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G. KEITH

INJECTOR FOR GAS BURNERS

Filed Feb. 11, 1926

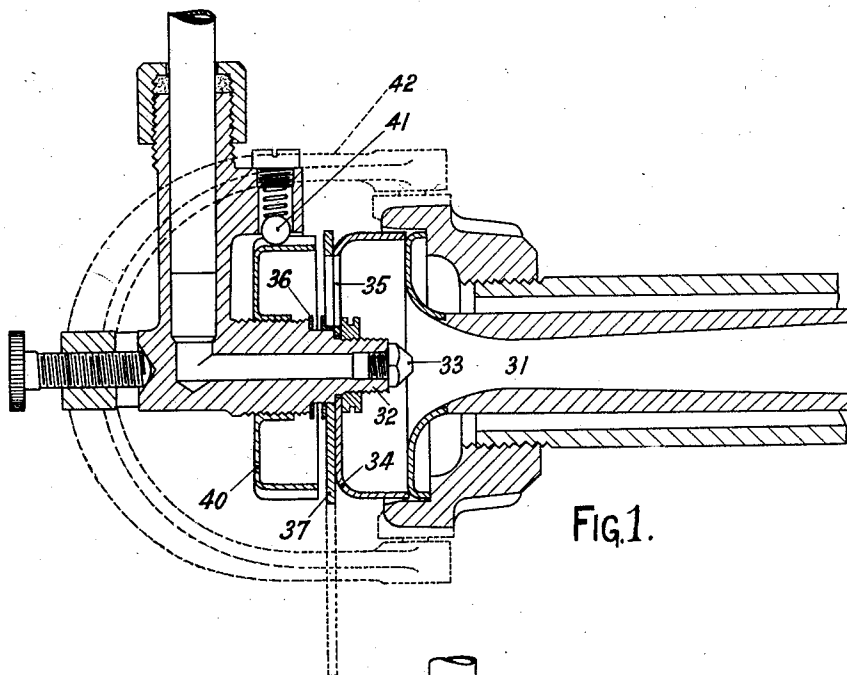


FIG. 1.

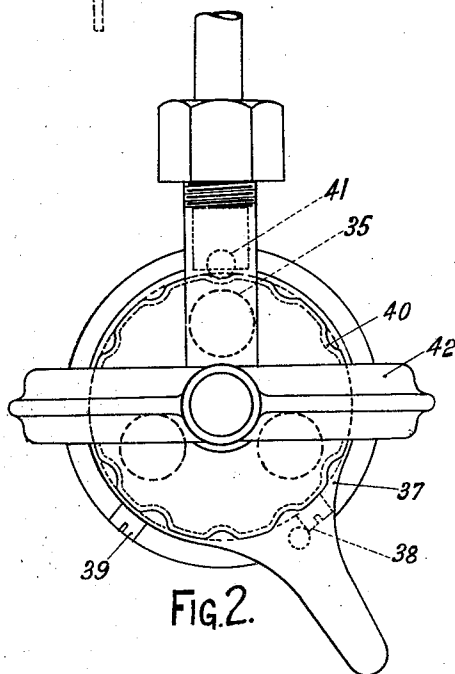


FIG. 2.

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UNITED STATES PATENT OFFICE.

GEORGE KEITH, OF LONDON, ENGLAND, ASSIGNOR TO JAMES KEITH & BLACKMAN COMPANY LIMITED, OF LONDON, ENGLAND, A BRITISH COMPANY.

INJECTOR FOR GAS BURNERS.

Application filed February 11, 1926, Serial No. 87,538, and in Great Britain February 24, 1925.

This invention refers to improvements relating to injectors for gas burners, particularly for installation in bread and biscuit ovens.

Fig. 1 is a vertical section and Fig. 2 an end view of an injector in accordance with the invention.

The device shown includes the usual Venturi throat 31 and a nipple-holder 32 with nipple 33 coaxial with the throat. Applied to the nipple-holder 32 is an apertured cap 34 designed to close the entrance to the throat and presenting in the present instance three air apertures 35. Beyond the cap 34 and pressed thereagainst, by a spring washer 36, is correspondingly apertured shutter 37 movable between two limiting positions defined by stops 38, 39, which in one limiting position unmasks the apertures 35 in the cap 34 and in another limiting position masks these apertures.

To regulate the passage of air through the apertures 35 when unmasked there is threaded on the stem of the nipple-holder 32 so as to be movable therealong a cap 40 the spacing of which from the shutter 37 determines the size of the air inlet opening.

The periphery of the cap 40 is formed with longitudinal grooves engageable by a spring-urged ball 41 serving to lock the cap 40 temporarily in any selected position of adjustment.

The assembly comprising nipple-holder, caps, washer etc., is held to the injector body by means of a stirrup 42 as usual, in such wise that it may be readily taken apart for cleaning, the arrangement being such that the dismantlement does not disturb the air adjustment.

What I claim is:—

An injector for gas burners comprising a Venturi tube, a gas nipple at one end of said tube, a nipple holder carrying said nipple, said holder being removably fitted in position coaxial with said tube, an apertured cap applied to said nipple holder and bearing on the same end of said tube, said cap surrounding said nipple, an apertured shutter bearing on the outer end of said cap and rotatable on said holder, stops co-operative with said shutter to hold said shutter either in a position with the shutter apertures in register with the cap apertures or with the shutter masking the cap apertures, a second cap mounted on said holder behind said shutter, said second cap adjustable along said holder towards and from said shutter, and means for locking said second cap temporarily in any selected position of adjustment.

In testimony whereof I have signed my name to this specification.

GEORGE KEITH.