No. 677,021. Patented June 25, 1901.

A. G. CRAMER.

GAS STOVE.

(Application filed June 30, 1900.)

(No Model.)

Fig. 1.

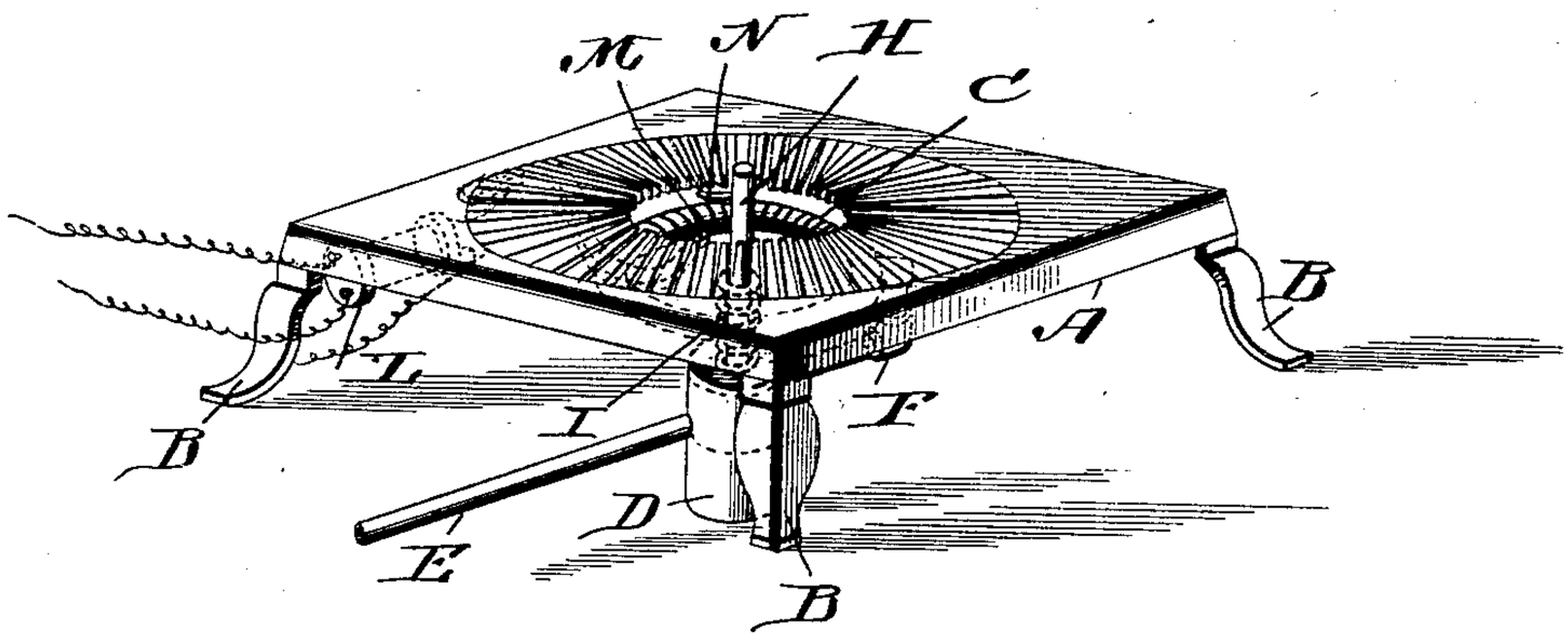


Fig. 3.

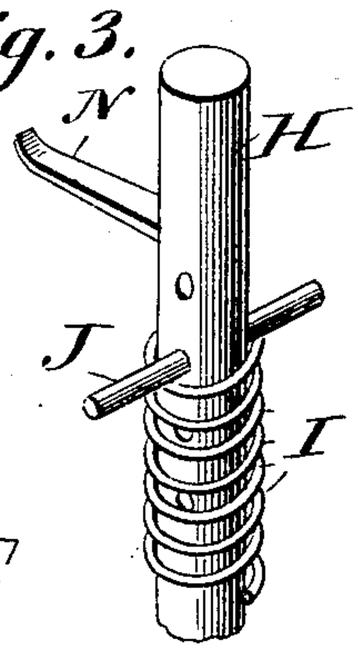
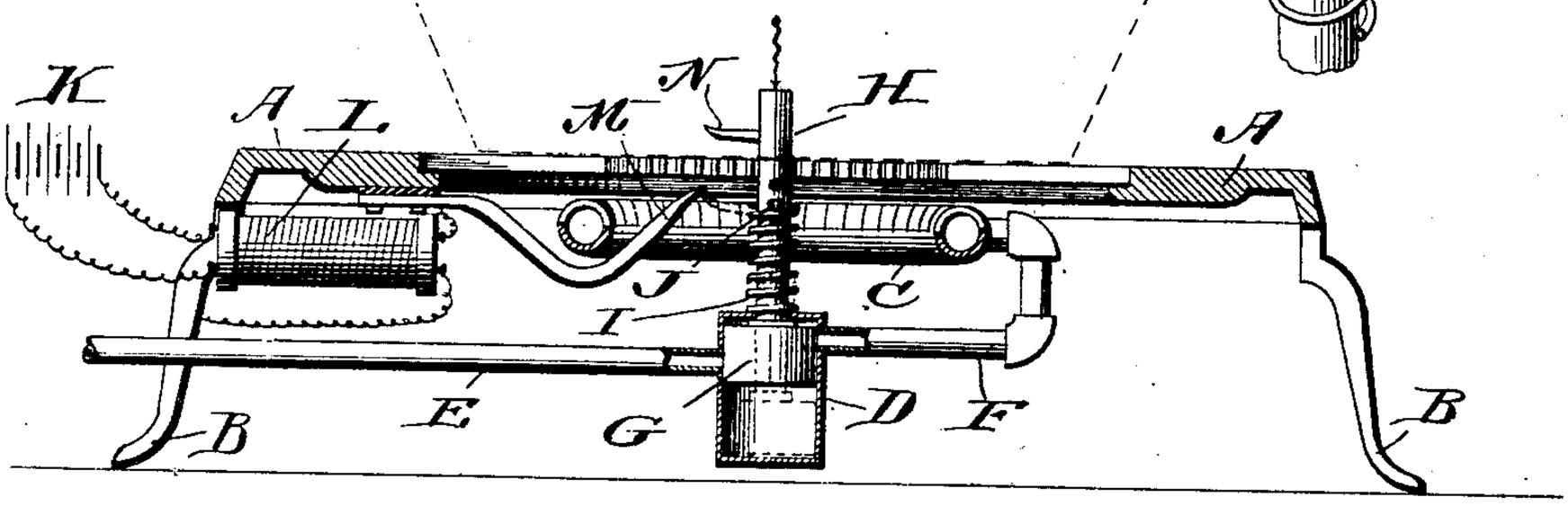


