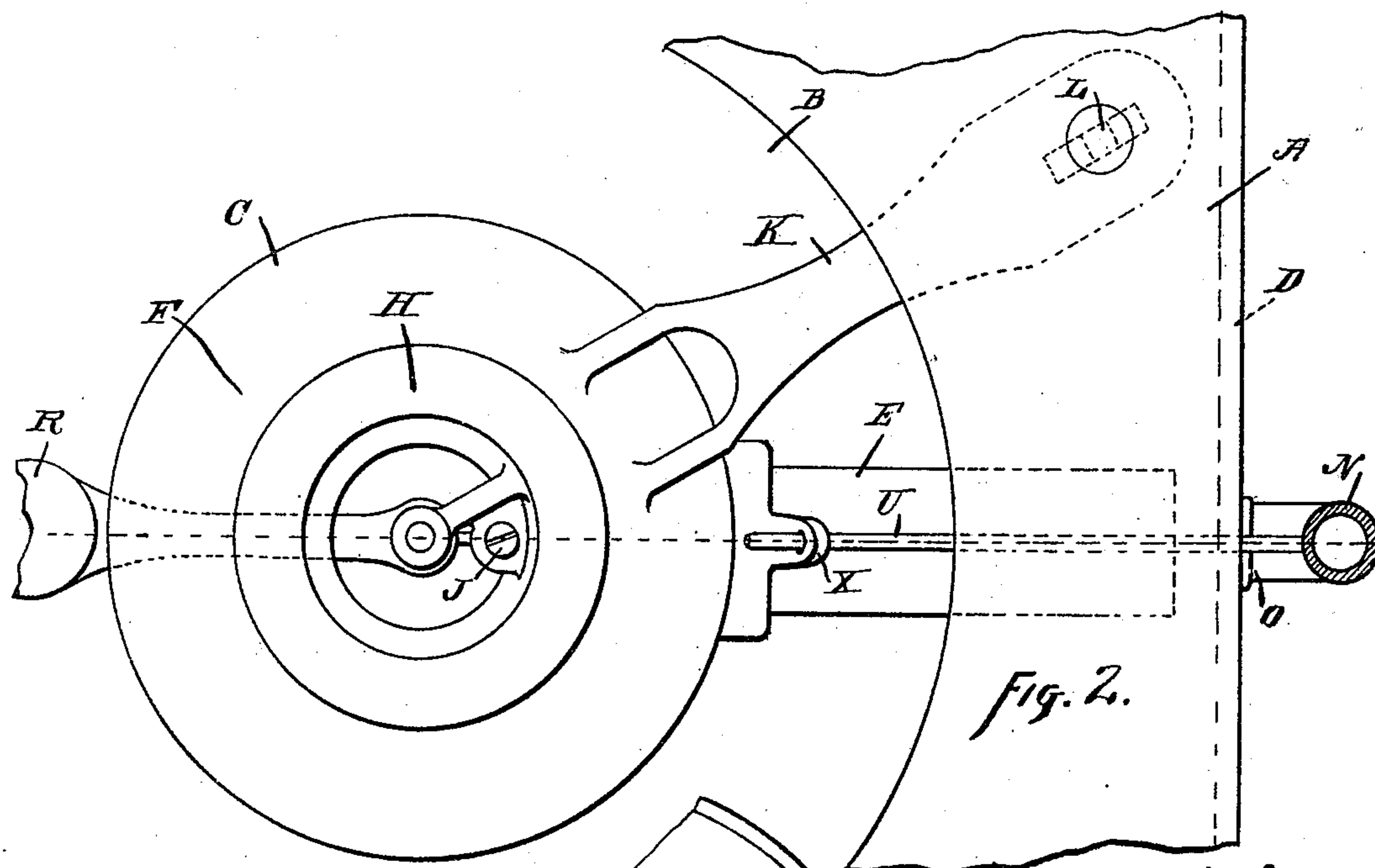
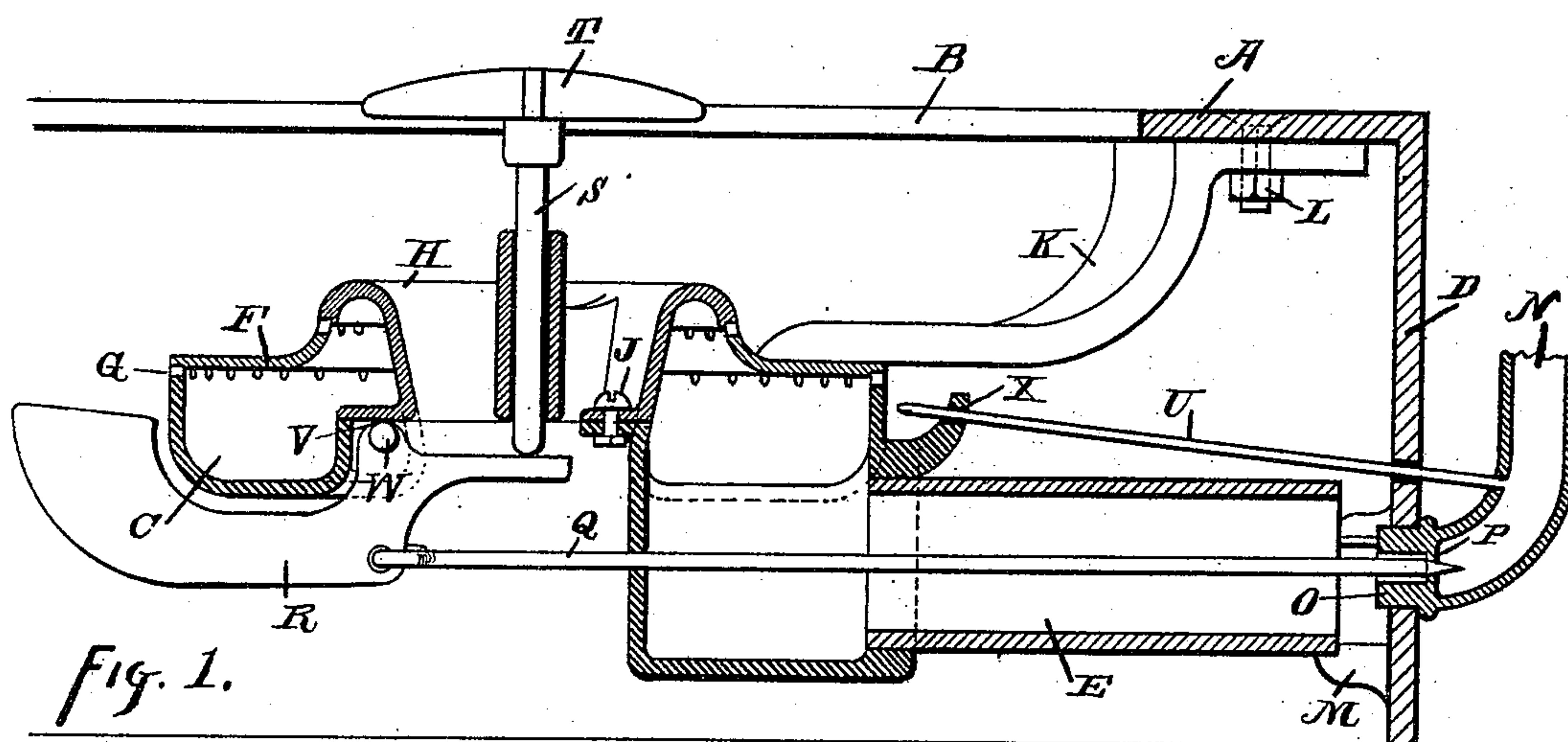


