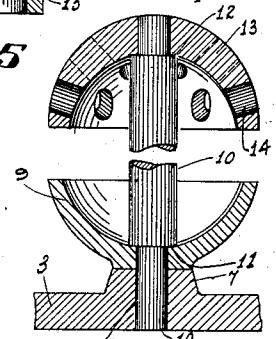
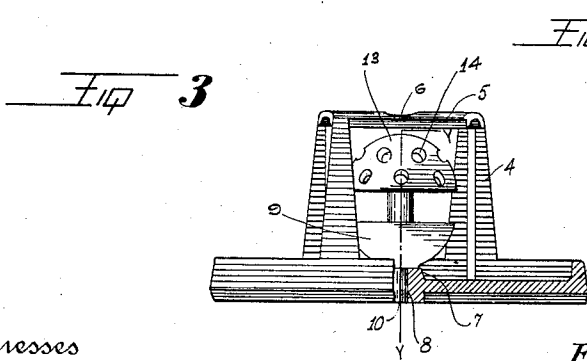
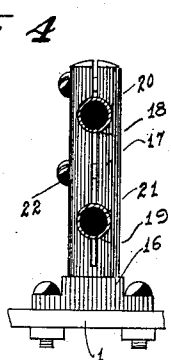
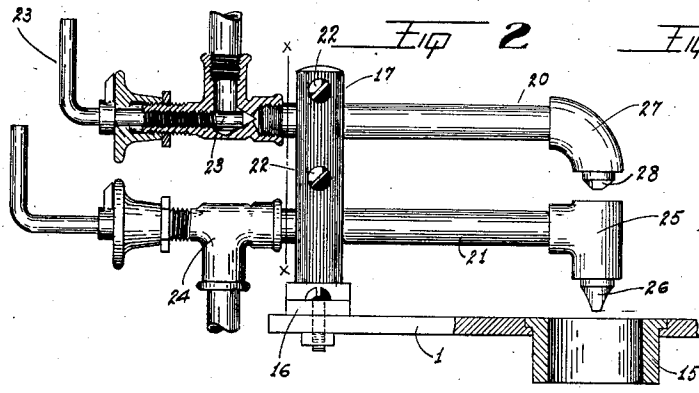
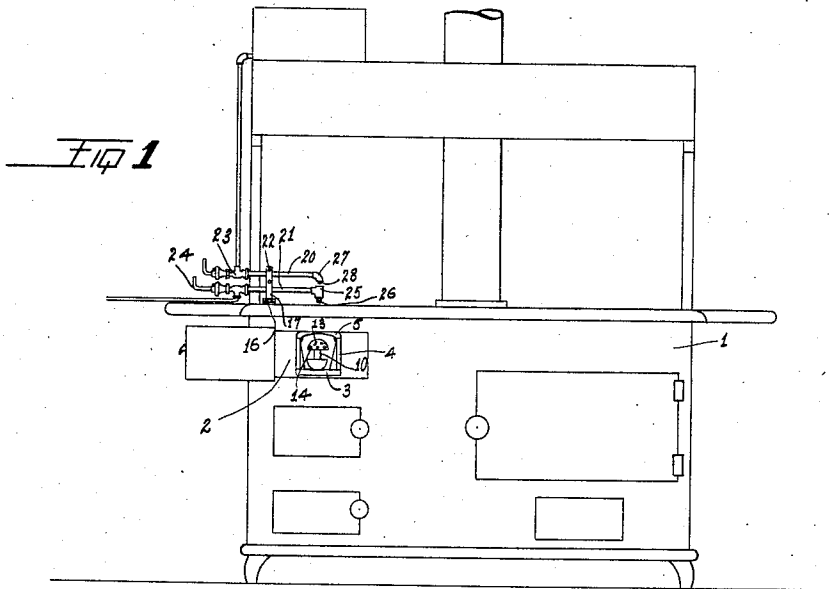


F. HENDRICKS.
 PETROLEUM BURNER.
 APPLICATION FILED SEPT. 18, 1912.

1,063,126.

Patented May 27, 1913.



Witnesses
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UNITED STATES PATENT OFFICE.

FRED HENDRICKS, OF LODI, CALIFORNIA.

PETROLEUM-BURNER.

1,063,126.

Specification of Letters Patent.

Patented May 27, 1913.

Application filed September 18, 1912. Serial No. 721,016.

To all whom it may concern:

Be it known that I, FRED HENDRICKS, a citizen of the United States, residing at Lodi, in the county of San Joaquin, State of California, have invented certain new and useful Improvements in Petroleum-Burners; and I do declare the following to be a clear, full, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this application.

