

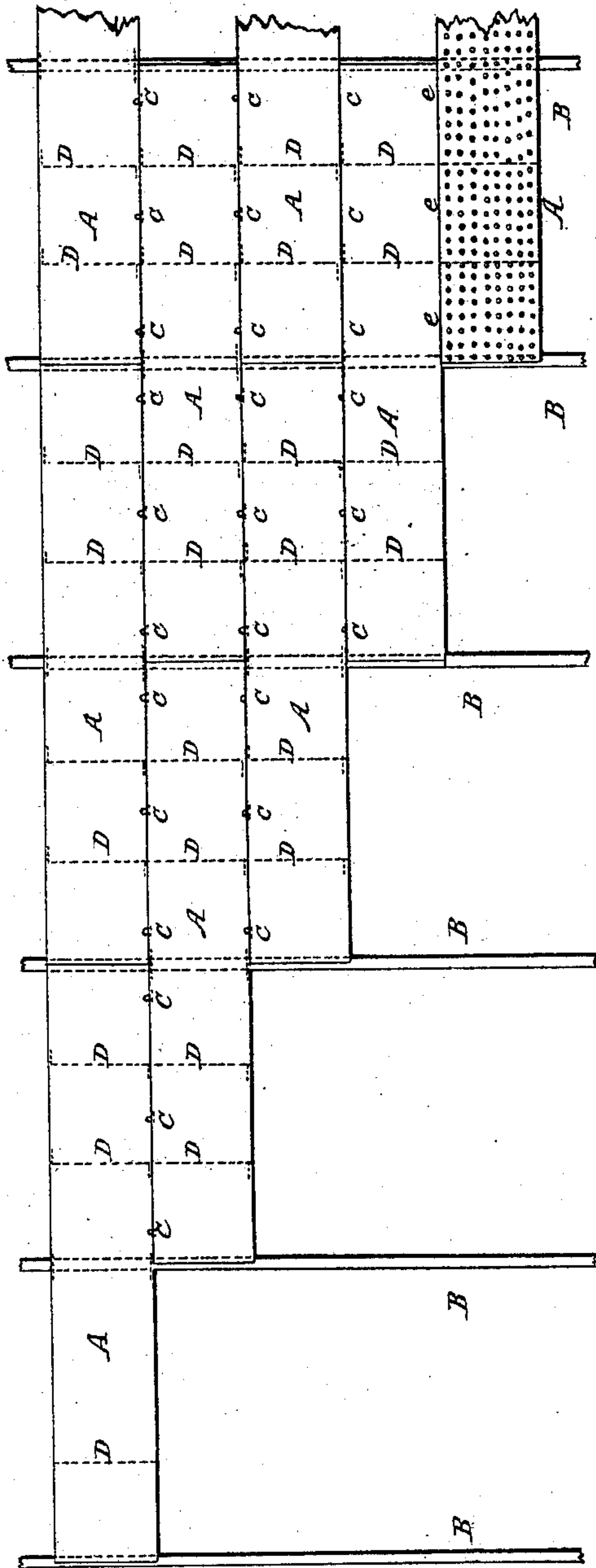
G. TAYLOR.  
Malt Kiln Floor.

2 Sheets—Sheet 1.

No. 57,997.

Patented Sept. 11, 1866.

Fig. 1.



Witnesses  
*W. H. H. H.*  
*John C. H. H.*

Fig. 2.

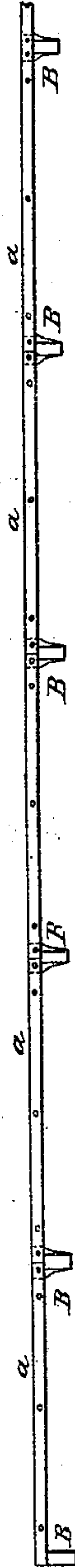


Fig. 5.

