

(No Model.)

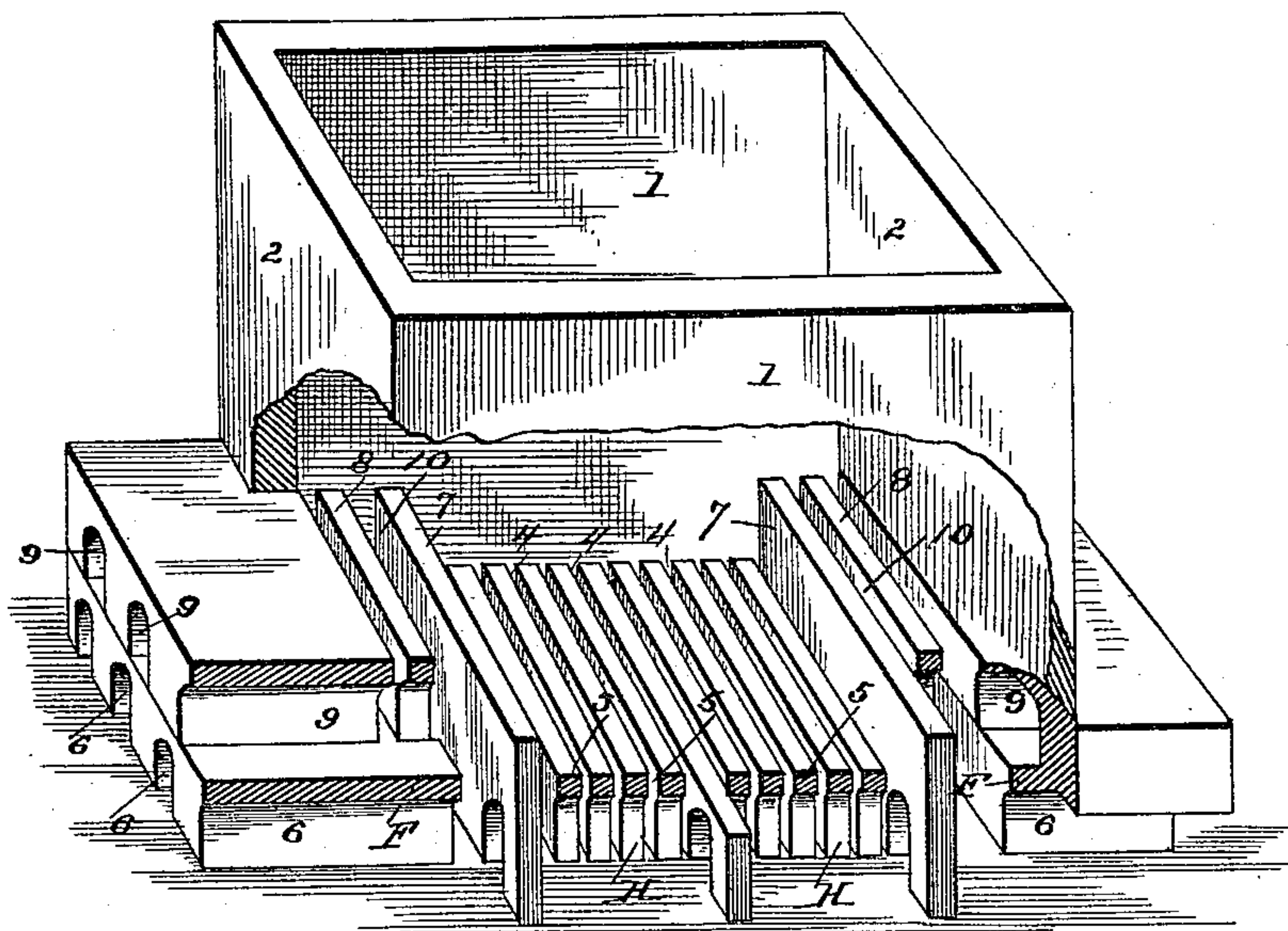
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H. MOEHLE.
TILE KILN.

No. 426,732.

Patented Apr. 29, 1890.