L. KAHN & R. CHRIST.
GAS STOVE.

Patented Dec. 8, 1891.



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Witnesses:-
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UNITED STATES PATENT OFFICE.

LAZARD KAHN AND RINEHART CHRIST, OF HAMILTON, OHIO, ASSIGNORS TO
F. & L. KAHN & BROTHERS, OF SAME PLACE.

GAS-STOVE.

SPECIFICATION forming part of Letters Patent No. 464,688, dated December 8, 1891.

Application filed April 11, 1891. Serial No. 388,518. (No model.)

To all whom it may concern:

Be it known that we, LAZARD KAHN and RINEHART CHRIST, of Hamilton, Butler county, Ohio, have invented certain new and useful Improvements in Gas-Stoves, of which the following is a specification.

This invention pertains to the construction and arrangement of burners on gas-stoves, and will be readily understood from the following description, taken in connection with the accompanying drawings, in which—

Figure 1 is a vertical section of a gas-burner shown in connection with a portion of the top plate of an ordinary gas-stove, the construction exemplifying our present improvements; Fig. 2, a plan of the same, the stem and button of the automatic lighting arrangement being omitted; and Fig. 3 a plan of the body of the burner, showing the manner of mounting the lever therein.

In the drawings, A indicates the ordinary top plate of a gas-stove; B, one of the usual cooking-holes therein and under which is located the burner; C, the body of the burner, having the ordinary disk form and disposed centrally under the cooking-hole of the top; D, the usual vertical flange formed with or attached to and dropping curtain-like from the margin of the top plate of the stove; E, the usual burner-pipe leading to the body of the burner and serving to convey to the burner the mixture of gas and air for combustion; F, a plate forming the top of the body of the burner, this plate joining the vertical walls of the burner of the body and having a circular form, so as to be capable of rotation on the body of the burner; G, the gas ajutages distributed, as usual, around the periphery of the body of the burner; H, a center piece engaging over the top plate F and extending down through a central opening therein and into a juncture with the lower portion or body of the burner, this center piece thus serving as a central pivot about which the top plate F may turn, and serving also as a means for clamping the plate F to the body of the burner, this center piece H being shown in the exemplification as having a vertical opening entirely through it; J, a bolt uniting the center piece H to the body C of the burner; K, an arm projecting rigidly from