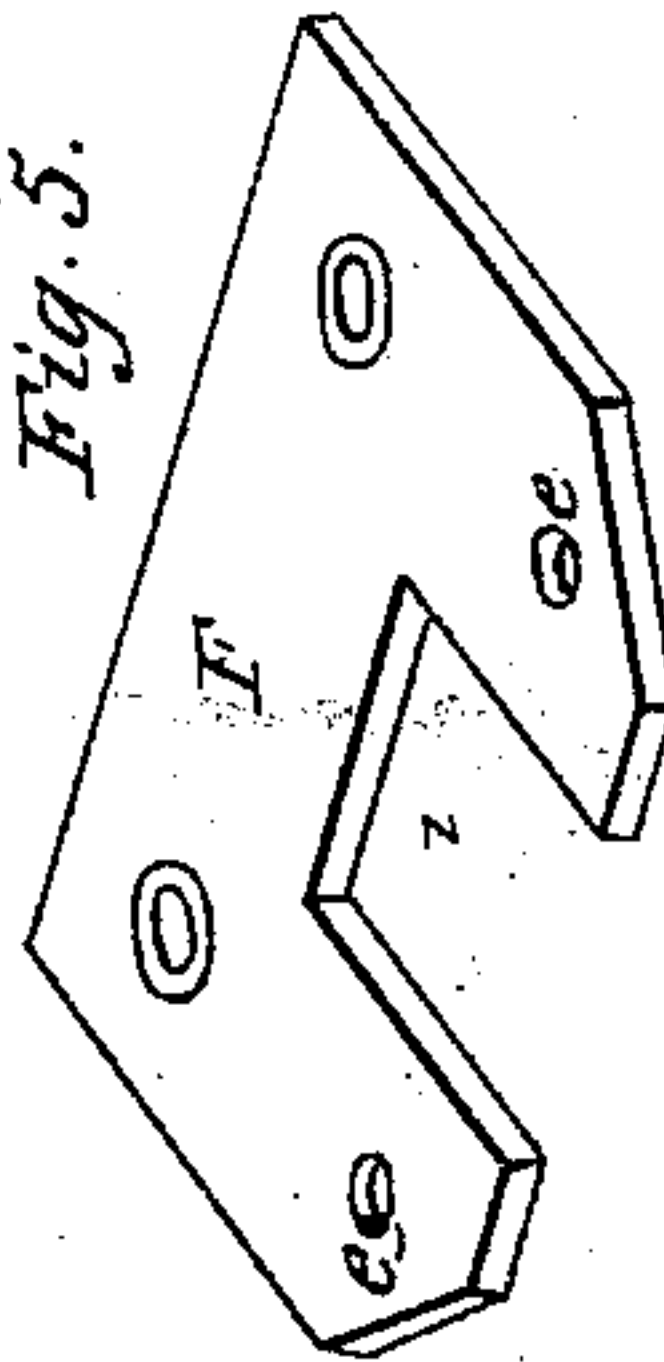
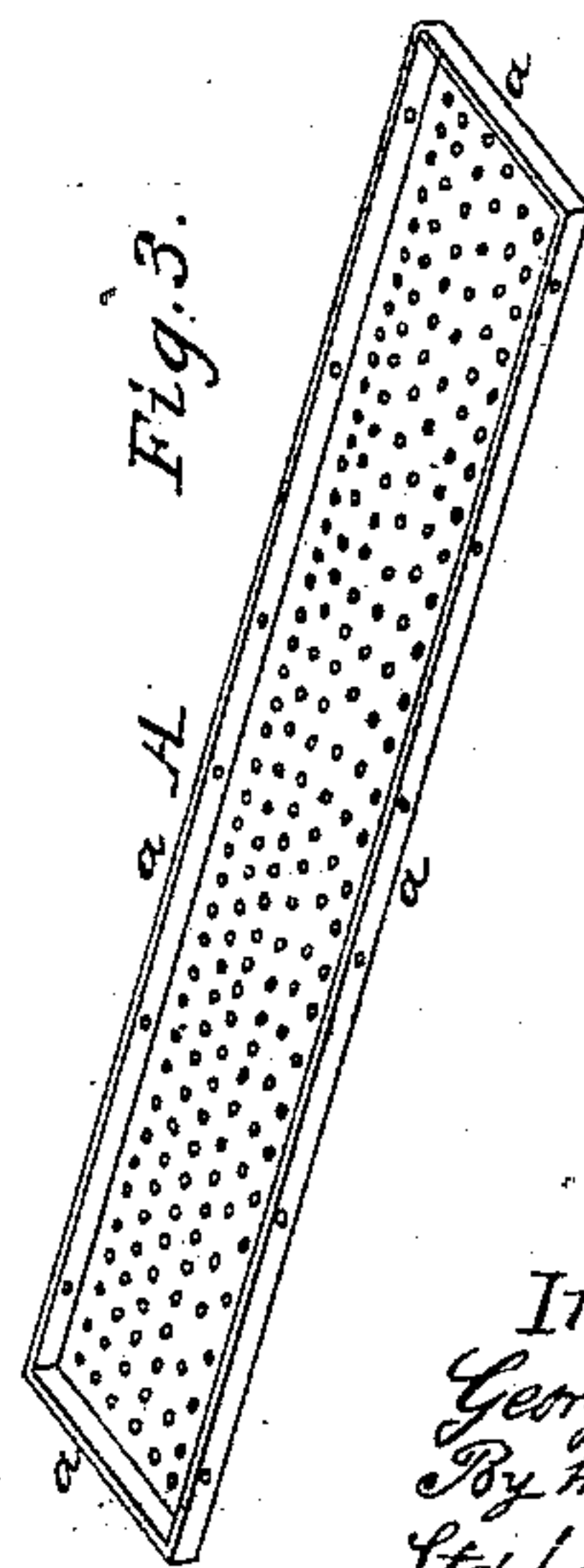


