March 4, 1930. F. J. LIESKE 1,749,290

VALVE FOR GAS RANGES

Filed Aug. 31, 1927

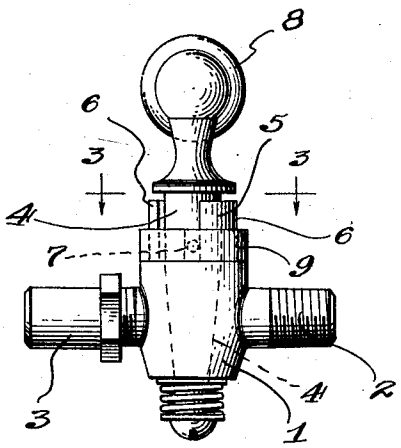

Fig. 1

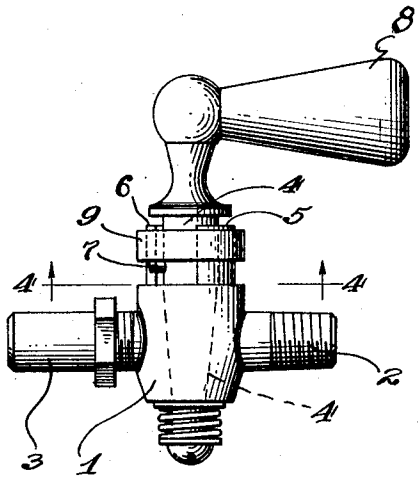

Fig. 2

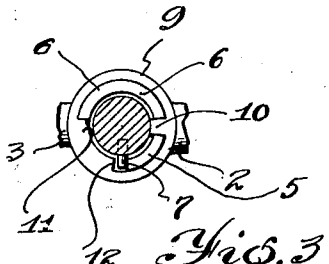

Fig. 3

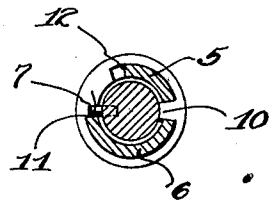

Fig. 4

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Patented Mar. 4, 1930

1,749,290

UNITED STATES PATENT OFFICE

FRANK J. LIESKE, OF DETROIT, MICHIGAN, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-HALF TO HARRY W. GILBERG AND ONE-FOURTH TO JOHN F. LA GRANT, BOTH OF DETROIT, MICHIGAN

VALVE FOR GAS RANGES

Application filed August 31, 1927. Serial No. 216,757.

This invention relates to valves for gas ranges and the object of the invention is to provide a safety valve which cannot be accidentally opened and which cannot be readily opened by children.

Another object of the invention is to provide a gas valve in which definite operations must be performed before the valve may be opened.

A further object of the invention is to provide a gas valve having an annular member normally preventing opening of the valve, the said annular member being adapted to be moved upward manually on the valve body to allow the valve to be opened.

Another object of the invention is to provide a valve having an annular member adapted to drop into position as the valve is closed and prevent reopening of the valve.

These obejcts and the several novel features of the invention are hereinafter more fully described and claimed and the preferred form of construction by which these objects are attained is shown in the accompanying drawings in which—

Fig. 1 is an elevation of a valve for gas ranges showing the valve and annular member in the closed position.

Fig. 2 is a similar view showing the annular member raised and the valve turned to the open position.

Fig. 3 is a section taken on line 3—3 of Fig. 1 showing the form of the annular member.

Fig. 4 is a section through the valve stem and extensions on the valve body taken on line 4—4 of Fig. 2.

As shown in Fig. 1 the valve comprises a body 1 having an inlet 2 and an outlet 3. The valve is provided with the usual rotating portion 4 and the body 1 is provided with two lugs 5 and 6, shown more particularly in Fig. 3, extending up about the rotating member 4. The rotating member 4 is provided with a pin 7 adapted to be moved by turning the handle 8 when the valve is opened. An annular member 9 is provided as shown in Fig. 3, having a small lug 10 on one side and a wide lug 11 on the opposite side extending between the lugs 5 and 6. This annular member 9 is provided with an additional space 12 into which the pin 7 extends when the valve is in the closed position. When in this position, as shown in Fig. 3, the valve cannot be opened as the pin 7 engages the lug 5 when the handle 8 is turned in one direction and when the handle 8 is turned in the opposite direction the pin 7 engages the annular member 6 which prevents the valve from being turned. To open the valve it is necessary to raise the annular member 9 manually so that the pin 7 is beneath the annular member 9. At this time the valve may be readily opened as indicated in Fig. 2 and the member 9 remains in the position shown in Fig. 2 as long as the valve remains open. As the valve is closed the pin 7 is moved beneath the notch 12 which allows the member 9 to fall by gravity thus preventing the valve from being opened until the member 9 is again raised. This valve is arranged to prevent the valve from being accidentally opened which sometimes occurs when a person is working around the range and it also eliminates the possibility of a child opening the valve as this is usually done by young children who do not understand the dangers of escaping gas and are therefore too young to understand the two operations necessary to open the valve.

One of the particular features of the invention is involved in the construction whereby the closing of the valve automatically locks the valve from further opening without attention from the operator. This is accomplished by means of the annular member 9 which drops by gravity as soon as the valve is closed and the member 9 is made with sufficient clearances to freely fall by gravity as soon as the valve is closed.

From the foregoing description it becomes evident that the device is very simple and efficient in operation, will not easily get out of order, is composed of few parts and is of consequent low manufacturing cost and provides a device which accomplishes the objects described.

Having thus fully described my invention, its utility and mode of operation, what I

claim and desire to secure by Letters Patent of the United States is—

1. In a valve for gas ranges, a valve body having a pair of upwardly extending spaced guide lugs, a valve member rotatably mounted in the body, a pin carried by the valve member and extending between the lugs to limit turning movement of the valve member, an annular member having notches fitting over the guide lugs, one notch being greater in width than the width of the companion lug and providing a space into which the said pin may extend when the valve is closed, the arrangement being such that when the annular member is moved upwardly on the guide lugs above the pin the valve may be opened.

2. In a valve for gas ranges, a valve body having a pair of upwardly extending arcuate guide lugs, a valve member rotatably mounted in the body, a pin carried by the valve member and extending between the guide lugs to limit turning movement of the valve member, an annular member slidable vertically on the guide lugs, said lugs preventing rotation of the annular member in relation to the valve body, the annular member having a notch into which the pin extends when the valve is closed, the arrangement being such that when the annular member is moved upwardly on the guide lugs above the pin the valve may be opened.

In testimony whereof I sign this specification.

FRANK J. LIESKE.