

No. 682,231.

Patented Sept. 10, 1901.

S. H. ALSIP.
COKING TABLE FURNACE.

(Application filed Apr. 1, 1901.)

(No Model.)

Fig. 1.

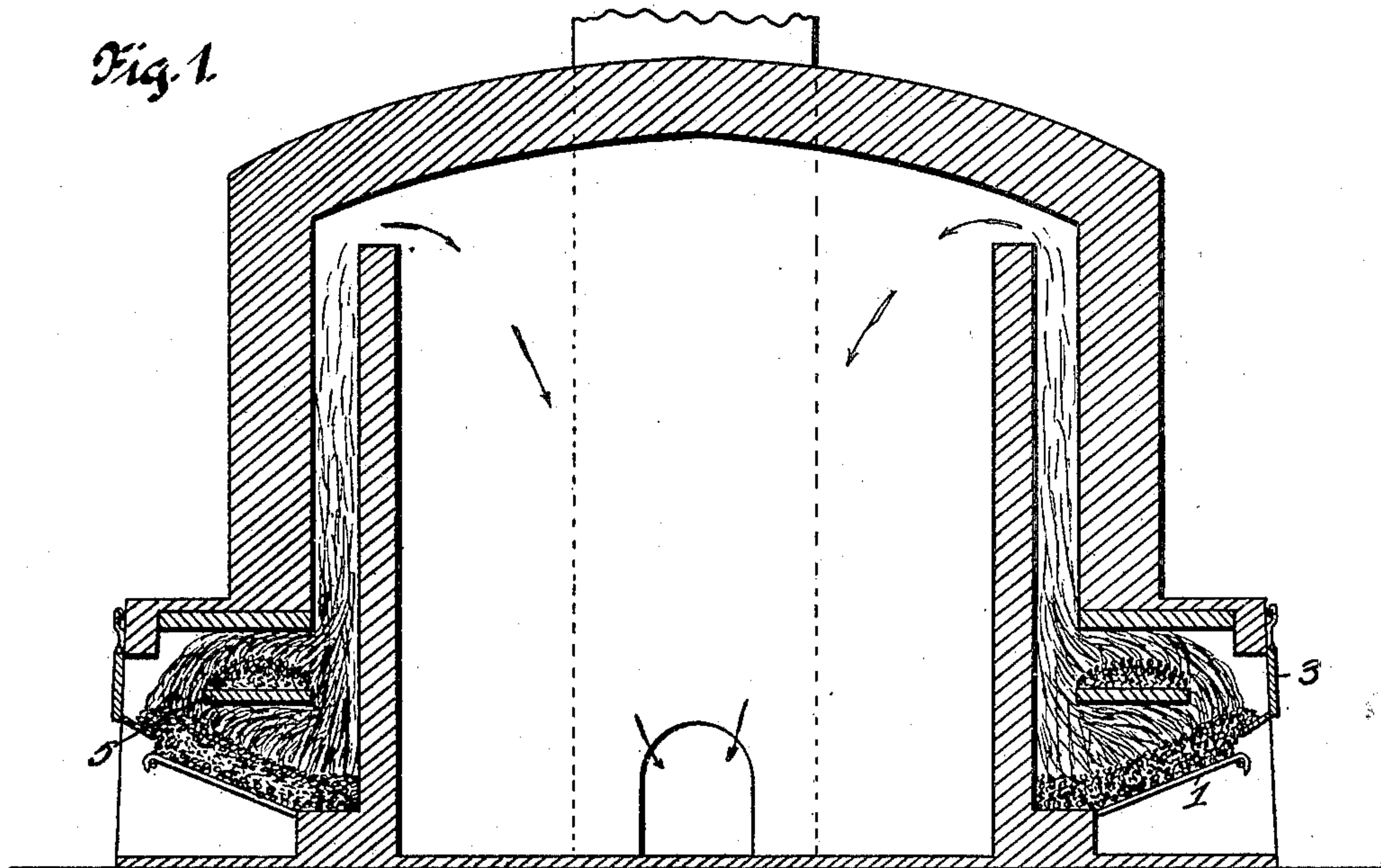


Fig. 2.

