No. 812,869

## PATENTED FEB. 20, 1906.

## A. O'HARE & C. B. WESTON. HEATER. APPLICATION FILED JULY 28, 1905.

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WITNESSES imn

INVENTORS Hare ATTORNEYS

## UNITED STATES PATENT OFFICE.

ANNA O'HARE AND CHARLES B. WESTON, OF BROOKLYN, NEW YORK.

## HEATER.

No. 519,869.

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**Specification of Letters Patent.** 

Fatented Feb. 20, 1906.

Application fied July 28, 1905. Berial No. 271,578.

To all whom it may concern:

Be it known that we, ANNA O'HARE and CHARLES B. WESTON, citizens of the United States, residing at Brooklyn, in the county of 5 Kings and State of New York, have invented certain new and useful Improvements in Heaters, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use ro the same.

This invention relates to heaters, and par-ticularly to what are known as "gas-heat-ers;" and the object thereof is to provide an improved device of this class which may be

15 connected with an ordinary gas-fixture in the manner of an illuminating-burner and which may be used to heat or aid in heating a room or compartment wherever gas is used for heating or illuminating purposes. The invention is fully disclosed in the fol-

20 lowing specification, of which the accompanying drawing forms a part, in which the separate parts of our improvement are designated by suitable reference characters, said draw-25 ing being a sectional side elevation of our im-proved heater and showing the same connected with an ordinary gas-fixture.

In the drawing forming part of this specification we have shown an ordinary gas-fix-30 ture comprising a tube a, having a coupling-

- head a<sup>1</sup>, with which is connected a threaded tip  $a^3$ , and in the practice of our invention we provide a heater which comprises a cupshaped member b, to the top of which is bolt-
- 35 ed or otherwise secured a horizontal cap c. The cup-shaped member b is provided centrally of the bottom thereof with an opening  $b^{*}$ , below which is a tubular neck member  $b^{*}$ , and connected with the gas-fixture is an or-to dinary Bunsen-burner tube d, provided in the bottom thereof with a threaded thimble  $d^2$ ,
- having a small port or passage  $d^3$ , and the upper end of the Bunsen-burner tube d is adapted to be inserted into the cup-shaped mem-45 ber b, as shown in the drawing, and the parts
- $b, d, and a^{2}$  are detachably connected. Around the top of the cup-shaped member b are a plurality of radially-arranged recesses b', through which the gas and air which passes

50 through the burner-tube d escapes, and said gas and air is ignited and burns in a horizontal flame beneath the cap c.

The cap c consists of a bottom member  $c^{i}$ , composed of asbestos, together with a top

member  $c^3$ , composed of sheet metal, and said 55 parts are bolted or screwed together, this operation being performed in the form of construction shown by the bolts  $b^{s}$ , which secured the cup-shaped member b to the cap c. In practice we provide the top part c' of the 66 cap c adjacent to the outer perimeter thereof with an annular bead or raised portion  $c^4$ , and i the edges of the parts  $c^2$  and  $c^3$  are connected, preferably, by means of a metal strip e, bent thereover.

A burner made in this manner will produce a high degree of heat, and by making the bottom member  $c^2$  of the cap c of asbestos the bottom of said cap remains clean at all times and no deposits of any kind will collect there- 70 on, and all deposits of dust, carbon, or other substances which would otherwise collect thereon will be burned away, and the bottom of the cap member c represents a clean and substantially white or gray surface at all 75 times.

The object of using the asbestos bottom for the cap member c is to deflect the heat and throw it out into the room or other compartment in which our improved heater is 80 used, and it will be apparent that this device may be of any desired size, and the asbestos bottom thereof may be made of any desired thickness, and a heater made in this manner may be used wherever devices of this class 85 are required.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is-

1. A gas-heater comprising a cup-shaped 90 member having a horizontal cap member secured to the top thereof, said cup-shaped member being provided at the top thereof and beneath the cap member with a plurality of recesses forming ports or passages, and said 95 cup-shaped member being also provided in the bottom thereof with an opening and a Bunsenburner tube adapted to be inserted into said opening, substantially as shown and described.

2. A gas-heater comprising a cup-shaped member having a horizontal cap member secured to the top thereof, said cup-shaped member being provided at the top thereof and beneath the cap member with a plurality 105 of recesses forming ports or passages, and said cup-shaped member being also provided in the bottom thereof with an opening and Bun-

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sen-burner tube adapted to be inserted into said opening, the cap member being also com-posed of a bottom part of asbestos and a top part of metal, substantially as shown and de-saribed. In testimony that we claim the foregoing as our invention we have signed our names, in