Nov. 18, 1924. 1,515,938

B. J. DONADA

MOTOR ATTACHMENT

Filed Dec. 7, 1920

Fig. 1.

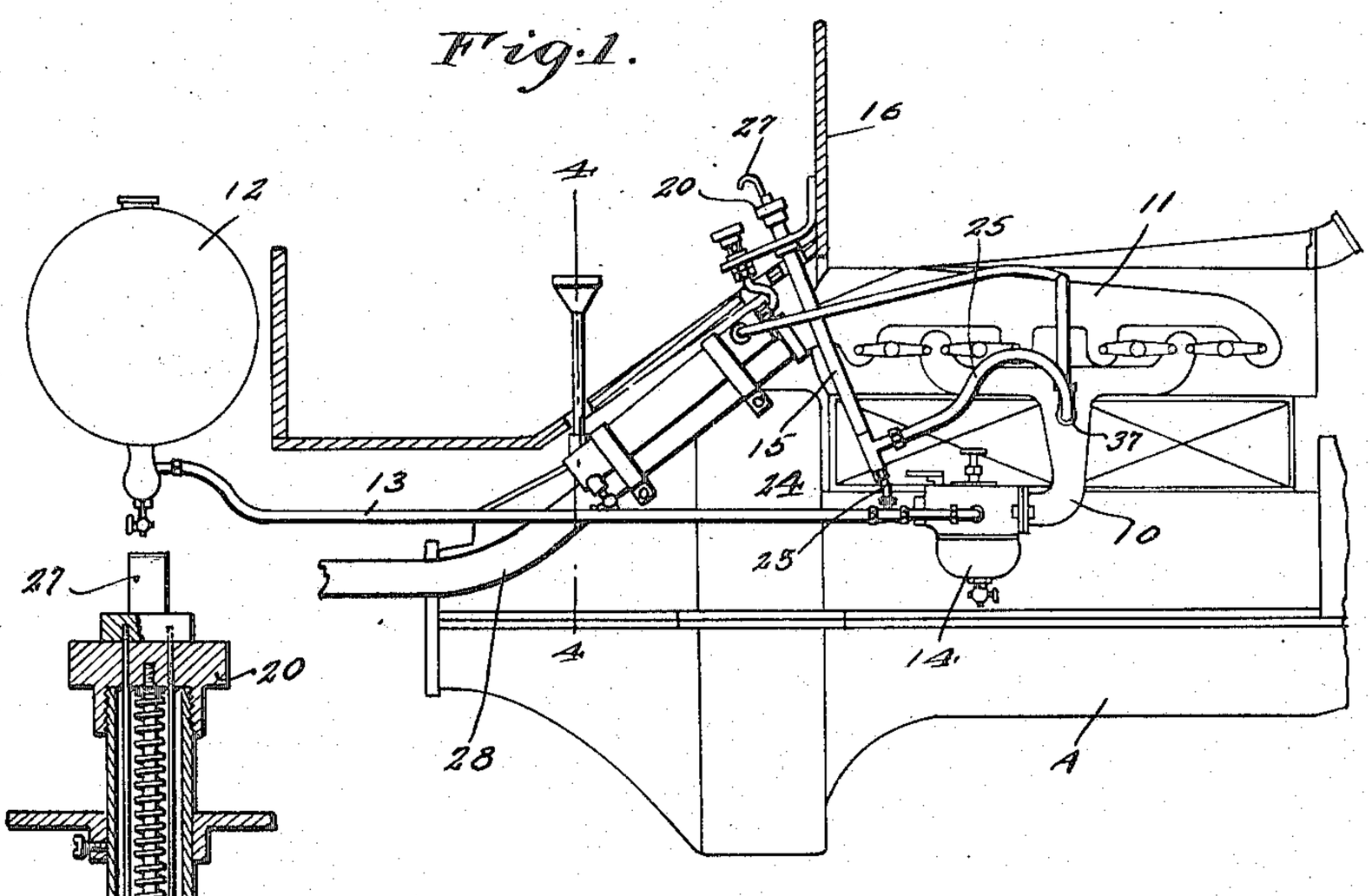

Fig. 2.

