A. SPIELMAN.

VALVE AND SIGNAL DEVICE FOR GAS CHANDELIERS.

APPLICATION FILED JULY 6, 1917.

1,242,488. Patented Oct. 9, 1917.

Fig. 1.

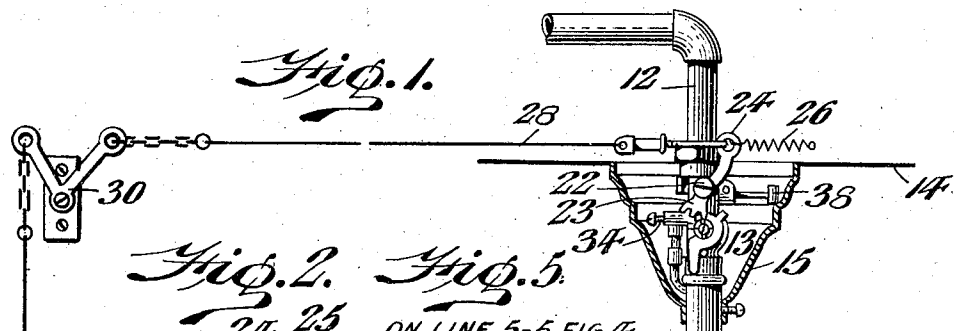


Fig. 2.

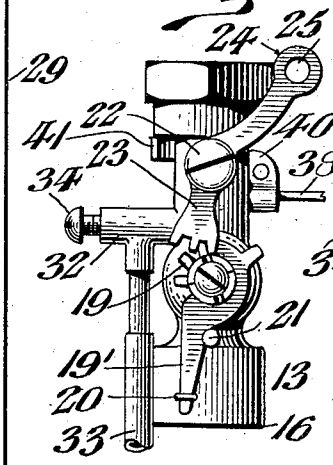
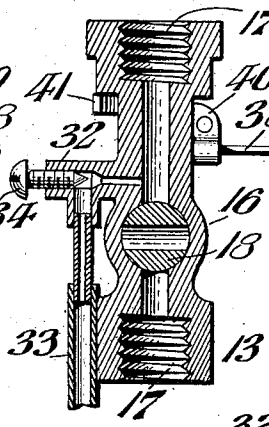


Fig. 5.

ON LINE 5-5 FIG. 4.



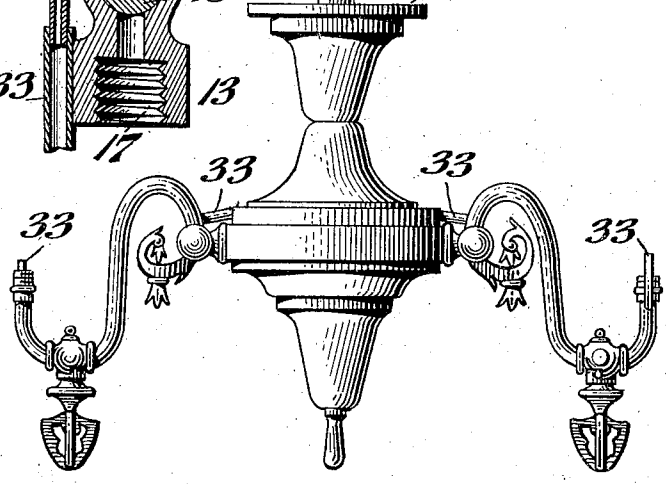


Fig. 4.

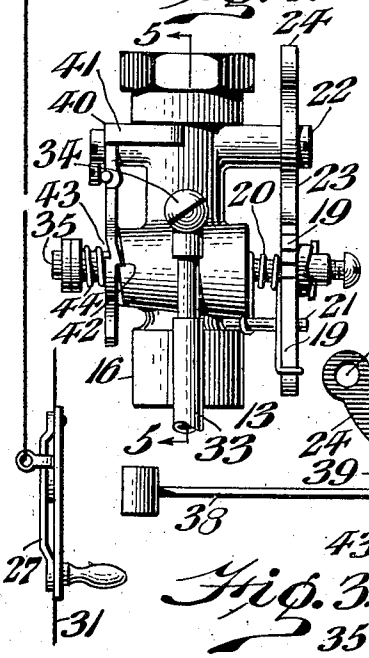


Fig. 6.

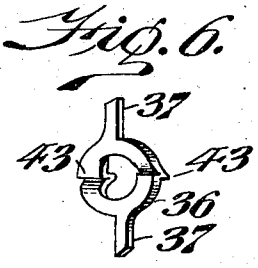


Fig. 3.

Inventor

Adolph Spielman

By Wilkinson & Johnson

Attorney

UNITED STATES PATENT OFFICE.

ADOLPH SPIELMAN, OF PHILADELPHIA, PENNSYLVANIA.

VALVE AND SIGNAL DEVICE FOR GAS-CHANDELIERS.

1,242,488. Specification of Letters Patent. **Patented Oct. 9, 1917.**

Application filed July 6, 1917. Serial No. 178,955.

To all whom it may concern:

Be it known that I, ADOLPH SPIELMAN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improved Valve and Signal Device for Gas-Chandeliers, of which the following is a specification.

The principal object of the present invention is to provide a simple, efficient, reliable and comparatively inexpensive valve for regulating the supply of gas in a system of distant control by mechanical means to a chandelier. A further object of the present invention is to equip such a valve with means for contacting with the canopy of the chandelier at predetermined intervals to give an audible signal to indicate the shutting off of the gas supply. Other and further objects of the present invention reside in the providing of general details of construction and in the providing of certain new and novel combinations of parts as will hereinafter be more fully described.

The invention consists of the improvements hereinafter described and finally claimed.

