

J. DINERS.
 AUTOMATIC VALVE.
 APPLICATION FILED AUG. 7, 1914.

1,138,093.

Patented May 4, 1915.

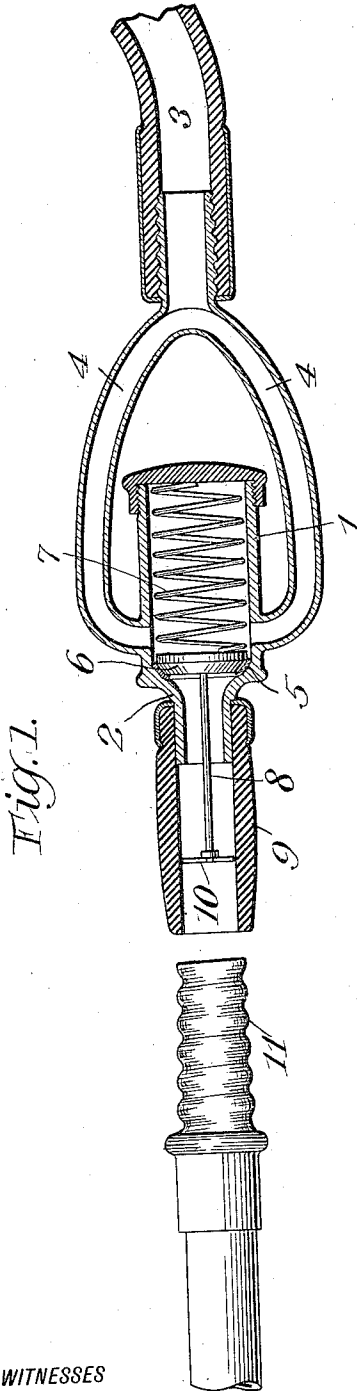


Fig. 1.

Fig. 2.

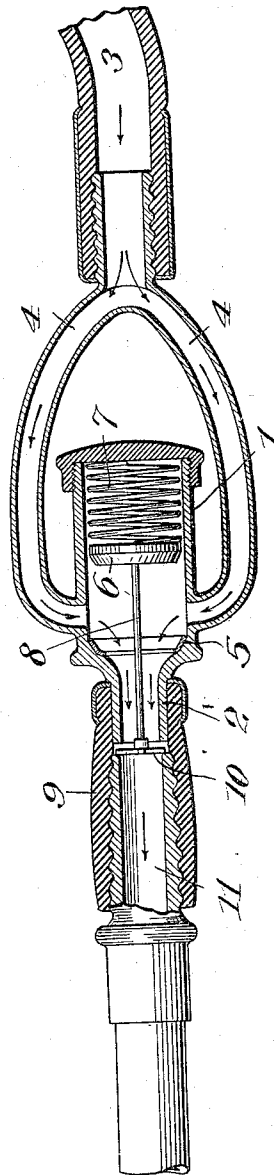
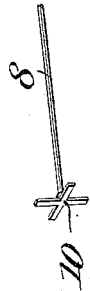


Fig. 3.



WITNESSES
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JULIUS DINERS, OF NEW YORK, N. Y.

AUTOMATIC VALVE.

1,138,093.

Specification of Letters Patent.

Patented May 4, 1915.

Application filed August 7, 1914. Serial No. 855,577.

To all whom it may concern:

Be it known that I, JULIUS DINERS, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Automatic Valves, of which the following is a specification.

My invention relates to an automatic valve or cut off for gaseous fuel burners.

The objects of my invention are to provide a novel valve device of simple and inexpensive construction, which may readily be applied to the pipe line connecting a burner with its supply and which automatically operates to cut off the flow of gas upon detachment of the burner.

My device is particularly useful in connection with gas stoves or other gas burning appliances. Heretofore accidents have sometimes happened with such appliances by reason of the inadvertent detachment of their flexible rubber supply tubes and the consequent unchecked flow of gas from the end of the tube. By means of my device such accidents may be prevented as the valve is designed to automatically shut off the gas upon detachment of the device from the gas appliance from any cause whatsoever.

I attain the objects specified as well as others not herein enumerated by means of the device illustrated in the accompanying drawings, in which:

Figure 1 is a vertical section of the device showing the valve in closed position and showing the nipple of a detached gas burning appliance. Fig. 2 is a section in elevation of the device showing the valve held in open position by engagement of its plunger with the nipple of an attached gas burning appliance; and Fig. 3 is a perspective view in detail of the valve plunger.

Similar reference characters refer to similar parts throughout the several views.

Referring to the drawings, 1 indicates a valve chamber provided with a neck 2 having an opening through which gas flows from the chamber. Gas enters the chamber, from the supply pipe 3, through the tubes 4 attached to the sides of the chamber and communicating therewith. The lower end of the chamber 1, at the entrance of the neck 2, is interiorly coned and is provided with a suitable washer 5 serving as a seat for the conical face of the disk valve 6. Said valve is normally pressed against its seat by ex-

pansion of the spring 7 into position shown in Fig. 1 so as to close the opening of the neck 2 and cut off the flow of gas from the valve chamber. The valve 6 is provided with a stem or plunger 8 projecting through the neck 2 into the bore of the coupling 9 and carrying, at its lower end, a head 10.

In attaching the valve to a gas burning appliance, the coupling 9, which is preferably made of rubber, is slipped over the threaded portion of the nipple 11. Such nipples usually form a part of a gas burning appliance, and for the purposes of this specification only the nipple is illustrated. As shown in Fig. 2, in its attached position, the end of the nipple 11 presses against the head 10 of the plunger and holds the valve 6, against the action of the spring 7, away from its seat so as to permit the free flow of gas from the chamber to the gas burning appliance. The head 10 of the plunger is preferably constructed as shown in Fig. 3, of two cross bars extending transversely across the bore of the coupling 9 so as to permit of its being readily engaged by the end of the nipple 11, upon insertion thereof into the coupling, without interfering with the flow of a sufficient quantity of gas to the burner.

Should the gas appliance become disconnected or detached, from the coupling, by accident or otherwise, the spring 7 will automatically press the valve against its seat so as to cut off any further flow of gas immediately upon the withdrawal of the nipple 11.

Various changes and modifications may be made in the form of construction of the device herein illustrated and described without departing from the scope of my invention.

What I claim as my invention and desire to secure by Letters Patent is:

1. An automatic valve comprising a valve chamber having a tubular neck at one end, a valve seat formed therein adjacent the neck, a forked tube spanning said chamber and communicating with openings in the sides of the chamber above the valve seat, a tubular coupling secured to the neck, a spring-pressed valve in said chamber normally closing the neck-opening, and a stem on said valve projecting through the neck-opening into the bore of the coupling.
2. An automatic valve comprising a hollow cylindrical casing open at one end and

having a tubular neck at the opposite end, a screw cap closing the open end of the casing, a valve seat formed in said casing adjacent the neck, a forked tube spanning said casing and communicating with openings in the casing above the valve seat, a valve in said casing, a spring bearing at its ends against the cap and the valve whereby to normally hold the latter on its seat, a stem on said valve projecting through the neck-

opening into the bore of the coupling and carrying at its end a cross-piece.

In testimony whereof, I have hereunto affixed my signature in the presence of two subscribing witnesses.

JULIUS DINERS.

In presence of—

LESTER F. DITTENHOEFER,
ROSAMOND M. COANE.

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