No. 840,796. PATENTED JAN. 8, 1907.

R. N. OAKMAN.

GAS CONTROLLING DEVICE.

APPLICATION FILED DEC. 8, 1905.

FIG. 1.

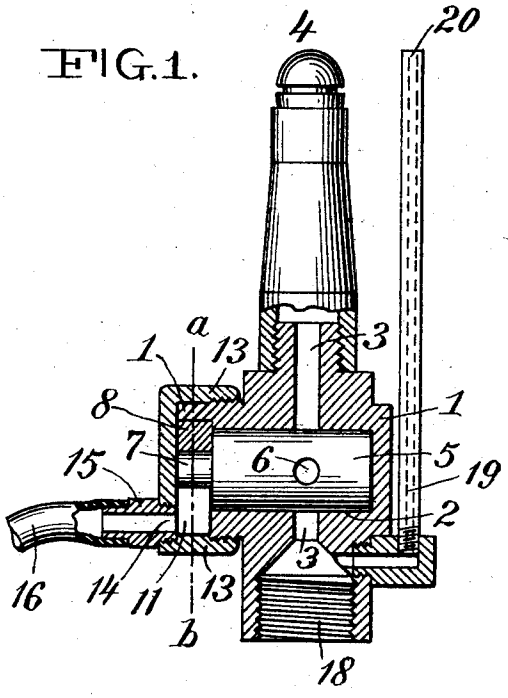


FIG. 2.

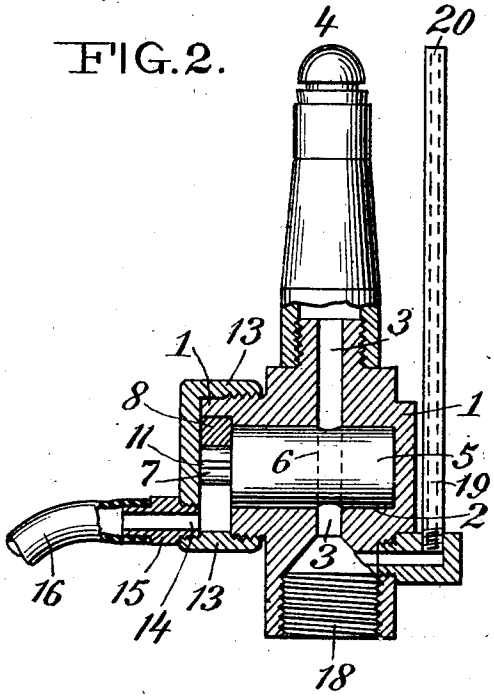


FIG. 3.

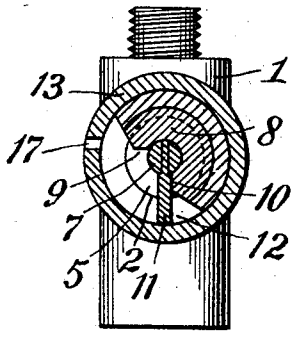
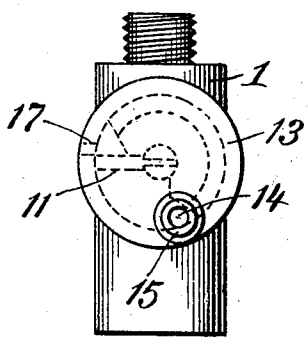


FIG. 4.



WITNESSES:

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GAS-CONTROLLING DEVICE.

No. 840,796. Specification of Letters Patent. Patented Jan. 8, 1907.

Application filed December 8, 1905. Serial No. 290,901.

To all whom it may concern:

Be it known that I, RICHARD N. OAKMAN, a citizen of the United States, and a resident of the city, county, and State of New York, have invented a new and useful Improvement in Gas-Controlling Devices, of which the following is a full description.

The accompanying drawings illustrate the invention, of which—

Figure 1 is a vertical section of the standard and details of the device with a pilot-burner for lighting the gas and showing rotary plug in full. Fig. 2 is a vertical section like Fig. 1, showing the passage-way for the gas open to the burner. Fig. 3 is a cross-section of rotary plug, collar, and blade on line A B of Fig. 1. Fig. 4 is an end view of device, showing the cap which incloses the rotary plug, blade, and collar.

1 is a standard provided with a bore 2 and a throughway 3 for the passage of gas to a burner 4. Into the bore 2 of the standard is inserted a rotating plug 5. This plug is provided with a hole 6 through its body which when turned to coincide with the passage-way 3 permits a free passage of gas to the burner, and when turned again until the body of the plug covers the opening 3 the gas is shut off. Upon the end of this plug I have placed the projection 7 and over this projection a collar 8, fitted tightly into a recess in the standard to prevent it from turning, but loosely over the projection, so that the latter may readily turn with the plug without disturbing the position of the collar. This collar is not a full circle. As shown in the figures, it is cut away between the points 9 and 10 to give room for the operation of a blade 11 and to provide stopping-points for the blade when turned.

The blade 11 may be secured to the projection 7 in any suitable manner. The preferred way is that shown in the drawings, with one end driven into a slot in the projection 7, the other end extending to the inner circumference of a cap 13, which covers the collar, blade, and rotary plug. From the faces 9 and 10 the collar and wall of the standard are cut away, as shown in Figs. 3 and 4. This construction leaves a space 12 for the introduction of a pressure of air or other fluid to turn the blade until it reaches the point 9 and also for the exhaust of air from this space to cause the blade to return to its original position. A cap 13 is placed over all, which bears against the outer edge of the blade, also against the collar 8, and prevents leakage. This cap is provided with a nozzle 15 to receive a tube 16, which connects with a fluid pressure and exhaust device. When the blade is in position shown in Fig. 3, the introduction of compressed fluid in the space 12 will cause the blade and plug to turn until the blade is stopped at the point 9, thus opening the passage-way for the gas to the burner, while the air behind the blade is forced out through the opening 17. To close the passage-way, the air is exhausted in the space 12 and the blade returns to its original position, facilitated by the entrance of air behind it through the opening 17. Thus the blade and plug may be turned alternately, opening and closing the passage-way for the gas to the burner. Any of the well-known devices for compressing and exhausting air may be connected to the space 12 through the opening 14 in the outer cap. Such devices are well known and need not be described.

The standard 1 is provided with a socket 18 for connection with a gas-supply, and leading from the socket is a conduit 19, proceeding to a small burner 20, kept always lighted and located in the path of the gas escaping from burner 4 to light the gas when turned on

What I claim, and desire to secure by Letters Patent, is—

1. In a gas-controlling device a standard provided with a bore having a throughway for the passage of gas, and a rotary plug-valve seated within the bore adapted to open and close the throughway when rotated, in combination with a blade secured to the rotary valve, a space behind the blade for the admission of compressed air or fluid and adapted to be exhausted of air or fluid, to propel the blade to the end of its stroke and return it to its original position.

2. In a gas-controlling device a standard provided with a cylindrical bore, and having a throughway for the passage of gas and a rotary plug-valve seated within the bore adapted to open and close the throughway when rotated, in combination with a blade secured to the valve, a space behind the blade to re-

ceive compressed air or fluid, to propel the blade and return it, and a vent on the other side of the blade for the escape and entrance of air to facilitate its movement in either direction.

In testimony whereof I, the said RICHARD N. OAKMAN, have signed my name to this specification, in the presence of two subscribing witnesses, this 8th day of August, 1905.

RICHARD N. OAKMAN.

Witnesses:
MARGARET TURNER,
ALMA I. ALBERTSON