Fig. 4.



Fig. 3.



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Fig. 6

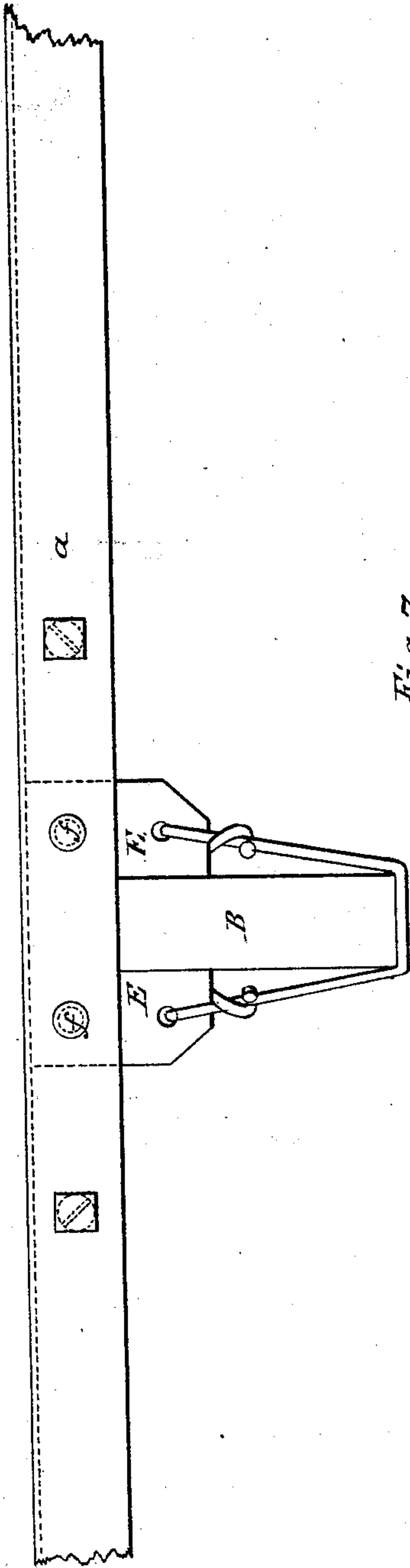


Fig. 7.

