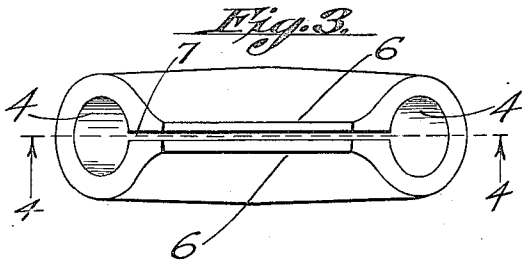
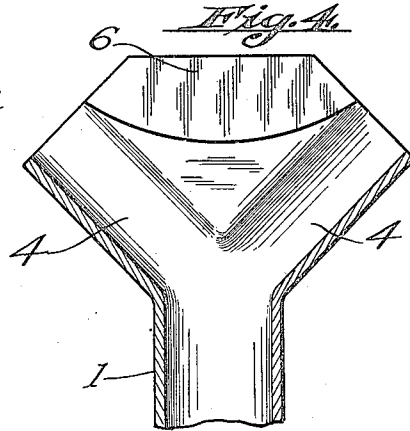
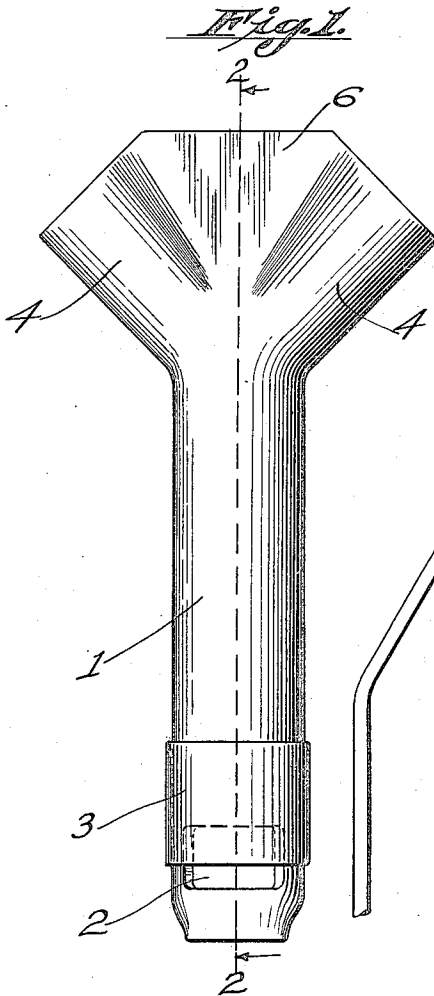
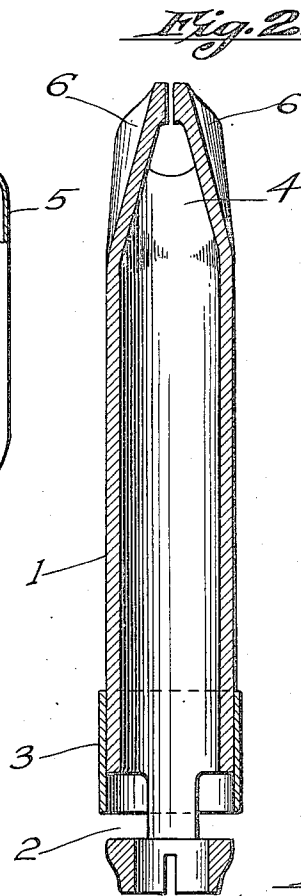


J. B. REEVES.
BURNER.
APPLICATION FILED MAR. 2, 1921.

1,424,739.

Patented Aug. 1, 1922.



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UNITED STATES PATENT OFFICE.

JOHN B. REEVES, OF LOS ANGELES, CALIFORNIA.

BURNER.

1,424,739.

Specification of Letters Patent.

Patented Aug. 1, 1922.

Application filed March 2, 1921. Serial No. 449,101.

To all whom it may concern:

Be it known that I, JOHN B. REEVES, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Burners, of which the following is a specification.

It is the object of this invention to provide a burner of the type employing a pilot light in connection therewith, and particularly adapted to be employed in a hot water heater.

The burner is of the type having a plurality of burner openings, one of which is adjacent the pilot light, and the invention has for its object the provision of means whereby when the fuel discharged through the burner opening adjacent the pilot light is ignited, the flame will immediately travel to the other burner openings so as to ignite the fuel discharged therethrough. By this arrangement the accumulation of fuel at a burner opening, before ignition thereof, is prevented and as a consequence the possibility of explosive ignition of the fuel at said burner opening is eliminated.

The invention will be readily understood from the following description of the accompanying drawings, in which

Figure 1 is a front elevation of the burner constructed in accordance with the invention.

Fig. 2 is a transverse section on the line 2—2 of Fig. 1.

Fig. 3 is a plan view of the burner.

Fig. 4 is a section on the line 4—4 of Fig. 3.

In the present embodiment of the invention I have shown the burner as having a Y head forming two burner openings or discharge nozzles. It will be obvious, however, that the invention is also applicable to other types of burners having a plurality of burner openings.

The burner comprises a tube 1 having the usual air intake 2 at its base. This air intake may be controlled by a usual sliding

sleeve 3. The upper end of tube 1 terminates in tubes 4 forming the respective arms of a Y head, and the open ends of these tubes form the discharge nozzles which provide the burner openings. A usual pilot light 5 is arranged adjacent one of the discharge nozzles, and said discharge nozzle communicates with the opposite discharge nozzle in such manner as to cause the flame from the pilot light to immediately travel across to the distant nozzle and thereby ignite the fuel discharged therefrom.

For this purpose walls 6 are arranged in the space between the arms of the Y head and are formed as continuations of the inner walls of tubes 4, so that the interiors of said tubes communicate with the space 7 between walls 6. The walls 6 are so arranged that opens 7 is a restricted slot extending from one tube 4 to the other, and as a consequence when the pilot at one discharge nozzle is ignited by the pilot light, as previously described, the flame will immediately travel through slot 7 to the opposite burner opening so as to ignite the fuel discharged at said opening.

Various changes may be made without departing from the spirit of the invention as claimed.

What is claimed is:

A burner comprising a tubular body, the upper end of which terminates in a Y-shaped head, the diverging arms of which head are hollow and communicate with the opening through the tubular body, parallel walls formed integral with and arranged between the inner portions of the arms of the Y-shaped head, said walls extending above the upper ends of the arms of the Y-shaped head, and the upper portions of said walls being spaced apart to form a relatively narrow slot that communicates with the openings through both arms of the Y-shaped head.

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

JOHN B. REEVES.