

No. 842,135.

PATENTED JAN. 22, 1907.

G. CAMPION & M. WYANT,
POKE HOLE VALVE FOR FURNACES.
APPLICATION FILED AUG. 23, 1906.

Fig. 1.

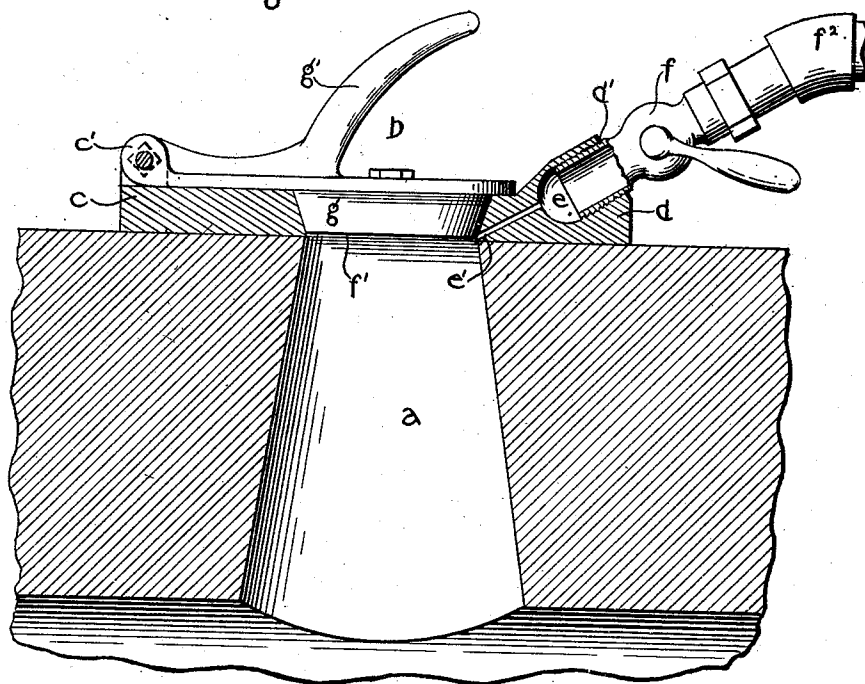
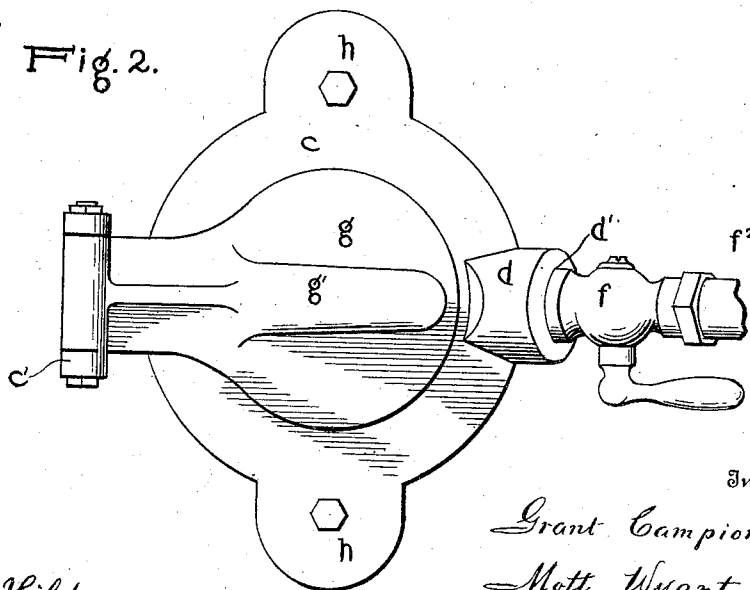


Fig. 2.



Witnesses

Stuart Hilder.
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UNITED STATES PATENT OFFICE.