Fig. 1.



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Fig. 2.

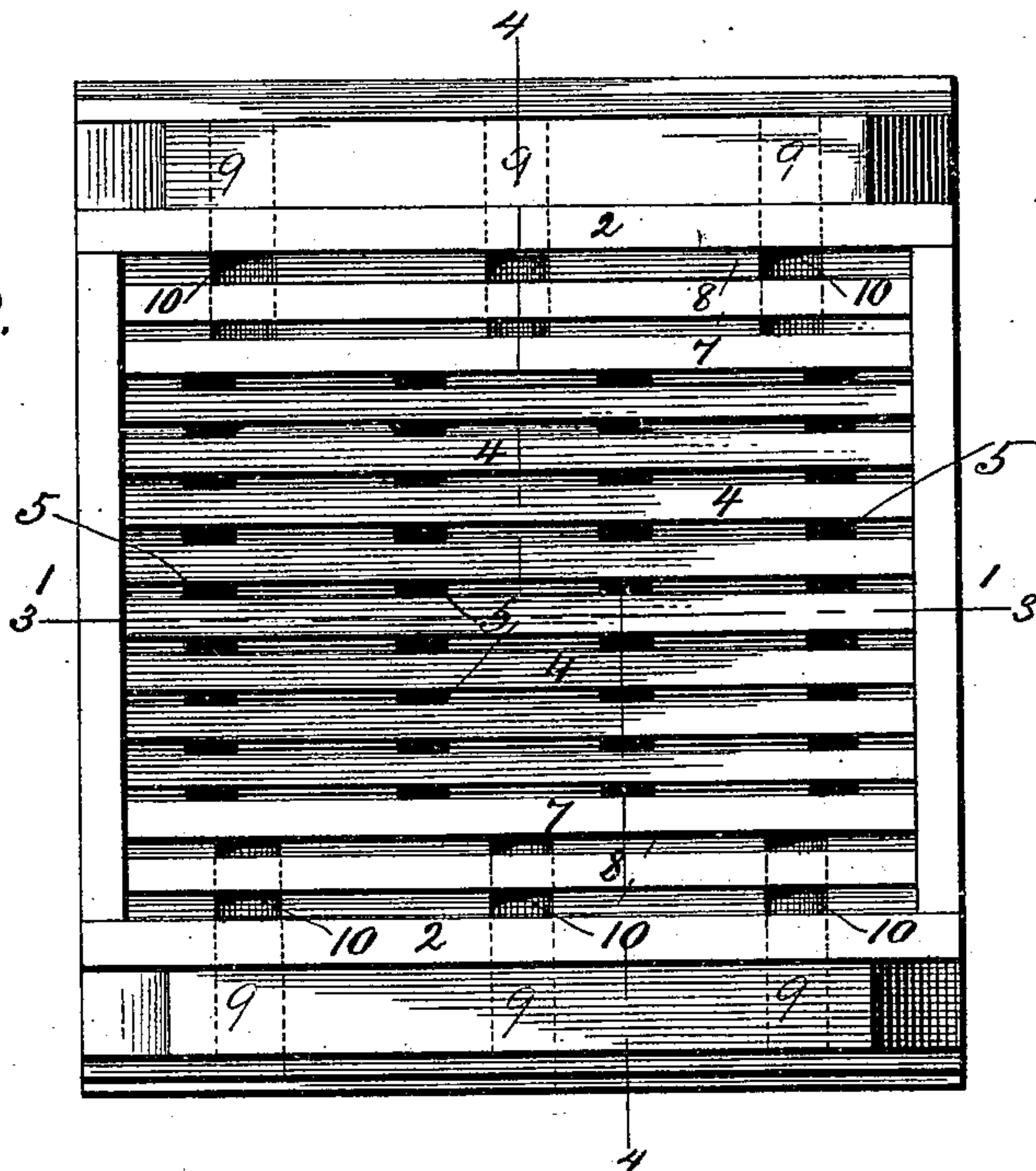


Fig. 3.

