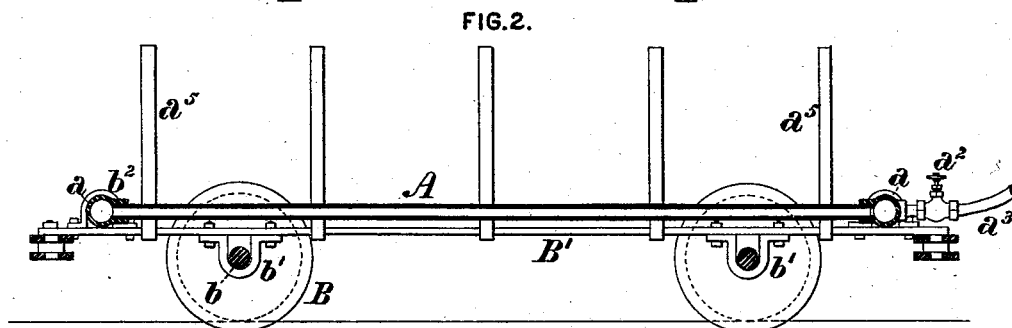
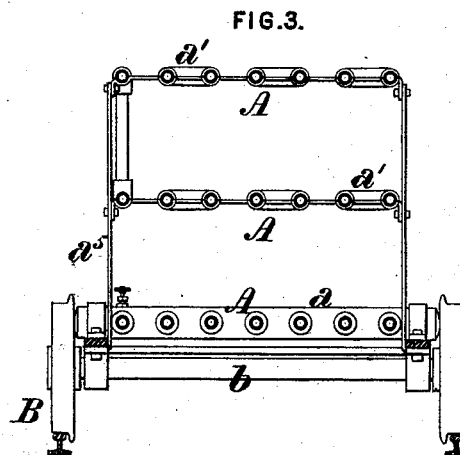
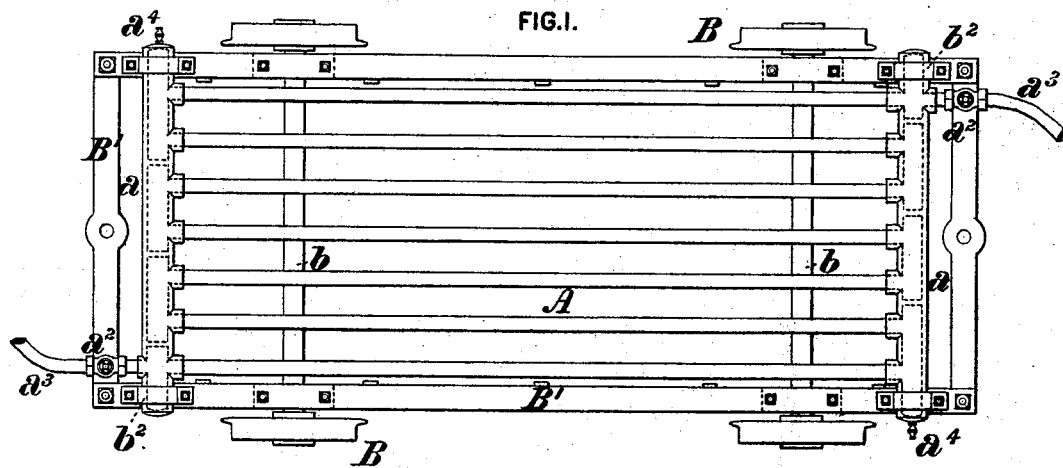


W. L. GREGG.
Drying-Car for Brick.

No. 220,972.

Patented Oct. 28, 1879.



WITNESSES.

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WILLIAM L. GREGG, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN DRYING-CARS FOR BRICK.

Specification forming part of Letters Patent No. 220,972, dated October 28, 1879; application filed April 23, 1879.

To all whom it may concern:

Be it known that I, WILLIAM L. GREGG, of the city and county of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Drying-Cars for Bricks, Pottery, &c., of which improvements the following is a specification.

