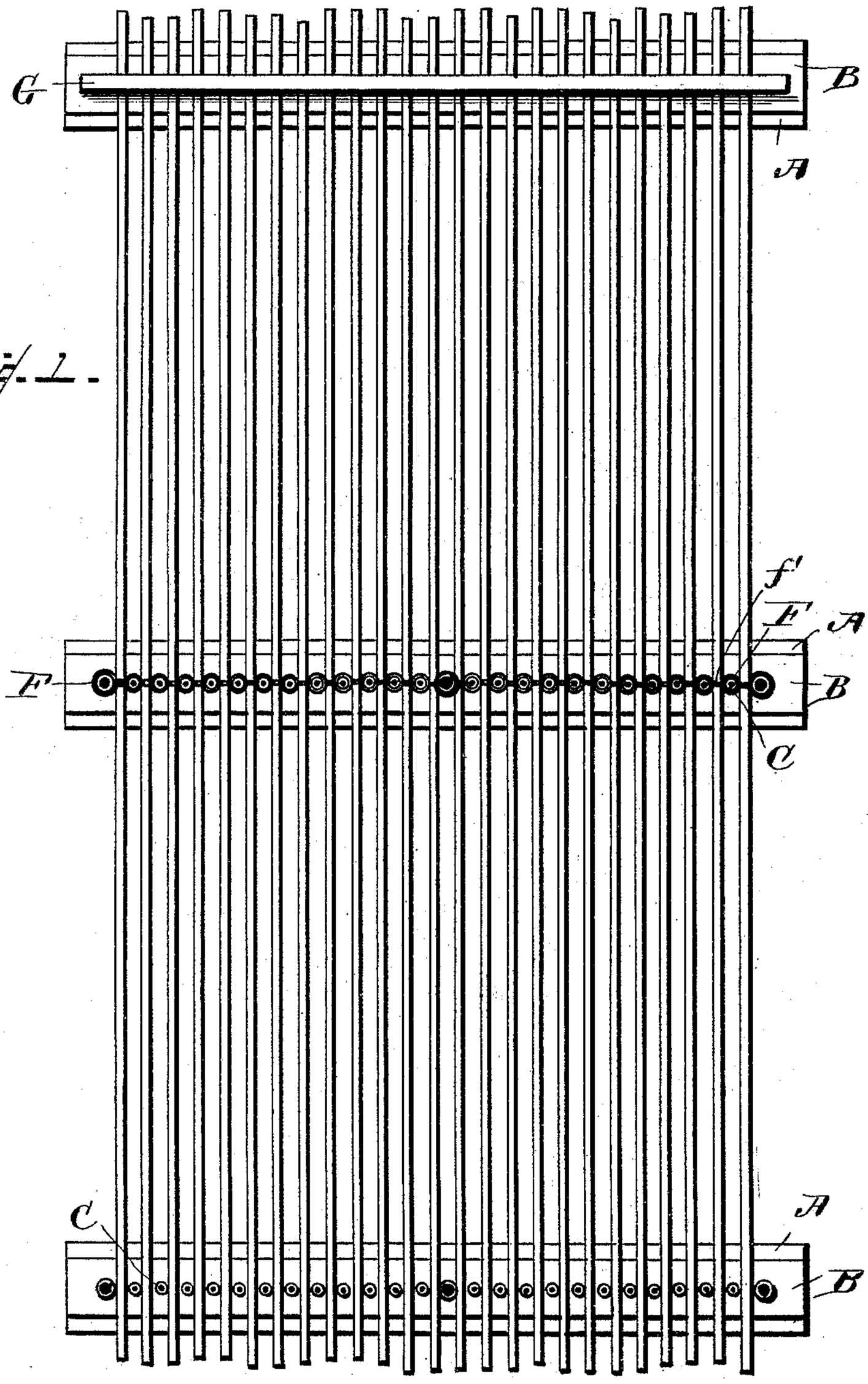
(No Model.) 2 Sheets—Sheet 1.