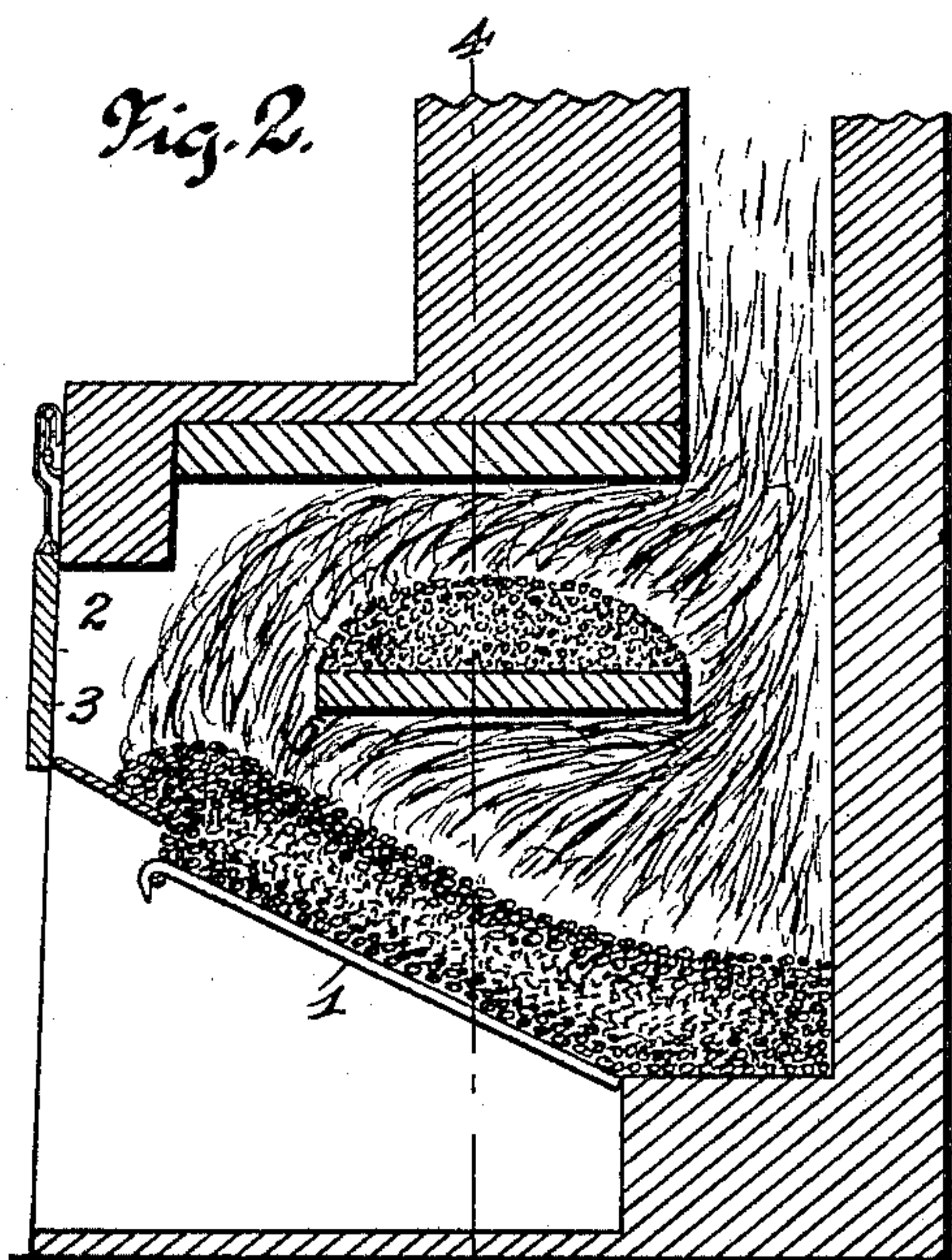


Fig. 3.

