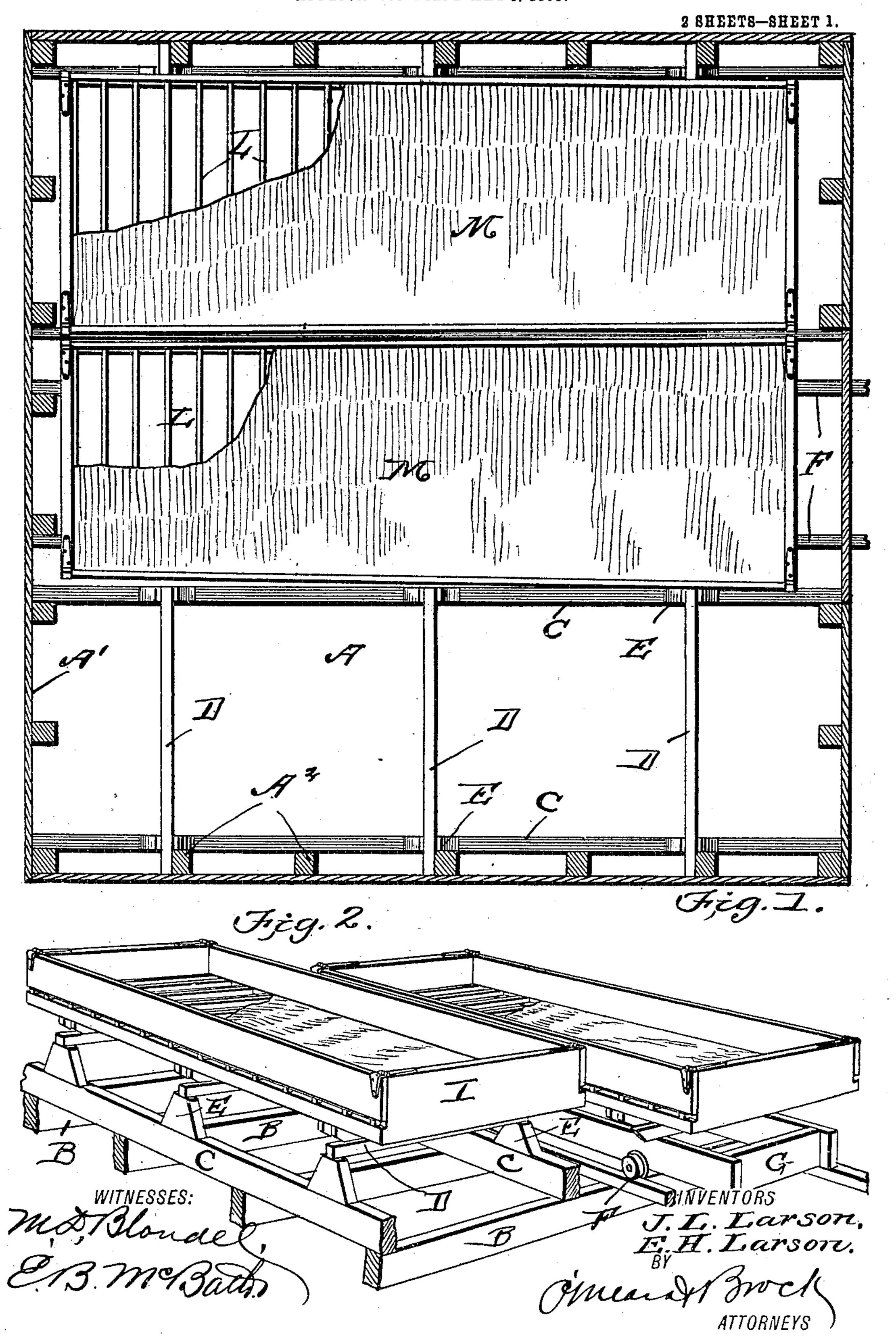
J. L. & E. H. LARSON.

HOP DRIER.

