

March 8, 1932.

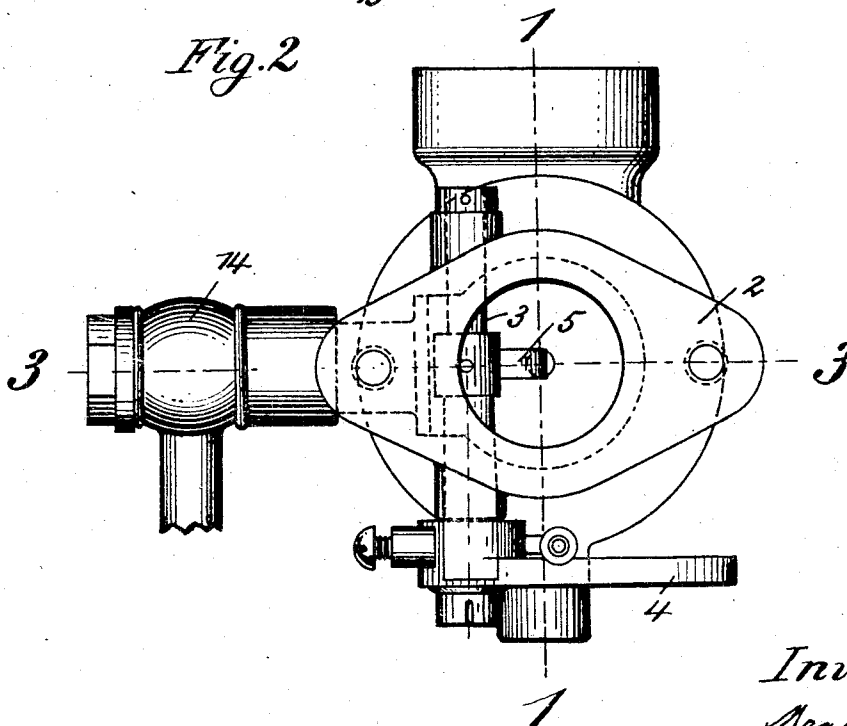
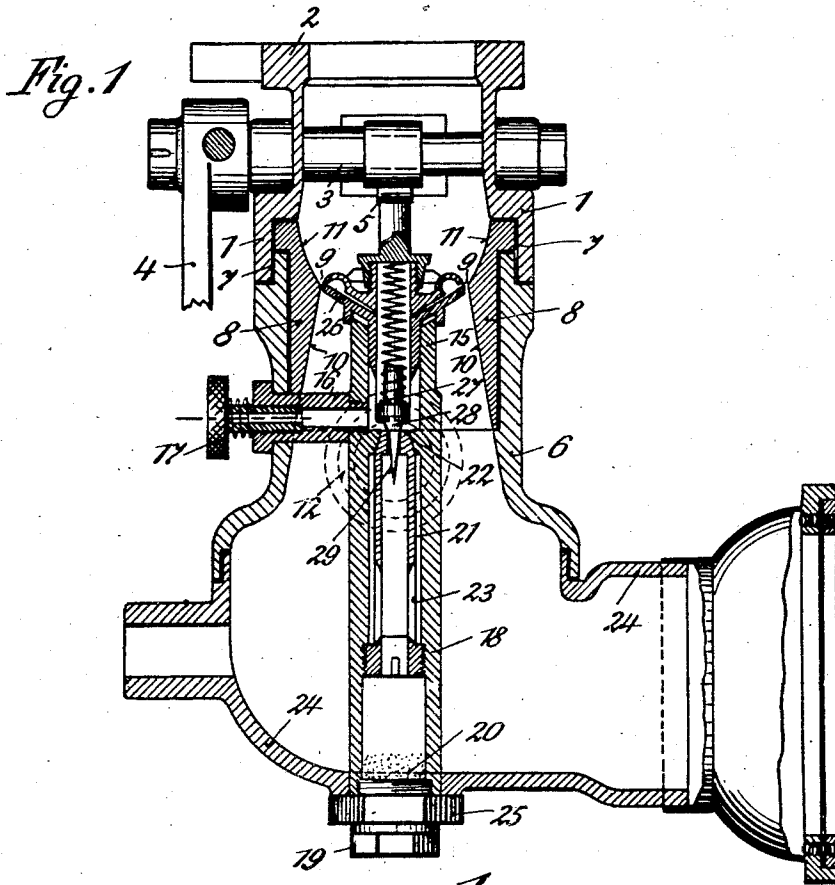
M. KREHER

