

(No Model.)

I. SPIELMANN.

GAS HEATER.

No. 348,641.

Patented Sept. 7, 1886.

Fig. 1.

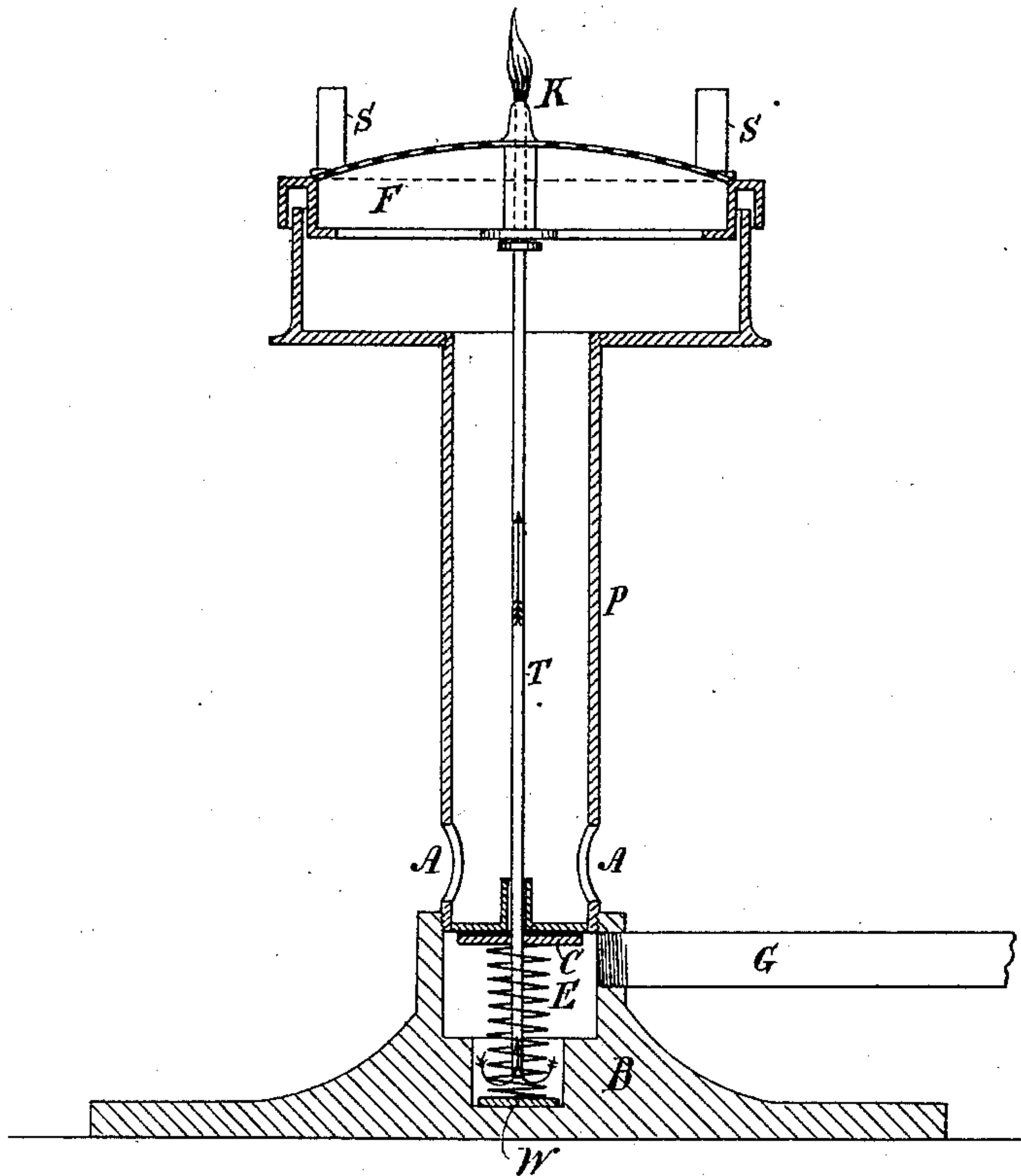
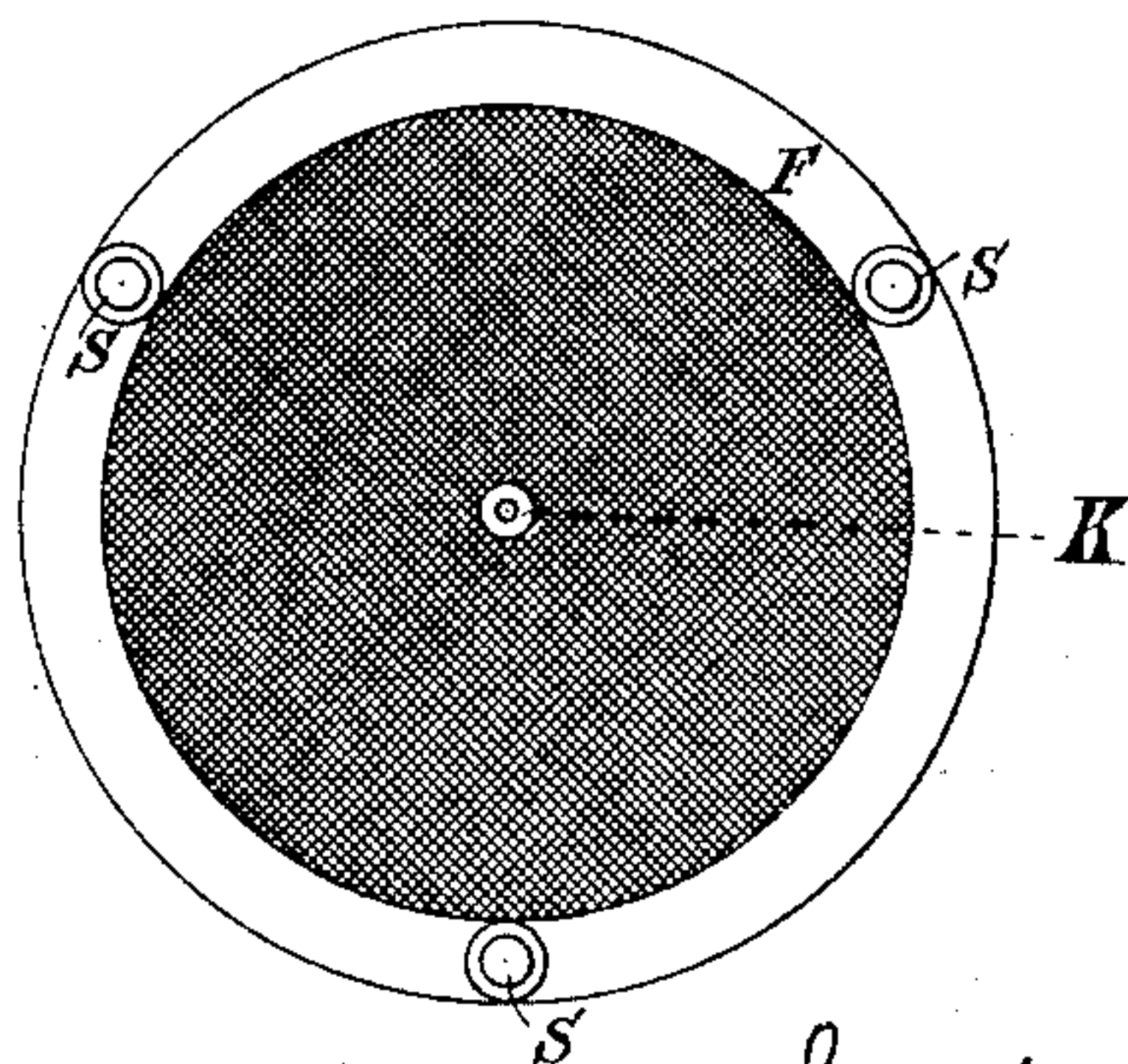


Fig. 2.



Witnesses

Joe R. Bowen.
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Inventor

Isidore Spielmann,
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UNITED STATES PATENT OFFICE.