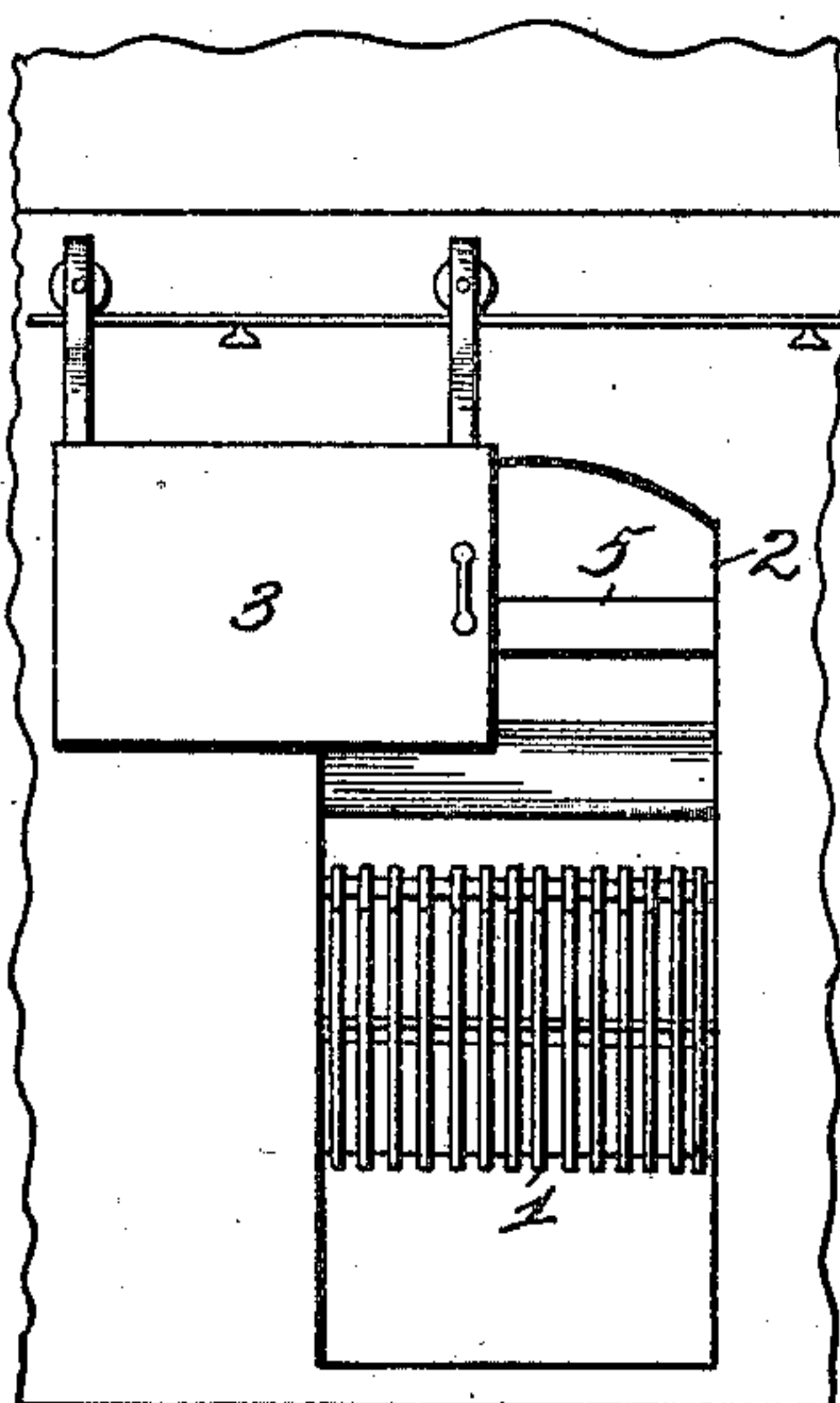
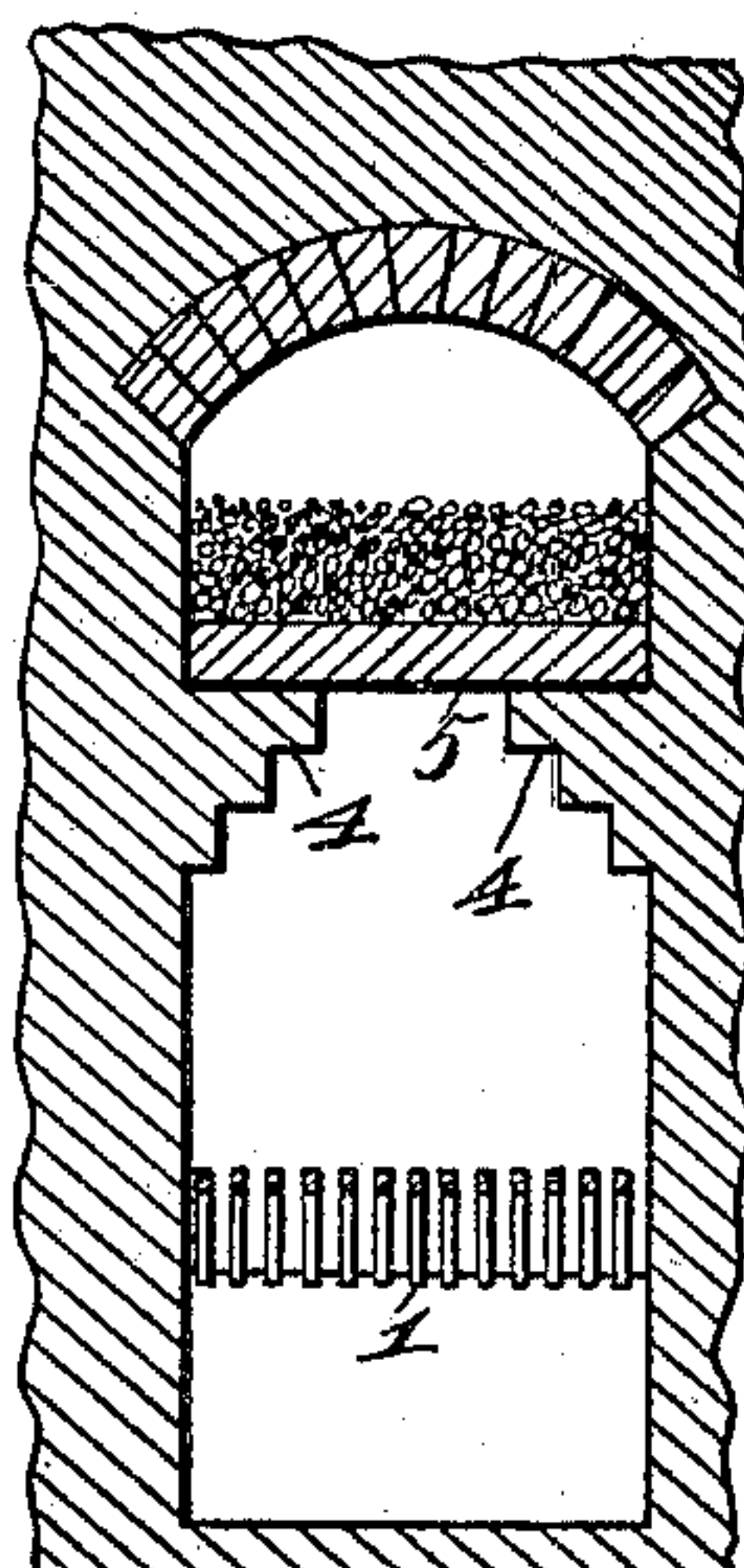