Fig. 2.



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UNITED STATES PATENT OFFICE.

ARTHUR G. CRAMER, OF PHILADELPHIA, PENNSYLVANIA.

GAS-STOVE.

SPECIFICATION forming part of Letters Patent No. 677,021, dated June 25, 1901.

Application filed June 30, 1900. Serial No. 22,161. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR G. CRAMER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Gas-Stoves, of which the following is a specification.

This invention relates to improvements in gas-stoves; and the object is to provide a stove in which the gas-supply is automatically controlled by the placing of a cooking utensil upon the stove and having an ignition device also automatically operated by the utensil.

The invention consists in the novel features of construction which will be hereinafter fully described, pointed out in the claims, and clearly illustrated by the accompanying drawings, in which—

Figure 1 is a perspective view of a gas-stove constructed in accordance with my invention. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a detail view illustrating the construction for adjusting the spring of the valve-stem.

Referring more particularly to the drawings, A designates the frame of the stove, having supporting-legs B and an annular burner C. Arranged beneath the burner is a cylinder D, with which the gas-supply pipe E communicates. A pipe F is connected at its upper end with the annular burner and at its lower end with said cylinder at a point above the communication therewith of pipe E. The flow of gas to this pipe F is controlled by a valve G, movable in said cylinder and having its stem H extending upwardly above the annular burner to be engaged and depressed by a cooking utensil placed upon the stove. The depression of this rod causes the valve to be moved downwardly in the cylinder and establishes communication between the pipes E and F. The rod is held normally raised by a spring I, coiled thereabout, the lower end of said spring resting on the top of the cylinder and the opposite end engaging a pin J, extending through a perforation in the rod, a series of perforations being provided, so that the pin may be adjusted to vary the tension of the spring.

K indicates a battery, and L a coil secured in any desired position upon the framework of the stove, one of the wires from the coil extending to a point adjacent to the rod, where it is attached to a platinum contact-point M, the other wire of the coil being connected with one of the legs of the stove or frame. The rod H carries a platinum contact-point N, which when the rod is depressed is adapted to engage the point M, generating a spark which ignites the gas, the contact-point N being so placed as to cause the spark to be generated a sufficient length of time after the gas has been permitted to flow into the pipe F to insure a supply of gas in the burner when the said spark is generated. The point M is insulated from the stove in any well-known manner to prevent the current from being short-circuited. As soon as the cooking utensil is removed from the stove the spring returns the valve to its normal position, cutting off the supply of gas.

From the above description it will be seen that I produce a simple construction of gas-stove in which the gas is automatically supplied to the burner and cut off therefrom by the placing or removal of a cooking utensil from the stove and in which the gas is automatically ignited.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a gas-stove, of a valve for controlling the gas-supply, a movable member connected with the valve and normally extending into the path of an article to be placed upon the stove, and provided with means for forming an electrical spark, and an electrical circuit including said means, whereby a spark is formed when the valve is operated to turn on the gas.

2. The combination, with a gas-stove, of a valve for controlling the gas-supply, a spring-actuated stem connected with the valve and normally projecting above the top of the stove, spark-forming mechanism connected with said stem, and an electrical circuit including said mechanism, whereby a spark is formed when the stem is depressed to turn on the gas.

3. The combination with a gas-stove, the supply-pipe of which is provided with a cyl-

inder, of a reciprocatory valve in the cylinder adapted to open or close the pipe when it is reciprocated, a spring-actuated stem secured to the valve and projecting above the top of the stove, a pin projecting from the stem, a contact-point arranged in the path of said pin, and adjacent to the burner, and an electrical circuit including said points, said parts being so arranged that the gas will be turned on and a spark formed when the valve and stem are depressed.

4. The combination with a gas-stove, of a valve in the gas-supply pipe, the stem of which normally projects above the top of the stove and is perforated and provided with a pin, said pin projecting from one side thereof, a spring around the stem, a pin through one of the perforations of the stem for engaging with and adjusting the tension of the spring, and an electrical circuit including the projecting pin and provided with a contact-point in the path of the pin, whereby a spark is formed when the stem is depressed to turn on the gas.

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