Dec. 30, 1924. 1,521,079

F. DERCK

DISTRIBUTOR

Filed Dec. 22, 1921

FIG. 2.

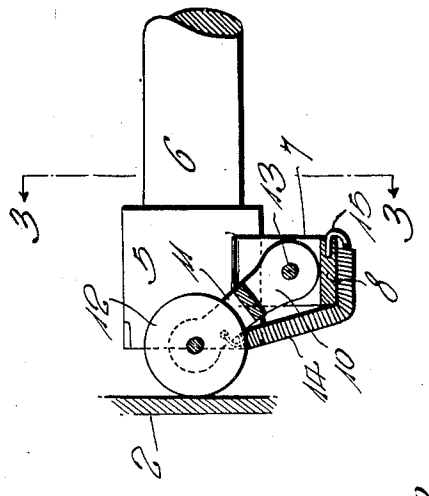


FIG. 3.

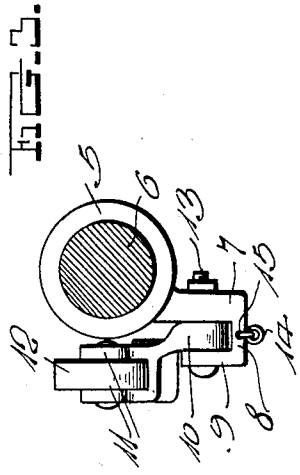
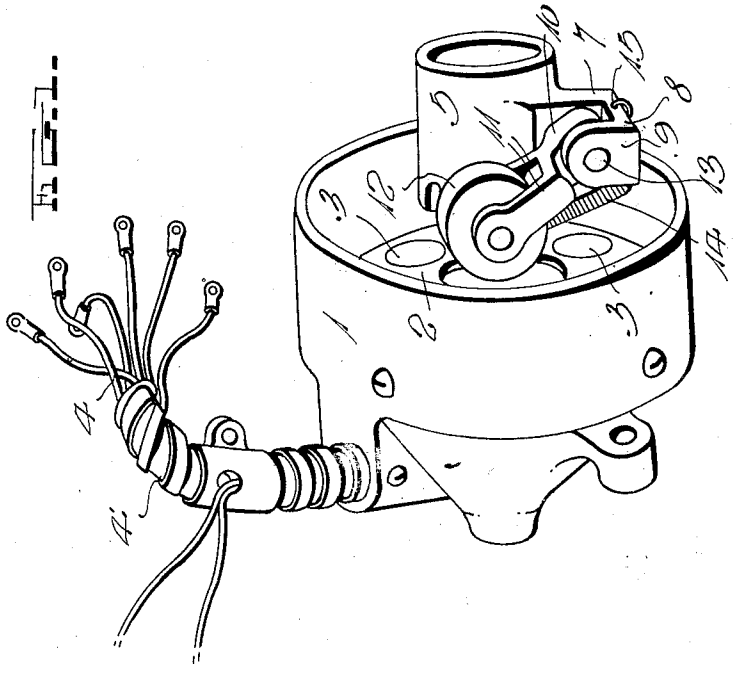


FIG. 1.



Witness
H. Woodard

Inventor
F. DERCK

By A. B. Williamson & Co
Attorneys

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UNITED STATES PATENT OFFICE.

FRED DERCK, OF KOKOMO, INDIANA.

DISTRIBUTOR.

Application filed December 22, 1921. Serial No. 524,233.

To all whom it may concern:

Be it known that I, FRED DERCK, a citizen of the United States, residing at Kokomo, in the county of Howard and State of Indiana, have invented certain new and useful Improvements in Distributors; 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.

This invention relates to an improved distributor of the type including a head mounted upon a distributor and timer operating shaft and a casing or housing which is positioned about the distributor shaft and head carried thereby and provided with contact points for engagement by a contact element carried by the head.

One object of the invention is to provide the head with an improved type of bearing for the carrier arm which is pivotally mounted and yieldably held in the operative position so that the roller carried by this carrier arm or shaft will engage the contact points of the housing when the shaft is rotating.