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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COKING-TABLE FURNACE.

SPECIFICATION forming part of Letters Patent No. 682,231, dated September 10, 1901.

Application filed April 1, 1901. Serial No. 53,762. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL H. ALSIP, of the city of Belleville, St. Clair county, State of Illinois, have invented certain new and useful Improvements in Coking-Table Furnaces, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to coking-table furnaces; and it consists of the novel construction, combination, and arrangement of parts hereinafter shown, described, and claimed.

The object of this invention is to provide a simple, durable, and efficient means within the main fire-chamber of the furnace for receiving and containing fresh supplies of coal without placing the same upon the fire in the first instance, but in such position as to expose it to the action of the flames or heat from the front and rear, so as to burn only from the surface, and thereby consume all the volatile gases which are generated by the action of the heat on the coal.

In the drawings, Figure 1 is a sectional view of a form of furnace, showing my improved coking-table supported therein. Fig. 2 is an enlarged longitudinal section. Fig. 3 is a front view of a portion of the furnace. Fig. 4 is a cross-section taken on the line 4 4 of Fig. 2.

My improved coking-table may be applied within any desired form of furnace the interior of which is large enough to permit the flames to pass around the table, and thereby act directly upon the coal supported upon the table. I have shown one form of furnace having the inclined grate-bars 1 and the fuel-opening 2, which may be closed by a door 3. Within the furnace are formed projections 4, upon which is placed the support or table 5. The said table 5 is of shorter length than the furnace, as shown in Fig. 2, so that the flames from the fuel on the grate-bars 1 can pass both in front of and behind the said support. The support 5 is located in a central position, so that the flames may pass over and under

and along each side thereof in order to subject the coal to an intense heat, and thereby remove and consume all the gases and quickly reduce the coal to coke. The table is preferably movable, so that it may be located in different positions over the fire-bed, and it may be made in different sizes to correspond to the side of the furnace in which it is desired to be used. As the coal becomes coked it may be removed from the support 5 and thrown onto the grate-bars, where it will be consumed, and another charge may be placed upon the support, where the action of the flames is repeated.

By locating the table or support in the central position described a more direct action of the flames is had and the gases will be more quickly removed from the coal and consumed to a greater extent than will be the case where the flames can act only upon one side of the coal, and it is not subject to heat from the under side.

The table is simple, durable, economical, and is more efficient than those tables of ordinary construction in which the heat only acts upon one side.

I claim—

In a furnace, having projections 4 rigid with the inner sides of its walls, a table 5 mounted on said projections substantially midway of the front and rear walls and extending entirely across the furnace so that part of the flames will be deflected in front of and pass over the table while the other part of the flames is passed along the under side of the table and up the rear side thereof, so that all the table except the extreme outer ends is entirely surrounded by the flames, substantially as specified.

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

SAMUEL H. ALSIP.

Witnesses:

J. D. RIPPEY,
ALFRED A. EICKS.