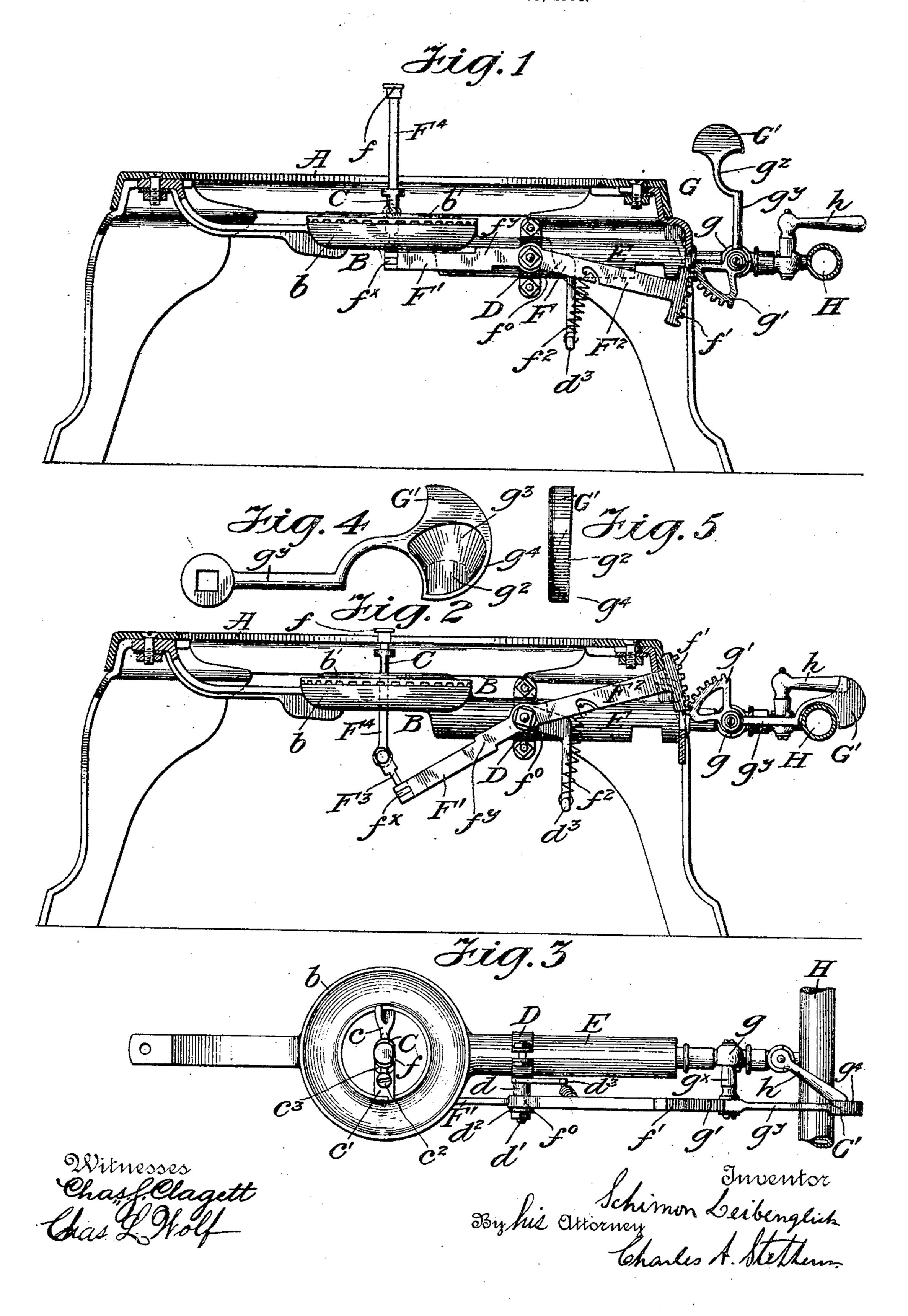
S. LEIBENGLICK. ATTACHMENT FOR GAS STOVES. APPLICATION FILED DEC. 15, 1904.



UNITED STATES PATENT OFFICE.

SCHIMON LEIBENGLICK, OF NEW YORK, N. Y.

ATTACHMENT FOR GAS-STOVES.

No. 801,025.

Specification of Letters Patent.

Patented Oct. 3, 1905.

