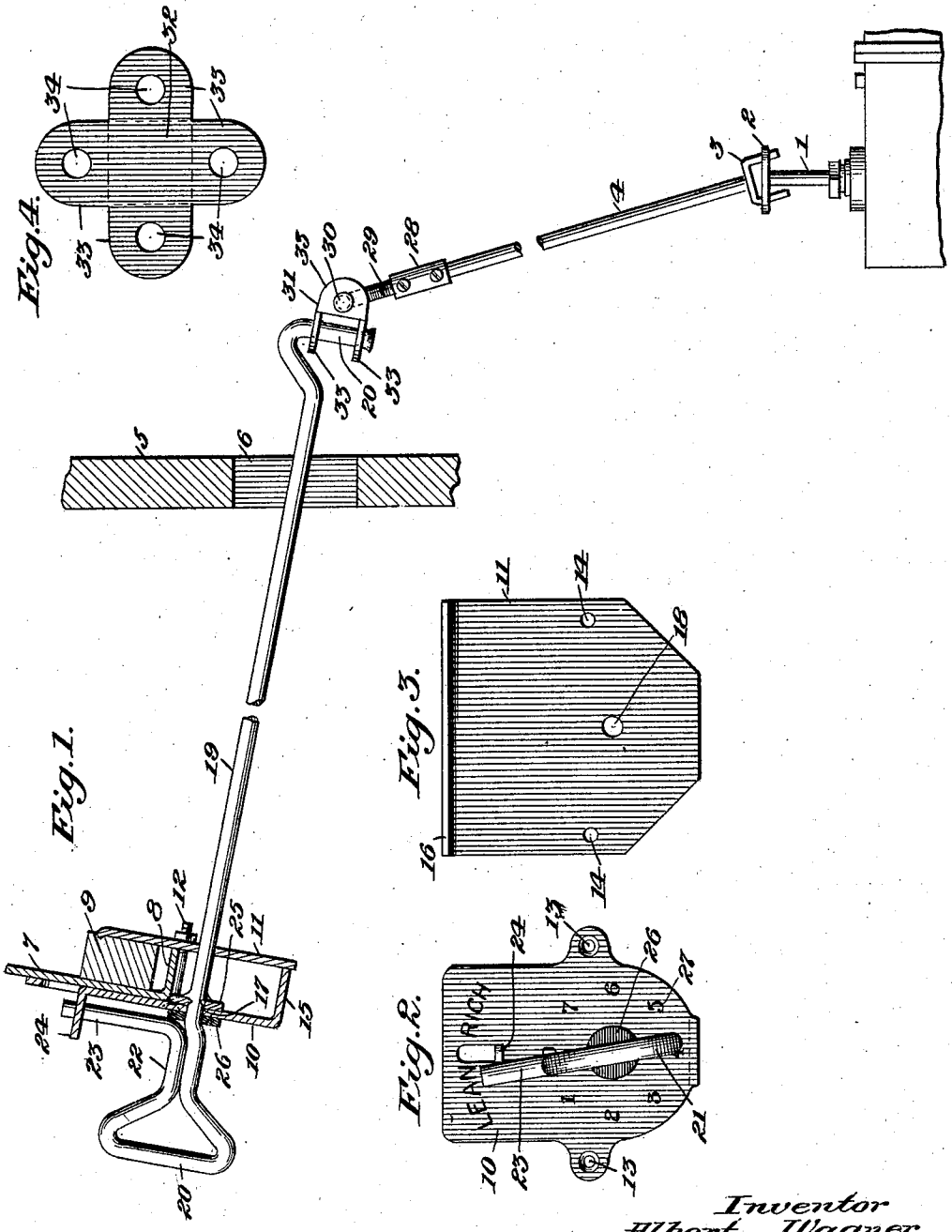
Jan. 6, 1925. 1,521,919

A. WAGNER

DASH CONTROL FOR CARBURETORS

Filed Nov. 17, 1923



Inventor
Albert Wagner,
By Chas. E. Riordan
Att'y.

Patented Jan. 6, 1925. 1,521,919

UNITED STATES PATENT OFFICE.

ALBERT WAGNER, OF NORWOOD, OHIO, ASSIGNOR TO THE WEMB COMPANY, OF CINCINNATI, OHIO, A CORPORATION OF OHIO.

DASH CONTROL FOR CARBURETORS.

Application filed November 17, 1923. Serial No. 675,396.

To all whom it may concern:

Be it known that I, ALBERT WAGNER, of Norwood, in the county of Hamilton and State of Ohio, a citizen of the United States, have invented certain new and useful Improvements in Dash Controls for Carburetors, of which the following is a specification.

This invention relates to devices for controlling the carburetor of an automobile engine from the instrument board of the vehicle, and the object of the present improvements is to provide a mechanism which may be produced and installed at a low cost, simplicity and economy in construction being attained without any loss of efficiency in operation. The invention is illustrated in the annexed drawing and is hereinafter described, and it consists in certain novel features which are particularly pointed out in the appended claims.

In the drawings, Fig. 1 is a sectional elevation of a controlling device embodying my present improvements,

Fig. 2 is a front elevation of the dial plate,

Fig. 3 is an elevation of the clamping or backing plate,

Fig. 4 is a plan view of the blank from which a coupling joint is formed.

