

No. 712,840.

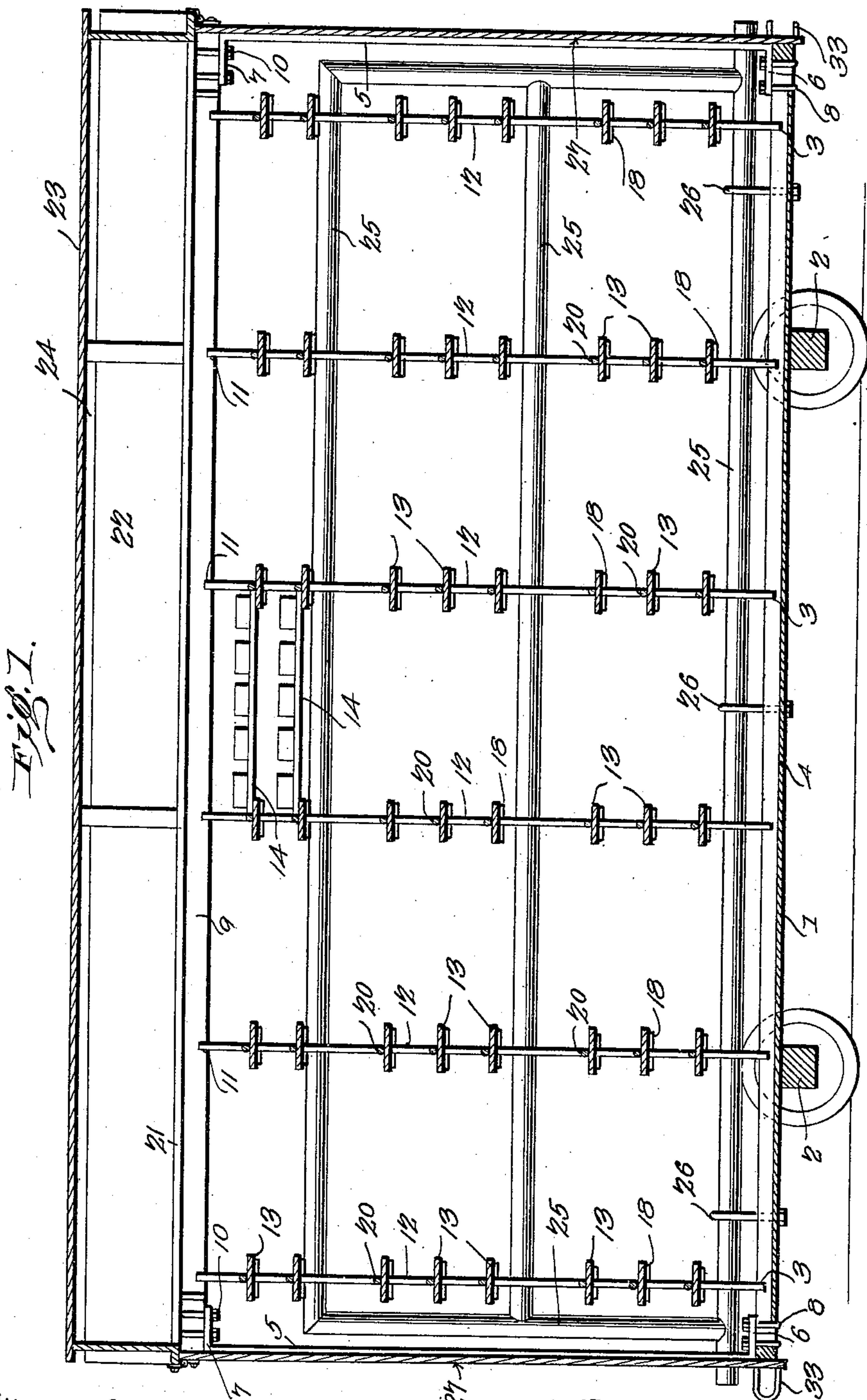
Patented Nov. 4, 1902.

