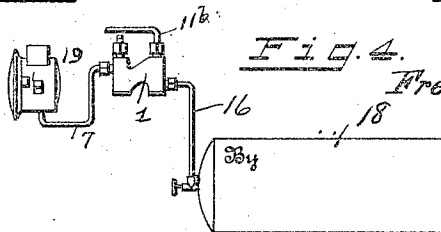
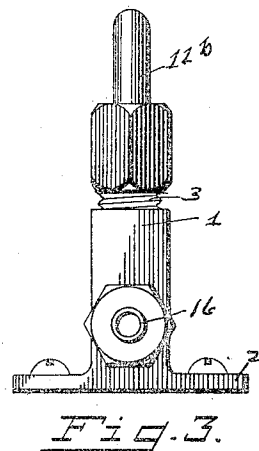
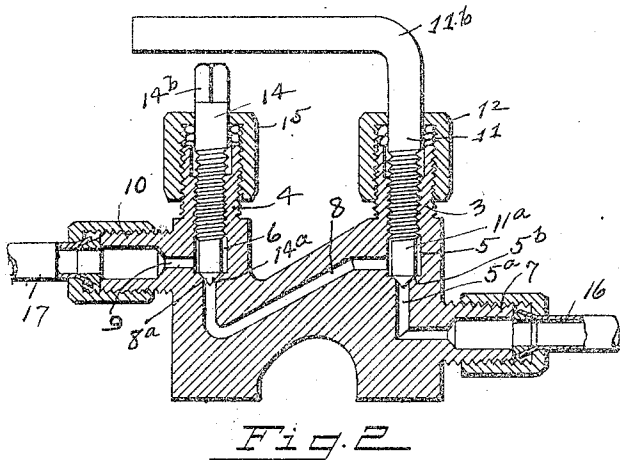
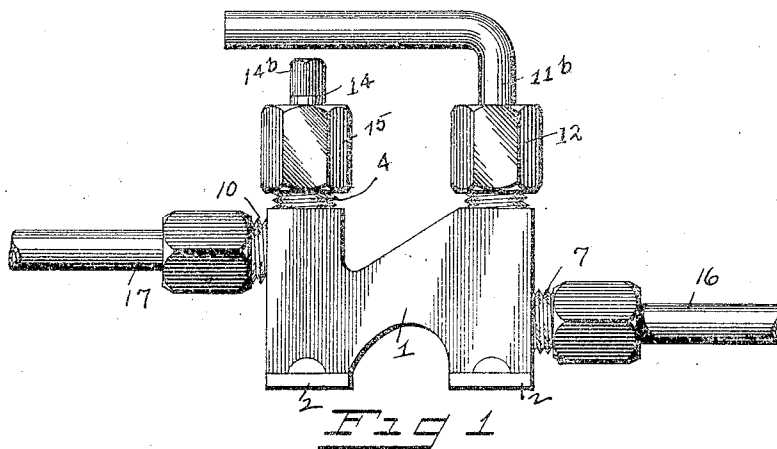


F. C. BARGAR,
 PRESSURE CONTROLLING VALVE FOR AUTOMOBILE LAMPS.
 APPLICATION FILED MAR. 22, 1909.

942,995.

Patented Dec. 14, 1909.



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UNITED STATES PATENT OFFICE.

FREDERICK C. BAEGAR, OF COLUMBUS, OHIO.

PRESSURE-CONTROLLING VALVE FOR AUTOMOBILE-LAMPS.

942,995.

Specification of Letters Patent.

Patented Dec. 14, 1909.

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To all whom it may concern:

Be it known that I, FREDERICK C. BAEGAR, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Pressure-Controlling Valves for Automobile-Lamps, of which the following is a specification.

My invention relates to the improvement of pressure controlling valves for automobile lamps and has particular relation to a gas valve mechanism adapted to be used in conjunction with electrically ignited gas lamps of that class in which acetylene gas is conducted from a pressure tank to the lamp burners, and the objects of my invention are to provide an improved valve mechanism interposed between the gas supply tank or gasometer and the lamp, by means of which the gas will be supplied to the clamp at a proper uniform pressure regardless of the pressure contained in the gas tank or gasometer, and to produce certain improvements in details of construction and arrangement of parts which will be more fully pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawing, in which:

Figure 1 is a side elevation of my device, Fig. 2 is a central vertical section of the same, Fig. 3 is a view in elevation at right angles with that shown in Fig. 1, and, Fig. 4 is an outline view of the device showing its relation to the gas tank and the lamp.

Similar numerals refer to similar parts throughout the several views.

