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PATENT SPECIFICATION



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PROVISIONAL SPECIFICATION

Improvements relating to Gas Lighters

I, ALBERT REGINALD WILLMOTT, a British Subject, of Central Buildings, Station Approach, Coulsdon, in the County of Surrey, do hereby declare the nature of this invention to be as follows:—

This invention relates to gas lighters of the general kind described in my specification No. 406,473. An object of the present invention is to provide constructions in which certain disadvantages of these devices may be obviated; it is desired to provide a device in which the torch or jet which is used as a gas flame for lighting may be withdrawn from its support without effort whether the gas tap which controls it is on or off, and also replaced in like circumstances. It is frequently desirable to be able to withdraw these torches without turning the gas on, for repair, adjustment, cleaning, or like reasons.

According to this invention means are provided for retaining the torch or jet in its holder which associates it with the tap, of such a nature that withdrawal and maybe replacement can take place without the tap being operated; in one form of the invention a slight manipulative movement may be required, and in another form the mere application of slight force.

According to one embodiment of the invention there is a tubular housing for the torch, which preferably contains a

pyrophoric striker element, and overhanging the entrance to this housing is a radially operating leaf or like spring so arranged as to be forced aside by a projection, recess, or equivalent, on the jet or torch or stem thereof, and this spring is preferably arranged as a simple leaf of spring steel secured to the outside of the housing, maybe by the same clip or fitting which secures the housing to the tap.

In an alternative embodiment of the invention the housing for the torch carries pivotally a retaining member which is adapted to swing out of the way either when the tap is turned on (by gravity), or by a simple manipulative movement of the user. This retaining element is adapted to fall by gravity into such a position that it will retain the torch in the housing, in the off position of the tap.

In either of the above constructions the stem of the torch preferably carries a conical or chamfered annular collar adapted to be engaged by the retaining element, and maybe to push that element aside upon replacement of the torch in the housing.

Dated the 26th day of April, 1935.

For the Applicant,

F. J. CLEVELAND & CO.,

Chartered Patent Agents,

29, Southampton Buildings,

Chancery Lane, London, W.C.2.

COMPLETE SPECIFICATION

Improvements relating to Gas Lighters

I, ALBERT REGINALD WILLMOTT, a British Subject, of Central Buildings, Station Approach, Coulsdon, in the County of Surrey, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to gas lighters of the kind as exemplified in my prior Patent No. 406,473, i.e. of the kind having a support or housing for a jet or torch, carried on the spindle of the gas tap

regulating the supply of gas to the jet or torch. An object of the present invention is to provide constructions which obviate certain disadvantages of prior proposals.

It has previously been proposed to provide devices of the kind referred to, in which the jet or torch could only be removed after opening of the gas-cock. The present invention seeks to provide a device in which the jet or torch may be withdrawn from its support without substantial effort, whether the tap or cock is

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in the open or closed position, and also replaced in like circumstances. In my prior specification No. 406,473 it was further proposed to provide resilient or other retaining means for restraining the withdrawal of the torch or jet, but no proposal was made to provide retaining means as characterised by the present invention.

10 It is frequently desirable to be able to withdraw the torch or jet without turning on the gas, for repair, adjustment, cleaning, or like reasons.

15 According to the present invention, there is provided a device of the kind referred to, wherein means are provided for retaining the torch or jet in its housing or support, which means are so adapted that withdrawal and replacement of the torch is possible in any tap position, such withdrawal and replacement being unimpeded when the tap is open. In one preferred form of the invention a slight manipulative movement is required to allow withdrawal and replacement when the tap is closed, and in another form the mere application of a slight force suffices.

