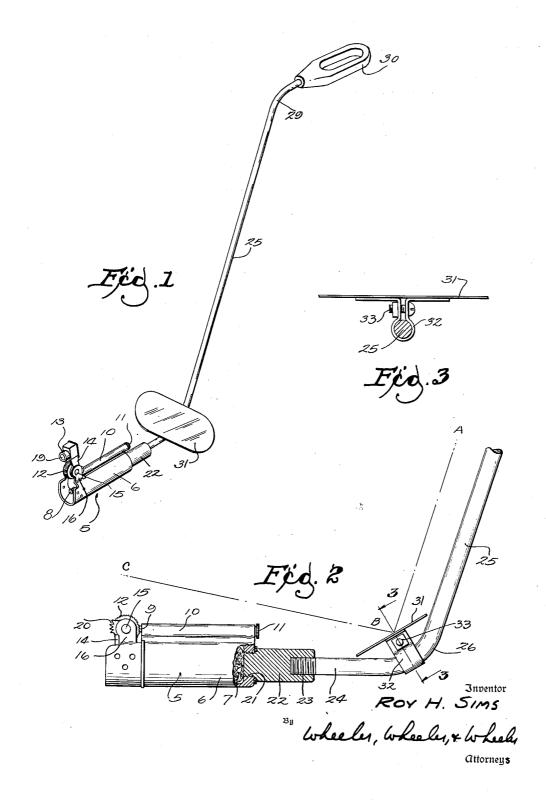
OFFSET BURNER LIGHTER AND VIEWER DEVICE Filed Sept. 6, 1949



UNITED STATES PATENT OFFICE

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OFFSET BURNER LIGHTER AND VIEWER DEVICE

Roy H. Sims, Waukesha, Wis.

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2 Claims. (Cl. 67-6.1)

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The invention relates to improvements in an offset burner lighter and viewer device.

The lighting of a gas burner for an oven or a gas burner in any enclosed fire pot, and particularly the lighting of an oven burner for a domestic gas stove is always attendant with danger due to the location of the burner out of the line of vision of the person lighting the burner, and also due to the necessary location of the burner at a point spaced from the door or opening through which the operator's hand must extend if a match or other ordinary igniting device is to be used. Furthermore, gas burners are usually made up in multiple units spaced from one another, with a result that the more remote burner units oft times project a large amount of combustible gas before flame is instituted, and the pursuant explosion, even though minor, is sufficient to ignite clothing or the hair of the operator.

The problem presented is one involving not only the application of a match or other igniter element at a number of different ignition points along a multiple unit burner, but is also one involving difficulties in "sighting" to position the igniter and still to keep the face and eyes of the operator in a safe position.

Always there is the tendency for the operator to attempt to view the fire pot at a time when the danger is greatest and, if upon viewing the fire pot, it is ascertained that all units of the burner are not functioning, there is a necessity for igniting the non-functioning burner under dangerous conditions.

It is the principal object of the invention to provide a burner lighter of such a construction that a person lighting a gas oven burner will be protected from the hazards of late ignition. Such late ignition not infrequently is the cause of a minor explosion which may burn or otherwise injure the operator.

In this connection it is an object of the invention to provide an oven burner lighter having an elongated arm with a handle offset from the igniter so that the operator may light the burner from a sheltered position at the side of the oven and need not stand directly in front of the open oven door or insert his arm into the oven.

It is a further object of the invention to provide a burner lighter having a reflector positioned near the igniter to enable the operator to view the condition of the burner from a sheltered position.

Other objects will be more apparent to one skilled in the art upon an examination of the following disclosure.

In the drawings:

Figure 1 is a perspective view of a burner lighter, offset handle and viewer embodying the invention.

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Figure 2 is an enlarged side elevation view of the lighter and reflector with portions broken away or shown in section to show details of construction.

Figure 3 is a cross sectional view taken along 10 the line 3—3 of Figure 2.

In the preferred embodiment of the invention the oven lighter includes an automatic igniter, such as a cigarette lighter or the like, which is brought in proximity to the gas jet for ignition 15 purposes. The igniter is of conventional design and is indicated generally as 5. By way of exemplification only the igniter comprises a hollow reservoir 6 containing an absorbing material 7 for the retention of the lighting fluid, a wick 8, and a flint 9 which is fed through a cartridge 10 by a thumb screw 11 into intimate contact with a striker wheel 12. The striker wheel is provided with a roughened periphery, which is rotatable by the operator's thumb into frictional 25 engagement with the flint 9 to project a spark against the wick 8 for the purpose of creating a flame. The igniter is further provided with a cap 13 which is carried on dual arms 14 pivoted at 15 to the paired brackets 16 mounted on the reservoir case 6. The cap is provided with a flame snuffer 19 which fits in air tight position over the wick 8 to extinguish the flame when the snuffer is snapped to closed position. The cap arm 14 is provided with a serrated portion 20 which is finger engageable at the same time as the periphery of the striker wheel to remove the cap from the wick simultaneously with the projection thereupon of the spark from the flint.

The base of the igniter is provided in a conventional manner with a tapped filler opening 21 through which it may be supplied with combustible lighter fluid. A threaded plug 22 is in threaded engagement with the threads at 21 and is likewise provided with a tapped bore 23 45 within which the offset threaded end 24 of an operating arm 25 is connected. Thus the plug 22 not only serves as a plug for the reservoir 6, but also serves as a connection to the operating arm. The operating arm 25 is provided with a bend or elbow 26 near the igniter 5 and with an elbow 29 in the end of the arm remote from the igniter. The respective elbows are preferably disposed in the same plane. The arm is further provided at its end adjacent elbow 29 55 with a handle 30 for the convenient manipula-

tion of the oven lighter. In this manner the handle is offset from an axis through the igniter and adjacent arm portion so that the operator may insert the lighter into the oven without exposing his hand to the open front of the oven.

Within the crook of elbow 26 a reflector is mounted upon a clamp bracket 32 which is provided with a nut and bolt tightening means 33 to properly position the reflector so that the operator holding handle 30 and projecting the 10 igniter into a fire pot may view the igniter and

the burner parts adjacent it.

It is readily understood that one using the lighter may grasp the handle 30 while he stands in a sheltered position at the side of the oven and thrust the lighted igniter 5 into proximity to the oven burner so as to light it, and yet remain shielded from the effect of a late ignition or explosion of the oven gases. Furthermore, the condition and status of the gas jets 20 may be observed from this sheltered position by the reflection thereof in the reflector 31. The line of sight is indicated generally as A-B-C in Figure 2.

The location of the reflector in the crook of 25 the angle at 26 provides protection for the reflector, as will be seen from an examination of

Figures 1 and 2.

I claim:

1. In a burner lighting device, the combina- 30 tion with an igniter, of an arm connected to the igniter, said arm being provided with an

elbow near the igniter, a reflector mounted in the crook of said elbow, and a handle connected to the end of the arm remote from the igniter, said arm being provided with a second elbow near the handle, said elbows being disposed in substantially the same plane and the said reflector being disposed transversely of said plane.

2. In a device of the character described, a lighter having a reservoir for lighter fluid and a threaded filler opening therefor, a plug in threaded engagement with the filler opening and provided with a bore for reception of an offset portion of an operating arm, an operating arm having an offset handle at one end and an offset portion at the other end, said offset portion providing a crook at its junction with the arm, and a reflector sheltered in the crook of said offset portion.

ROY H. SIMS.

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