In carrying out my invention, I employ a valve casing in the form of an oblong bracket body 1, which has cast therewith, projecting lugs 2 to facilitate the attachment of the device to an automobile dash-board or other part of an automobile. Although the device shown in the drawing, is illustrated with the attaching flanges at the lower side of the valve casing body, it is obvious that this body may be supported at right angles to the position shown or in any other desired position. In constructing the valve casing or bracket body, I form the same with two arms or tubular projections which are indicated respectively at 3 and 4, each of said arms or tubular projections being externally threaded and formed with a central bore, these bores being indicated at 5 and 6 respectively, and leading from the inner end of the bore 5 is one arm of an angular and

smaller passage 5^a, the remaining arm of which leads into the inner end of a hollow externally threaded projection 7 near the base of the body 1. The upper end of the passage 5^a at its junction with the bore 5, is, as shown, formed with a flaring mouth to provide a needle-point valve seat 5^b. From the bore or hollow 5 at a point above the valve seat 5^b leads through the body 1 a passage 8, the remaining end of which communicates with the inner end of the bore 6 and as prescribed for the passage 5^a, is formed at its junction with said bore 6 with a needle-point valve seat 8^a. The lower end portion of the bore 6 above the valve seat 8^a has leading therefrom, a short laterally extending passage 9 which leads into the inner end of a hollow externally threaded valve casing projection 10.

11 represents a needle-point cut-off valve, the vertical portion of which passes through a packing nut 12 carried on the projection 3, said vertical valve member being threaded, as shown, to a point near its lower end and said threaded portion engaging the internal threads of the projection 3. Below the threaded portion of the valve 11, said valve presents a slightly reduced circumference and is provided with a terminal valve point 11^a, which is adapted to seat in the mouth 5^b of the passage 5^a. The upper end of the valve member 11 is provided with a suitable handle 11^b. I likewise provide the internally threaded projection 4 with a threaded needle point regulating valve 14, which engages the internal threads of said projection 4 and which has its inner terminal end portion formed with a valve point 14^a adapted to engage the seat 8^a. The upper portion of the valve 14 passes through a packing nut 15 mounted on the projection 14 and has its head on the outer side of said packing nut squared as indicated at 14^b.

With the outer end of the lateral projection 7, is detachably connected in any suitable manner, one end of a gas supply pipe 16 which may be of rubber or metal, as desired. I also connect with the outer end of the casing projection 10, a suitable gas conducting pipe or tube 17.

In practice the valve casing body 1 is adapted to be secured in a suitable position in connection with the dash-board or other convenient frame part of an automobile. The pipe or tube 16 leading from the tubular projection 7, connects with a gas storage

tank 18 which may be of the type ordinarily employed for storing acetylene gas for use in automobile lamps or which may be the gasometer of an acetylene gas generator. 5 The pipe 17 leads as indicated in Fig. 4 of the drawing, to a gas burning lamp 19 and it is obvious that branch pipes or conductors may lead from said pipe 17 to other lamps on the machine.

10 Where an acetylene gas cutoff has been employed near the driver's seat of an automobile and at a distance from both the supply tank and the lamps, considerable difficulty has been experienced owing to the fact 15 that when the controlling valve of the cutoff is operated, an undesirable pressure of gas is at once discharged from the burners in the lamps, thus preventing proper ignition of the gas at the lamp burner, particularly 20 where the electric spark is employed for producing such ignition. This difficulty arises from the fact principally that the operator at the cutoff being located at a distance from the lamp, is unable to observe the height or 25 character of the flame produced in the lamp and is therefore unable to properly regulate the same. By my construction it will be seen that by first turning or setting the regulating valve 14, so that the desired volume 30 of gas only can pass from the passage 8 into the passage 9, the cut-off valve 11 may be opened to any desired extent without danger of admitting too great a volume of pressure of gas to the conducting pipe 17. In this

connection, it will be understood that the 35 acetylene gas in a storage tank such as is used ordinarily in automobile lighting, contains gas under such high pressure as to prevent its proper ignition without reduction in pressure. 40

What I claim is:

In a pressure controlling valve for automobile lamps, the combination with a valve casing body, having four externally threaded extensions thereon, there being a port extending 45 between two of said extensions, a pair of separated valve seats located in said ports, a cut off valve threaded into another of said extensions and engaging one of said valve seats, a packing nut threaded upon 50 said extension, a controlling handle carried by said valve and extending through said packing nut, a regulating valve threaded into the remaining one of said extensions, 55 and a packing nut through which said regulating valve extends, said packing nut being threaded upon the remaining one of said extensions, both the regulating valve and the cut-off valve being accessible and controllable 60 from the exterior of the valve casing.

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

FREDERICK C. BARGAR.

Witnesses:

A. L. PHELPS,
L. CARL STOUTON.