

2. Sheets, Sheet 1.

C. Chambers, Jr.,

Brick-Drying Car.

No. 88,274.

Patented Mar. 30, 1869.

FIG. 1.

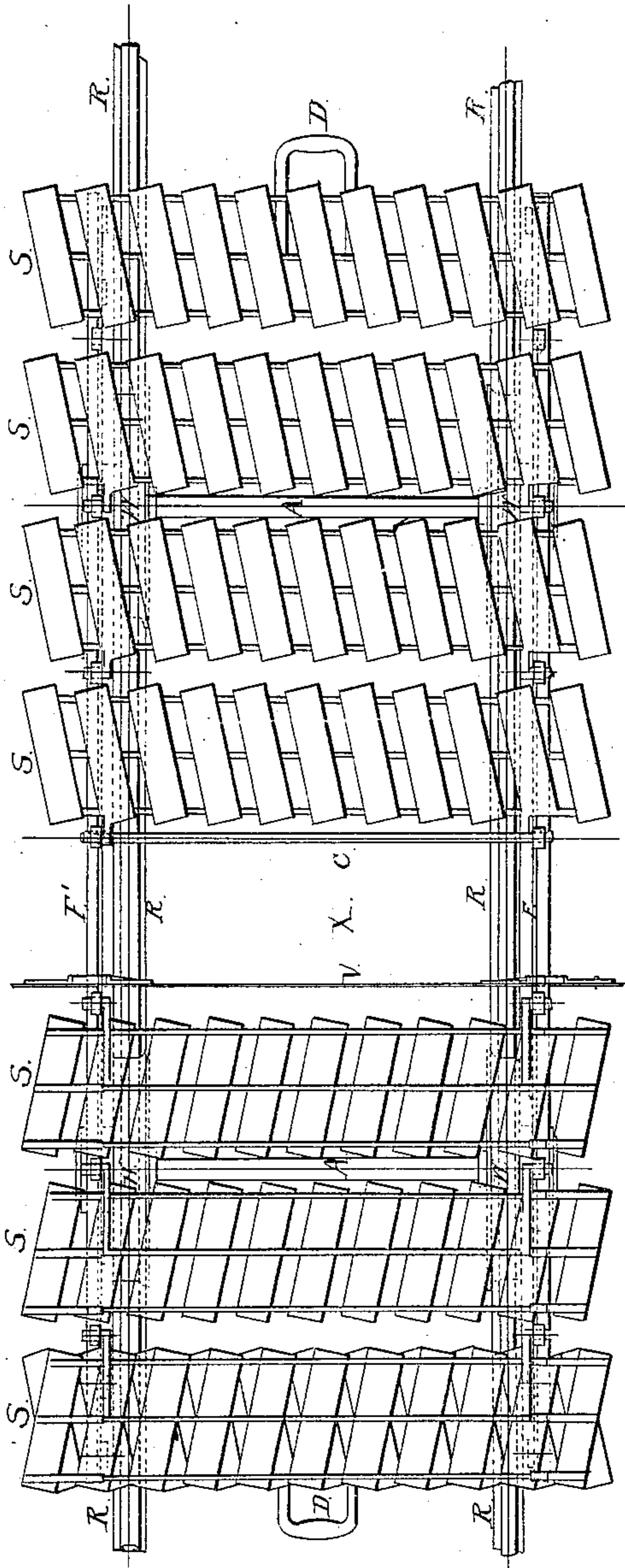
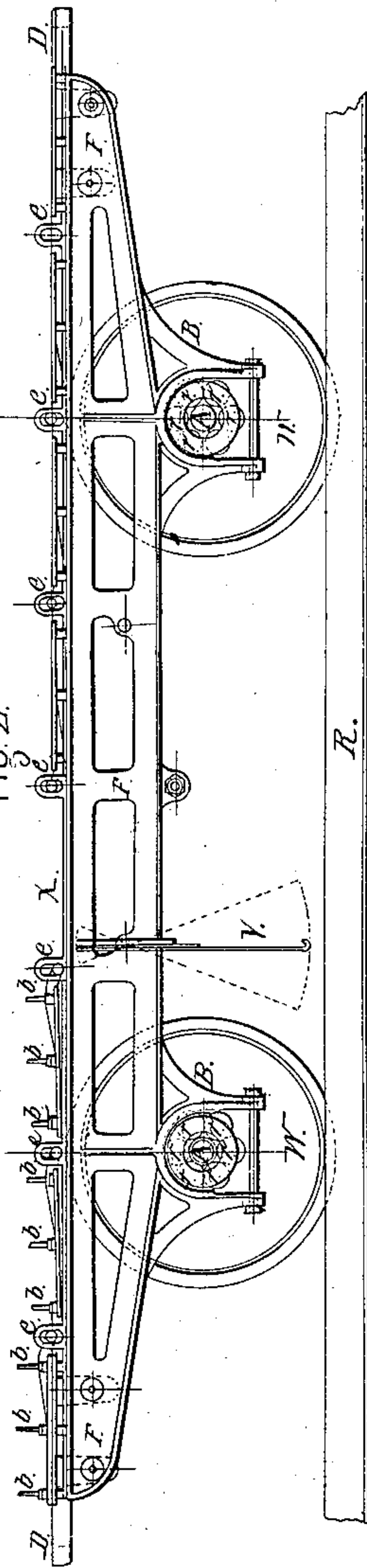