W. A. LEARY.

LUMBER DRYING TRUCK.

No. 476,801. Patented June 14, 1892.

Fig. 1.



Witnesses
Albert Heiden.
A. L. Hough

Inventor
William A. Leary
By his Attorney
Franklin H. Hough

(No Model.) 2 Sheets—Sheet 2.

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LUMBER DRYING TRUCK.

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Fig. 2.

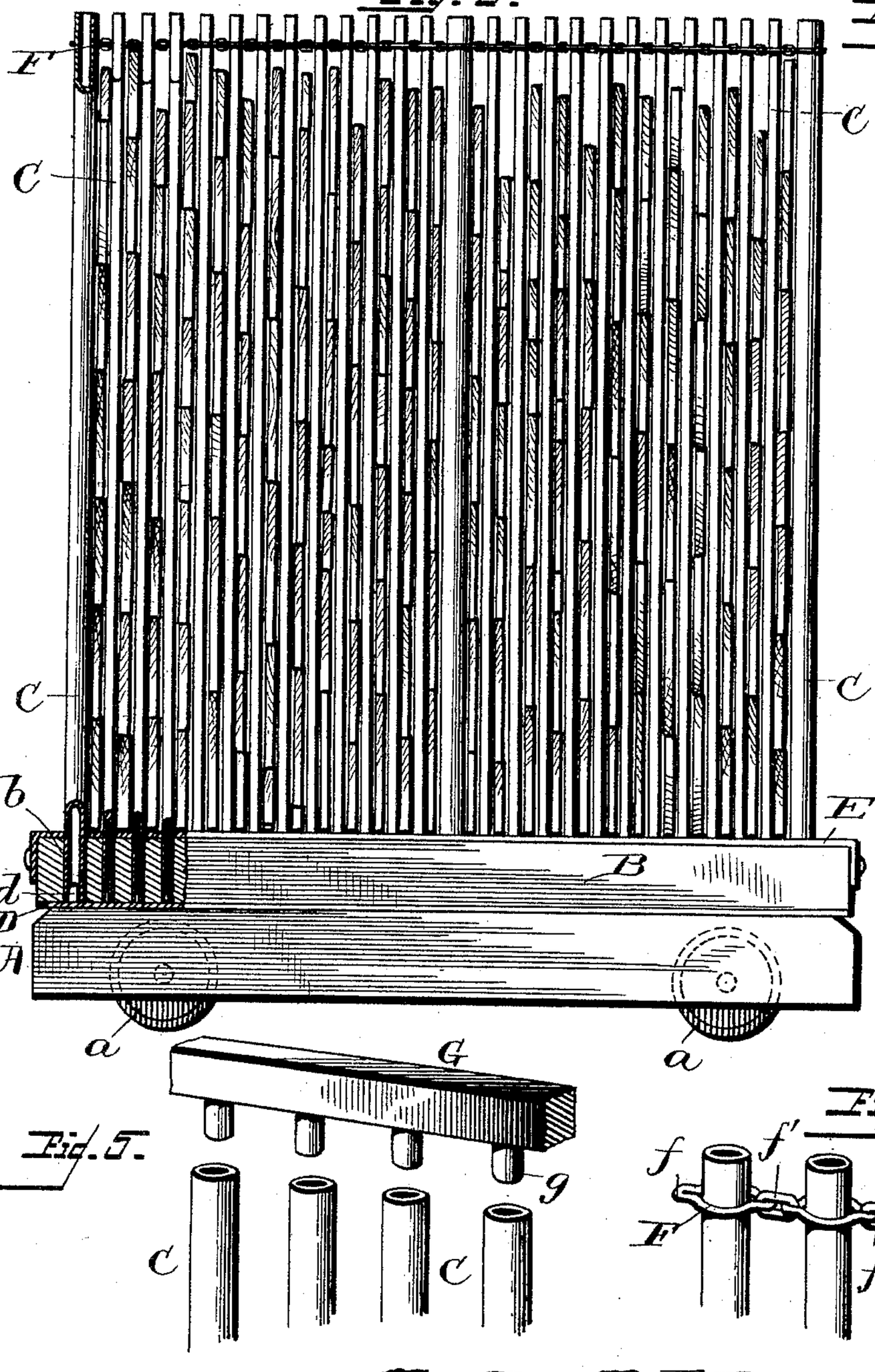

Fig. 3.

