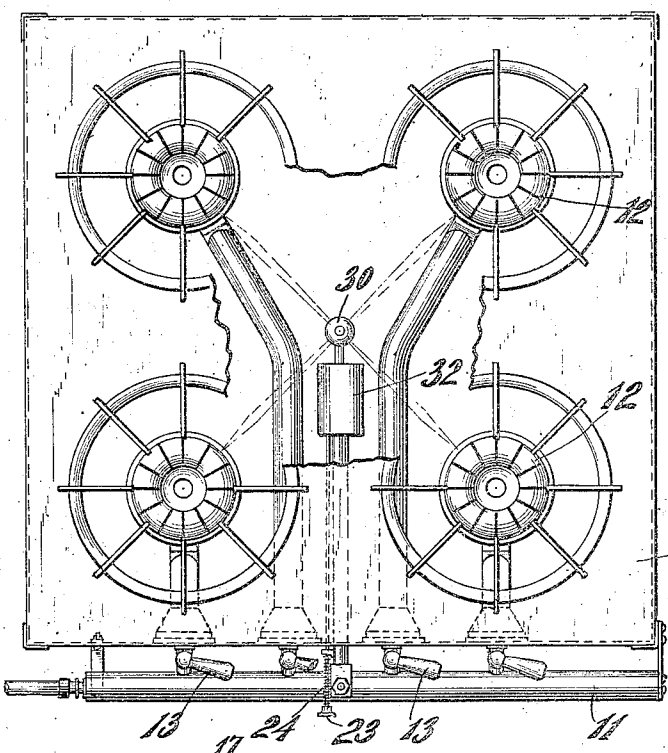
T. L. WIESE.

LIGHTER FOR GAS STOVES.

APPLICATION FILED APR. 14, 1913.

1,128,644. Patented Feb. 16, 1915.

FIG. 1.



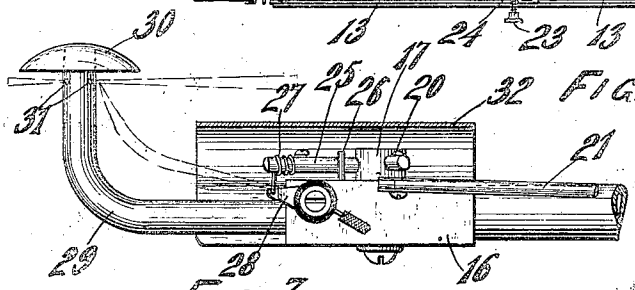


FIG. 2.

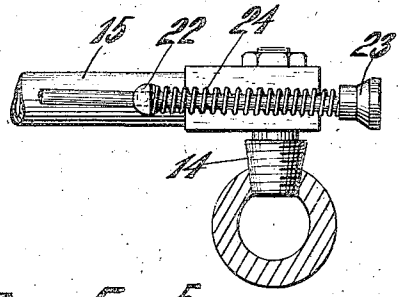


FIG. 3.

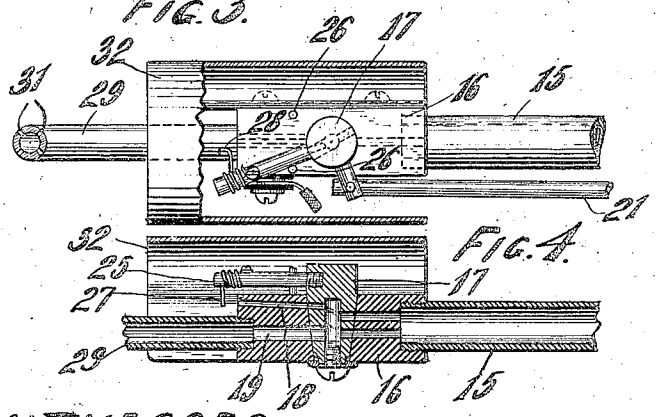
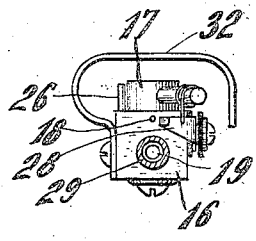


FIG. 4.

FIG. 5.



WITNESSES.

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THEODORE L. WIESE, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF ONE-THIRD TO JOSEPH FROELICH AND ONE-THIRD TO LEON B. LAMFROM, BOTH OF MILWAUKEE, WISCONSIN.

LIGHTER FOR GAS-STOVES.

1,128,644. Specification of Letters Patent. Patented Feb. 16, 1915.

Application filed April 14, 1913. Serial No. 760,918.

To all whom it may concern:

Be it known that I, THEODORE L. WIESE, a citizen of the United States, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Lighters for Gas-Stoves, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

This invention relates to lighters for gas stoves and has for its object to provide an igniting burner which is opened and lighted by the simple operation of pressing a button and which serves to light a number of burners nearby.

With the above and other objects in view the invention consists in the lighter for gas stoves as herein claimed and all equivalents.

Referring to the accompanying drawings in which like characters of reference indicate the same parts in different views: Figure 1 is a plan view of a gas stove equipped with a lighter constructed in accordance with this invention, the center portion of the stove top being broken away to show the igniting burner; Fig. 2 is a side view of the igniting burner with its initial burner; Fig. 3 is a sectional plan view of the initial burner; Fig. 4 is a longitudinal sectional view thereof with the valve in its open position; and, Fig. 5 is an end view of the initial burner.