FIG. 2.



Witnesses:

Thornell Dambory

Mr. P. Davis

Inventor:

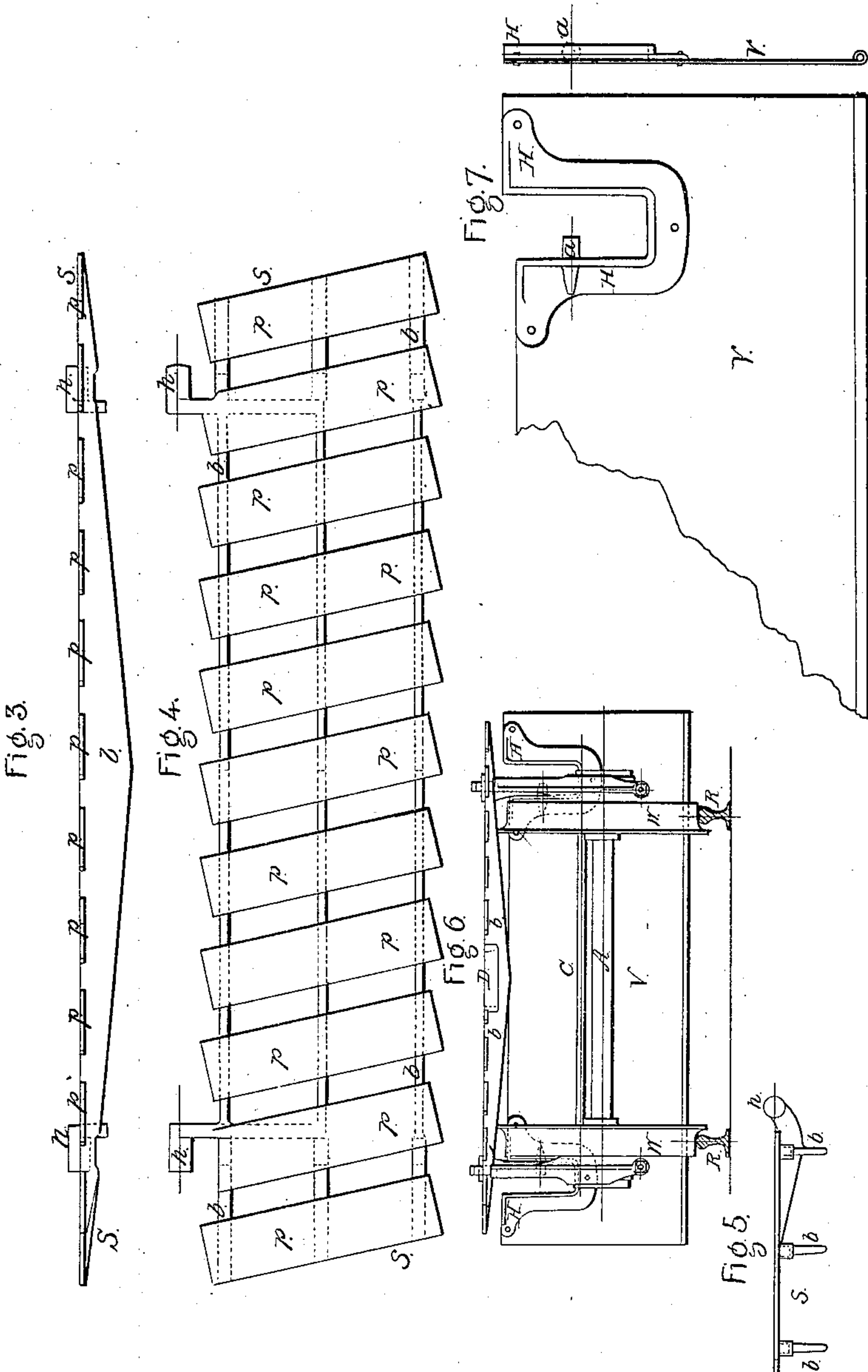
Cyrus Chambers, Jr.