GRANT CAMPION AND MOTT WYANT, OF ANDERSON, INDIANA, ASSIGNORS
TO JAMES L. BURSON, OF VENITO, VIRGINIA.

POKE-HOLE VALVE FOR FURNACES.

No. 842,135.

Specification of Letters Patent.

Patented Jan. 22, 1907.

Application filed August 23, 1906; Serial No. 331,774.

To all whom it may concern:

Be it known that we, GRANT CAMPION and MOTT WYANT, citizens of the United States, and residents of Anderson, in the county of Madison and State of Indiana, have made a certain new and useful Invention in Poke-Hole Valves for Furnaces; and we declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a central vertical section of my invention as applied with parts in full lines. Fig. 2 is a plan view of the invention.

The invention relates to poke-holes for gas-producers, having for its object the provision of simple and efficient means for delivering a blast of steam or the like into the poke-hole of a gas-producer or other furnace.

With this object in view the invention consists in the novel construction and combinations of parts as hereinafter set forth.

In the accompanying drawings, illustrating the invention, the letter *a* designates a poke-hole of a gas-producer, and *b* is the valve therefor consisting of a seat-plate *c*, having upward-projecting perforated lugs *c'* at one side, an inclined extension *d* at the opposite side having an oblique passage *d'* therethrough, said passage consisting of an outer portion *e*, having an internal thread for connection with a valved union joint *f* and an inner portion *e'* of small diameter opening into the bottom of the portion *e* and leading to the bottom of the tapering valve-seat *f'*. The joint *f* has a steam-pipe connection, as shown at *f''*.

h represents laterally-projecting lugs of the seat-plate located at right angles to the upward-projecting lugs *c* and the oblique extensions *d*, said lugs *h* being perforated for bolt connection.

The valve-plug *g* is hinged between the lugs *c* and is of tapering form to fit closely the valve-seat. This valve-plug terminates just above the small oblique steam-passage

e', which has a direction toward the center of the poke-hole, and thus opens below the valve-plug. The valve-plug is provided with a handle extension *g'*.

When the poke-hole is opened for inspection or working of the fuel-bed, steam is turned on to drive the gas away from the opening before the valve-plug is lifted and to check the escape of gas while the operator inspects the interior of the furnace or attends to working the fuel-bed. Saving of gas is thus effected as well as the inconvenience of having it puff out into the face of the workman.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A poke-hole valve for furnaces, formed in two parts, namely, a seat-plate provided with a valve-seat and a single oblique passage at one side, opening at the bottom of the valve-seat and below the valve-plug, said passage having a steam-pipe connection, and a valve-plug constructed to fit said valve-seat.

2. A poke-hole valve for furnaces formed in two parts, namely, a seat-plate provided with a valve-seat and an oblique passage at one side opening at the bottom of the valve-seat and below the valve-plug and being directed toward the center of the poke-hole, said passage consisting of two portions of different diameters, and having a steam-pipe connection, and a valve-plug constructed to fit said valve-seat.

3. A poke-hole valve for furnaces formed in two parts, namely, a seat-plate provided with a valve-seat and an oblique extension at one side provided with a passage consisting of two portions of different diameters, the larger of which portions has a steam-pipe connection, said passage opening at the bottom of the valve-seat and below the valve-plug, said seat-plate having upward-projecting lugs at its opposite side and laterally-projecting lugs at right angles to the oblique extension and upward-projecting lugs and perforated for bolts, and a valve-plug hinged to said upward-projecting lugs.

4. A poke-hole for furnaces having a seat-

plate provided with a valve-seat and an oblique passage directed toward the center of the hole and opening below the valve-plug, said passage consisting of two portions of different diameters, the larger of which portions
5 has a steam-pipe connection, and a valve-plug constructed to fit said valve-seat.

In testimony whereof we affix our signatures in presence of two witnesses.

GRANT CAMPION.
MOTT WYANT.

Witnesses:

JULIA A. MOORE,
D. C. CHIPMAN.