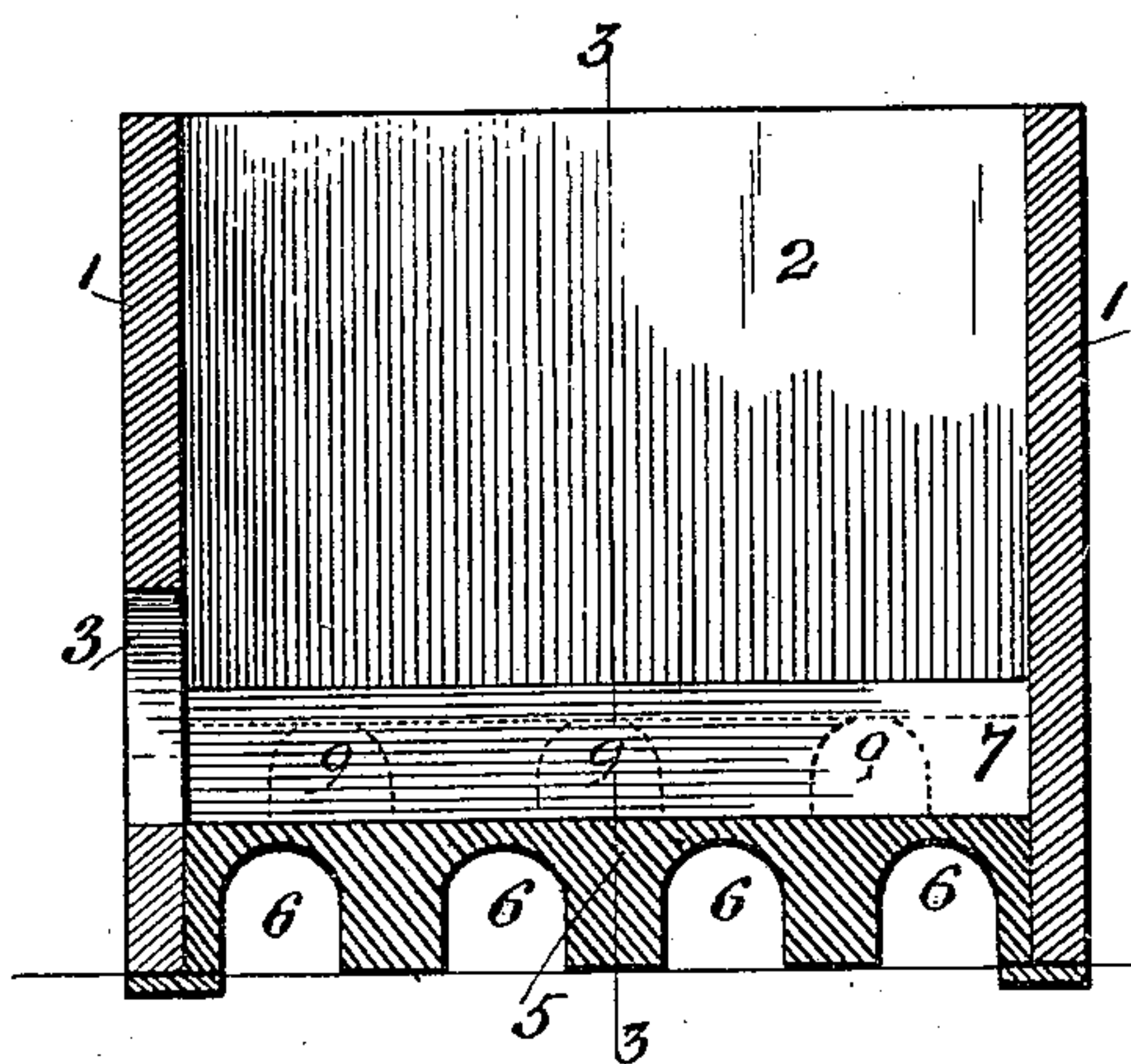