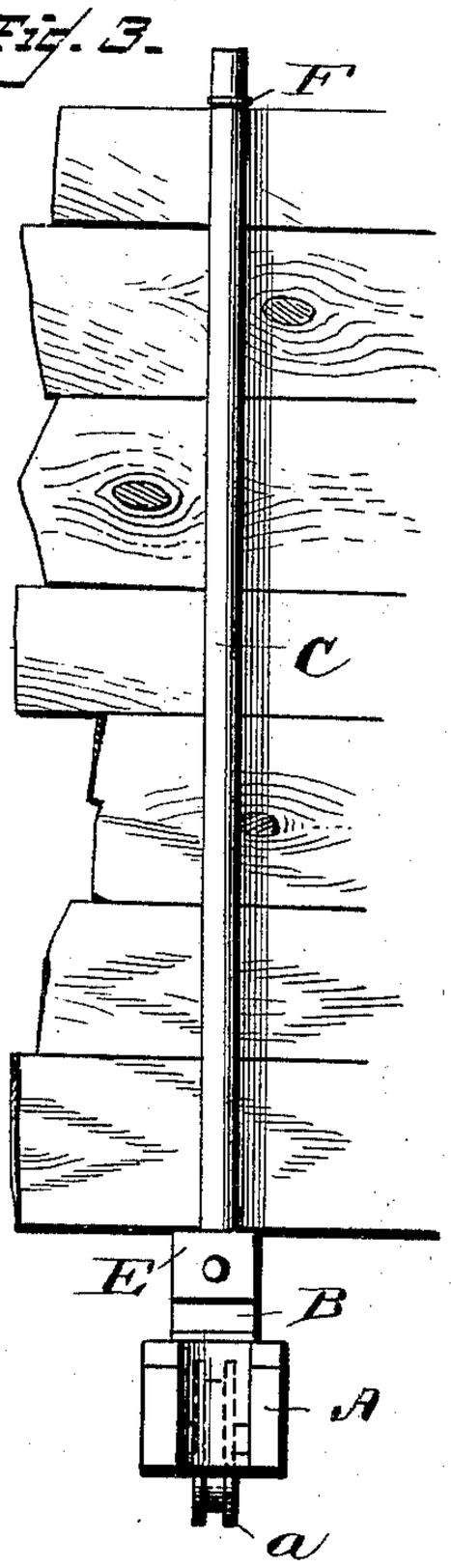

Fig. 5.

