

W. E. JORDAN.
DETACHABLE BURNER BOWL.
APPLICATION FILED AUG. 14, 1911.

1,056,796.

Patented Mar. 25, 1913.

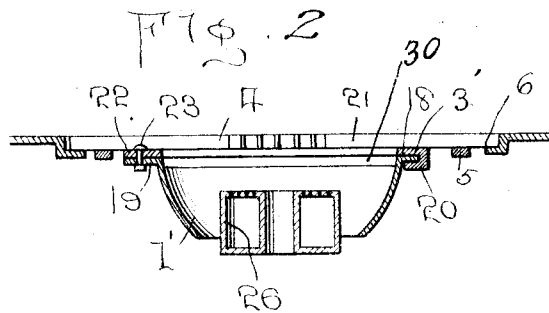
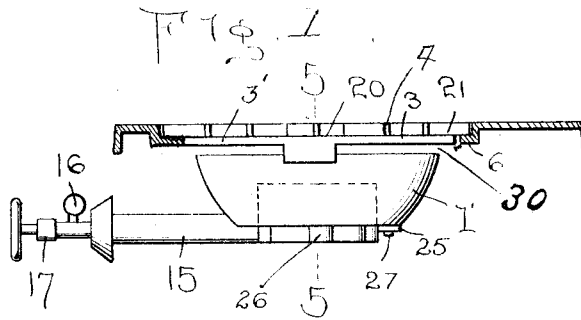


Fig. 6

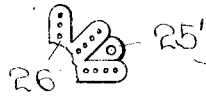


Fig. 3

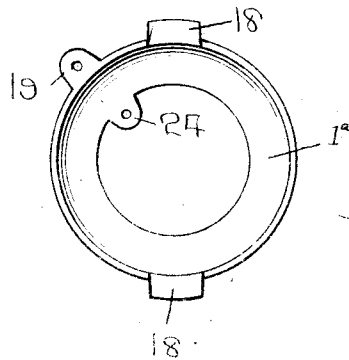


Fig. 4

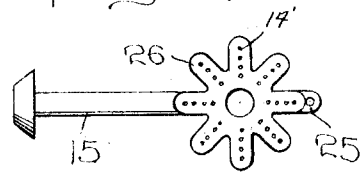
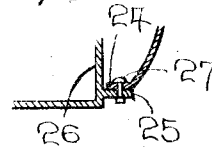


Fig. 5



WITNESSES:

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WESLEY E. JORDAN, OF ERIE, PENNSYLVANIA.

DETACHABLE BURNER-BOWL.

1,056,796.

Specification of Letters Patent.

Patented Mar. 25, 1913.

Application filed August 14, 1911. Serial No. 643,995.

To all whom it may concern:

Be it known that I, WESLEY E. JORDAN, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Detachable Burner-Bowls; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to fluid or gaseous fuel stoves, and it more particularly relates to a detachable burner bowl therefor.

An object of the invention is to provide a bowl to surround the burner and means for detachably connecting the bowl to a grate above the burner.

Another object is to provide a burner-bowl detachably suspended from the burner-grate of a fluid or gaseous fuel stove, the bowl being held against displacement, and serving to receive and guide a current of air to the openings of the burner, for controlling the supply of oxygen to be combined with the gas which emanates from the burner-openings, and, another object is to provide an improved burner-bowl which may be connected at its lower edge, to a radial projection of the burner, for preventing the bowl from rotating and thus becoming disengaged, the connection of the bowl serving to support the burner.

Other objects and advantages may be recited hereinafter and in the claims.

In the accompanying drawings which form a part of this application, Figure 1 is a sectional view of the burner plate, a modified form of connection being shown between the bowl and grate which are shown in side elevation. Fig. 2 is a cross sectional view on the line 5—5 of Fig. 4. Fig. 3 is a top plan view of a modified form of the bowl detached. Fig. 4 is a top plan view of a modified form of burner, showing the apertured retaining lug carried by one of the burner prongs or radial projections. Fig. 5 is a fragmentary view of a portion of the burner and bowl, showing the connecting means of the bowl and burner, as indicated in Fig. 4, and, Fig. 6 is a fragmentary top plan view of a slightly modified form of the burner, showing a lug located between two of the burner prongs.