This invention relates to improvements in petroleum burners and is particularly designed as an improvement over my issued patent, dated the 22nd day of August, 1911, No. 1,001,143, the object of the invention being to produce an improved combined fuel and water inlet for the burner and also to produce a more effective form of burner whereby by the combination of these elements a more satisfactory adjustment of the parts may be had and also a more perfect combustion can be had than with the use of the previous burner mentioned in said patent.

A further object of the invention is to produce a simple and inexpensive device and yet one which will be exceedingly effective for the purposes for which it is designed.

These objects, I accomplish by means of such structure and relative arrangement of the parts as will fully appear by a perusal of the following specification and claims.

On the drawings similar characters of reference indicate corresponding parts in the several views.

Figure 1 is a diagrammatic outline view of a stove showing my improved burner therein. Fig. 2 is an enlarged view of the fuel and water inlet pipes. Fig. 3 is an enlarged view of the burner proper. Fig. 4 is a sectional view taken on a line X—X of Fig. 2. Fig. 5 is a sectional view taken on a line Y—Y of Fig. 3.

Referring now more particularly to the characters of reference on the drawings, the numeral 1 designates the stove and numeral 2 the fire box therein. The numeral 3 designates the base of my improved burner which is substantially the same as shown in the above mentioned patent and the same may or may not be provided with

four upwardly projecting supporting posts 4 having a removable flanged cap 5 disposed on their upper ends and provided with a central orifice 6.

Disposed centrally in the member 3 and between the members 4 is a collar 7 having a central orifice 8. The numeral 9 designates a cup shaped member having a central orifice disposed through which orifice is a pin 10 having a shoulder 11, which pin 10 also projects into the orifice 8, the shoulder 11 then holding the member 9 in position on the top of the collar 7. On the upper end of the pin 10 is another shoulder 12, while the numeral 13 designates an inverted cup shaped member disposed over the shoulder 12 at a spaced distance from the member 9. This member 13 is provided with a plurality of orifices 14 similar to the orifices shown in the above mentioned patent, but slightly larger and disposed at a different angle from those shown in said patent. As can readily be seen, the structure of the pin 10 with its shoulders 11 and 12 and the orificed collar 7 permits all the parts to be readily disposed in position or removed without the necessity of using a nut or bolt as is done in the structure shown in the above mentioned patent.

The numeral 15 designates a collar disposed in the top of the stove just over the inverted member 13 and I then supply fuel and water to drop through said collar 15 upon said member 13 by means of the following structure, to-wit: the numeral 16 designates a base bolted to the top of the stove 1 mounted on which is a vertical split supporting standard 17 provided with two orifices 18 and 19. Through the hole 18 projects a water supply pipe 20 and through the hole 19 a fuel supply pipe 21, the same being clamped in position in the holes 18 and 19 respectively, by screws 22 projecting through the split member 17 to clamp the same against the pipes 20 and 21. The pipe 20 has a needle control valve 23 and the pipe 21 has a similar needle control valve 24.

On the end of the pipe 21 is a T-member 25 screwed into the end of which is a nipple 26 through which the fuel drips into the member 13. On the end of the pipe 20 is an elbow 27 screwed into which is a nipple 28 which drips the water through the T 25 where it mixes with the fuel and drips upon the member 13. The oil and water thus mixed drops upon the member 13 as de-

scribed and passes through the plurality of orifices 14 which partially gasifies it and it then drops into the receptacle 9 which is heated by reason of the fire in the burner 5 and the oil and water is further gasified or atomized and then passes above the member 3 where combustion takes place, a suitable amount of air of course is taken into the burner through the collar 15 which also aids 10 in the combustion.

From the foregoing description it will be readily seen that I have produced such a device as substantially fulfils the objects of the invention as set forth herein.

15 While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of 20 the invention.

Having thus described my invention, what I claim as new and useful and desire to secure by Letters Patent is:

25 1. A device of the character described comprising the combination with a stove having a hole, of a burner disposed below said hole, a split standard secured to said stove and provided with two orifices, a fuel supply pipe projecting through one orifice,

a water supply pipe projecting through the 30 other orifice, means for clamping said standard against said pipes, a T-joint on the end of the fuel pipe, such T-joint being disposed over the hole in said stove, an elbow on the water pipe, such elbow being positioned to 35 discharge the water through said T-joint, as described.

2. A device of the character described comprising a burner having a base provided with a central orifice, a pin projecting into 40 said orifice, a cup-like receptacle mounted on said base and having an orifice, said pin projecting through said orifice and having a shoulder to hold such cup-like receptacle in 45 position on said base, an inverted cup-like receptacle provided with an orifice to receive the top of said pin, such pin having an upper shoulder against which said inverted member rests, said inverted member 50 being provided with a plurality of orifices, as described.

In testimony whereof I affix my signature in presence of two witnesses.

FRED HENDRICKS.

Witnesses:

STEPHEN M. BLEWETT,
CLARENCE M. SMITH.