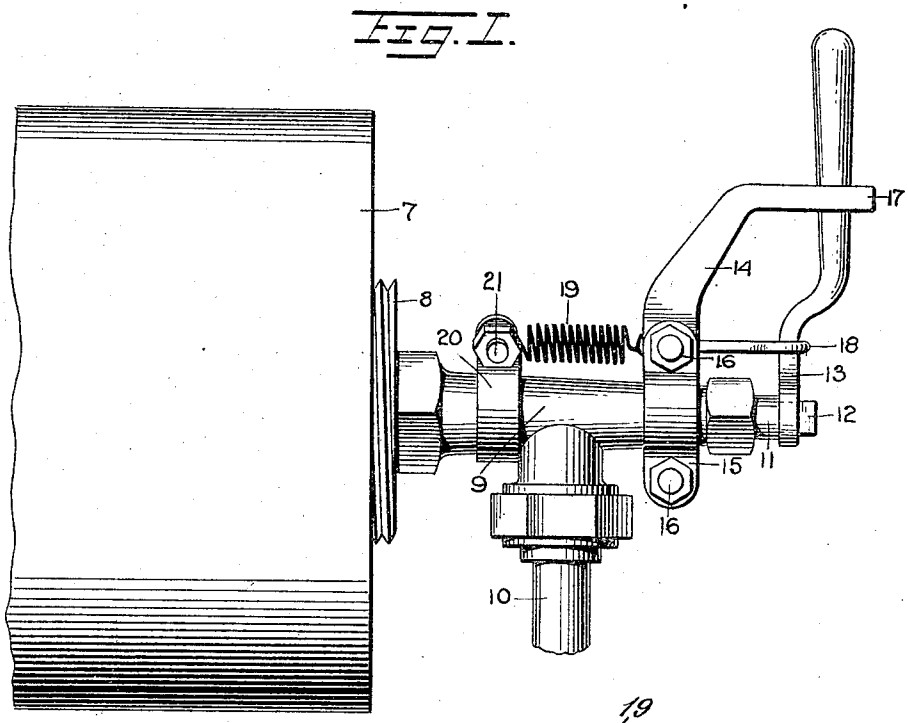
G. F. BREUNINGER.

GAS FEED REGULATOR AND KEY RETAINER THEREFOR.

APPLICATION FILED DEC. 28, 1915.

1,188,892. Patented June 27, 1916.

Fig. 1.



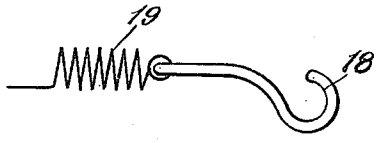
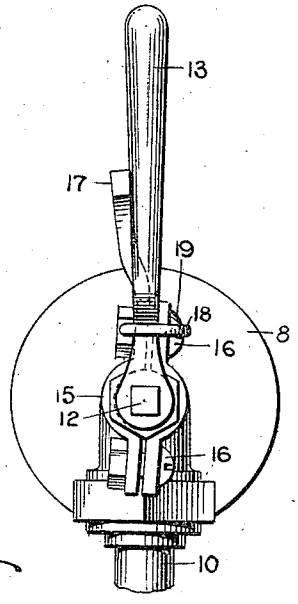


Fig. 3.

Fig. 2.



WITNESSES

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GOTTLIEB F. BREUNINGER, OF BEDFORD HILLS, NEW YORK.

GAS-FEED REGULATOR AND KEY-RETAINER THEREFOR.

1,188,892. Specification of Letters Patent. Patented June 27, 1916.

Application filed December 28, 1915. Serial No. 69,110.

To all whom it may concern:

Be it known that I, GOTTLIEB F. BREUNINGER, a citizen of the United States, and a resident of Bedford Hills, in the county of Westchester and State of New York, have invented a new and Improved Gas-Feed Regulator and Key-Retainer Therefor, of which the following is a full, clear, and exact description.

Among the principal objects which the present invention has in view are: to provide means for predetermining the service position of a gas control feed key; to provide means for adjusting the service position of the key; and to provide means for holding the key in service to avoid loss thereof.

Drawings.—Figure 1 is a side view of an end fragment of a gas tank, showing in conjunction therewith, a delivery pipe and control valve, a key for said valve, and means for holding the key in position to regulate the feed of gas from said tank; Fig. 2 is an end view of the valve and key therefor shown in Fig. 1, and the cap on which the said valve is mounted; Fig. 3 is a detail view showing the resilient keeper for the detachable handle with which the regulator is provided.

Description.—As seen in the drawings, a gas tank 7 is closed by means of a screw cap 8. The tank 7, as shown in the drawings, is of the character generally employed on automobiles for transporting illuminating gas under pressure. The cap 8 is conventionally provided with a valve 9 from which is carried a delivery pipe 10.

The valve stem 11 employed in the present valve is provided with a reduced wrench end 12 to receive a key 13 by which the said stem and valve ports provided therein are manipulated.

To register the service position of the key 13, a bracket 14 is mounted on the barrel of the valve 9 and there secured by clamps 15, small bolts 16 being passed through openings in the ends of the clamps and corresponding openings in the bracket 14. The bracket 14 has an end extension 17, which, in service, is disposed in the path of the handle of the key 13.

To hold the key 13 on the end 12 for the purpose of preventing the loss thereof, a retaining hook 18 is furnished to engage the key 13. The hook 18 is held in engagement with the key 13, by means of a spiral spring 19, the end of which is anchored to a clamp collar 20 and to the clamping bolt 21 therefor.

Operation.—When a tank is provided with a bracket 14 arranged as shown in the accompanying drawings, and as above set forth, the operation is as follows: The bolts 16 are loosened to permit movement of the bracket 14 and clamp 15 thereof around the valve 9. The key 13 is moved to revolve the stem 11 to permit a rapid and full flow of gas from the tank 7 to the delivery pipe 10 and lamps connected therewith. In practice, it is found that when lighting lamps supplied from a gas tank, such as indicated in the accompanying drawings by the numeral 7, a very free flow is initially required. The lamp having been ignited, the key 13, together with the bracket 14, are then manipulated until the flame in the lamps is disposed as desired in service. In this position of the key 13, the extension 17 is held firmly against the handle of the key, while the bolts 16 are tightened to draw the clamps 15 and the body of the bracket 14 firmly upon the valve 9, in which position the bracket and parts connected thereto will thereafter remain. Without testing the flow and the illumination dependent thereon, the operator knows that the key 13 is in the position required to give the desired flow of gas to the lamps.

If the operator desires the key 13 to remain in place, the hook 18 is slipped over the key, the spring 19 being expanded to permit this action. If, however, the operator desires to remove the key, the hook 18 is released and is permitted to dangle from the spring 19. The operator releases the hook 18 and removes the key 13 only when he fears the annoyance of others using the key to disarrange the flow of gas.

Claim:

An apparatus as characterized comprising a rotary valve; a key laterally extending therefrom; means adjustably mounted on said valve for engaging said key for regulating the opening of said valve; a keeper for said key, permanently anchored on said valve, said keeper embodying a spiral spring; and a hook attached thereto, said hook being adapted for engagement with said key.

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Witnesses:

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