



# UNITED STATES PATENT OFFICE.

FLOYD I. SWANBERG, OF CINCINNATI, OHIO, ASSIGNOR TO THE D. T. WILLIAMS VALVE COMPANY, OF CINCINNATI, OHIO, A CORPORATION OF OHIO.

PRIMING-CUP FOR GASOLENE-ENGINES.

985,223.

Specification of Letters Patent.

Patented Feb. 28, 1911.

Application filed June 12, 1909. Serial No. 501,735.

To all whom it may concern:

Be it known that I, FLOYD L. SWANBERG, a citizen of the United States, residing in the city of Cincinnati, county of Hamilton, and State of Ohio, have invented certain new and useful Improvements in Priming-Cups for Gasolene-Engines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

The object of my invention is to provide a suitable and convenient device for introduction into the cylinder in a gasolene engine of a priming charge for the initial starting of the engine, which charge is frequently required when for any reason the cranking of the engine fails to supply automatically the proper mixture.

Heretofore open mouthed cups have been mounted on the cylinder with an ordinary stop cock controlling the passageway to the cylinder, but in such constructions the cup is apt to collect dust and dirt which enters the cylinder with the charge.

My invention is intended to obviate this objection and it consists of that certain novel construction and arrangement of parts in which the cup is dispensed with and the handle for the valve is hollowed out to form a cup with a passageway from the hollowed handle through the plug, so that when the handle is in vertical position, the valve will be open, and when the handle is turned down the valve will be closed.

In the drawings Figure 1 is a central vertical section of my improved device with the handle turned down and the valve closed. Fig. 2 is a side elevation of same partly in section with the handle raised, and the valve open. Fig. 3 is a rear elevation of the parts shown in Fig. 2. Fig. 4 is a horizontal section on line *a-a* of Fig. 2.

1 is the body or casing of the primer screw-threaded at its lower end 2 for mounting same on the engine cylinder and provided with a central passage 3 connected with the horizontal tapered seat 4 for the tapered plug 5, which plug is held in its

seat by the coiled spring 6 engaging between the valve body and the washer 7, held in place by the cotter pin 8 on the plug. The plug 5 is provided with the central passage 9 and the port 10. The outer end of the plug is screw threaded at 11, to receive the screw threaded boss 12 of the plug handle 13.

The handle 13 is hollowed out at 14 to form a receptacle, and a passageway 15 is drilled into the passageway 9 in the plug, and in order to secure the handle on the plug a tool is passed through the opening 15 and the outer end of the screw threaded portion of the plug upset into the notch 16, opposite the opening 15. In this way the handle can be readily and easily secured to the plug.

The parts are so arranged that when the valve is closed the handle will be turned down as shown in Fig. 1. When the handle is raised into vertical position the port 10 in the plug will be brought to register with the opening 3, and the valve will be open so that any priming charge will be discharged into the cylinder.

While I have illustrated my invention as applied to a valve casing which is intended to be vertically mounted, it will be understood, of course, that by providing a casing with a screw threaded end turned at right angles to the body of the casing, the device can be mounted in the side or end of the cylinder instead of on top.

As soon as the valve is closed the recess 14 in the handle will be turned down so that it will not gather dust and dirt.

Having thus described my invention what I claim as new and desire to secure by Letters Patent, is:

In a priming device for gasolene engines the combination of a valve casing having a central bore and with a tapered plug seated in the casing, said plug provided with a valve port and a longitudinal passageway, a handle for rotating the plug, provided with a notched socket registering with the longitudinal passageway in the plug and screw threaded to secure the plug

and the handle, with the outer end of the  
plug upset into the notch in the handle  
socket to lock the parts together, said han-  
dle being hollowed out to form a receptacle  
5 for gasolene, with a port from said recep-  
tacle into the longitudinal passageway in  
the plug, the handle being so mounted on

the plug that the valve port therefrom will  
be closed when the receptacle in the handle  
is inverted.

FLOYD L. SWANBERG.

Witnesses:

ARTHUR H. EWALD,  
EARL W. GRIFFIN.

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