

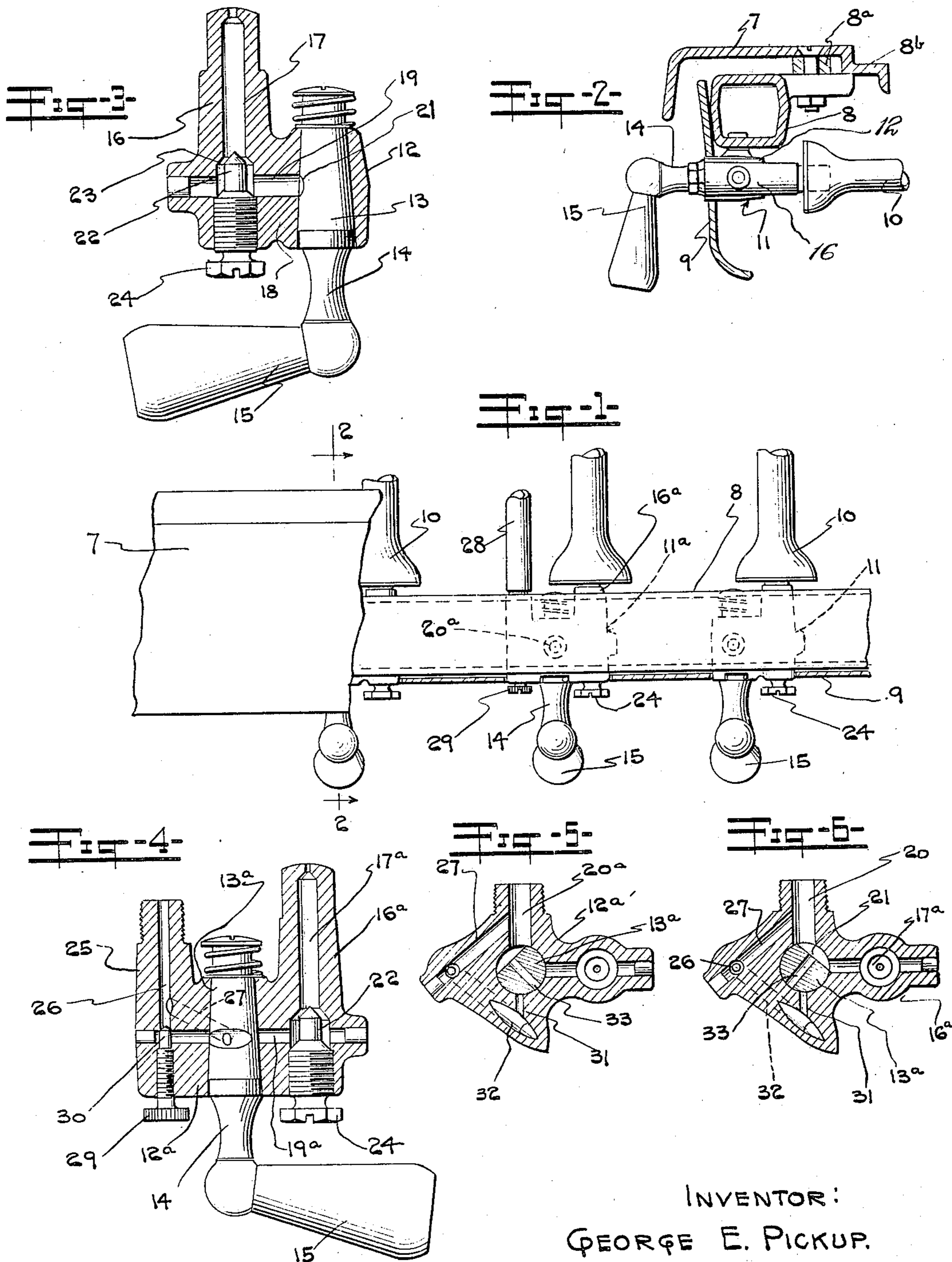
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G. E. PICKUP

GAS COCK

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GAS COCK.

Application filed July 5, 1921. Serial No. 482,387.

To all whom it may concern:

Be it known that I, GEORGE E. PICKUP, a citizen of the United States, residing at Newark, in the county of Licking and State of Ohio, have invented new and useful Improvements in Gas Cocks, of which the following is a specification.