1,848,255

FLOATLESS CARBURETOR

Filed June 20, 1929

2 Sheets-Sheet 1



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Fig. 3

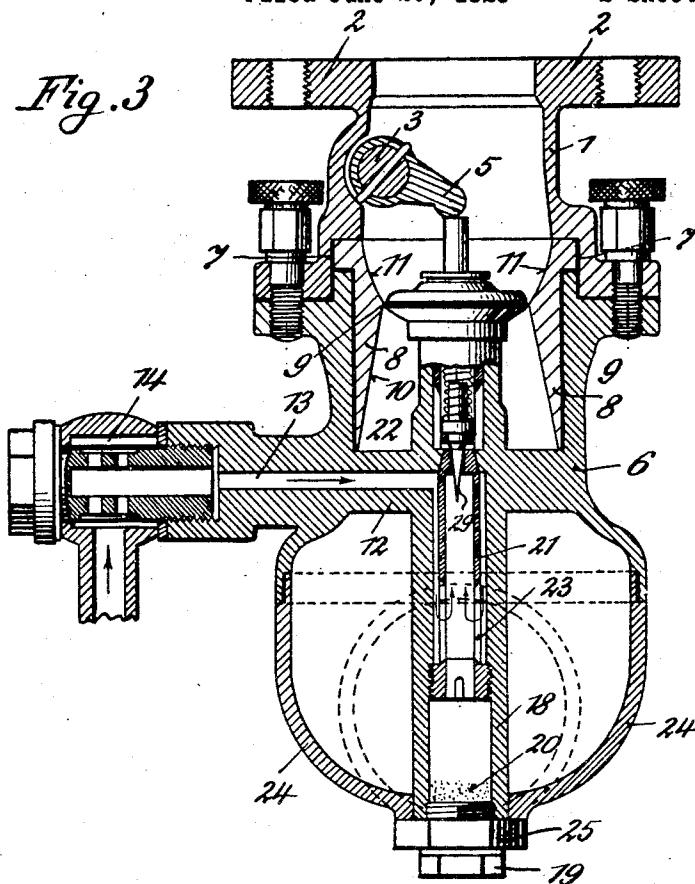
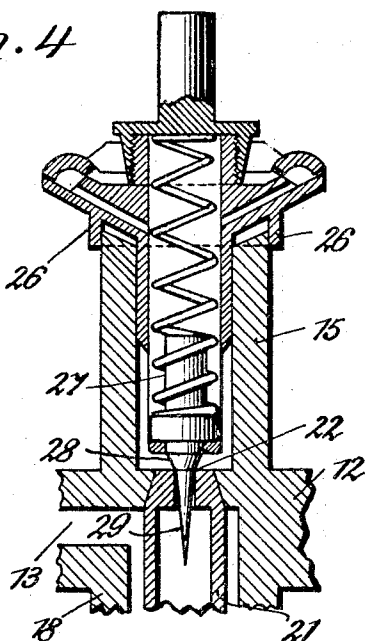


Fig. 4



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UNITED STATES PATENT OFFICE

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FLOATLESS CARBURETOR

Application filed June 20, 1929, Serial No. 372,468, and in Germany March 16, 1929.

This invention relates to a floatless carburetor which works without throttle valve. The construction and object of the invention are hereinafter explained.

5 An embodiment of the invention is illustrated by way of example in the accompanying drawings in which:

Fig. 1 shows a vertical section on line 1—1 of Fig. 2.

10 Fig. 2 is a top plan view of the carburetor.

Fig. 3 shows a vertical section on line 3—3 of Fig. 2.

Fig. 4 shows on a larger scale a detail.

The casing is in three parts and constructed 15 as follows:—

The top part 1 has a flange 2 at its upper end, which serves for connecting to the housing of the engine. In part 1 a shaft 3 with lever 4 is mounted which shaft carries a fin- 20 ger 5.

The middle part 6 is screwed to the top part. Between these two parts an annular space 7 is provided in which a ring 8 is fitted having a shoulder 9, a lower inclined surface 10 and 25 an upper inclined surface 11. This latter is curved. In a bridge a channel 13 is bored in front of which a benzine chamber 14 is arranged. A socket 15 projects from the bridge 12 and an air channel 16 fitted with an adjusting screw 17 terminates in said socket 15. 30 A hollow boss 18 projects in downward direction, the lower portion of which forms a mud pocket 20 and is closed by a screw 19. In the boss 18 a sleeve 21 is screwed the head of 35 which forms a valve seat 22 and is provided with slots 23. The channel 13 terminates in the boss 18.

The bottom part 24 of the housing is a fore-chamber for the feed air and is screwed to the 40 middle part 6 by a nut 25.

The fuel valve is described in a former application and is therefore designated as a whole as a mushroom valve 26. The valve needle 27 has a cone 28 and a point 29.

45 In the drawings the carburetor is shown in inoperative position. The fuel valve is held in the extreme position by the finger 5. The closure is effected by the cone 28, whereas the point 29 regulates. The air passage leads be- 50 tween the mushroom 26 and the ring 8, the

shoulder 9 causes a strangling in the air passage. The mushroom 26 lifts automatically owing to the suction when it is released by the finger 5 actuated by the turning of the shaft 3. The farther the finger is turned back the 55 higher can the valve rise and the greater will be the quantity of suction air. The channel 16 is an auxiliary air passage in the interior of the mushroom.

The benzine passes through the channel 13 in the boss 18 and maintains the same continually full. Impurities can settle in the mud pocket 20. Owing to the suction the benzine rises into the head 26 and is torn away on the edge of this head by the circulating suction current and thereby atomized. The bowl 11, 60 to which the mixture first passes, causes an eddying and produces a very intimate and perfect mixing. The suction current 16 is then introduced if necessary; it unites with 65 the outer suction current through the mushroom 26.

I claim:—

A floatless carburetor, comprising in combination an upper part of a casing, a lower 75 part of a casing, a fuel feed pipe communicating with said lower casing part a double cone clamped between said upper and said lower casing parts, a mushroom valve in said double cone to control the fuel feed, a shaft 80 in said upper casing part, a finger on said shaft adapted to hold said mushroom valve on said cone, a spring actuated needle valve in said mushroom valve adapted to regulate the fuel feed, and an auxiliary air conduit 85 discharging into the mushroom valve above said needle valve.

In testimony whereof I affix my signature.
MAX KREHER.

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