting and a plurality of power-transmitting connections between said rotatable and reciprocable control member, said shiftable means and different motor controlling appliances for the vehicle.

3. A controller attachment for the instrument board of an automobile, comprising a mounting a rotatable control member extend-

ing through said mounting, a rotatable push and pull member extending through said rotatable control member and a shiftable member mounted upon said mounting and operatively connected with said rotatable control member.

4. A controller attachment for the instrument board of an automobile, comprising a mounting, a plurality of control members rotatable about a common axis within said mounting, and a shiftable member supported upon said mounting and operatively connected with one of said rotatable control members, one of said control members being also movable longitudinally of said axis.

5. A controller attachment for the instrument board of an automobile, comprising a mounting, and a rotatable control member reciprocably supported upon said mounting, a lever pivoted to said mounting and coupled with said member, and separate power-transmitting elements associated with said member and lever respectively.

6. A controller attachment for the instrument board of an automobile, comprising a mounting, a lever pivotally connected to said mounting, a rotatable member in operating connection with said lever, a reciprocable controlling device extending through said rotatable member, and means connected with said lever and reciprocable device for transmitting the respective movements thereof to other appliances upon said automobile.

7. A controller attachment for the instrument board of a motor driven vehicle, comprising a mounting, a rotatable push and pull member extending through said mounting, an oscillatory means supported upon said mounting and a swiveled element extending through said mounting and axially aligned and coupled for actuating said oscillatory means with said push and pull element.

8. A controller attachment for the instrument board of an automobile, comprising a mounting, a plurality of controller members within said mounting, one movable longitudinally and a second movable rotatably about a common axis within said mounting, a shiftable means coupled with said rotatable controller element and supported upon said mounting, and means for connecting said longitudinally movable member and said shiftable means operatively to separate working appliances on the automobile.

In testimony whereof I affix my signature.
ALBERT J. WEATHERHEAD, Jr.