R. B. FRYETT.

MIXING DEVICE.

APPLICATION FILED JUNE 13, 1921.

1,424,349.

Patented Aug. 1, 1922.

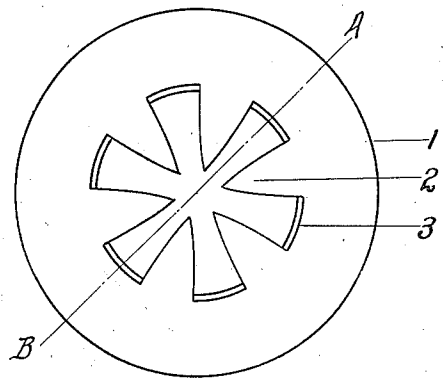


FIG. 1

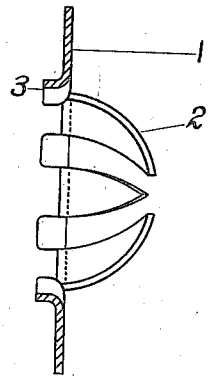


FIG. 2

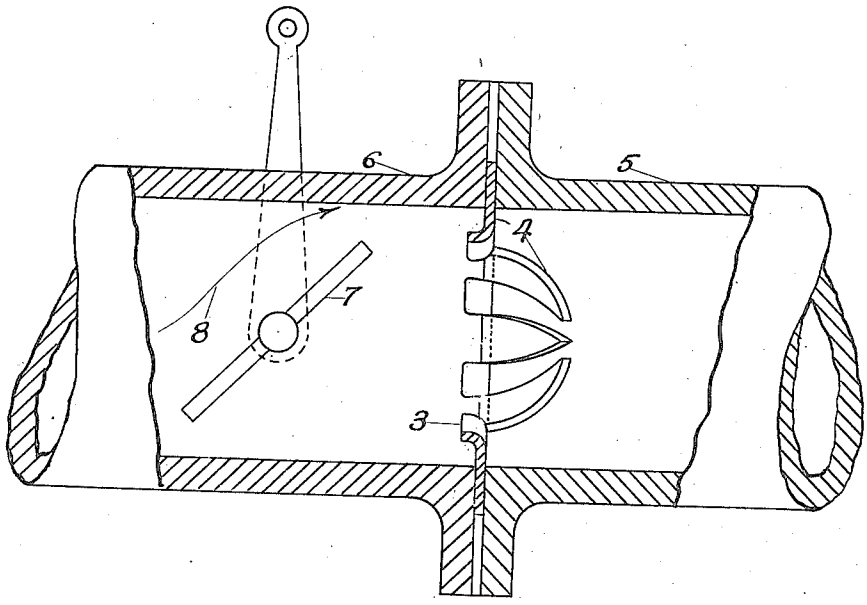


FIG. 3

INVENTOR

Rollo B Fryett

UNITED STATES PATENT OFFICE.

ROLLO B. FRYETT, OF BREMERTON, WASHINGTON.

MIXING DEVICE.

1,424,349. Specification of Letters Patent. Patented Aug. 1, 1922.

Application filed June 13, 1921. Serial No. 477,222.

To all whom it may concern:

Be it known that I, ROLLO B. FRYETT, a citizen of the United States, residing at Bremerton, in the county of Kitsap and State of Washington, have invented a new and useful Mixing Device, of which the following is a specification.

My invention relates to improvements in increasing the thoroughness of mixture of gasoline or other liquid fuel, and air which is supplied to an internal combustion engine. An auxiliary carbureting device is placed between the main carbureter which supplies the engine with a mixture of air and fuel and the manifold of the engine.

The object of my invention is to provide a simple means for further carbureting the carbureted air supplied an internal combustion engine especially when starting with a cold engine and thereby facilitating the starting of the engine.

It is known that considerable liquid fuel passes the main carburetor and adheres to the wall or periphery of the passage from the main carburetor to the engine manifold. My invention provides a simple means for vaporizing said liquid fuel and thereby utilizing its fuel value.

The details of my invention will be explained by reference to the drawing accompanying this specification.

Figure 1 shows a plan view of my improved auxiliary carbureting device. Figure 2 shows a sectional view A—B of Figure 1. Figure 3 shows the location of the device between the main carburetor and the manifold of the engine.

In Figures 1 and 2 the circular metal plate 1 has inwardly projecting tapering flat surfaces 2, dished with respect to, and forming part of the plate 1. Surfaces 2 may be either flat, concave or convex.

The ridge 3 is on the plate on the side opposite to the dish and extends between the bases of adjacent projections 2.

In Figure 3, the auxiliary carbureting device 4 is shown located and held in position by the flange of the pipe 5 through which carbureted air passes to the manifold of the engine and the flange of the pipe 6, having a throttle valve 7 which controls the amount of carbureted air from the main carburetor.

My explanation for the improved results due to the presence of the auxiliary carburetor is as follows: The carbureted air from the main carburetor deposits liquid fuel on the inside wall or periphery of pipe 6 especially as the carbureted air passes through the throttle valve in the direction 8. This deposit is probably caused by the carbureted air being laden with liquid fuel or by liquid fuel being condensed on the wall inside of the pipe 6. This deposited liquid fuel is deflected by the projections 2 of the auxiliary carburetor inwardly and the carbureted air from the main carburetor becomes further carbureted. The ridges 3 (Figures 1 and 2) prevent the deposited fuel from passing inwardly between the bases of the projections 2.

The invention claimed is:

An auxiliary carbureting device comprising a flat ring having a plurality of inwardly projecting radially converging surfaces, said surfaces being out of the plane of said ring, said ring having on its opposite side a plurality of short projections between the bases of said converging surfaces.

Signed at Bremerton, county of Kitsap and State of Washington this 7th day of June, 1921.

ROLLO B. FRYETT.

Witnesses:
R. S. HAYWARD,
SHERMAN G. SCOTT.