Jan. 6, 1931. A. W. SCOTT 1,788,337

GASOLINE DISTRIBUTOR

Filed Jan. 25, 1929

Fig. 1.

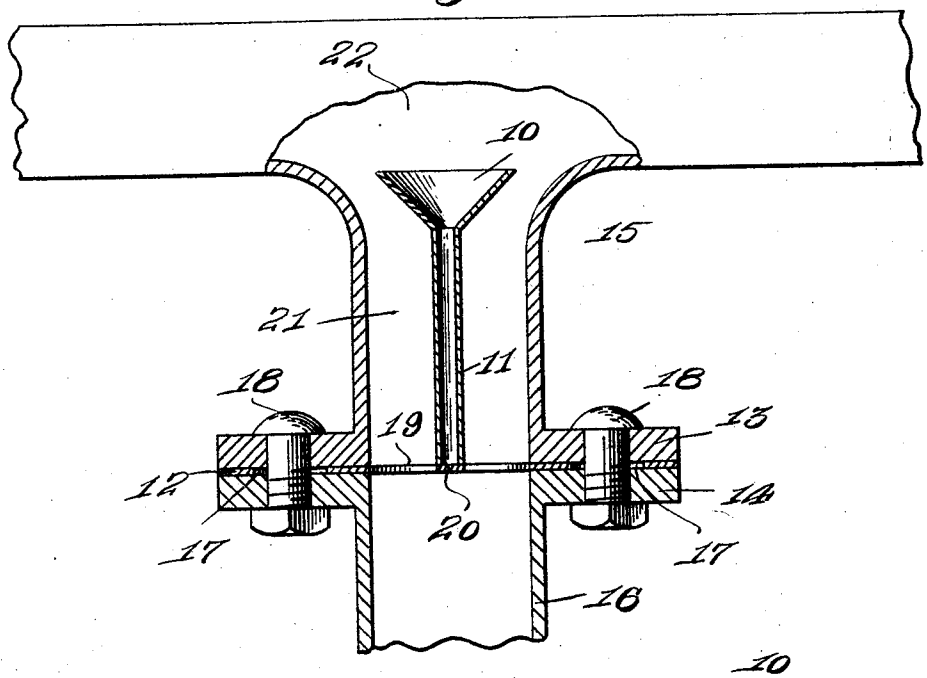


Fig. 2.

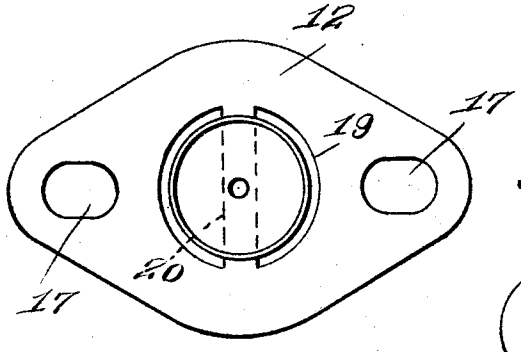


Fig. 3.

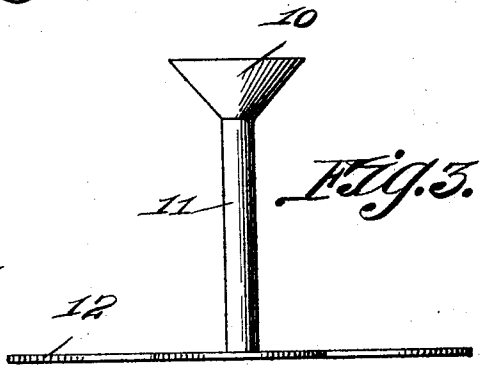
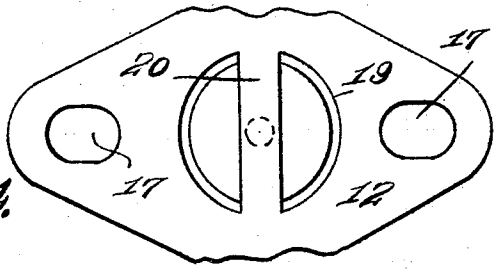


Fig. 4.



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WITNESS:

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UNITED STATES PATENT OFFICE

ASA W. SCOTT, OF INDIANA, PENNSYLVANIA

GASOLINE DISTRIBUTOR

Application filed January 25, 1929. Serial No. 335,124.

This invention relates to improvements in internal combustion engines and has particular relation to means for feeding the fuel mixture to the engine cylinders.

An object of the present invention is to provide a device which may be secured within the fuel intake manifold of an engine to break up and separate the usual solid column of fuel mixture during its passage through the intake manifold, and to distribute said mixture in opposite directions as it enters the horizontal passage of the manifold, so that a more equal distribution of fuel to all of the engine cylinders will be assured and the efficiency of the engine thereby increased.

Another object of the invention is the provision of a device of the above character which is simple and economical in construction, efficient in use, and may be readily and easily secured in place.

With the above and other objects in view, the invention further includes the following novel features and details of construction, to be hereinafter more fully described, illustrated in the accompanying drawing and pointed out in the appended claim.

In the drawing:—

Figure 1 is an elevation partly in section showing a fragmentary portion of the fuel intake manifold of an internal combustion engine with the invention applied.

Figure 2 is a top plan view of the invention per se.

Figure 3 is a side view.

Figure 4 is a bottom view.

Referring to the drawing in detail wherein like characters of reference denote corresponding parts, the invention as illustrated comprises a hollow inverted cone-shaped member 10 which is mounted upon the upper end of a hollow stem 11 and provides a funnel-like device having an elongated neck represented by the stem 11. The lower end of the stem 11 is suitably secured to a plate 12 which is shaped to conform to the shape of the flanges 13 and 14 which extend respectively from the lower end of an intake manifold 15 and the upper end of a carbureter 16. The plate 12 is provided with openings 17 for the passage of bolts 18 and this plate in addition to supporting the distributing device provides a packing for the joint between the flanges 13 and 14. The plate is provided with a central opening 19 across which extends a bar 20 and the stem 11 rises from this bar.

In use, the device is placed within the vertically extending passage 21 of the intake manifold 15 with the member 10 positioned at the juncture of this passage with the horizontal passage 22 of the manifold. The fuel mixture passes from the carbureter through the openings 19 upward through the passage 21 and strikes the inclined surface of the member 10. As this member is positioned at the juncture of the passages 21 and 22, the fuel mixture will be broken up at this point and separated and deflected in the direction of the passage 22 and a more even distribution of the fuel to the cylinders of the engine will be made.

The invention is susceptible of various changes in its form, proportions and minor details of construction and the right is herein reserved to make such changes as properly fall within the scope of the appended claim.

Having described the invention what is claimed is:

A fuel distributor for internal combustion engines comprising a flat plate for disposal between the connected ends of the intake branch of the intake manifold of the engine and the delivery neck of the carburetor, the said plate having a centrally located opening of a diameter equal to that of the bores of the intake manifold and carburetor neck to provide for free passage of the explosive mixture, the plate having a supporting portion extending diametrically of said opening, a stem supported, at its lower end, by and extending upwardly from, said supporting portion, and a distributing head of inverted conical form supported, at its minor end upon the upper end of the stem to effect spreading of the explosive mixture and its delivery into both branches of the intake manifold.

In testimony whereof I affix my signature.

ASA W. SCOTT.