the burner-plate F and extending outwardly and upwardly to engage the under surface of the stove-top A; L, a bolt securing the outer end of the arm K rigidly to the stove-top, the body of this bolt and the openings through which it passes being square, so as to prevent improper swiveling of the arm upon the bolt; M, lugs projecting inwardly from the flange or side plate D and serving to support the outer end of the burner-pipe E at some distance from the side plate, so that air is at liberty to enter the outer end of the burner-pipe E; N, the gas-supply pipe leading from the source of gas-supply; O, the gas-nozzle on the discharging end of this pipe concentric with and near the outer end of the burner-pipe E, so that the forcible inflow of gas from pipe N to the burner-pipe will project that gas into the burner and at the same time by injector-like action draw atmospheric air in at the open end of the burner-pipe, the mixture of gas and air thus going to the burner; P, a valve-seat formed in the nozzle O; Q, a valve-rod disposed within the burner-pipe and having its end in the form of a valve engaging the valve-seat P and having its inner end in the neighborhood of the center of the burner; R, a weighted lever pivoted to the body of the burner and having the inner end of the valve-rod attached to it, whereby the gravity of the lever tends to press the valve-rod into seating or closed position and prevent the discharge of gas from the gas-pipe N; S, a stem working freely in a vertical guide in the burner and resting with its lower end upon the lever R, so that downward pressure upon the stem will lift the weighted lever and move the valve-rod to open position and permit the gas to flow to the burner; T, a head or button on the upper end of this stem and projecting normally above the top of the stove, so that a cooking-vessel or the like set upon the top of the stove will depress the stem and open the gas-valve; U, a tube connected with the gas-pipe N and projecting inwardly toward the burner and having its inner end formed with a minute aperture disposed contiguous to the jet-holes G of the burner; V, upwardly-open notches formed in the body of the burner and roofed by the center piece H; W, trunnions integrally formed upon the le-

ver R and journaled in these notches, and X a projection from the body of the burner provided with an eye for the support of the inner end of the tube U.

5 Gas-pipe N will of course have the usual gas-cock, so that the burner may be positively cut off from the source of supply when the stove is not in use, such cock being also used, as usual, to regulate the quantity of gas
10 flowing to the burner and the consequent heat of the flame; but assuming such cock to be open, still no gas can flow from the nozzle O into the burner, for the reason that the nozzle is closed by the valve-rod Q and held
15 closed by the weighted lever; but when a cooking-vessel is set upon the stove, then the lever is tipped and the valve-rod pulled open, and the gas is at liberty to flow to the burner mixed with air, as usual, and the gas can be
20 lighted at the burner-holes. A small flame also burns at the inner end of tube U. When the cooking-vessel is removed, then the weighted lever will rock and valve-rod Q will shut off the supply of gas from the interior of
25 the burner, but the small flame will continue to burn from tube U. When the vessel is again set on the stove, the valve-rod is opened automatically and gas admitted to the burner and it lights from the flame from tube U. In
30 this way the gas is admitted to and shut off from the burner automatically as a vessel is placed upon or removed from the stove—a result not at all novel. When the supply of gas is cut off by closing pipe N by means of
35 the usual stop-cock, then of course even the small flame from pipe U becomes extinguished. Burner-pipe E projects rigidly from the body C of the burner, and it of course projects in the proper direction to receive gas
40 from the nozzles, as does also the tube U. The burner is sustained by the arm K, which projects outwardly from the burner in the direction best suited for its attachment to the stove-top. Plate F and the arm as are liberty

to turn about the body of the burner, so that 45 the arm may project in any desired direction with reference to the projection of burner-pipe E, tube U, and valve-rod Q. Bolt J holds the parts of the burner together, and the center piece H forms a cap over the trunnions of the lever. When the body of the
50 burner is separated from the other parts, the lever may be readily disconnected, as will be understood by reference to Fig. 3. The outer end of arm K is so attached to the stove-top, 55 as by means of the exemplifying square bolt L, that the arm is incapable of pivoting upon this bolt so as to disturb the proper relationship between the valve-rod and the valve-seat formed in the nozzle. 60

We claim as our invention—

1. In a gas-stove, the combination, substantially as set forth, of a burner made in two or more parts pivotally united, an arm formed on one part and adapted for attachment to 65 the stove-top, a gas-pipe to supply the burner with gas, an eye formed on the burner, and a tube engaging said eye and communicating with said gas-pipe.

2. In a gas-stove, the combination, substan- 70 tially as set forth, of a burner formed in two or more parts pivotally united, an arm formed on one part and arranged for attachment to the stove-top, and two tubes attached to another part of the burner, one tube for admit- 75 ting gas and air to the burner and the other tube for maintaining a lighting-flame.

3. In a gas-stove, the combination, substantially as set forth, of a gas-burner body hav- 80 ing upwardly-open notches, a burner part secured to said body and roofing said notches, and a lever provided with trunnions engaging said notches.

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Witnesses:

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