Referring to the drawings in which similar reference characters designate corre-

sponding parts throughout the several views, 1' represents the bottomless burner-bowl, which is relatively small at its lower edge, being flared toward its upper edge. The outer ends of the bars 4 rest upon a downwardly and inwardly extending flange 6, of a stove top or burner-plate 7. A burner 14 extends upwardly into the bowl, and is encompassed by the latter and thereby protected from lateral draft. The bowl 1' also serves to receive air and to provide for proper expansion thereof, so that the gases, which emanate from the openings 14', may advantageously combine with the oxygen in said air, for the purpose of obtaining perfect combustion. A feed pipe 15 is connected with the burner 14 and with the supply pipe 16, a suitable valve 17 being provided for regulating the supply of gas.

In Fig. 2, the burner bowl 1' is shown as being provided with a horizontally extending flange 18, and a perforated and horizontally extending ear or lug 19 is formed on the outer and upper edge of the bowl 1' while, in the form of bowl 1^a, illustrated in Fig. 3, two of the flanges 18 and one of the ears or lugs 19 are employed. The flanges 18 are adapted to be seated upon and supported by the lugs 20, which are formed on the under surface of the grate-ring 3', by rotating the bowl, so as to slide the flanges 18 upon said lugs 20 of the grate ring, after which the perforated ear 19 will be bolted against a corresponding perforated ear 22 of the grate ring 3', by means of an ordinary bolt 23. The flanges 18 are extended a short distance above the upper edge of the bowl before they are directed outwardly, so as to leave a space 30 between the upper edge of the bowl and the under surface of the grate-ring 3' for the easy escape of the products of combustion, over the top edge of the bowl, the same as in the first form. The bowl may be connected with the burner by means of an inwardly and horizontally extending lug 24, integral with the lower edge of the bowl, and a similar lug or ear 25, carried by one or more prongs of the burner 26, with a bolt 27 through said lugs or ears, said ears being suitably perforated to receive said bolt. The lug or ear 25 is preferably located at or near the rear side of the burner; that is, the portion opposite to the valve 17 and pipe 15. It will also be understood that the ear or lug may be located between two of the burner

prongs 26 as shown at 25' in Fig. 6, or it may be extended from one prong of the burner, (see Fig. 4.)

5 The burner may be of any proper and ordinary form or type, and its construction is therefore not limited to the present disclosure.

10 In operation, air passes up around the burner and between the radial prongs 26 thereof, while a current of air is also passing through the central opening of the burner, and thus supplying oxygen to the center of said burner. It will be seen, therefore, that oxygen is admitted to the perforated upper surfaces of the burner-prongs, from all sides thereof, thus providing an even distribution of the oxygen, and resulting in an even flame; the expansion of the air, heated by the burner, and the consequent rising thereof, causing the upward draft of air through and around the burner.

20 Owing to the fact that the bowl, burner-plate and grate are formed separately, the cost and difficulty of casting the several parts are reduced to the minimum.

25 The detachable bowl may be omitted when desirable, and an unskilled person may easily remove and replace the bowl.

30 I have illustrated the grate as being secured to the burner-plate 7 by means of one bolt, numbered 13, at the front of the grate. This bolt, however, may be placed at any proper and desired point, and obviously, any desired number of bolts may be employed.

35 It will be seen that I have provided a device of this character which is fully capable of attaining the foregoing objects, and in a thoroughly practical and efficient manner.

40 I do not limit my invention to the exact details of construction, combination and arrangement of parts as herewith described and illustrated, but my invention may only

be limited by a reasonable interpretation of the following claims.

45

What I claim is:

1. The combination with a burner-plate having a grate located on the burner plate and a burner associated therewith under the grate, of a removable burner-bowl under the grate and encompassing the burner, said bowl having lugs projecting from its respective upper and lower edges, and means carried respectively by the grate and burner to receive thereupon the lugs extending from the respective upper and lower edges of said bowl. 55

2. The combination with a stove having a burner-grate including a ring, and a burner under the grate and including an outwardly extending lug, of a burner bowl encompassing the burner in spaced relation thereto and extending approximately to the under side of the grate, said bowl being open at the top and bottom and having lugs projecting from its respective upper and lower edges, the upper lug being adapted for engagement with said ring while the lower lug rests upon the lug of the burner, and means connecting with the lugs for securing the bowl in position. 65

3. In a stove, the combination of a burner having a lug, a burner-bowl encompassing the sides of the burner and having lugs one of which is secured to the burner-lug for supporting a side of the burner, and a grate having a lug with which one of the lugs of the burner-bowl is movably connected. 75

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses. 80

WESLEY E. JORDAN.

Witnesses:

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