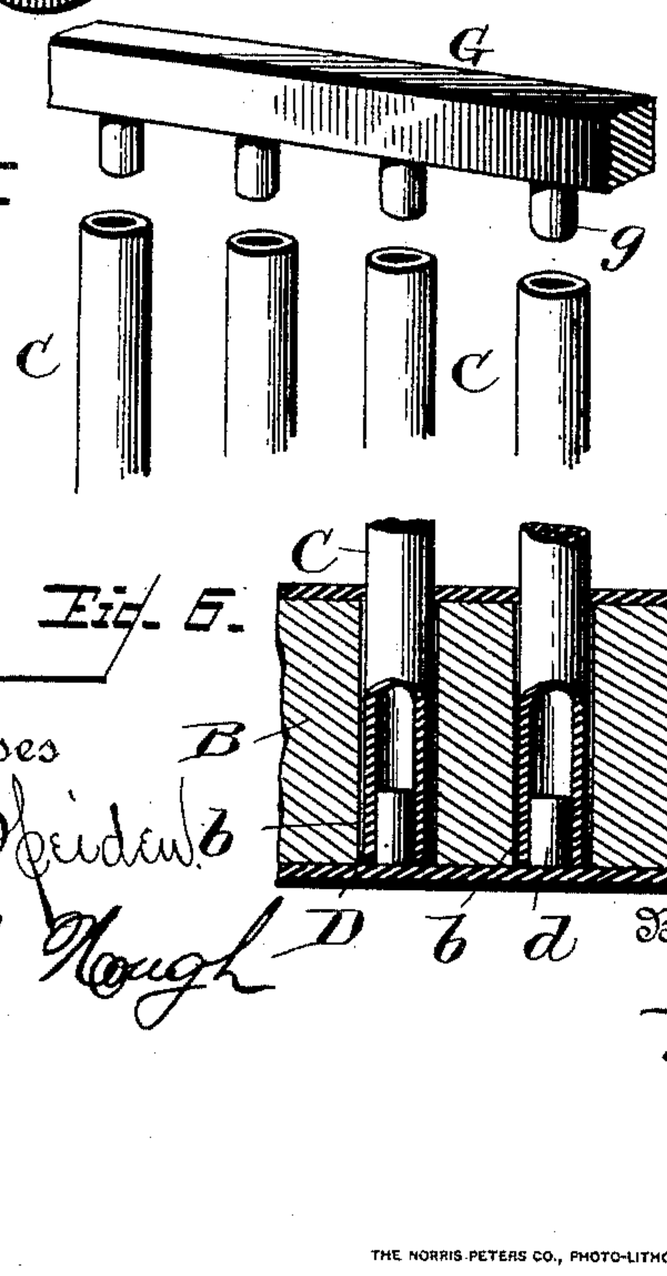

Fig. 4.