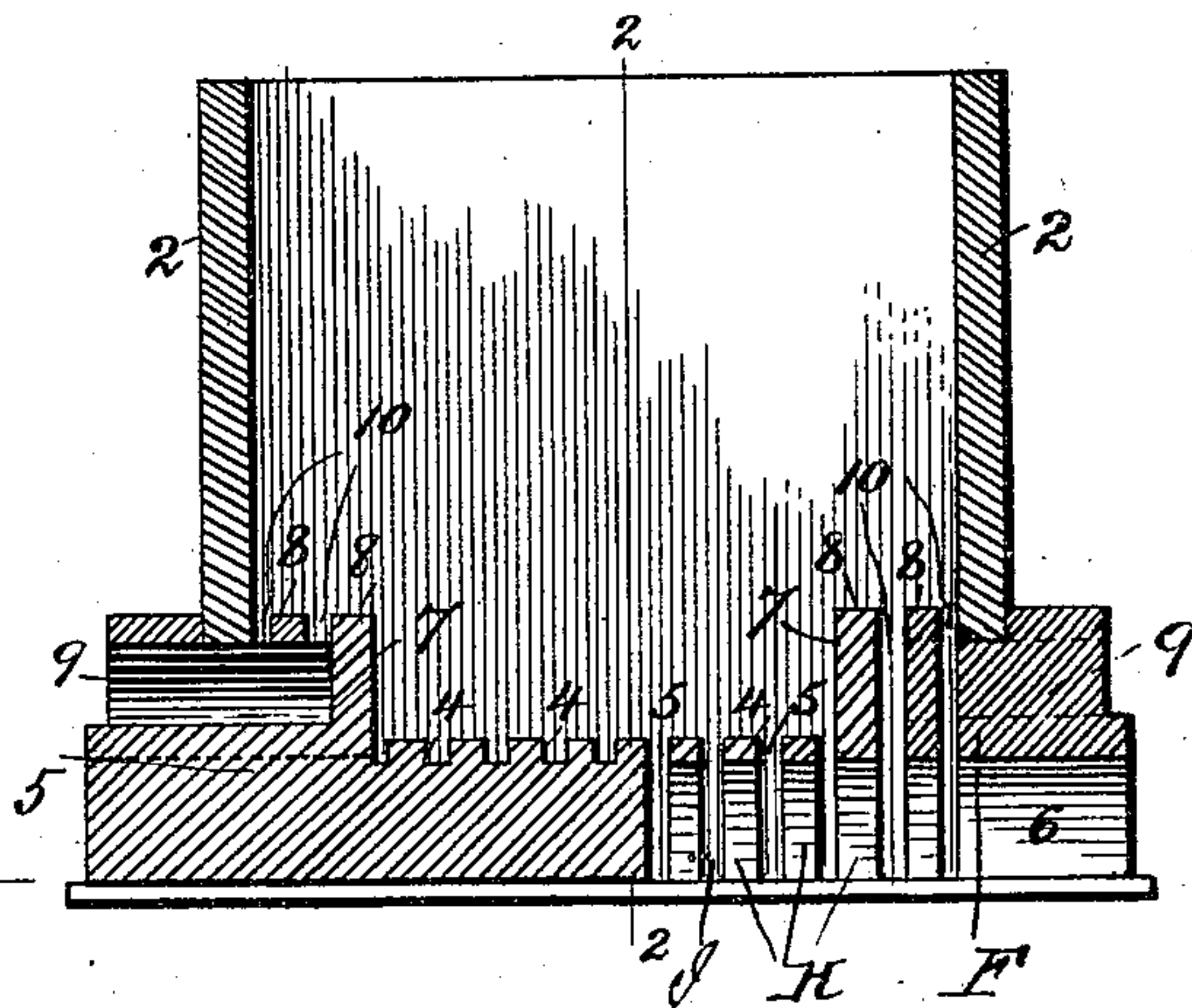