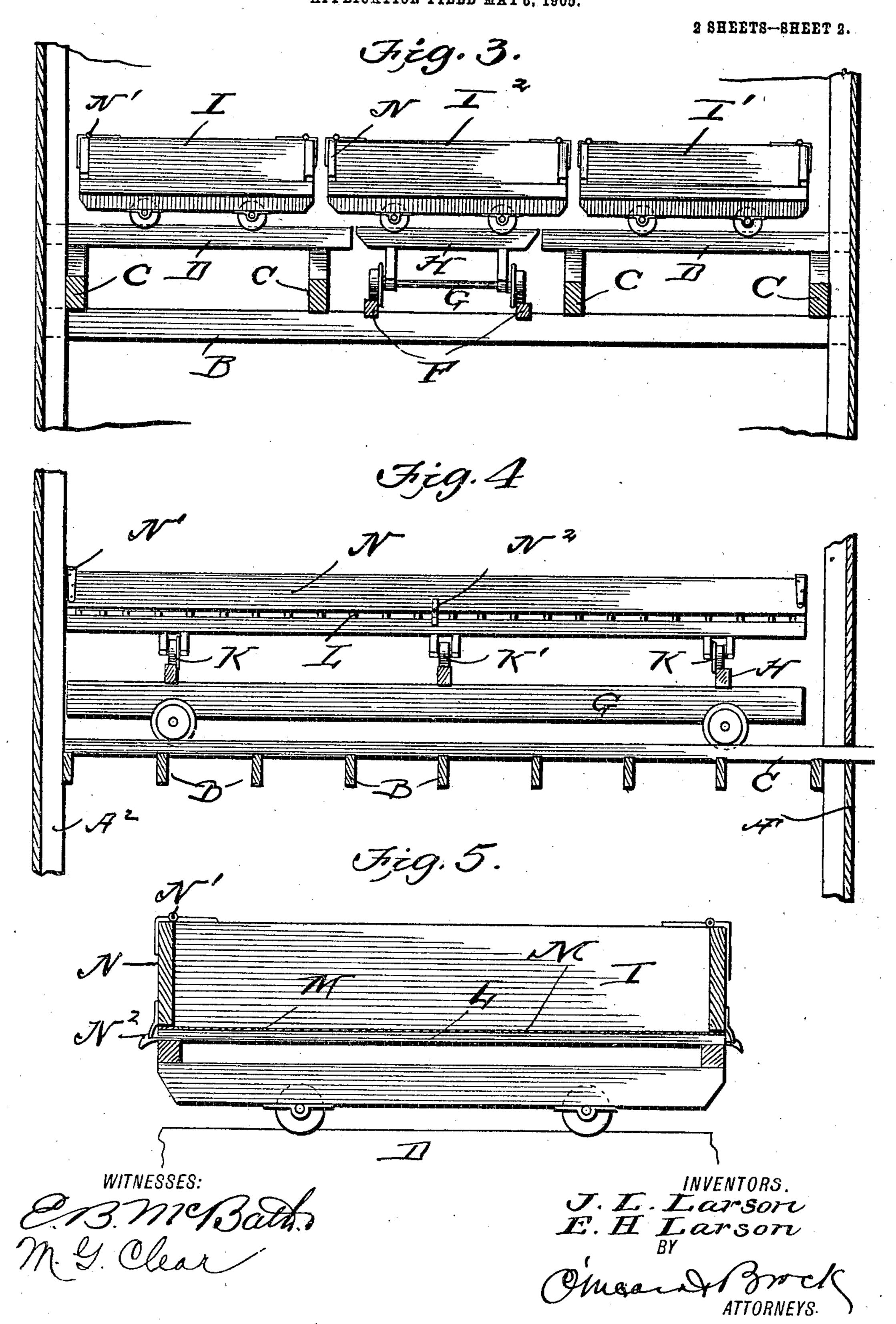
APPLICATION FILED MAY 8, 1905.



J. L. & E. H. LARSON.

HOP DRIER.

APPLICATION FILED MAY 8, 1905.



## UNITED STATES PATENT OFFICE.

JOHN L. LARSON AND EDD H. LARSON, OF SILVERTON, OREGON.

## HOP-DRIER.

No. 837,412.

Specification of Letters Patent.

Patented Dec. 4, 1906.

Application filed May 6, 1905. Serial No. 259,187.

To all whom it may concern:

Be it known that we, John L. Larson and Edd H. Larson, citizens of the United States, residing at Silverton, in the county of Marion and State of Oregon, have invented a new and useful Improvement in Hop-Driers, of which the following is a specification.