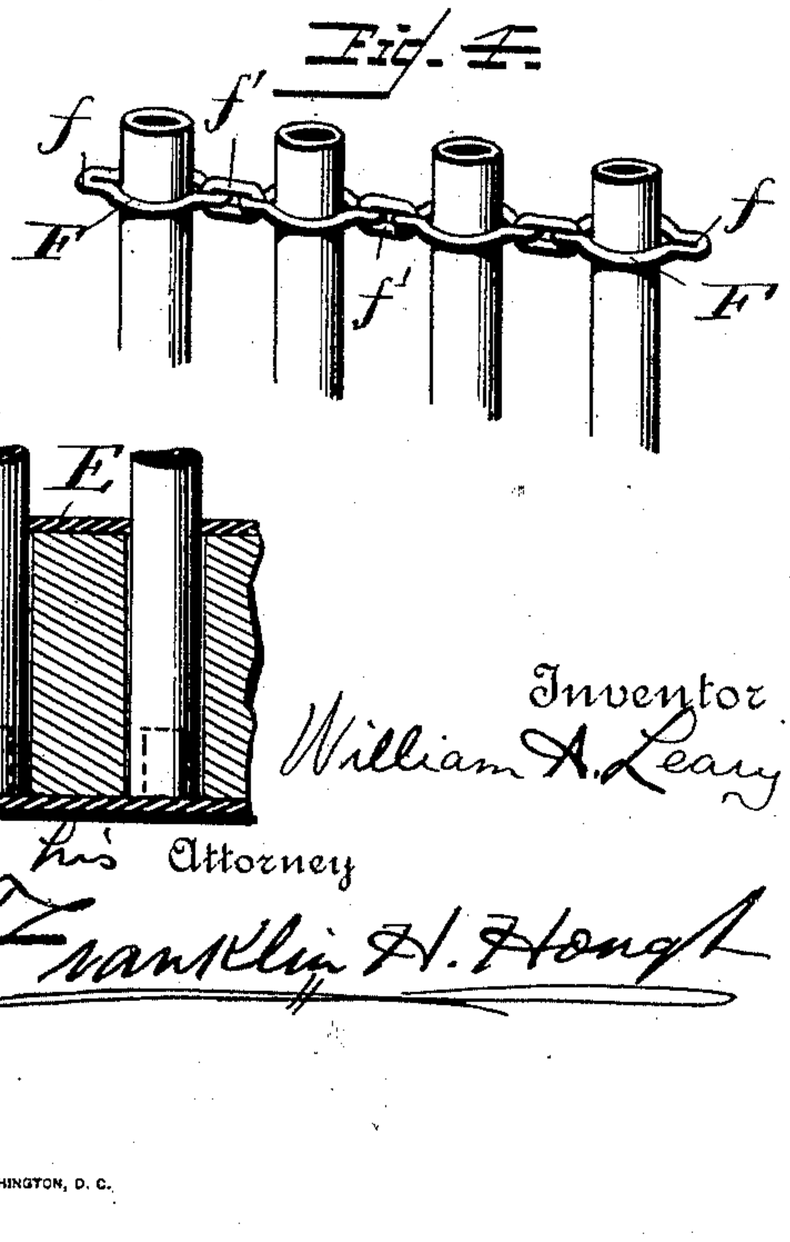

Fig. 6.

Witnesses
Albert Spiden
A. L. Hough

Inventor
William A. Leary
By his Attorney
Franklin H. Hough

UNITED STATES PATENT OFFICE.

WILLIAM A. LEARY, OF NORFOLK, VIRGINIA.

LUMBER-DRYING TRUCK.

SPECIFICATION forming part of Letters Patent No. 476,801, dated June 14, 1892.

Application filed October 12, 1891. Serial No. 408,460. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. LEARY, a citizen of the United States, residing at Norfolk, in the county of Norfolk and State of Virginia, have invented certain new and useful Improvements in Devices for Transferring Lumber to Drying-Kilns; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to appliances or means for moving lumber into and out of lumber-drying kilns; and it has for its object certain improvements in the construction of that class of lumber trucks or cars in which it is designed to place the lumber upon edge instead of piling the same flatwise and separating the boards by thin strips of wood, as has heretofore been the common way of piling lumber upon the trucks or cars used in the drying-kilns.

It has been found that lumber piled upon edge, with a sufficient space intervening between the boards to allow a free passage of the heated air from the bottom to the top of the pile, will dry much more evenly and in less time than when piled flatwise or horizontally. In order to accomplish this result, it has been found necessary to provide cars or trucks with frames having spaces, within which the boards could be slid from the end or side of the car. This process of loading the car has proven to be, even under the most favorable circumstances, exceedingly troublesome and inconvenient, and in some cases in which the boards have been warped or have been unevenly sawed or have projections or irregularities upon either the faces or edges it is difficult and at times impossible to use the racked cars heretofore in use. These objections to the appliances heretofore in use I have had in view in producing my present invention, and accordingly my aim has been to provide for the convenient and easy loading and unloading of the trucks and to construct a device which when not in use will occupy but little space.

To these ends and to such others as the invention may pertain the same consists in the novel construction of the lumber-transporting device, which will be more fully hereinafter described, shown in the accompanying drawings, and then specifically defined in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, like letters of reference indicating like parts throughout the several views, and in which drawings—

Figure 1 is a plan view showing my invention as loaded with lumber, the same constituting what I term a "car." Fig. 2 is an end elevation of the same. Fig. 3 is a detail view in side elevation of a portion of the car. Fig. 4 is a detail perspective view showing one method of securing together the upper ends of the vertical lumber-supporting posts or uprights. Fig. 5 is a like view of another mode of securing the upper ends of the uprights, and Fig. 6 is a detail view in section showing the manner of supporting the said uprights or posts at their lower ends.

Reference now being had to the details of the drawings by letter, A designates a timber which forms the sill of the truck, and is mounted upon two grooved wheels *a a*, journaled therein near its opposite ends. Said wheels are adapted to run upon a suitable track leading into the drying-chamber of a drying-kiln. Secured to the upper face of said beam A is a second timber B. Passing vertically through the timber B is a series of holes *b*, said holes being provided in a continuous series extending the entire length of the timber, and within each of the holes is placed the lower end of a tubular upright or post C. These uprights are arranged at such distances apart as will correspond with the thickness of the boards to be dried, and are preferably from six to eight feet in height.