Fig. 4.



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UNITED STATES PATENT OFFICE.

HENRY MOEHLE, OF ST. MARY'S, OHIO.

TILE-KILN.

SPECIFICATION forming part of Letters Patent No. 426,732, dated April 29, 1890.

Application filed December 12, 1889. Serial No. 333,545. (No model.)

To all whom it may concern:

Be it known that I, HENRY MOEHLE, residing at St. Mary's, in the county of Anglaize and State of Ohio, have invented certain new and useful Improvements in Tile-Kilns, of which the following is a specification.

My invention relates to a kiln especially designed for burning tile; and it has for its object to provide a kiln of this character wherein deflecting and burner walls are connected with a series of burners passing longitudinally through and into the kiln, and wherein burner-walls are extended the entire width of the kiln transversely to the burners, said burner-walls connected with the deflecting-walls, said burners extending outside of main walls of kiln.

My invention consists in the novel construction and peculiar combination of parts, all of which will hereinafter be fully described in the annexed specification, and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved kiln, parts being broken away to more clearly illustrate the invention. Fig. 2 is a top plan view thereof. Fig. 3 is a vertical section of the same on the line 3 3, Fig. 2; and Fig. 4 is a similar view thereof on the line 4 4, Fig. 2.

In the accompanying drawings, 1 1 indicate the side walls, and 2 2 the end walls, one side of the kiln having the usual door 3.

6 6 indicate a series of burners, which are fired from the outside of the kiln, and which extend across the bottom of the kiln and communicate therewith, as shown at 5 5. (See Figs. 1 and 2.)

9 9 indicate burners, also fired from the outside, which are arranged above the burners 6 6, and which extend a short distance into the interior of the kiln, as shown, a floor-wall F being disposed between the burners 9 and 6, said wall extended into the kiln and ending at vertically-arranged deflecting walls or chambers 7 7. The burners 6 pass between a series of burner-walls H, which extend the full length of the kiln, between which transverse heat-spaces I I are formed, which communicate with the burners 6 6 at 5 5, and which serve to deflect the heat over the lower surface of the kiln, and 8 8 indicate ribs extended over

the inner end of the burner 9 9, which form heat-spaces 10 10, as shown.

By the above-described construction I am enabled to force the heat from the burners 6 through the heat-spaces I and equalize and distribute same over the bottom of the kiln, while the heat from the burners 9 9 strikes against the walls 7 7, which extend entirely across the kiln, and is thereby deflected up through the heat-spaces 10, such spaces serving to more readily lead the said heat in an upward direction, thereby enabling me to get a heat near the outer walls of the kiln uniform with that in the center of the kiln, whereby I am enabled to burn a kiln of tile in forty hours, whereas it usually requires seventy or eighty hours to burn a kiln in the usual manner. By this construction I am also enabled to burn the tile all alike and sustain no loss in soft tile, also saving time and fuel. The heat passing from the burners 6 between the walls H H and through the heat-spaces I allows the heat to pass up through the kiln, which being open at the top forms a draft or current, causing the smoke and heat to rise, and thereby allowing me to build fires on the outsides of the kiln and secure a complete combustion. The vertical burner-walls H form a floor on which the tiles are placed, thus bringing the tile in direct contact with the heat which comes up through the heat-spaces I.

The complete operation of my kiln is as follows: The tiles are placed on the burner-walls, leaving space enough between them to allow the heat to pass through. The fires in the upper and lower burners are started, the smoke and gas passing upward to the top of the kiln, from whence they escape. All of said fires are allowed to burn until I observe the "water-smoke," at which time I weaken or strengthen my fires at such burners as I deem necessary until the kiln is properly burned.

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

1. In a kiln having an open top, the combination, with the body of the kiln, a series of flues extended entirely across the bottom thereof and extended beyond its opposite sides, of a series of burner-walls arranged across the bottom of said kiln, disposed over

and arranged transversely of the burners, and having communication therewith, substantially as and for the purpose described.

2. In a kiln, the combination, with a series
5 of burners 6, extended longitudinally across the bottom of the kiln, and a series of transverse burner-walls forming heat-spaces arranged over said burners and communicating therewith, of heat deflectors or chambers 7,
10 open at the top, arranged at opposite sides of

the kilns transversely over the burners 6, and a second series of burners 9 9, disposed over the burners 6 and entering said transverse chambers 7, whereby a portion of the heat is led up on the sides of the kiln, substantially as de- 15 scribed.

HENRY MOEHLE.

Witnesses:

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