The invention relates to valve means for controlling the flow of gas from a manifold in a gas range to a burner, and has particular reference to a device of this character which is adapted for use in connection with a concealed manifold such as is illustrated in my copending application Serial No. 482,388, filed July 5, 1921.

One object of the invention is to provide a gas cock adapted to permit of the interposition of the valve means between the manifold and the burner while enabling the operation thereof from a point forwardly of the manifold.

A further object of the invention is to provide a device of the character indicated which is capable of supplying, under the control of the valve, an increased supply of gas to the lighting device.

A further object of the invention is to provide a gas cock of the kind described which is of a very practical character from a structural standpoint as well as from an operative point of view.

In the accompanying drawings, wherein I have illustrated a preferred embodiment of my invention, Figure 1 is a fragmentary top plan view of a portion of the stove top or frame and the manifold having gas cocks embodying the invention. Fig. 2 is a vertical sectional view taken substantially in the plane of line 2—2 of Fig. 1. Fig. 3 is a horizontal sectional view on an enlarged scale through the cock shown in Fig. 2. Fig. 4 is a similar view but showing the cock for supplying gas to the simmering burner and to the lighter. Figs. 5 and 6 are vertical sectional views through the cock shown in Fig. 4 and showing the valve member in different operative positions.

Referring to Fig. 2, 7 designates the forward member of the stove top, and 8 indicates the manifold arranged below the top and secured thereto in any suitable way as by means of bolts 8^a entered through lugs 8^b. 9 is an upright plate member coacting with the forward frame member 7 to conceal the manifold which is connected with the rear

ends 10 of the burners by means of cocks 11 and 11^a. Said cocks are located below the manifold and have operating means extending through the plate member 9 forwardly into a readily accessible position.

The valve means 11 comprises a body providing a tubular casing 12 (Fig. 3) having an elongated chamber adapted to receive a conical valve member 13. The latter has a forwardly projecting stem 14, which is provided with an operating handle 15 of any preferred form. Parallel with said tubular casing 12 is a tubular stem 16 providing a passageway 17, and said stem is connected with the casing by means of a transverse portion 18 having a fork 19 therein establishing communication between the valve chamber and the passageway 17. The casing 12 is connected with the manifold by means of a vertical port 20 in an upstanding tubular stem portion of the body and the valve member is ported as at 21 so as to control the flow of gas from the manifold to the burner by way of the port 19 and the passageway 17.

For the purpose of controlling the height of the flame at the burner, I provide a needle valve 22 having a seat 23 in the forward end of the passageway 17. Said valve is screw-threaded into the forward end of the stem 16 so as to be adjustable therein, the forward end of the screw being provided with a head 24. It will be seen that the needle valve 22 constitutes an adjusting means for controlling the flow of gas, which is separate from that provided by the valve 13.

In Figs. 4 to 6 I have shown valve means as embodying an additional outlet for the gas which is adapted to supply gas to the lighting device. Thus, I have in this instance provided a central portion 12^a providing a chamber for the valve member 13. Upon one side of this portion 12^a is a tubular stem 16^a which provides a passageway 17^a. This passageway preferably discharges into the forward end of the simmering burner and hence is made of relatively small size, and the flow of gas from the valve chamber to the passageway 17^a is effected by a port 19^a, and is controlled by a needle valve 22 as in the case of the valve shown in Fig. 3.

On the opposite side of the valve chamber is a tubular stem 25 providing a passageway 26 which communicates directly by way of an inclined port 27 (Fig. 5) with the vertical port 20^a which communicates at its up-

per end with the manifold. It will be observed that through this port 27 gas is constantly supplied to the passageway 26 through the tubular stem 25, said stem being
 5 connected by means of a pipe 28 with a lighting device (not shown). An additional adjusting screw 29 for controlling the volume of gas supplied to the lighting device is provided. This adjusting screw has
 10 at its inner end a needle valve 30 adapted to seat in the forward end of the passageway 26 as shown in Fig. 4.