E. W. OSTRANDER.  
BRICK DRYING CAR.

(Application filed Dec. 9, 1901.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses  
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by *E. W. Ostrander*, Inventor.  
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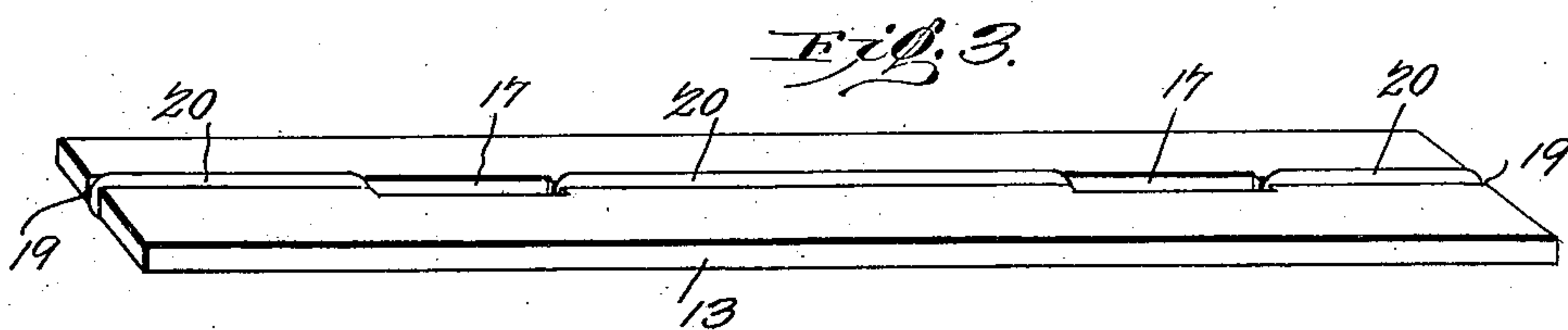
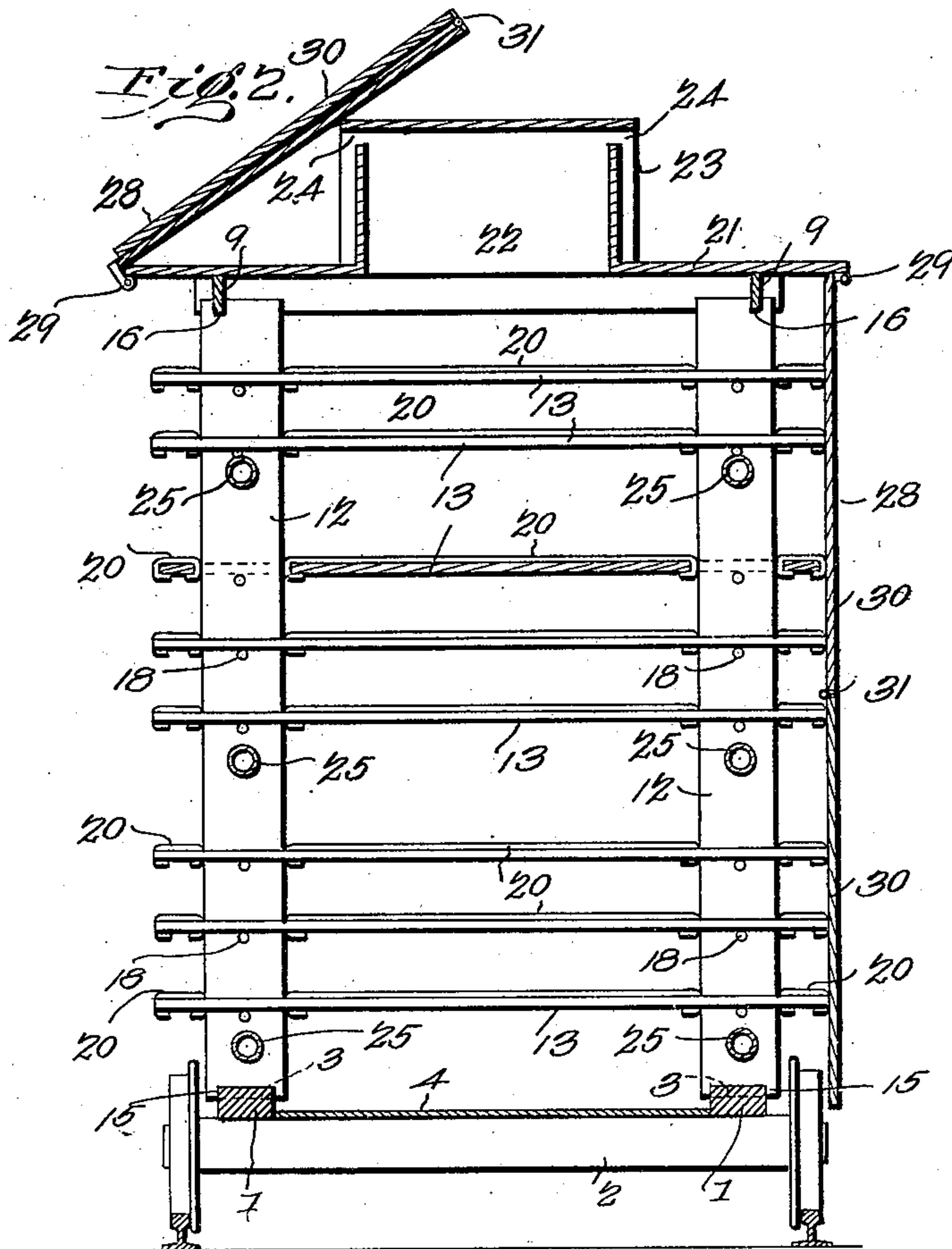
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# UNITED STATES PATENT OFFICE.