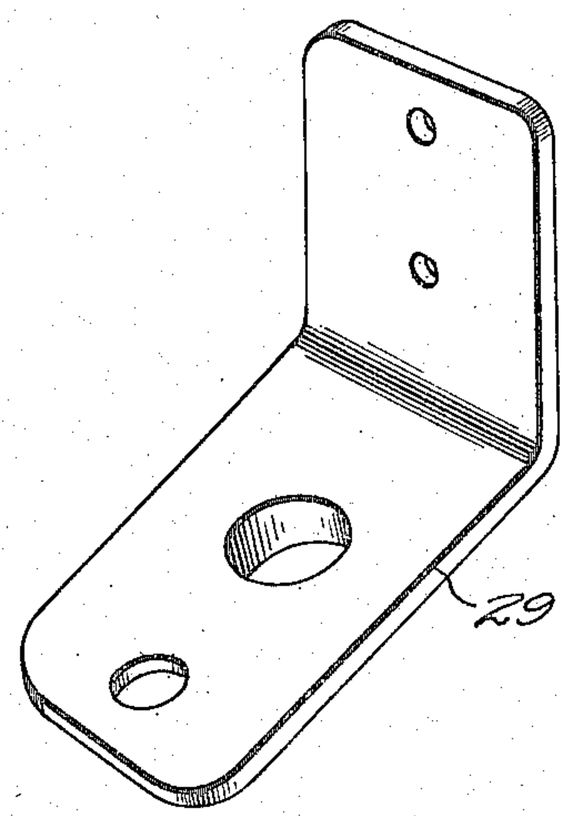

Fig. 3.

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WITNESSES

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ATTORNEY

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UNITED STATES PATENT OFFICE.

BENITO JOSEPH DONADA, OF REFUGIO, TEXAS.

MOTOR ATTACHMENT.

Application filed December 7, 1920. Serial No. 428,982.

To all whom it may concern:

Be it known that I, BENITO J. DONADA, a citizen of United States of America, residing at Refugio, in the county of Refugio and State of Texas, have invented new and useful Improvements in Motor Attachments, of which the following is a specification.

My invention relates to motor attachments and its primary object is to provide a priming device which is so arranged as to be conveniently operated by the driver of an automobile to inject a quantity of liquid fuel into the cylinder of an internal combustion engine.

The nature and advantages of the invention will be better understood when the following detail description is read in connection with the accompanying drawings, the invention residing in the combination, construction and arrangement of parts as claimed.

In the drawings forming part of this application, like numerals of reference indicate the similar parts in the several views and wherein:—

Figure 1 is a diagrammatic view showing the application of the invention.

Figure 2 is a vertical sectional view through the priming device.

Figure 3 is a perspective of one of the elements embodied in the invention.

Referring to the drawings in detail, A indicates generally a motor including the intake manifold 10 and the exhaust manifold 11. Leading from the fuel supply tank 12 is a feed pipe 13 communicating with the carburetor 14 which is interposed between the feed line and intake manifold. A hollow tubular casing 15 projects through the dash board 16 of the vehicle, and arranged to reciprocate within this casing is a hollow plunger 17 of a diameter less than the diameter of the internal casing 15 so as to be slightly spaced from the latter. The plunger 17 is supported by spaced parallel rods 18 which are slidable through a cap 20 removably associated with the upper end of the casing 15. Secured to this cap 20 is a needle valve 21 which passes through the casing and normally engages the seat 22 adjacent the lower end thereof. This valve controls the communication between the feed line 13 and the casing 15 through a branch pipe 23. The casing 15 is provided with a lateral projection 24 to which is coupled one end of a pipe 25, the opposite end arranged in communication with the intake manifold 10. Surrounding the needle valve 21 is a coiled spring 26 having one end bearing against the cap 20, this spring operating to forcibly move the plunger 17 through the casing 15, after the plunger has been retracted and the spring compressed. Normally the valve 21 is seated, and the fuel from the tank 12 passes through the pipe 13 into the carburetor 14 and then to the motor through the intake manifold. When it is desired to prime the engine, the cap 20 is unscrewed from the casing 15 just about one or two turns, thereby lifting the valve 21 from its seat and establishing communication between the feed pipe 13 and the branch pipe 25. After a few minutes this communication is closed by screwing the cap 20 home. The plunger is retracted as above stated, and as the fuel from the feed line 13 enters the casing the plunger is released and forcibly moved through the casing to inject the fuel contained in the casing into the intake manifold through the pipe 25. The rods 18 are terminally secured to a finger engaging element 27 arranged exteriorly of the cap 20 for the purpose of operating the plunger in the manner set forth.

As shown in Figure 3, I have provided an angle bracket 29 for supporting parts of the invention as shown in Figure 1.

While it is believed that from the foregoing description the nature and advantages of the invention will be readily apparent, I desire to have it understood that I do not limit myself to what is hereinshown and described, and that such changes may be resorted to when desired, as fall within the scope of what is claimed.

What I claim is:—

A device of the character described comprising a barrel casing having a valve seat at one end thereof controlling a passageway, a cap fitted to the other end of said casing carrying a rod forming a needle valve for cooperation with the valve seat, a plunger slidably arranged on the rod, a coil spring encircling the rod and having engagement

with the plunger and cap, a finger engaging element arranged above the cap and attached to a plurality of rods passing through and supported by the cap and attached at their opposite ends to the plunger whereby upon movement of said finger engaging element, rods and plunger, priming fluid will be drawn through the passageway into said casing and subsequently will be forcibly ejected therefrom by the spring-pressed return movement of the plunger.

In testimony whereof I affix my signature.

BENITO JOSEPH DONADA.