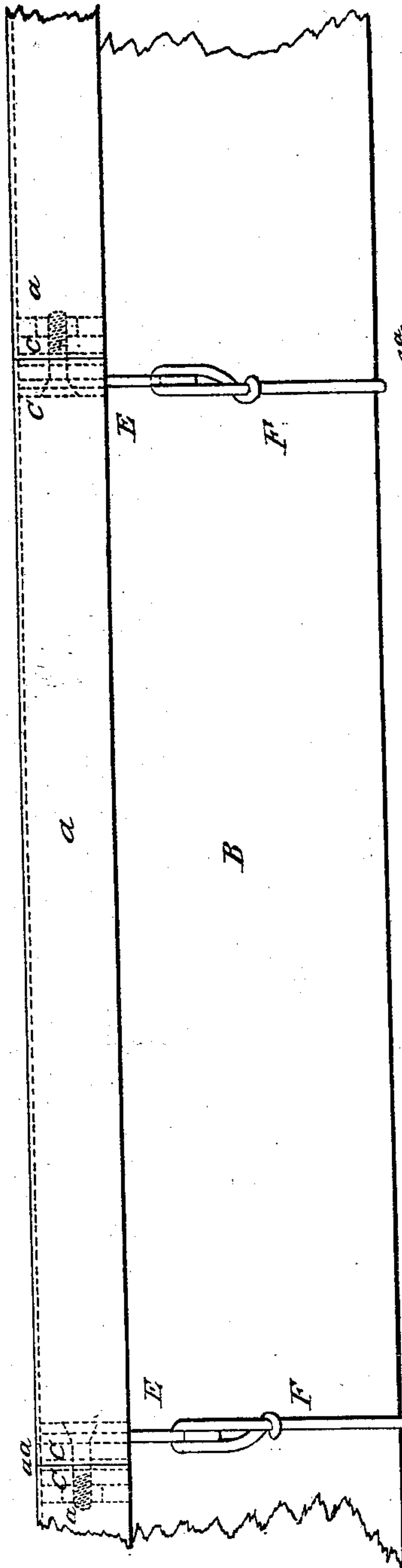
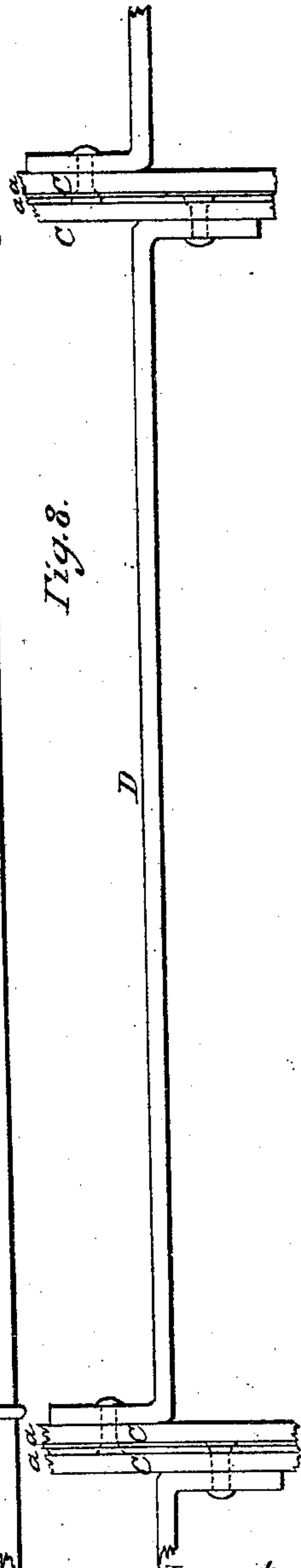


Fig. 8.



Witnesses:  
J. Haffal  
John C. Wilson.

Inventor.  
George Taylor  
By his atty.  
Stephen Watson.



# UNITED STATES PATENT OFFICE.

GEORGE TAYLOR, OF CAMDEN, NEW JERSEY.

