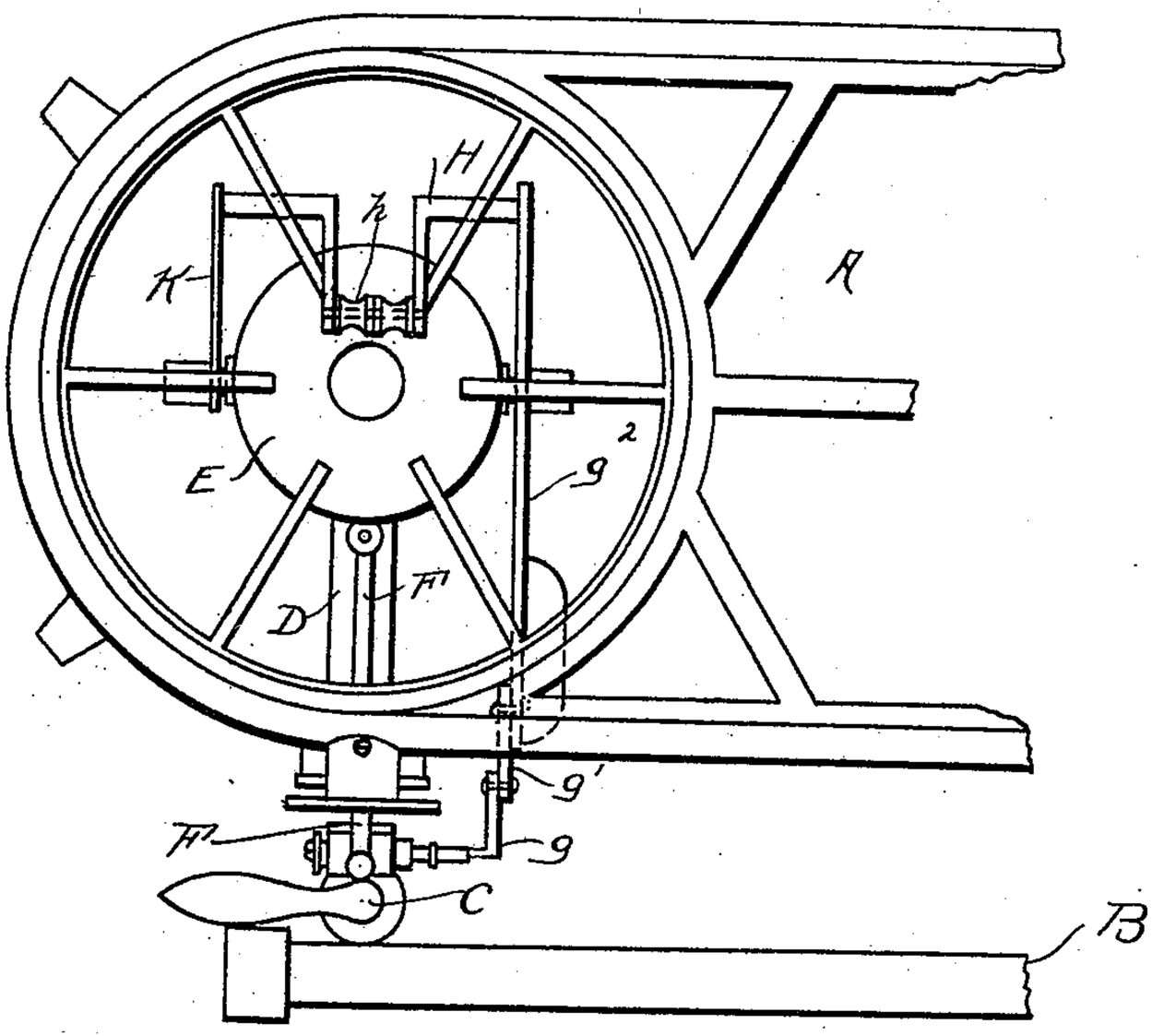
(No Model.)

C. MELLISH.

SHUT-OFF ATTACHMENT FOR GAS JETS, &c.

