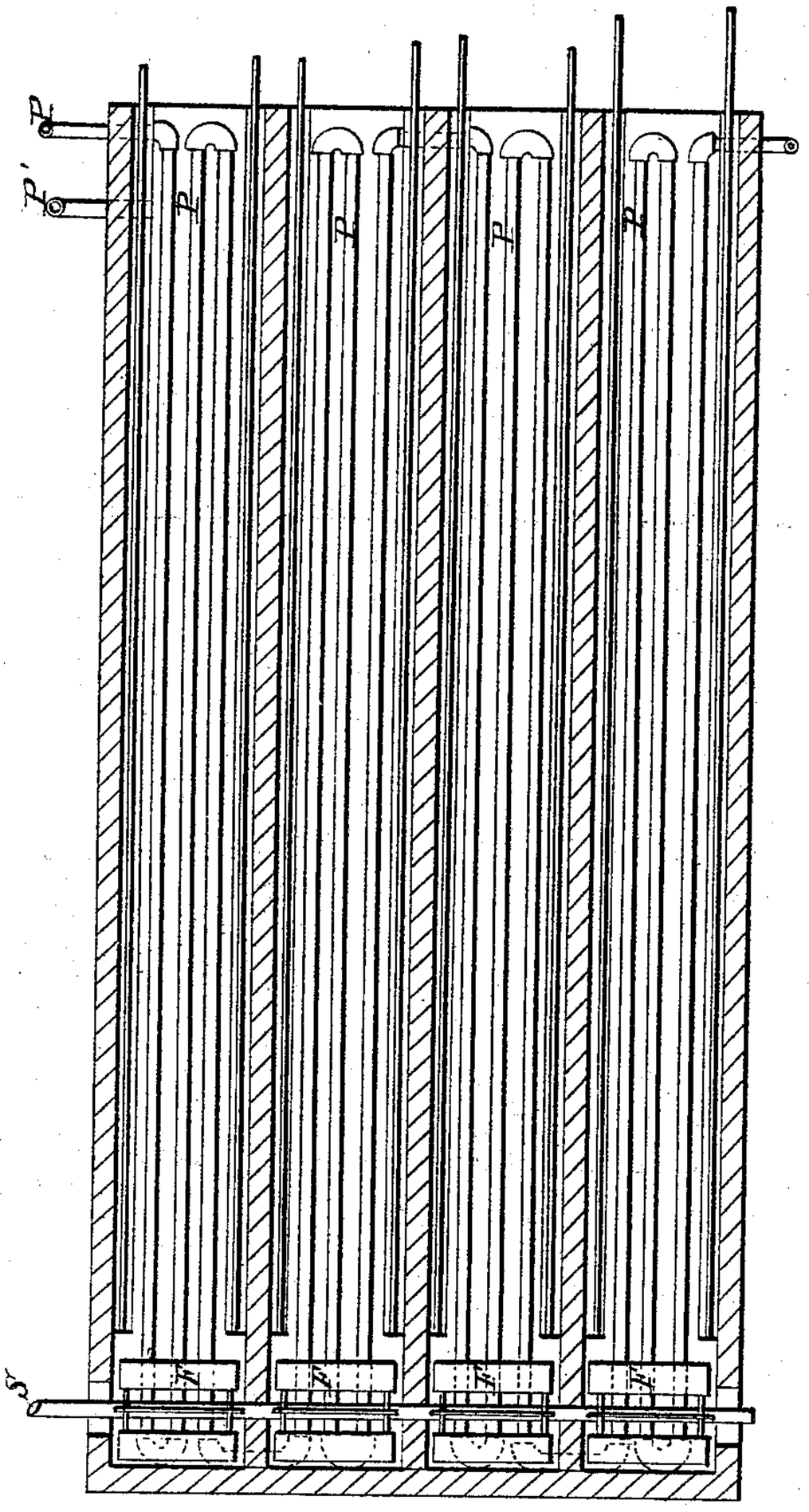
I. C. HATCH.

Drying Brick.

2 Sheets—Sheet 1.

No. 78,802.

Patented June 9, 1868.



Witnesses.

Isaac R. Rakford

Charles Hebard

Inventor.