To the lower face of the timber B is secured a metal strip D, which upon its upper face is provided with a series of stub posts or pins *d*, the number and relative arrangement of which posts correspond with the holes in the timber. These stub-posts are of slightly less diameter than the diameter of the holes *b*, which they enter, and fitted over the said

posts the tubular uprights are provided with a secure position within the holes *b*.

The upper face of the timber B is provided with a wearing-plate E of boiler-plate iron, which has a series of openings coinciding with those of the beam for the passage of the uprights. Before the loading of the lumber, which will be presently described, the upper ends of the uprights are not connected together, so that a free and unimpeded space is left between the uprights, thus permitting the boards to be dropped from the upper ends of the uprights between the same; but after the lumber has been loaded I attach together the upper ends of the uprights for their mutual support and to hold the load securely together. My preferred method of doing this is by means of a device shown in Fig. 4, which consists of a chain composed of a circular link F for each post, adapted to slip over the same, having upon opposite sides loop-extensions *f*, which by links *f'* are connected to the extensions *f* of the next adjacent link F. Another manner of connecting and mutually supporting the uprights is by means of a bar G, (shown at the top of Fig. 1 and in detail in Fig. 5 of the drawings,) of a length adapted to extend across the entire series of uprights and having upon its under side studs or projections *g*, adapted to enter the upper ends of the hollow uprights.

The manner of loading lumber for transportation to the kiln-chamber is as follows: Platforms are erected upon either side of the tracks leading into the kiln. Upon each of the tracks and in a line parallel with each other are arranged the trucks A, the number of trucks employed corresponding with the number of tracks. The uprights are placed in position upon the trucks, as described, and when the several trucks are thus in position and in readiness for receiving the boards the spaces between the uprights upon the several trucks will be in alignment. The boards are dropped into the spaces between the uprights by the men engaged in loading the car. The platforms upon the sides of the tracks should be of such a height as to permit the operators to simply drop the boards into the spaces between the uprights, thus avoiding the extra labor required in lifting the boards. Each of the spaces is thus filled and the tops of the uprights are then secured, as described, either with the chain or some equivalent form of fastening, and the lumber is in readiness for moving into the kiln. It will be seen that by the arrangement which I have described the lumber will be transferred to the kiln so arranged as to permit the free circulation of the heat through the entire mass of boards, the passages between the boards being continuous from top to bottom of the pile, and the heat will have direct access to the faces of the boards. In unloading the car the several uprights may each in turn be removed, thus avoiding the necessity of lifting the boards over the uprights.

Having thus described my invention, what I claim to be new, and desire to secure by Letters Patent, is—

1. In a lumber-transporting device, the combination, with a movable support, of a series of uprights or posts suitably spaced and adapted to have lumber let down between them, and means, substantially as described, for attaching together the upper ends of the posts, substantially as and for the purpose described.

2. In a lumber-transporting device, the combination, with a movable support having a series of openings, of a series of hollow posts or uprights fitted in said openings and a stud upon the support for each of the uprights and adapted to enter the lower end of the same, substantially as and for the purpose described.

3. The combination, with a lumber-transporting device, of a movable support having a series of openings, a series of tubular uprights or posts, one being contained in each of the openings, and a plate or bar upon the under side of the support having a stud or projection for each opening and entering the same and the end of the tube therein, substantially as described.

4. In a lumber-transporting device, in combination, several movable racks, each consisting of a support having suitably-spaced posts or uprights adapted to have lumber passed down between them, and a bar G, having a plurality of depending studs *g* for entering the upper ends of the posts for connecting the posts of each rack after the lumber has been placed, substantially as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM A. LEARY.

Witnesses:
H. H. LITTLE,
DAVID P. GUEST.