ISIDORE SPIELMANN, OF LONDON, COUNTY OF MIDDLESEX, ENGLAND.

GAS-HEATER.

SPECIFICATION forming part of Letters Patent No. 348,641, dated September 7, 1886.

Application filed January 23, 1886. Serial No. 189,537. (No model.) Patented in England February 3, 1885, No. 1,509.

To all whom it may concern:

Be it known that I, ISIDORE SPIELMANN, of London, in the county of Middlesex, England, have invented a certain new and useful
5 Improvement in Gas-Heaters, of which the following is a specification.

My invention relates to the construction and arrangement of gas-heaters in such a manner that the heating-flame becomes automatically extinguished when the object heated is removed, and only burns when the object is placed above the burner. For this purpose I support the stem which carries the burner by a counter-weight or spring slightly overbalancing it, and arrange in the passage to the
10 burner a valve or slide in such a manner that when an object is placed above the burner, on supports projecting from it, its weight makes the burner descend, and thus the valve or slide
20 port is opened and gas is admitted to the burner. When, on the other hand, the object is taken off, the counter-weight or spring causes the burner to ascend and so to close the gas-passage, thus extinguishing the heating-flame. The burner employed may be of
25 any known kind, such as any of the various forms of the Bunsen or atmospheric burner, with or without a wire-gauze distributor. In many cases it is convenient to make the burner self-lighting. For this purpose I provide
30 a small jet, the supply of gas to which is effected through a by-pass, so that it is not cut off when that to the main flame is cut off. This jet-tube may be made to move with the
35 main burner and have its supply controlled by a valve or slide arrangement, so that the small jet is extinguished when the main flame is lighted, and is itself lighted when the main flame is extinguished.

40 Figure 1 of the accompanying drawings is a vertical section, and Fig. 2 is a plan, of one form of gas-heater according to my invention, suited for use on the table.

Similar letters of reference designate corresponding parts in both figures.

45 The gas-supply pipe G leads into a cavity in the base B, from which cavity a small tube, T, ascends, supporting at the top an open frame, F, and a kindling-burner, K. The frame
50 F is covered with wire-gauze or perforated metal, and has several studs, S, projecting up from it. On the tube T is fixed a collar, C, faced with leather or other suitable packing material, and against this collar presses a

spring, E, of sufficient strength to support the tube T and the top frame, F. In this condition gas passes into the tube T by its lower mouth, as indicated by the arrows, and supports a small flame at K; but there is no other issue for gas from the cavity of B, as the collar C acts as a valve, closing the thin annular passage around the tube T. When a cooking vessel or dish is placed upon the studs S, its weight, overcoming the force of the spring E, presses down the tube T and its collar C, and
60 now gas issues by the narrow annular passage surrounding T and ascends the interior of the pillar P, becoming mixed with air that enters by the lateral apertures A. The mixture of gas and air, as it issues through the porous
70 cover of F, is ignited by the flame K, and its flame serves for heating the vessel or dish resting on the studs S. A packing-washer, W, being placed in the bottom of the base-cavity, serves to close the mouth of the tube T when
75 it is pressed down, and thus causes extinction of the kindling-flame at K when the main flame is burning. On removing the load from the studs S the tube T is again raised by the spring closing the valve C and opening the
80 mouth of T. The kindling-flame K thus becomes lighted again and the main flame is extinguished.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, in a burner, of a gas-supply pipe or conduit therefor, a valve for controlling the passage of gas, a movable support for a utensil to be heated connected with such valve, a perforated covering for such support, through which gas passes to be ignited, and a projection or projections on said support extending above said covering, and upon which the utensil to be heated rests, substantially as specified.

2. The combination, with a main burner, a gas-supply pipe or conduit therefor, and a valve for controlling the passage of gas, of a movable support for a utensil to be heated connected with such valve, a supplemental
100 burner, and an independent gas-supply pipe or conduit for the latter, substantially as specified.

ISIDORE SPIELMANN.

Witnesses:

GEORGE COGDALE,
SYDNEY CLARKE HOOK.