EDWARD W. OSTRANDER, OF COEYMANS, NEW YORK.

## BRICK-DRYING CAR.

SPECIFICATION forming part of Letters Patent No. 712,840, dated November 4, 1902.

Application filed December 9, 1901. Serial No. 85,257. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD W. OSTRANDER, a citizen of the United States, residing at Coeymans, in the county of Albany and State of New York, have invented a new and useful Brick-Drying Car, of which the following is a specification.

My invention is an improved brick-drying car adapted for use in drying green bricks preparatory to burning the same in a kiln; and it consists in the peculiar construction and combination of devices hereinafter fully set forth and claimed.

In the accompanying drawings, Figure 1 is a vertical longitudinal sectional view of a brick-drying car constructed in accordance with my invention. Fig. 2 is a vertical transverse sectional view of the same, showing one side of the casing opened. Fig. 3 is a detail perspective view of one of the rack-bars for supporting the pallets.

The sills 1 of the car-frame, which are here shown as resting on and secured to the axles 3, are iron bars of suitable dimensions and are provided on their upper sides at suitable regular distances apart with transverse grooves 3. The bottom 4 of the car is made of sheet or plate iron and is here shown as secured to the under sides of the sills. Vertical corner-bars 5, which are made of iron, have their lower and upper ends bent inwardly at right angles, as at 6 7. The lower portions of the said corner-bars are secured on the end portions of the sills 1 by clip-bolts 8. The upper frame 9 of the car is in practice a continuous bar, which in transverse section is disposed in a vertical position. The corners of the said upper frame 9 rest on the bent upper portions 7 of the corner-bars 5 and are secured thereto by clip-bolts 10. The sides of the upper frame 9 are notched in their lower edges, as at 11, the said notches 11 being disposed above and in vertical alinement with the grooves 3 of the sills 1. Vertical bars 12, which support the rack-bars 13, that carry the brick-pallets 14, have their lower ends notched, as at 15, and fitted in the grooves 3 of the sills 1, and the upper ends of the said vertical bars 12 are provided with notches 16, which receive the notched portions 11 of the side bars of the top frame 9. The said vertical bars 12 are also made of iron. Each of the

rack-bars 13 is of iron and is provided with vertical openings 17, through which the vertical bars 12 extend, the said rack-bars being supported at the required distance apart by cross-pins 18, which are inserted in openings with which the said vertical bars 12 are provided. Each rack-bar 13 is provided with notches 19 in its ends at points midway between its sides and in line with the openings 17. Guide-flanges to separate the brick-pallets are formed on the said rack-bars 13 by wires or rods 20 of suitable size, the ends of which are bent under the said rack-bar in the notches 19 and in the ends of the openings 17 thereof, the said wires or rods 20 being disposed on and projecting above the upper side of the rack-bar, as shown in Fig. 3. The diameter of said wires or rods is equal to the thickness of the vertical bars 12.