No. 582,297. Patented May 11, 1897.

FIG. 1



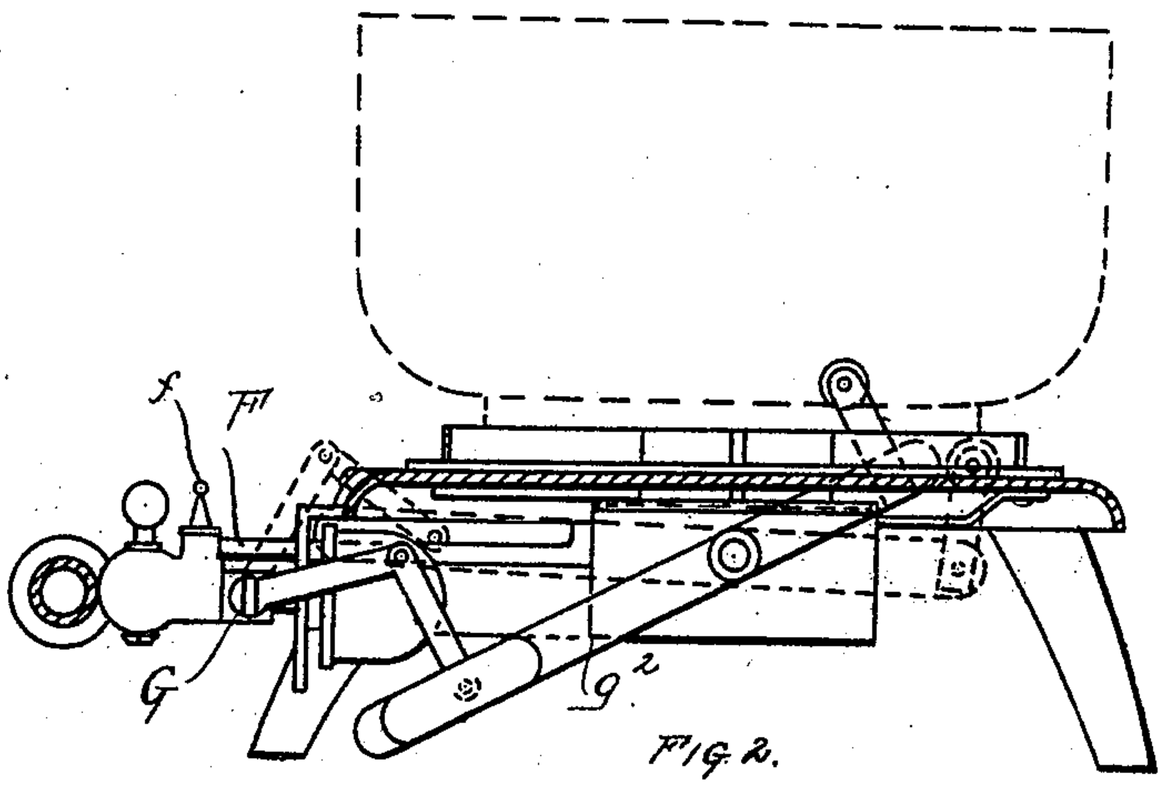


FIG. 2.

WITNESSES:
C. B. Larson
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INVENTOR
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BY
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ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES MELLISH, OF BROOKLYN, NEW YORK, ASSIGNOR OF ONE-HALF TO LEON L. BURR, OF SAME PLACE.

SHUT-OFF ATTACHMENT FOR GAS-JETS, &c.

SPECIFICATION forming part of Letters Patent No. 582,297, dated May 11, 1897.

Application filed March 19, 1896. Serial No. 583,963. (No model.)

To all whom it may concern:

Be it known that I, CHARLES MELLISH, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Shut-Off Attachments for Gas or Similar Devices, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to automatic shut-off attachments for gas burners, jets, or similar devices; and the object thereof is to provide an attachment of this character which is simple in construction and effective in operation and which is automatically operated to prevent a large quantity of gas from being consumed when the stove or other device is not in use by providing an auxiliary burner which is always lighted and from which the burner of the stove is ignited by the above-mentioned automatic device; and with these and other objects in view the invention consists in the construction, combination, and arrangement of parts hereinafter more fully described in the following specification and illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a stove provided with this attachment. Fig. 2 is a vertical section of Fig. 1.

