

W. FEICKS.
COKE OVEN OR GAS FURNACE.
APPLICATION FILED NOV. 4, 1910.

1,011,933.

Patented Dec. 19, 1911.

FIG. 1.

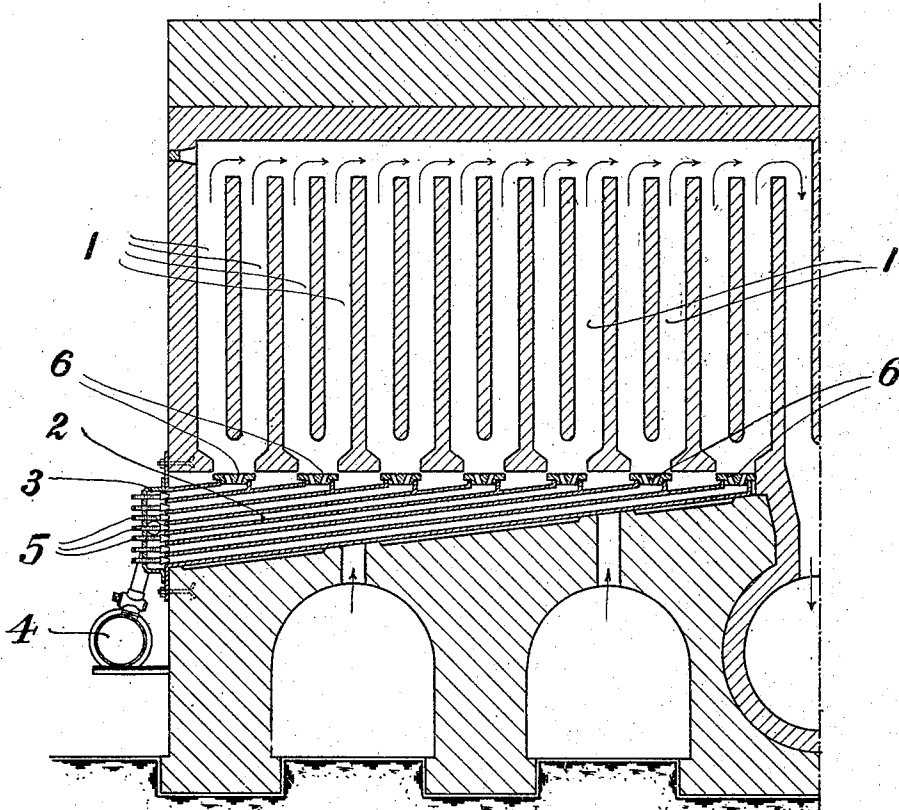


FIG. 2.

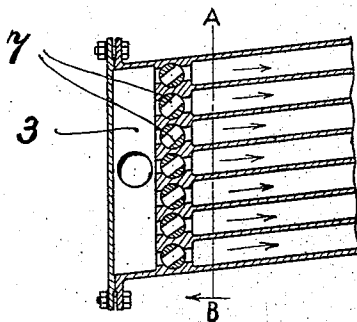
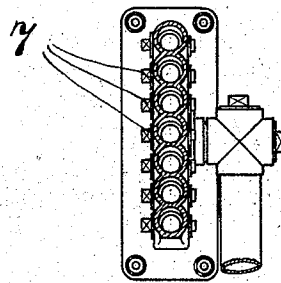


FIG. 3.



WITNESSES:

Frank P. Lawatsch
H. A. Applegate

INVENTOR: *William Feicks*

UNITED STATES PATENT OFFICE.

WILLIAM FEICKS, OF BETHLEHEM, PENNSYLVANIA.

COKE-OVEN OR GAS-FURNACE.

1,011,933.

Specification of Letters Patent.

Patented Dec. 19, 1911.

Application filed November 4, 1910. Serial No. 590,764.

To all whom it may concern:

Be it known that I, WILLIAM FEICKS, a subject of the German Emperor, residing at Bethlehem, in the county of Northampton and State of Pennsylvania, have invented new and useful Improvements in Coke-Ovens or Gas-Furnaces, of which the following is a specification.

The object of the present invention is to provide simple and efficient means for exactly regulating the supply of gas to the different points of combustion in coke ovens or gas furnaces.

Ovens have been known in which each heating flue or each smaller group of heating flues is connected to a separate passage or channel formed by the oven brickwork, such channels leading separately to the front or back of the oven where their inlets and thereby the gas supplied to each heating flue or each smaller group of flues can be regulated. A so constructed furnace, however, is very expensive and the gas channels are not easily accessible for cleaning, etc.

To carry my improvements into effect, I provide a body, separate and independent from the oven brickwork and forming a number of passages or channels leading from the front or back of the oven where they are supplied with gas to different points of combustion in the oven wall. Suitable devices provided in said passages or in the common housing from which these passages start and movable from the outside, allow easy and exact regulation of aforesaid passages. By this construction the cost of the furnace is considerably reduced, leakage of the gas channels is made impossible and the latter are easily accessible for cleaning, etc., as the whole body can readily be removed from the oven.

In the accompanying drawing Figure 1 represents a vertical section through one half of an oven wall, showing the proposed body in place. The other half of the oven wall is identical with the one shown but reversed. Fig. 2 shows on a larger scale part of the proposed body; the method of regulating the passages here shown differing from the one shown in Fig. 1. Fig. 3 is a section on the line A—B in Fig. 2.

Referring to the drawing, 1 indicates the

heating flues of the oven wall below which the proposed body 2 is arranged. The latter is preferably made of cast metal and as shown on the drawing forms a number of passages or channels leading from a common housing or cap 3 at the end of the oven to different points of combustion. The housing 3 is supplied with gas from the gas main 4. By means of plug screws 5 having tapered ends projecting through said housing and movable from the outside, the inlets of the passages or channels can be separately regulated. The housing 3 as shown in Fig. 1 or, according to the different construction shown in Fig. 2 the cover to the latter can, if necessary, easily be removed. Even the whole body may for cleaning or other purposes be removed from the oven. The ends of the passages connecting to the heating flues are provided with nozzle-stones 6. With the construction shown in Figs. 2 and 3 the gas passages can be regulated by means of turn plugs 7 provided with a hole and projecting transversely through said passages. The plugs 7 can be turned from outside.

I claim:—

1. In a coke oven or gas furnace a body separate and independent from the oven and comprising a plurality of passages leading from one end of the oven to different points of combustion for supplying gas thereto, and means for separately regulating aforesaid passages.

2. In a coke oven or gas furnace a cast metal body comprising a plurality of passages leading from a common housing at one end of the oven to different points of combustion for supplying gas thereto, and means for separately regulating aforesaid passages.

3. In a coke oven or gas furnace a removable body comprising a plurality of passages leading from one end of the oven and terminating in burners, means for supplying gas to said passages and means for separately regulating such supply.

WILLIAM FEICKS.

Witnesses:

FRANK R. LAWATSCH,
W. A. APPLGATE.