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Thornald Lambory
H. P. Davis.

Inventor:
Cyrus Chambers Jr.

United States Patent Office.

CYRUS CHAMBERS, JR., OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 88,274, dated March 30, 1869.

IMPROVED CAR FOR BRICK-DRIERS.

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, CYRUS CHAMBERS, Jr., of the city and county of Philadelphia, and State of Pennsylvania, have invented certain new and useful Improvements in Cars for Brick-Driers; and I do hereby declare the following to be a full and correct description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a top view of the car complete.

Figure 2 is a side elevation of the same.

Figure 3 is a side elevation of one of the brick-holding slats, or sections.

Figure 4 is a top view of the same.

Figure 5 is an end view of the same.

Figure 6 is an end view of the car complete.

Figure 7 is a side and end view of the swinging apron, or air-valve.

The same letter indicates the same part wherever it occurs.

The nature of this invention consists in a peculiar construction of a car, upon which bricks are intended to be placed, preparatory to their passage through drying-tunnels, whereby easy access is secured for the hacker to every portion of the car, for the purpose of loading, and the proper position of the bricks is so indicated that an unskilled laborer can readily hack them.

It further consists in the devices for preventing the heated air from passing under the car, and for securing a free circulation of air among the bricks, all as hereinafter more fully set forth.

To enable others skilled in the art to make use of my improvements, I will proceed to describe the construction and operation of my improved car, referring to the drawings by the letters of reference marked thereon.

The body of the car I form of two side-frames, *F F'*, united together by cross-rods, *C*; and the fixed end-slats *S*, or in any other suitable manner.

From the upper edges of the side-frames project the slotted eyes *e e*, &c., which receive hooks, *h h*, projecting from the slats *S S*, &c., forming the hinges on which said slats are turned.

An enlarged view of the slats *S* is seen in fig. 4, a side view, on the same scale, in fig. 3, and an end view, on the same scale, in fig. 5.

From these, it is apparent that the slats *S* are formed each of three bars, *b b b*, united at top by the brick plates *p p*, &c., placed across them at an inclination, as shown.

The hooks *h h*, projecting in opposite directions from one side of each slat, enter the eyes *e e*, on the frame, and form, with them, the hinges on which the slats are turned.

The slots in the eyes *e e* are intended to allow the slats to be folded on each other, the hook rising in the slot, the thickness of the slat, when the latter is folded on to the slat next to it.

The plates *p p*, I make about the size of an ordinary brick, and their position indicates to the hacker the

place for each bottom brick, as he begins the loading of the car.

The object of hinging the slats is to allow them to be folded back, one on another, as described, so as to afford standing-room between them for the hacker while engaged in loading the car. Such an open space is seen at *X*, in figs. 1 and 2.

The wheels *W* of this car run on rails, *R*, in a tunnel of heated air.

The axles turn on friction-rollers, *r r*, &c., attached to rings, held in brackets *B*, projecting downward from the car-frame.

Draw-heads, *D*, are attached to either end of the car, and serve as handles to operate them separately, and, when united in a train, allow lateral flexure sufficient to turn curves.

The car, constructed as hereinbefore described, is intended, as before observed, to be drawn through a tunnel, through which a current of heated air is continually passing from a source of heat at one end, to a flue, or chimney at the other.

To prevent any considerable portion of this heat from passing beneath the car, and thus escaping without circulating among the green bricks placed on the car, I make use of a swinging apron, or valve, *V*, suspended from the car-frame, and made of such size as nearly to equal in area that of the cross-section of the lower portion of the tunnel which it is intended to close.

This apron is shown in top view in fig. 1, in end view in fig. 2, in front elevation in fig. 6, and in end view and side elevation in fig. 7.

It may be made of sheet-metal, supported by two clamps, or brackets *H*, suspended, by pivots *a*, to the car-frame.

It is weighted at its lower edge, to counteract the effect of strong air-currents upon it, while it is free to swing out of the way of any obstruction it may encounter.

The axles of the car are placed sufficiently near the ends of the car to prevent it from tilting, when loaded at one end only, and yet near enough to each other to allow of the easy turning of curves.

Having thus fully described my invention,

What I claim therein, and desire to secure by Letters Patent, is—

1. The bottom of the car, constructed of the hinged slats *S S*, &c., capable of being turned over on to each other, in the manner and for the purpose described.

2. The slats *S*, constructed in the manner herein specified.

3. The swinging apron *V*, constructed and suspended substantially as and for the purpose described.

The above specification of my said invention signed and witnessed at Boston, this 15th day of August, A. D. 1868.

Witnesses:

CYRUS CHAMBERS, JR.

W. W. SWAN,

CHAS. F. STANSBURY.