The object of my invention is to provide a convenient and efficient portable drier for bricks and other articles made from clay, as well as for various products of chemical and other manufacturing industries which require to be subjected to a process of desiccation, and subsequently transported from one portion of the plant or factory to another.

To this end my improvements consist in the combination, in a drying-car, of running-gear, a series of tubular supports for the articles to be treated, and valves governing the admission and exit of steam or heated air to and from the tubular supports, and affording attachments for couplings, whereby the car may be connected to a steam-boiler or other source of heat, and to another car when desired, all as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a plan or top view of a drying-car embodying my improvements; Fig. 2, a vertical longitudinal central section through the same, and Fig. 3 a vertical transverse section through the same as provided with additional drying-racks.

To carry out my invention I construct a rectangular rack or platform, A, of gas or steam pipes, united at their ends by manifolds *a*, elbows or fittings *a'*, or in any other suitable manner, the arrangement of the pipes and connections being such as to provide a circulation of steam or hot air from one end of the rack to the other through each pipe of the series. A valve or cock, *a*², is fitted to each end of the rack, so as to govern the admission and exit of steam or other heating medium to and from the interior of the same, each of the valves being threaded or otherwise adapted for the attachment of a flexible coupling or hose, *a*³, by which communication may be established with a steam-boiler or other heater, or with the rack of another similar drying-car.

Drip-cocks *a*⁴, one or more, may be provided

for relieving the rack from any water of condensation that may accumulate therein.

The form of rack shown in the drawings consists of a series of pipes arranged longitudinally and connected by end manifolds, *a*, having internal partitions, which provide a continuous passage, in alternate directions, through all the pipes; but the arrangement and method of construction may be varied, according to the judgment of the constructor, without departing from the spirit of my invention.

The tubular rack A is mounted upon running-gear, consisting of wheels B and axles *b*, the wheels being either fast or loose upon the axles, as preferred. In the instance shown the axles rotate in bearings *b'*, secured to the lower side of a rectangular frame, B', to the top of which the rack A is secured by straps *b*². Such arrangement of a separate frame supporting the drying-rack I deem preferable for use in cases where two or more cars are to be coupled together and moved with their contents from place to place, as the pipe-joints are thereby relieved from longitudinal strain, and convenient means for attaching the axle-boxes and coupling the cars together are provided.

It will be obvious, however, that when desired for the purpose of reducing weight and cost of construction, the drying-rack may serve as the sole framing of the car, and the wheels can either be made to revolve on journals formed upon the end manifolds, or with or upon axles supported in bearings connected to the manifolds or to the pipes themselves.

Vertical bars *a*⁵ or slatted side pieces of any desired form may be secured to the car, to afford lateral support to the articles placed upon the rack.

In the transverse section, Fig. 3, the car is shown as provided with three separate tubular racks, arranged one above the other, which construction will be found desirable where a large amount of heating-surface is required.

The pipes of the upper racks are connected at their ends by elbows or fittings *a'*, and are supported by transverse straps secured to the vertical bars *a*⁵.

My invention provides a car which is simple, strong, and durable, and in its use a

material economy of time, labor, and fuel is attained by applying the heating medium to any required number of the articles to be dried within the capacity of the car as soon as placed upon the racks, and completing the operation thereon, (which may be effected, if desired, within a closed chamber or apartment having suitable apertures for the escape of the vapors,) instead of, as has heretofore been the case, employing the heat of a kiln, in which a small quantity of the articles cannot be economically dried, nor can the degree of heat be conveniently or expeditiously governed and altered.

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

The combination, in a drying-car for bricks, pottery, &c., of one or more tubular racks or supports for the articles to be dried, running-gear supporting the same, and valves or cocks governing the admission and exit of steam or other heating medium to and from the interior of the racks, substantially as set forth.

WILLIAM L. GREGG.

Witnesses:

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