Similar letters of reference designate like parts throughout both views.

Referring to the drawings, A designates a gas-stove of the usual construction provided with a supply-pipe B, regulating-cock C, and communicating by means of the pipe D with a burner E, the burner frame and stand being provided with inwardly-directed projections or supports of the usual character, it being understood that this construction is of the usual form ordinarily employed in gas-stoves of this character, and I therefore do not claim the same as my invention.

Running from the pipe D, near the connection of said pipe with the supply-main, is an auxiliary pipe F, lying upon the pipe D, the inner end of which is directed upwardly and supplied with a burner, the top of which is in close proximity to the orifices of the main burner E, and mounted in pipe D is a valve G, having an orifice formed therein adapted to communicate with the bore of the pipe D when the article to be heated is placed upon the burner, which depresses the yoke-shaped frame connected with a regulating apparatus by a link g', one end of which is pivotally connected with the weighted end of the lever g^2, forming one side of said frame, the other end of said link g' being pivotally connected to the crank-arm g, secured to the valve. To the free end of the link is pivoted one end of the counterweighted lever g^2, which is eccentrically pivoted to the burner E at one side thereof, and to the free end of the lever is pivoted one end of the yoke-shaped frame H, in the central portion of which are mounted rollers, and the other or opposite end of said frame H is pivotally connected with the short lever K, the free end of which is pivoted to the opposite side of the burner E. The supply of gas which passes through the auxiliary pipe F may be regulated by a small set-screw f, which is located in said pipe between the cock C and the valve G. The object of this yoke-shaped frame H and the counterweighted lever g^2 is that said valve G is normally held in a closed position, so that when the burner E is ignited by the cooking utensil or other vessel forcing the yoke-shaped frame downwardly against the action of the counterweighted lever the opening of the valve G will register with the opening of the pipe D, allowing the full supply of gas to pass through said pipe to the burner E, which burner is lighted from the flame of the burner of the auxiliary pipe F, which causes the instantaneous ignition of the gas from the main burner as soon as the vessel to be heated shall have depressed the yoke-shaped frame without the difficulty or trouble of lighting said main burner when it is desirous to use the same.

When the vessel is removed from the stove, the weight upon the outer end of the counterweighted lever g^2 forces said lever downwardly, closing the valve G, thereby cutting off the supply of gas from the main burner E and leaving the small burner of the auxil-

iary pipe F lighted, and this small burner is kept lighted until the main burner is again required.

It will be observed that the burner-supports limit the downward movement of the cross-piece connecting the short lever K with the counterweighted lever g^2.

In the construction illustrated in the accompanying drawings I have shown my attachment applied to only one supply-pipe, but it is obvious that the attachment may be applied to several burners without departing from my invention, as the operation will be exactly the same.

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

The combination in a gas-heater having a suitable burner, of a pipe connecting the burner with the supply-pipe, a valve in said pipe adjacent to its connection with the supply-pipe, a crank-arm one end of which is connected with said valve, a long lever eccentrically pivoted to one side of the burner, the long weighted end of which extends below and adjacent to said valve, a link pivotally connected to the weighted end of said lever and with the free end of said arm, a short lever pivoted at one end to the burner opposite the long lever, a frame consisting of a central revoluble portion having two angular arms, the ends of which are connected by a cross-piece forming a double receiver, the ends of said frame being connected with the free ends of the long and short levers, whereby the cross-piece connecting the angular arms of the frame is normally projected above the burner-supports and affords an extended receiving-surface for the article to be heated without decreasing the heating capacity of the burner, the downward movement of said cross-piece being limited by the burner-supports and means for automatically igniting the burner when the article to be heated is placed in position, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 17th day of March, 1896.

CHARLES MELLISH.

Witnesses:
C. GERST,
M. A. KNOWLES.