It will be understood from the foregoing description and by reference to the drawings that the pallets 14, on which the bricks are placed as they are taken from the molds, may be readily placed on the rack-bars or removed therefrom.

The top 21 of the car is in practice an iron plate. The said top plate 21 is provided with a longitudinal central opening 22 of suitable dimensions, over which is a cupola or dome 23, having openings 24 to admit the escape of air from the interior of the car.

Near the sides of the car are circulating-pipes 25, through which hot air, hot water, or steam may be caused to circulate from a furnace or boiler of suitable construction. The said pipes 25 pass through openings in the vertical bars 12, as shown, and the lower pipes 25 are secured to and above the sills 1 by clip-bolts 26.

The ends 27 and the sides 28 of the car box or casing are composed of iron plates and are hinged at their upper sides to the top plate 21, as at 29. The sides 28 are each composed of a plurality of sections 30, hinged together, as at 31, whereby the sides may be doubled and lifted and disposed above the top of the car, as shown in Fig. 2, or may be closed against the sides of the frame which carries the brick-pallets, as shown in the same figure.

In operation my improved brick-drying car is disposed on a track, which runs from the molding-machine to the kiln. The pallets as



they are filled with the freshly-molded bricks from the machine are placed on the rack-bars 13 until the car is filled. In warm sunny weather the sides and ends of the car-box are  
5 opened and the bricks dried in the car without the employment of artificial heat. In cold and rainy weather the sides and ends of the car-box are closed and hot air, steam, or hot water is caused to circulate through the  
10 pipes 25, the heat radiated from the said pipes being employed to dry the bricks, as will be understood. When the bricks are dry, the car is drawn to the kiln where they are to be burned. I provide a suitable clevis  
15 33 at each end of the car to enable the same to be drawn on the track.

By the use of my improved drying-car a considerable economy may be effected in the manufacture of bricks. My drying-car en-  
20 ables the bricks to be dried in all kinds of weather, preserves the form and color of the bricks during the drying process, enables the area of a brick-yard to be considerably reduced without diminishing the capacity of  
25 the plant, enables drying sheds and rooms to be dispensed with, and effects a great economy of labor.

Having thus described my invention, I claim—

30 1. In a brick-drying car, the bottom frame, a top frame forming the roof and having a cupola thereon provided with air-escape openings, corner-posts connecting the said bottom and top frames and sides each comprising a  
35 plurality of sections hinged together, the said sides being adapted to be folded, so that the sections thereof lie upon one another and being hinged to the sides of the roof and adapted to be folded over and disposed upon the cu-  
40 pola, substantially as described.

2. A brick-drying car having racks to support the pallets, a casing or box provided with sides adapted to be folded and disposed on the top thereof, and heating-pipes disposed in the interior of said casing or box, substan- 45 tially as described.

3. A brick-drying car having upper and lower frames provided with notches, corner-bars connecting said upper and lower frames, vertically-disposed bars notched in their ends 50 and fitted in said notches of said upper and lower frames, and rack-bars to support the pallets, said rack-bars being supported by said vertically-disposed bars and having open- 55 ings through which said vertically-disposed bars extend, substantially as described.

4. A brick-drying car having upper and lower frames provided with notches, corner-bars having their upper and lower ends bent inwardly at right angles and secured to the 60 said upper and lower frames, vertically-disposed bars notched in their ends and fitted in said notches of said upper and lower frames, and rack-bars to support the pallets, said rack-bars being supported by said vertically- 65 disposed bars, substantially as described.

5. In combination with vertically-disposed bars, a rack-bar having openings through which said vertically-disposed bars extend, and a flange element, as a wire disposed on 70 said rack-bar, and having its ends bent downwardly and under the same, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 75 the presence of two witnesses.

EDWARD W. OSTRANDER.

Witnesses:

JUSTIN L. BISHOP,  
FRANCIS SARELL WILLIS.