J. GOMEZ.

LIQUID FUEL BURNER.

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1,024,070.

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Fig. 1.

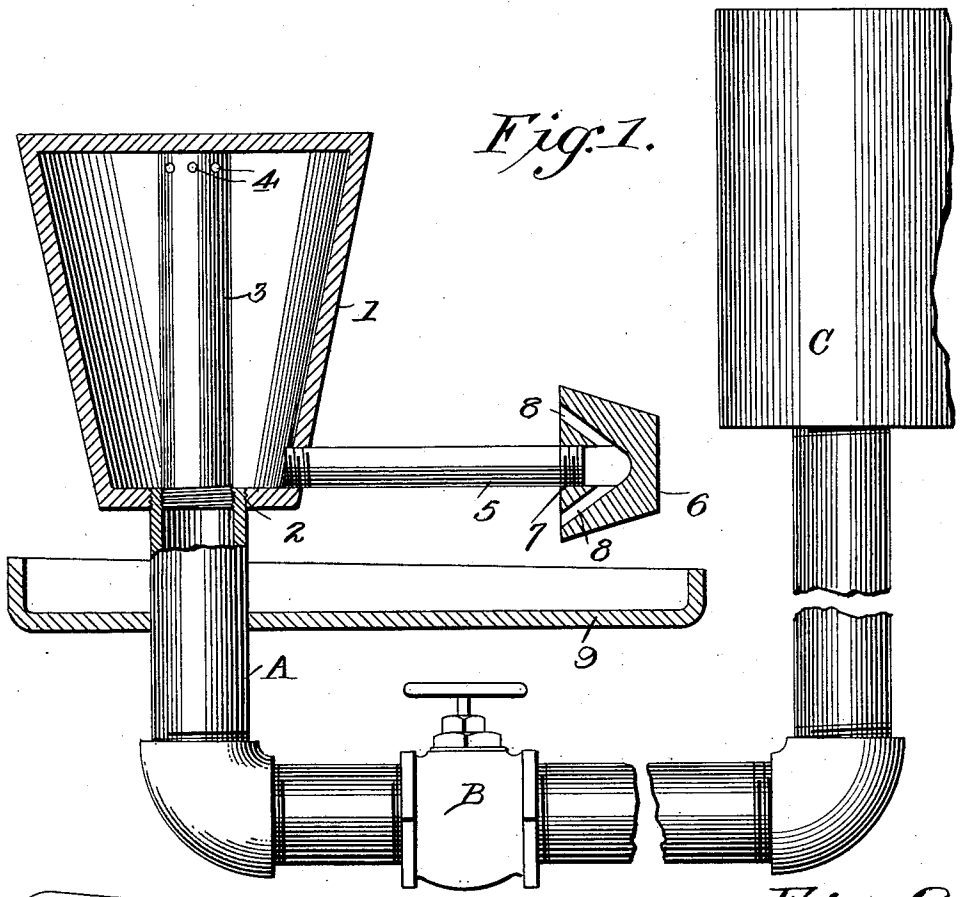
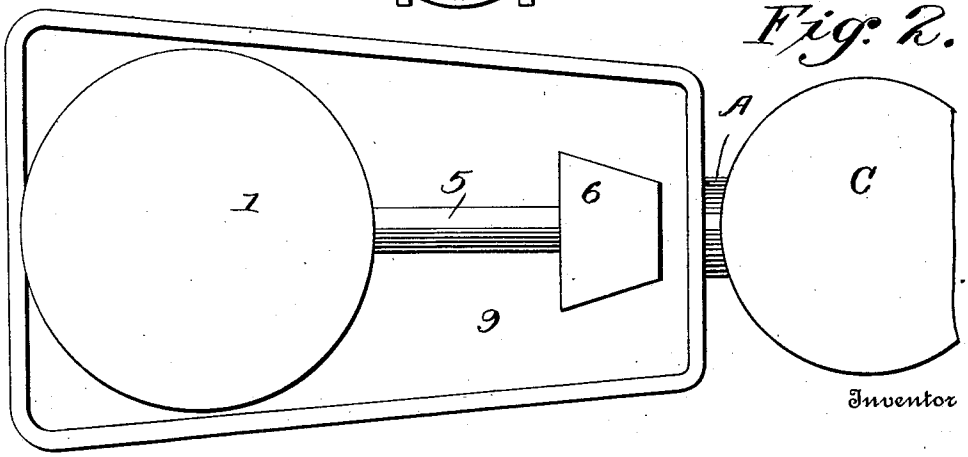