The nature, characteristic features and scope of the invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof and in which:

Figure 1 is a view in elevation, partly sectioned, of a chandelier equipped with a valve and signal device embodying the invention.

Fig. 2 is an enlarged view in side elevation of the valve shown in Fig. 1, detached from the chandelier.

Fig. 3 is an elevational view of Fig. 2 looking from the opposite side thereof.

Fig. 4 is a view in front elevation of Fig. 2.

Fig. 5 is a view in section taken upon the line 5—5 of Fig. 4, and

Fig. 6 is a detail view hereinafter referred to.

For the purpose of illustrating my invention, I have shown in the accompanying drawings one form thereof which is at present preferred by me, since the same has been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of the instrumentalities as herein shown and described.

In the drawings, 10 designates a chandelier, the gas supply pipe 11 of which is suspended from a gas pipe 12. The connection between the pipes 11—12 is effected by means of the improved valve of the invention, which is designated 13, the point of attachment being in juxtaposition to the ceiling 14 of a structure to be illuminated. Thus attached, it will be noted that the valve 13 is contained within and hidden by the chandelier canopy 15. Referring now to the valve 13 in detail, the same consists of a substantially cylindrical casing 16 having a central bore therethrough terminating in enlarged tapped ends 17 to receive the screw-threaded ends of pipes 11—12. Rotatably mounted within casing 16 is a valve-plug 18 having a bore therethrough, which plug is for controlling the flow of gas through pipe 11 to the chandelier burners. Mounted upon one end of valve-plug 18 is a toothed segment 19 so adjusted with respect thereto by means of a torsion spring 20 that when said segment is moved in a clockwise direction, the plug is turned for the required operating distance ($\frac{1}{4}$ turn), but with the movement of the segment in a counter-clockwise direction, said segment rides freely over the plug. The casing 16 is provided with a fixed pin 21 against which the arm 19′ of toothed segment 19 is adapted to abut to limit retrograde movement of the segment. Pivoted as at 22 to the valve casing is the plug operating means embracing a second segment 23 the teeth of which are in mesh with the teeth of segment 19. The segment 23 is provided with an arm 24, the free end of which is apertured as at 25, connecting with which is a spring 26 for returning the segments 19—23 and wall-switch lever 27 to normal position. Connecting the arm 24 and the lever 27 of the wall-switch are wires 28—29, there being a bell-crank lever 30 interposed between and connecting said wires together. The wiring and bell-crank lever may be concealed above the ceiling 14 and beyond the wall 31 if desired. Formed integral with the casing 16 is an extension 32 having a vertical and a horizontal passage therethrough, which

passages are in communication with the central bore of the valve casing at a point above the valve-plug 18. Leading from extension 32 to the burners of the chandelier is pilot tubing 33 which is concealed throughout the major portion of its length by the chandelier casing. A set screw 34 is provided in extension 32 for regulating the quantity of gas passing to the burners. Fixed to the end 35 of valve-plug 18 for rotation therewith, is a ring-like member 36 provided with fingers 37, which fingers, in the rotation of the valve-plug 18, are alternately adapted to trip a hammer 38 with the shutting off of gas to the burners. The hammer 38 is adjustably carried as at 39 by a trip-piece 40 pivoted upon casing 16, said trip-piece being provided with a stop 41 for abutting against the casing parts to limit retrograde movement of the trip-piece. The hammer 38 is adapted when operated to impinge against the chandelier canopy 15 and give off a metallic, bell-like sound. The purpose of this is to notify the user when gas has been turned off by the valve-plug 18. It will be understood in this connection that when the fingers 37 are in the position shown in Fig. 3, gas is passing to the burners and that with movement of the valve-plug 18 to the position shown in Fig. 5, a finger 37 has tripped the hammer to designate that the flow of gas has been cut off. To prevent slippage or retrograde movement of the member 36, the valve casing is peripherally notched as at 42, see Fig. 4, and the member 36 is provided with detents 43, whereby in the rotation of the member 36 the detents coöperatively engage with said notches to prevent slippage, a coiled spring 44 being present to insure said member 36 being maintained in abutting relation with the end of the valve casing.

It will now be apparent that I have devised a novel and useful construction which embodies the features of advantage enumerated as desirable in the statement of the invention and the above description, and while I have in the present instance shown and described the preferred embodiment thereof which has been found in practice to give satisfactory and reliable results, it is to be understood that the same is susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

What I claim is:

1. Apparatus of the character stated embracing a chandelier including its gas supply pipe, a rotary valve operable for controlling the gas supply, a chandelier canopy for concealing said valve, a trip-member provided with a medium for striking said canopy to produce an audible signal and means operable with the valve for tripping said member at predetermined intervals.

2. Apparatus of the character stated consisting of a chandelier including its gas supply pipe, a rotary valve operable for controlling the gas supply, a chandelier canopy for concealing the valve, a trip-member provided with a medium for striking said canopy to produce an audible signal, means for adjusting said medium with respect to the trip member and means operable with the valve for tripping said member at predetermined intervals.

3. A valve of the character stated embracing a valve-casing having a gas passage therethrough, a rotary valve-plug for controlling said passage, a toothed segment mounted upon said plug for moving it in one direction, another toothed segment having pivoted relation with the casing and in mesh with the plug operating segment, a pilot tube connecting with the gas passage at a point above said plug, a trip-device carried by the casing, a hammer adjustable with respect to said trip-device and means rotatable with the plug for operating the tripping device at predetermined intervals.

4. A valve as described in claim 3 characterized by means to permit retrograde movement of the segment upon the valve plug.

5. A valve as described in claims 3 and 4, characterized by means to prevent retrograde movement of the means for operating the tripping device.

In testimony whereof, I have hereunto signed my name.

ADOLPH SPIELMAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."