Preferably I provide means under the control of the valve 13^a for increasing the flow
 15 of gas to the pilot light. This means may comprise a port 31 (Figs. 5 and 6) leading from the lower side of the valve chamber and connected by means of an upwardly and rearwardly inclined passage 32 with the pas-
 20 sageway 26, rearwardly of its forward end. The valve member 13^a has in this instance, in addition to the port 21, a diametrical port 33 which is adapted, in an intermediate po-
 25 sition of the valve member, to establish a connection directly between the tubular stem 20 and the port 31. By this means it is possible to control the flow of gas to the pilot light in such a way that, when it is desired to
 30 effect the lighting of the burners, the pilot light will flare up so as to insure that the lighting of the burners into which the gas is turned, will take place.

It will be seen that I have provided a gas cock which is especially well adapted for use
 35 in connection with a concealed manifold, and which is otherwise of a very advantageous and practical character, and while I have illustrated and described the invention in connection with a single embodiment
 40 thereof, it is to be understood that various changes in form, construction and arrangement may be made without departing from the spirit and scope of the invention as expressed in the appended claims.

45 I claim as my invention:

1. In combination with a manifold, a gas cock comprising a body having a valve chamber therein, means located at the under-
 50 side of said manifold establishing communication between the manifold and said chamber, said body having an outlet for the gas located laterally to one side thereof and also communicating with said valve cham-
 55 ber, and valve means for controlling the flow of gas from the inlet to the outlet through said chamber, said inlet and outlet ports being arranged at right angles with respect to each other and said valve means comprising a member arranged at right an-
 60 gles with respect to said ports.

2. In combination with a manifold, a gas cock comprising, in combination, a body hav-
 65 ing a valve chamber and an inlet and an outlet port opening into said chamber at substantially right angles with respect to

each other, said inlet port being vertically disposed and the outlet port horizontally disposed relative to the manifold, a valve member operable in said chamber upon an axis at substantially right angles with re-
 70 spect to said ports, and a valve operating stem extending forwardly from the body.

3. In combination with a manifold and a gas cock mounted in superposed relation, said cock comprising a body having a pas-
 75 sage adapted to discharge into a burner, a valve chamber parallel with and located laterally to one side of said passage, a port connecting said chamber with said passage, a port connecting the underside of said
 80 manifold with said chamber, and a valve member operable in said chamber and adapted to control the flow of gas from the manifold to said discharge passage.

4. In combination with a manifold and a
 85 gas cock mounted in superposed relation, said cock comprising a body having a passage adapted to discharge into a burner, a valve chamber parallel with and located lat-
 90 erally to one side of said passage, a port connecting said chamber with said passage, a port connecting the underside of said manifold with said chamber, a valve member op-
 95 erable in said chamber and adapted to control the flow of gas from the manifold to said discharge passage, and supplemental means for adjustably controlling the flow of gas through said passage.

5. A gas cock comprising, in combination,
 100 a body having two parallel stems each providing a longitudinal discharge passage, said body having a valve chamber between said stems and parallel therewith, an inlet port communicating with said chamber and with one of said passages, and a valve mem-
 105 ber for controlling the flow of gas from said port to the other one of said passages.

6. A gas cock comprising, in combination,
 110 a body having two parallel stems each providing a longitudinal discharge passage, said body having a valve chamber between said stems and parallel therewith, an inlet port communicating with said chamber and with one of said passages, a valve member for con-
 115 trolling the flow of gas from said port to the other one of said passages, and means controlled by said valve member providing a second connection between said port and the first one of said passages.

7. A gas cock comprising, in combination,
 120 a horizontal discharge passage, an upright inlet port, a horizontal valve chamber into which said inlet port opens, means provid-
 125 ing two separate connections between said passage and said chamber, and a valve member in said chamber for controlling the flow of gas through one of said connections.

8. A gas cock comprising two parallel passages and an intermediate parallel cham-
 130 ber, an inlet port leading substantially at

right angles into said chamber, a valve member in said chamber, and means controlled by said valve member for establishing communication with either of said passages.

- 5 9. A gas cock comprising, in combination, a body having a longitudinal passage constituting an outlet, a longitudinal chamber parallel with said passage and communicating therewith, a port at right angles to said

chamber constituting an inlet, a valve member in said chamber adapted to control the flow of gas from said inlet to said outlet, and a stem coaxial with said valve member and having an operating handle at its forward end.

In testimony whereof, I have hereunto set my hand.

GEORGE E. PICKUP.