Fig. 2.



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LIQUID-FUEL BURNER.

1,024,070. Specification of Letters Patent. Patented Apr. 23, 1912.

Application filed August 31, 1911. Serial No. 647,048.

To all whom it may concern:

Be it known that I, JOSEPH GOMEZ, a citizen of the United States, residing at Jacksonville, in the county of Morgan and State of Illinois, have invented certain new and useful Improvements in Liquid-Fuel Burners, of which the following is a specification.

My invention relates to liquid fuel burners employing a retort to vaporize the oil and has for one of its objects the provision of a retort consisting of a hollow casing heated by the flames from the burner and having the oil supplying pipe provided with small outlets through which the oil is sprayed against the walls of the casing and is immediately vaporized.

Another object of my invention is the provision of an improved construction of burner.

My invention will be described in detail hereinafter and illustrated in the accompanying drawings in which—

Figure 1 is a side view of my improved burner showing the retort and burner in section, and Fig. 2, a top plan view.

In the drawings similar reference characters will be used to designate corresponding parts in the several views.

My invention consists of a retort 1 comprising an inverted cone shaped casing 1 having a threaded opening 2 in its lower end in which is secured the end of supply pipe A, and 3 indicates a pipe screwed into the end of pipe A and having its upper end engaged by the inner face of the top of retort 1.

4 designates holes adjacent to the top of pipe 4 through which the oil is sprayed under pressure against the walls of the retort.

Pipe A is provided with a cut off-valve B and connects with supply tank C.

The burner pipe 5 is tapped into the side of the retort at its bottom and has its free end secured to the burner that consists of block 6 having a threaded socket 7 to receive the end of pipe 5, and outlet ducts 8 that communicate with socket 7 and incline upwardly and downwardly and have their delivery openings above and below pipe 5.

9 indicates a pan mounted on pipe A and adapted to hold a small supply of fuel 1 that is burned initially to heat the retort 1 to start vaporization.

In operation the burner is started by placing oil in pan 9, either by hand or by opening valve B, and letting it flow from retort 1 through pipe 5 and out of burner orifices 8, which upon being ignited heats the retort and pipes A and 5. When the parts are sufficiently heated the valve B is again opened and the oil sprayed from holes 4 against the sides of the retort is vaporized and passes through pipe 5 to the burner, and is burned when it emerges from the burner orifices 8. The flames striking the retort 1 and pipe 5 serve to heat them to maintain vaporization.

As the pipe 5 is connected to the bottom of the retort 1 it will be apparent that any sediment, remaining after vaporization of the oil, passes out through the burner, but should it be found necessary to clean the retort it can be readily accomplished by unscrewing the casing from the end of pipe A and then removing pipe 3 from the end of pipe A.

Having thus described my invention what I claim is—

In a liquid fuel burner, a retort, a supply pipe having its delivery end in the retort and formed with small delivery orifices through which the oil is sprayed against the walls of the retort, a burner pipe connected to the retort near its lower end and a block having a socket secured to the burner pipe and provided with outlet ducts inclined upwardly and downwardly from the socket and having their delivery orifices above and below the burner pipe and directed toward the retort aforesaid.

In testimony whereof I hereto affix my signature in the presence of two witnesses.

JOSEPH GOMEZ.

Witnesses:
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