## IMPROVEMENT IN MALT-KILN FLOORS.

Specification forming part of Letters Patent No. 57,997, dated September 11, 1866.

*To all whom it may concern:*

Be it known that I, GEORGE TAYLOR, of the city and county of Camden, and State of New Jersey, have invented a new and useful Improvement in Malt-Kiln Floors; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention and improvement consists, in the first place, in constructing the floor-plates of malt-kilns of such length as to cover two or more spaces between the joists, and so arranging them as to make the plates of one row break the end joints of the plates of the contiguous rows; secondly, in combining clips with the plates and joists, so as to keep the end joints of the plates central with the joists; and, thirdly, in combining the side flanges of the plates with supporting-bars, by means of bolts, rivets, or pins, to give additional strength and firmness to the floor.

In the accompanying drawings, Figure 1 is top view or plan of the improved floor. Fig. 2 is an end elevation of a series of joists, B, with plates A in connection therewith. Fig. 3 is a perspective view of one of the perforated plates A inverted. Fig. 4 is a perspective view of one of the braces D. Fig. 5 is a perspective view of one of the clips E, full size. Fig. 6, Plate 2, is an end elevation of one of the joists B, with a portion of a plate, A, in connection. Fig. 7 is a side elevation of a portion of a joist, B, with plates A in connection. Fig. 8 is a view, from beneath, of one of the bearing-bars and braces D, in combination with the side flanges, *a*, of the plates A and supporting-bars C.

Like letters in all the figures indicate the same parts.

The floor is composed of sheet-iron rectangular plates A, confined, as hereinafter described, on the iron joists B, as represented in the drawings, or on common wooden joists. The plates are of such length as to cover two or more spaces between the joists, and, usually, about one foot in width; yet I do not

confine myself to any particular width, as the width may vary to suit circumstances.

The plates have flanges *a*, made by cutting out square corners equal to the width of the flanges, and turning the edges of the plates at right angle with the face of the latter. The end flanges of the plates rest upon the joists B; but the plates are supported at their edges endwise by the bars C, which rest upon the joists B, as represented in Fig. 7. The said bars are of the same width as the flanges, so that the plates are made to rest on the top edges of the former. The bars C also serve to stiffen the floor, being secured against the side flanges of the plates by means of bolts *c*, as represented in Fig. 1, or by rivets or pins.

There are bearing-bars D, which support the plates A crosswise, the bars being secured to the supporting-bars *c* by means of bolts, as represented in Fig. 8. These bars also serve as braces in holding the frame-work firmly together.

Instead of having the bars constructed as described, with the flanges on their ends turned opposite to each other, they may both be turned the same way, and their flat surface come against the plates A.

I confine the edges of the plates A centrally with the joists B, by means of clips E, as shown in detail, Figs. 6 and 7. The slots *d* of the clips fit on the joists B, and there are wires F, which are bent to come beneath the joists, the ends being passed through the holes *e* of the clips and tied, as represented.

Instead of wires, rods or strips of sheet-iron may be used in the same manner; or strips may be bent and riveted to the clips instead of tying them.

One of the clips is shown full size in Fig. 5. The clips are secured against one of the supporting-bars by means of rivets *f*, as shown in detail in Figs. 6 and 7.

Having thus described my improvement in malt-kiln floors, what I claim therein as new, and desire to secure by Letters Patent, is—

1. Constructing the plates A of such length as to cover two or more spaces between the joists B, and so arranging them as to make

the plates of each row break joints with the plates of the adjoining rows, to give additional strength and stiffness to the floor, substantially as described.

2. The combination of the clips E with the plates A and joists B by means of the wires F, or their equivalent, substantially as and for the purpose set forth.

3. Confining the flanges *a* of the plates A together by means of bolts, rivets, or pins, to

give permanency to the plates and stiffness to the floor, substantially as specified.

In testimony that the above is my invention I have hereunto set my hand and affixed my seal this 13th day of August, 1866.

GEORGE TAYLOR. [L. S.]

Witnesses:

STEPHEN USTICK,

JOHN WHITE.