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To all whom it may concern:

Be it known that I, Schimon Leibenglick, a subject of the Emperor of Russia, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Attachments for Gas-Stoves, of which the following is a specification.

This invention has reference to attachments
of for gas-stoves, and pertains to that class of
devices wherein a movable stem is adapted to
be depressed by a pot or other article placed
thereon, such depression effecting through
suitable connections the opening of a gassupply cock controlling the flow to the burner.

One of the prominent objects of my improvements is to insure the automatic cut-off of the gas-supply to the burner whenever the pot or other article is removed from said 20 burner, whereby the liability of the flame becoming extinguished and the consequent dangerous leakage of the gas are avoided. Another object is to permit the parts to be so adjusted that the flame when not in use will 25 be of reduced character, but upon placing a pot or other article in position the full supply of gas will be opened to increase the flame to its maximum extent, the parts, however, being then capacitated for the automatic extinguish-30 ment of the flame upon the subsequent removal of the pot or other article. I also have in mind simplicity and durability of construction, high efficiency of operation, and convenience of application to existing types of gas-35 stoves generally.

With the above and other purposes in view the invention consists in the novel construction and combination of parts clearly set forth in the subsequent detailed description and illustrated in the accompanying drawings, in which—

Figure 1 is a side view disclosing a burner and the gas connections of a gas-stove with my improvements embodied in connection therewith, the parts being in their normal or gas-cut-off position. Fig. 2 is a view similar to Fig. 1, but illustrating the parts as being in the position they occupy when a pot or other article is in position with respect to said burner. Fig. 3 is a plan view of the parts as they appear in Fig. 2, the top section of the burner being removed. Fig. 4 is a detail view of the secondary gas-cock detent as it appears at the side opposite to that shown in Fig. 2.

functions of the detent with respect to the handle of the main gas-cock.

Similar reference characters are employed to designate corresponding parts in the several figures of the drawings wherein they occur.

While the type and construction of the gasstove may be of any suitable character, the present description is confined to that disclosed as exemplifying a single application of my improved attachment in order to convey a 65 general understanding of the nature of the invention.

As illustrated, A in Figs. 1 and 2 indicates the plane of the top plate or platform of the stove, and B a gas-burner immediately below 7° a suitable opening in said plate. As is frequently the case, the burner comprises a lower section b, secured to the frame of the stove, and an upper removable section b, resting on the section b, the upper section containing in 75 its lower face a series of marginal radial grooves, at the outer mouths of which the issuing gas-jets are ignited in order to provide substantially an annular flame.

A vertical bridge or standard C has a lower 80 horizontal foot c recessed to engage the upper edge presented by the enlarged central opening in the lower section b, the bridge C being rigidly braced and secured in position by a notched block c', engaging the opening edge 85 at the opposite side and which is connected by an adjusting-screw c^2 to the foot c^3 of the bridge. The ribs or connections on the under side of the top section b', which cooperate to form the radial gas-passages, are removed 9° or reduced at diametrically opposite points of said section to accommodate the projecting portions of the foot c and block c' when such section is placed in position, the accurate adjustment of said section being provided for by 95 an indicating-mark on the upper side thereof.

A clamp D on the branch pipe E of the gassupply has integrally at one side thereof a horizontal projection d embodying a tenon and threaded portion d', the hub f° of a lever F being pivotally confined on said tenon between the shoulder formed by the latter and a washer d^2 . The lever F is of the peculiar shape illustrated in Figs. 1 and 2 and comprises at one side of its pivot a member F', having a short angular bend f° thereon, the member F^2 at the other side of the pivot being disposed slightly at an angle with regard to the general plane of the member F'.

The extremity of the member F' is thick- 110

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ened to admit of horizontally recessing the member end without weakening such member thereat, and pivotally secured within said recess is the toe f^{x} at the lower end of a link 5 F³, the upper enlarged part of which is pivotally connected to the lower enlarged rounded end of a vertical stem F^{*}, which is slidingly guided in the top of the bridge C and which has an enlarged circular rest f rigidly at its 10 upper extremity.

The lever member F² carries at its extremity a vertically-disposed gear-segment f', which meshes with a corresponding segment g', carried by a detent G, keyed on the lateral ex-15 tension g^x of the controlling-plug of the secondary gas-cock g. The parts are normally held in the position illustrated in Fig. 1 by a contractile spring f^2 , connected to the member F^2 and to an arm d^3 , depending from the

20 clamp D.