Another object of the invention is to so mount this carrier arm that it will extend upon one side of the head and substantially longitudinally thereof, the spring which is connected with the carrier arm holding this arm in a normal position with the roller at the free end of the arm extending beyond the end of the head for engagement with the contact points of the housing.

Another object of the invention is to so mount this carrier arm that the spring for yieldably holding it in a normal position may extend longitudinally of the arm and have one end connected with one of the forks between which the roller is mounted and its second end connected with the bearing arm.

Another object of the invention is to so construct this head and contact arm that the head may be used in connection with any housing of a conventional construction in which the contact points are positioned in the head portion of the housing instead of in the side walls thereof.

This invention is illustrated in the accompanying drawings, wherein:

Figure 1 is a perspective view of the improved construction.

Figure 2 is a view showing the improved head mounted upon a shaft, the view being partially in side elevation and partially in section.

Figure 3 is a sectional view taken along the line 3—3 of Fig. 2.

The housing or casing 1 is of a conventional construction and provided with a head 2 in which are embedded the contact points 3 from which lead the wires 4. These wires 4 extend through the cable 4′ and are to be connected with the spark plugs of a motor. As previously stated, this casing or housing is of a conventional construction and any conventional structure may be substituted for the specific structure shown providing of course that the housing is provided with a head 2 having the contact points 3 embedded therein. The head or sleeve 5 which is to fit upon the distributor and timer operating shaft 6 of a motor is provided with a bearing arm 7 which extends from the sleeve or head 5 as shown and is provided with a side arm 8 which extends transversely from the outer end of this bearing arm 7 and is provided with a wing extension 9 which extends parallel to the arm 7 in spaced relation to the same. The carrier arm 10 is in the form of a fork having arms 11 between which a roller 12 is rotatably mounted. This fork is provided with a shank portion which extends from its inner side portion and extends between the wing 9 and bearing arm 7. A bolt which forms a pivot pin for the carrier arm extends through the arm 7 and wing 9 and through the shank portion of the carrier arm so that this carrier arm is pivotally mounted for swinging movement longitudinally of the sleeve or head 5. The spring 14 which is to retain the carrier arm in the position shown in Fig. 2 with the roller 12 in engagement with the head 2 of the housing 1 extends longitudinally of the carrier arm and has one end connected with one of the fork arms 11. This spring is brought into engagement with the side arm 8 of the bearing arm 7 and has its second end embedded in the side arm as shown at 15. It will thus be seen that this spring will hold the wheel 12 in close contact with the head 2 of the casing and cause a good contact between the wheels and the contact points 3. By having the carrier arm mounted as shown, the wheel or roller 12 will be positioned to one side of the head 5 and as the shaft 6 rotates, the roller will

be in the proper position to move freely and have contact with the points 3. It will be readily seen that this head 5 can be mounted upon the shaft 6 in the usual manner and the housing 1 then put in place so that the roller will engage the contact points 3.

I claim:

1. In a distributor, a head for fitting upon a distributor shaft, a bearing element extending from said head, parallel but out of alignment with the diameter of the head, a carrier in the form of a fork pivotally connected with the bearing element, a roller mounted in said fork and a spring extending longitudinally of the fork and having one end connected with the bearing element and its other end connected with the free end of the fork.

2. In a distributor, a head for fitting upon a distributor shaft, a bearing arm extending from said head and having a side extension terminating in an ear extending in spaced relation to the arm, a carrier arm pivotally mounted between said bearing arm and ear and extending upon one side of said head and terminating in fork arms, a roller rotatably mounted between the fork arms of said carrier arm, and a spring extending longitudinally of the carrier arm and having one end connected with one of the fork arms and its other end connected with the side extension of the bearing arm whereby the carrier arm will be yieldably held in an operative position.

In testimony whereof I have hereunto set my hand.

FRED DERCK.