This invention relates generally to hop-driers, and more particularly to the improved construction of drying rack or car and also the supporting frame or tracks arranged within the drying-house for the purpose of supporting the said cars or racks.

The object of the invention is to provide novelties of construction whereby the drying racks or cars can be quickly and easily arranged within the drying-house and when so arranged are not likely to become displaced or shifted.

With these and certain other objects in view the invention consists in the novel features of construction hereinafter fully described, and pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a sectional plan view of a drying-house and two of the cars or racks arranged therein. Fig. 2 is a detail view in perspective, showing the manner of transferring the car from a central to a side position.

Fig. 3 is a transverse sectional view taken through a portion of the drying-cars, the drying house or racks being shown in elevation. Fig. 4 is a longitudinal sectional view, the car being shown in side elevation and also the movable track. Fig. 5 is a transverse sectional view of the drying car or rack.

In carrying out our invention we employ a drying-house A, comprising the siding or sheeting A', connected to the vertical stud-

40 ding  $A^2$ .

B indicates a series of joist arranged transversely, said joist supporting the longitudinal stringers C, and resting upon these stringers C are the transversely-arranged tracks D, there being three tracks, as shown, each resting upon a chair or support E, interposed between the stringer and the track for the purpose of elevating the said track a short distance above the stringer.

resting upon the transverse and centrally between the inner stringers C, said track F extending outside the drying-house, and a truck G is adapted to travel upon said track, said truck carrying three transverse tracks H, which are adapted to be brought into register

with the transverse tracks D when the truck G is pushed into the drying-house the proper distance.

I, I', and I2 indicate the drying cars or racks, 60 each car having three pairs of wheels arranged transverse, as shown, the end wheel K being flanged and the center wheel K' being devoid of flanges, as most clearly shown in Fig. 4. Each car has a slatted bottom L, 65 covered with any suitable fabric M, and the sides N are hinged at N' at their upper ends and are adapted to be secured at their lower ends by means of spring-catches N<sup>2</sup>. The car I is first placed upon the truck G, and 70 said truck is rolled into the drying-house the proper distance, and the said car or rack I is then rolled from the tracks H to the left upon the tracks D. This car or rack I is a triffe wider at its rear end than at the forward end. 75 After the car I has been properly placed upon the tracks D at the left of the house the truck G is withdrawn and the car I' placed thereon, rolled into the house, and transferred to the tracks D at the right side of the house, and 80 this car is also slightly wider at its rear end than at the forward end. As the cars I and I' narrow toward the front end, a wedgeshaped space is left between these cars when placed in position. The truck is then with- 85 drawn again, the car I<sup>2</sup> placed thereon and rolled into the drying-house, said car I<sup>2</sup> being narrower at the rear end than at the forward end, and thereby fitting snugly into the wedge-shaped space between the cars I and 9° I', thereby locking all three cars against accidental displacement. It will of course be understood that the cars are filled with the material to be dried before being placed in the drying-house, and after all have been ar- 95 ranged therein the door of said house is closed, and the drying process can then be proceeded with. After the material has been thoroughly dried the cars are removed in the reverse order in which they were put 100 into the drying-house and emptied, and by having the side hinged and opening upwardly the emptying operation can be quickly and easily accomplished. It will thus be seen that we provide a simple and efficient means 105 for drying hops capable of operating in the manner described and for the purposes set forth.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a hop-drier, a plurality of cars, two

of said cars being narrower at their rear ends than at their forward ends, a central track, side tracks, means for moving said cars to the side tracks, and a car narrower at its front 5 end than at its rear end and adapted to wedge between the other cars and lock the three cars in position.

2. In a hop-drier the combination with a drying-house having a centrally-arranged 10 longitudinal track, the transversely-arranged side tracks, said side tracks being higher than the central track, the truck adapted to move

upon the central track, and provided with transverse tracks of a height adapted to correspond with the transverse side tracks and 15 the cars adapted to be carried by the truck, the side cars being wider at their rear ends, and the central car narrower at its rear end, for the purpose set forth.

> JOHN L. LARSON. EDD H. LARSON.

Witnesses:

HARRY RICE, J. E. Hosmer.