In these drawings 10 indicates a gas stove and 11 the gas supply pipe thereof from which the burners 12 are supplied with gas through the valve connections 13, all as usual. At a convenient point the gas supply pipe 11 is tapped and a tapering plug 14 is fitted therein, said plug constituting the support and gas connection for a tube 15 carrying an initial burner at its end. The initial burner comprises a valve casing 16 threaded on the end of the tube 15 and provided with a turn plug valve member 17 which controls two separate gas passageways 18 and 19 through the valve casing from the tube 15. The passageway 18 which is smaller than the other is slightly inclined to produce an upwardly and forwardly directed flame when lighted as shown in Fig. 2 and communicates momentarily with the gas supply during the turning movement of the valve to the position in which it opens gas passageway 19, but becomes closed again when the valve reaches its full open position for admitting gas to the initial burner. This is accomplished by causing the port of the valve, which permits the flow of gas to passageway 18, to turn beyond said passageway in the final movement of the valve. An arm 20 on the valve member 17 has a pivotal connection with a rod 21 passing through a guide 22 near the end of the tube 15 and a button or knob 23 on the end of the rod constitutes the means by which the valve member 17 may be turned, there being a coil spring 24 surrounding the rod and confined between the knob 23 and the guide 22 for immediately returning the valve to its closed position when pressure is removed from the knob. Another arm 25 projecting from the valve 17 engages stop pins 26 on the valve casing to limit the movements of the valve member and carries at its end a coil spring contact 27 to engage a stationary insulated electrical contact 28 on the valve casing so that in the movements of the valve member which opens the gas passageways the said spring contact engages and passes out of engagement with the stationary contact 28 to draw an arc across the orifice of passageway 18 to ignite the gas issuing therefrom and produce the inclined jet of flame referred to, suitable electrical connections being made with parts to accomplish this purpose in the usual manner.

A bent tube 29 is connected with the valved casing and communicates with the other passageway, 19, and at its upturned end is provided with a concavo-convex or inverted saucer-shaped guard or deflector 30 and beneath it are openings 31 in the tube 29 directed toward each of the burners 12 of the gas stove. A sheet metal shield 32 is secured to one side of the valve casing and bends over the same to inclose the moving parts and especially the electrical lighter and prevent injury thereto. The guard or deflector 30 is positioned in the path of the jet of flame from passageway 18 so that it is communicated to each of the jets of gas issuing from the openings 31 and as the opening of the valve member 17 opens the passageway 19 as well as the passageway 18, the jet of flame from the passageway 18 which is lighted by the electrical contacts serves to light the jets of gas issuing from the openings 31 and these in turn being directed to

each of the burners of the gas stove will ignite any of them or all of them if desired, according to the number of valves 13 opened at the time.

The operation of the lighting device may be of the duration desired, the several jets of flame remaining as long as the knob 23 is depressed and being automatically extinguished by the closing of the valve as soon as the knob is released. However, the jet of flame from the passageway 18 is only momentary during the movement of the valve and while the passageway 19 is partly opened, becoming extinguished by the valve opening turning beyond such passageway 18 in the full open position of the valve so as to avoid possible injury to the spring contact 27.

By means of this invention a separate lighter for each of the burners of the gas stove is dispensed with and a single lighter is employed which will care for all of the burners, being adapted to project long jets of flame into the range of each of the burners from its central position between them. The parts being centrally positioned between the burners are protected from objects falling through the burner openings and the presence of the shield forms a further protection for the valve and the electrical lighter.

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

1. A lighter for the burner of a gas stove, comprising a suitably operated gas valve controlling a pair of passageways, an electric lighter operated by the movements of the valve for lighting the jet of gas at the end of one passageway, and an igniting burner connected with the other passageway and in the path of the flame from the first passageway and directing its flame toward the burner of the gas stove, said valve closing the passageway leading to the said jet of gas before completing the opening of the passageway leading to the igniting burner.

2. A lighter for gas stoves having a plurality of burners, comprising an initial burner and an igniting burner having communication with the gas supply pipe of the gas stove, a valve for simultaneously controlling the flow of gas to the initial burner and the igniting burner, but closing the flow of gas to the initial burner before completely opening the flow of gas to the igniting burner, and an electrical lighter operated by the valve for lighting the initial burner, said igniting burner being in the path of the flame from the initial burner and directing its own flames toward the several burners of the gas stove.

3. A multiple gas burner lighter, comprising a valve controlled igniting burner having openings to produce jets of flame directed toward each of the gas burners, a deflector on the igniting burner, a valve controlled initial burner for directing a momentary jet of flame into the deflector for igniting the several jets thereof, and an electric lighter for lighting the initial burner.

4. A lighter for multiple burner gas stoves, comprising a centrally located igniting burner having openings directing the jets of flame toward each of the stove burners, a tube connecting the igniting burner with the gas supply pipe of the gas stove, a valve between the tube and the igniting burner comprising a casing having a pair of passageways, one of them leading to the igniting burner and the other forming an initial burner, a valve member fitting in the valve casing to control both passageways and opening the passageway forming the initial burner during the opening movement of the passageway leading to the igniting burner, but closing the former before completely opening the latter, a spring retracted push rod having connection with the valve member for turning the same, an arm on the valve member, an electric contact thereon, and an insulated contact on the valve casing to be engaged by the other contact for drawing an arc in front of the ignition burner on the opening of the valve member to light the ignition burner, the flame of the initial burner being directed toward the igniting burner.

In testimony whereof, I affix my signature, in presence of two witnesses.

THEODORE L. WIESE.

Witnesses:
KATHERINE HOLT,
CLARA V. MUEHLBACH.