The more extended portion of the detent G is presented by a shank g^{y} and a head G', a part of the shank being bent to cooperate with the adjacent curved edge of the head to 25 constitute a semicircular depression g^{x} . That side of the head G' nearest the handle h of the cock in the main gas-supply pipe H contains a recess g^2 , immediately adjacent to which is an inclined face g^3 . It will be observed by 30 reference to Figs. 3, 4, and 5 that the circumferential portion of the head is presented by a lip or flange g^4 , a part of which is beveled.

With the parts as illustrated in Fig. 1 the main gas-cock H will be open and the second-35 ary cock g closed, the latter condition by reason of the depressed position of its detentsegment g' under the action of the segment f', induced by the contractile spring f^2 , the stem F^{*} being obviously in an upwardly-pro-40 jected position. Upon a pot or other article being placed in position over the burner, the stem F⁴ will be depressed thereby through the lever and segment devices turning the detent G downward and opening the secondary cock 45 g to admit gas to the burner, the jets issuing from which can then be ignited to effect the cooking or heating operation. The status will continue as long as the pot or other article is not disturbed; but immediately upon the re-50 moval of such pot or article the stem will be relieved of the weight and the spring f^2 permitted to restore the parts to their former position, thus automatically cutting off the

gas and extinguishing the flame. Should it be desired to have the gas-burner with a reduced flame during a period when the stove is not being used, the detent G is turned down, so that with the cock-handle h in a partially-open position the end of said 60 handle will be engaged within the recess g^2 of the head G' to retain the detent depressed and hold the lever and stem in positions corresponding with the partly-opened condition of the secondary valve. Now upon placing a 65 pot or other article in position the stem will be

forced down to its limit, thereby operating the lever and segments to further lower the detent-head G' to an extent sufficient to cause the end of the handle h to leave the recess g^2 and ride upon the inclined face g^3 , which lat- 7° ter will shunt the handle to its fully-open position, and consequently disengage the detent from being held by said handle. Therefore when the stem F is subsequently relieved from the weight of the pot or other article 75 the detent will be free to swing upward under the action of the spring, the secondary cock closed to cut off the gas-supply, and the lever and stem restored to their normal positions. The beveled lip of the head G' insures 80 the clearance of said head from the handle h, as the detent rises.

It will be appreciated from the foregoing description that the improvements embodying my invention are not only highly useful, but 85 are comparatively inexpensive and are of such character that they can be readily applied to existing constructions of gas-stoves.

I do not desire to be understood as limiting myself to the particular construction and ar- 9° rangements of parts shown and described, but reserve the right to all modifications within the scope of my invention.

Having now described my invention, what I claim as new, and desire to secure by Letters 95

Patent, is—

1. In a device of the character described, the combination with a burner and a cock controlling the gas-supply, of a vertically-movable stem, a pivoted lever having a gear-seg- 100 ment and pivotally connected to the lower end of the stem and turned thereby in one direction on its pivot, a spring for turning said lever in the opposite direction on its pivot to raise said stem and a rotatably-pivoted gear- 105 segment operatively connected with the segment of said lever and said cock and meshing with said lever, substantially as described.

2. In a device of the character described, the combination with a burner and cock con- 110 trolling the gas-supply, of a vertically-movable stem, a pivoted lever pivotally connected to the lower end of the stem by a link and turned by said stem in one direction on its pivot, a rigidly-secured depending arm, a 115 spring for turning said lever in the opposite direction on its pivot to raise said stem, one end of said spring secured to the depending arm and the other end to said lever and a pivoted gear-segment forming a detent-arm op- 120 eratively connected with said cock and said lever, substantially as described.

3. In a device of the character described, the combination with a burner and cock controlling the gas-supply, of a vertically-mov- 125 able stem, a pivoted lever having a gear-segment and pivotally connected to the lower end of the stem and turned by said stem in one direction on its pivot, a rigidly-secured depending arm, a spring for turning said lever 130

in the opposite direction on its pivot to raise said stem one end of said spring secured to the depending arm and the other end to said lever and a pivoted gear-segment operatively connected with said cock and said lever, substantially as described.

Signed at New York, in the county of New

York and State of New York, this 20th day of October, A. D. 1904.

SCHIMON LEIBENGLICK.

Witnesses:

A. Perlman, Chas. L. Wolf.