In the drawing, the numeral 1 indicates the stem of the mixing valve of the carburetor carrying a head 2 which is engaged and actuated by a fork 3 on the lower end of a rod 4, all of these parts being of well-known form. 5 indicates the dash of the vehicle having an opening 6 therethrough to accommodate the controlling shaft, and 7 indicates the instrument board which is shown as consisting of a metal plate having a forwardly projecting flange 8 along its lower edge, a wooden block 9 being disposed against the front side of the plate to reenforce the same and provide a bearing surface for the clamping plate.

A dial plate 10 and a backing clamping plate 11 are disposed at the opposite sides of the instrument board, and depend below the same, screws or bolts 12 inserted through openings 13 in the dial plate and openings 14 in the clamping plate serving to secure the plates in place. The dial plate is provided at its lower end with a forwardly projecting flange 15 which abuts the clamping plate, and the clamping plate is provided along its upper edge with a rearwardly projecting lip 16 adapted to bite into the block 9. The plates will, consequently, be firmly secured in position on the instrument board and will be prevented from buckling. The plates are provided with openings 17 and 18, respectively, in their lower portions which constitute bearings for the controlling rock shaft 19. The said shaft is formed integrally from rod material by having one end bent laterally to form a crank 20 while the opposite end is bent laterally and doubled on itsself to form a handle loop 21, the terminal portion of the loop extending along the shaft, as at 22, and then projecting laterally to form a pointer or index finger 23. A tongue 24 is struck from the upper portion of the dial plate and projects into the path of the pointer, as shown in Figs. 1 and 2, to constitute a stop limiting the movement of the pointer in both directions. The shaft 19 is, of course, threaded through the openings 17 and 18 and journals therein, its forward end portion extending through the opening 6 in the dash, as shown. To prevent endwise movement of the rock shaft, a metallic washer 25 is secured thereon by swaging or otherwise and bears against the front side of the dial plate, while a fiber washer 26 is secured upon the shaft at the rear side of the plate the frictional engagement of the fiber washer with the plate holding the shaft in a set position. Upon the dial plate concentric with the shaft are a series of digits 27 arranged in arithmetical progression while at the upper end of the plate at oposite sides of the tongue 24 appear the legends "Lean" and "Rich."

The rod 4 has its upper end secured in a coupling sleeve 28 and in the upper end of said sleeve is secured the lower end of a stem 29 which forms one terminal of a crank 30 the longitudinal axis of which is disposed at a right angle to the longitudinal axis of the crank 20. The cranks are connected by a coupling 31 so as to constitute a universal joint, the coupling being formed from a single integral blank consisting of a central rectangular body 32 having a substantially semi-circular lobe 33 extending from each side, an opening 34 being formed through each lobe. The alternate lobes are bent in opposite directions to lie at right angles to the body and the alined openings 34 then receive the cranks 20 and 30, as will be

understood on reference to Fig. 1, so that the motion of the controlling shaft will be transmitted to the rod 4.

It will be readily noted from the foregoing description taken in connection with the accompanying drawing that I have provided a device which may be produced and installed at a very low cost, which may be easily manipulated, and will operate efficiently. The controlling shaft may be easily formed in a bending machine, and the universal coupling, the dial plate, and the clamping plate may each be stamped from a blank of sheet metal by a single operation.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:—

1. In a control mechanism of the class described, the combination of a rock shaft formed from a length of rod material having one terminal disposed laterally to constitute a crank and its other terminal bent laterally and doubled upon itself to form a handle member and then projected laterally to constitute a pointer, means for coupling the crank to a device to be controlled, and indicator means cooperating with the pointer.

2. In a control mechanism of the class described, the combination of a rod connected with and rising from a device to be controlled, a crank at the upper end of said rod, a rock shaft having a crank at its front end disposed in angular relation to the first-mentioned crank, a coupling connecting said cranks and consisting of a rectangular body and lobes projecting from its edges at right angles to its faces, the alternate lobes extending in opposite directions and receiving the respective cranks, the terminal at the rear end of the rock shaft being laterally bent and doubled upon itself, then projected to form an indicating means for setting same.

3. In a control mechanism of the class described, the combination with an instrument board of a dial plate bearing against one side of the board and having a flange at its lower end projecting under the board in spaced relation thereto, a clamping plate bearing against the opposite side of the board and against said flange and provided at its upper end with a retaining lip to engage a fixed part on the board, means for securing the dial plate and the clamping plate together, a rock shaft mounted in and extending through said plates below the board, means for setting said shaft, and means for connecting the shaft with a device to be controlled.

4. In a control mechanism of the class described, the combination of a rock shaft, means for connecting the shaft to a device to be controlled, a dial plate providing a bearing for the shaft, a clamping plate coacting with the dial plate to suspend the shaft on a fixed support, the dial plate having notations upon its face concentric with the shaft, a pointer carried by the shaft, and a tongue struck from the upper part of the dial plate and projecting into the path of the pointer.

In testimony whereof I hereunto affix my signature.

ALBERT WAGNER.