20 In order that the invention may be more readily understood, one embodiment is described with reference to the accompanying drawing, in which:

Figure 1 is an elevation of the device in the inoperative position; and

25 Figure 2 is a similar view showing the device in position for use.

30 Construction of the device is for the most part similar to that described in my prior Specification No. 406,473. The torch or jet comprises a tube 1 with a steel striking flange or lip 2. The tube 1 is connected by rubber or like flexible tube (not shown) to a supply of gas controlled by a cock, as shown and described in Specification No. 406,473. Likewise pyrophoric material is provided in the housing 6 carried by the collar 5 on the spindle of the gas controlling tap. The housing 6 is retained by the screw 7, which also serves to retain the pyrophoric material, by passing through the wall of the housing and bearing against a split sleeve for retaining the pyrophoric material, as described in Specification No. 406,473. Pivoted to the housing 6 is a stirrup-shaped catch member 8, which comprises arms 9) one on each side of the housing 6), bent over at their extremities to engage depressions or holes 10 in the housing 6. The arms 9 are formed integral with a U-shaped catch portion 11 which is adapted to embrace the pipe 1 below the collar 12 when the torch is in the inoperative position as shown in Figure 1. If it is desired to remove the torch from the housing 6 without turning

on the gas, for repair, adjustments, cleaning or like reasons, the catch 8 can be swung to release the torch by a simple manipulative movement of the user. However when the torch is to be used for lighting burners etc. the tap is turned to the open position with the housing 6 by movement of the torch and the gas thereby turned on. Such movement of the housing 6 causes the catch 8 to fall by gravity into the position shown in Figure 2, where the torch is free to be withdrawn unimpeded.

It will of course be appreciated that the invention is not in any way limited to the above described form and that other forms of gravity-operated catches might be provided. Also in another embodiment not illustrated there is provided a leaf or like spring attached to the tap casing, which when the tap is closed is adapted to restrain the removal of the torch or jet, and to release it to allow unimpeded withdrawal and replacement on opening of the tap. However, it will be understood that by application of a slight force by the user, the torch can be removed for cleaning, etcetera, when the tap is closed.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A device of the kind referred to, wherein means are provided for retaining the torch or jet in its housing, which means are so adapted that withdrawal and replacement is possible in any tap position, such withdrawal and replacement being unimpeded when the tap is open.

2. A device of the kind referred to, wherein a catch provided to retain the jet or torch within its support or housing, is adapted to move under the influence of gravity to release the torch for unimpeded removal and replacement when the tap is opened, whilst the torch can be withdrawn by slight manipulative movement of the catch without opening of the tap.

3. A device as set forth in Claim 2, wherein the catch comprises a stirrup portion pivotally mounted on the housing of the torch, whereby on opening the tap the catch swings under the influence of gravity to release the torch.

4. A device as set forth in Claim 3, substantially as described with reference to and illustrated in the accompanying drawings.

5. A device as set forth in Claim 1, wherein the retaining means comprises a spring or the like which overhangs the end of the housing only when the tap is closed, and cooperates with a collar on the torch to retain the latter within the housing.

Dated this 25th day of April, 1936.

For the Applicant,
F. J. CLEVELAND & CO.,
Chartered Patent Agents,
29, Southampton Buildings,
Chancery Lane, London, W.C.2.

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[This Drawing is a reproduction of the Original on a reduced scale.]

Fig. 1.

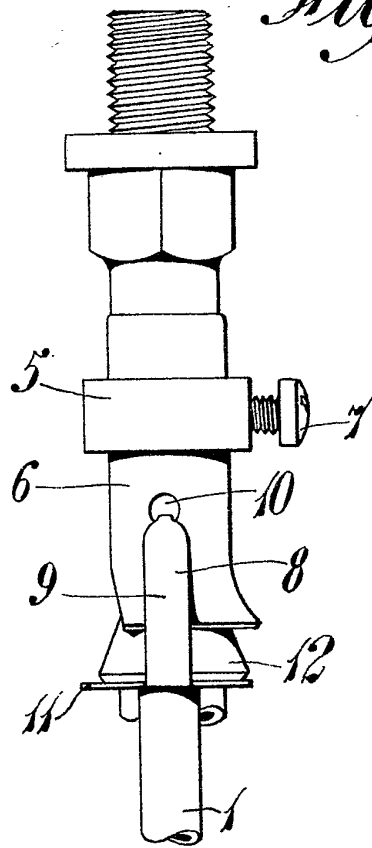


Fig. 2.