Isaac C. Hatch,

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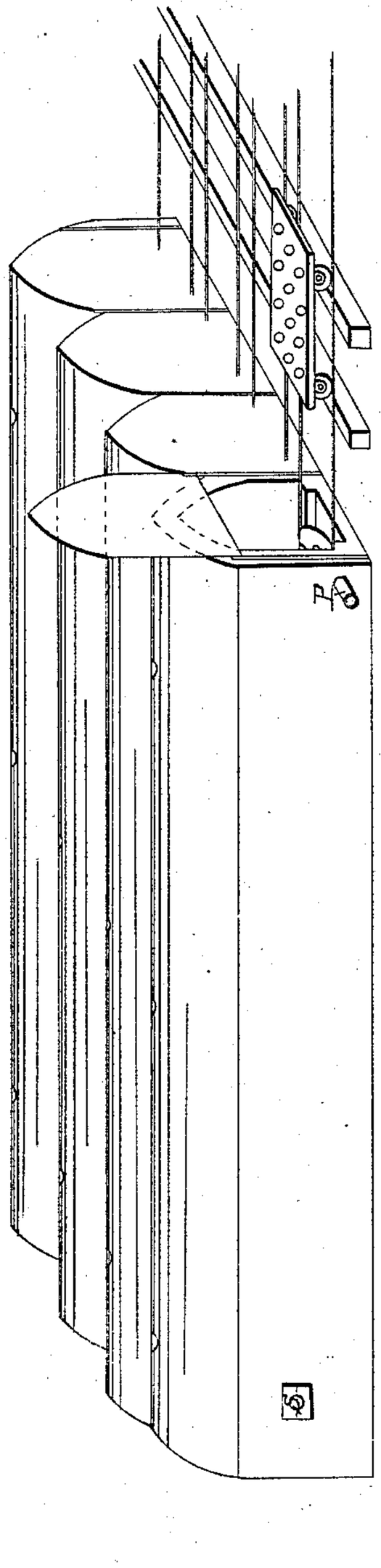

Witnesses.

Isaac R Aukford

Charles He. Evans

Inventor.

Isaac C. Hatch

United States Patent Office.

ISAAC C. HATCH, OF CAMDEN, NEW JERSEY.

Letters Patent No. 78,802, *dated June* 9, 1868.

IMPROVED BRICK-DRYING APPARATUS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ISAAC C. HATCH, of the city of Camden, county of Camden, and State of New Jersey, have invented a new and improved Apparatus for Drying Bricks; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same.

My invention consists of one or more kilns, heated by steam-pipes or hot-air flues, in combination with a fan at the rear of each kiln, for creating a blast within, and discharging from the kiln the moisture emanating from the drying bricks and taken up by the heated air, all as fully described hereafter.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe the manner of carrying the same into effect, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Plate 1 represents a perspective view of my improved brick-drying kiln, and

Plate 2 a sectional plan of the same.

The kiln may consist of a single long building, of bricks or other suitable material, although I prefer to arrange a series of kilns side by side, as shown in the drawing, each kiln having a roof, perforated at intervals, and having at one or both ends a movable door. On the bottom of each kiln, and extending nearly throughout the entire length of the same, is a series of pipes, arranged as shown in plate 2, the pipes of one kiln communicating with those of the other, so that steam admitted at P will first traverse the pipes of one kiln, then those of the next kiln, and will finally escape in a condensed form from the pipes of the last kiln of the series, after imparting the desired heat to the interior of the whole of the kilns.

On suitable foundations on the bottom of each kiln is laid a railroad-track, communicating with the adjacent brick-fields, and to this track are adapted the wheels of cars, on the perforated platforms of which the newly-moulded bricks are laid, in such a manner that there shall be as many open spaces between them as possible.

At the rear of each kiln is a fan, F, attached to a shaft, S, which may be common to the fans of the whole of the kilns.

The kilns having been charged with a number of loaded cars containing bricks fresh from the moulds, the doors are closed in front, steam is admitted to the pipes P, and the fans are set in motion, so as to create a blast of air, which, brought into contact with the pipes, becomes heated, and pervades the masses of wet bricks on the platforms of the cars, the air in its course taking up the moisture which emanates from the bricks, and passing off through the perforations in the roof or sides of the kiln.

If desired, hot air from a furnace may be introduced into the kilns through a pipe, P′, and hot-air flues built in the kiln may be used in place of the pipes P, although I prefer the latter, as they permit of the economizing of the exhaust-steam of engines, which are frequently used in brick-making establishments.

Without claiming broadly the use, for drying bricks, of kilns heated by steam,

I claim as my invention, and desire to secure by Letters Patent—

One or more kilns, built as herein described, and provided with hot-air or steam-pipes P P′, in combination with fans F within the rear end of each kiln, all constructed, arranged, and operating as and for the purpose herein set forth.

ISAAC C. HATCH.

Witnesses:

CHARLES H. EVANS,

ISAAC R. OAKFORD.