H. A. W. RASMUSSEN.

DRYING AND TRANSPORTATION TRUCK.

APPLICATION FILED APR. 9, 1917.

1,275,983. Patented Aug. 13, 1918.

Fig. 1

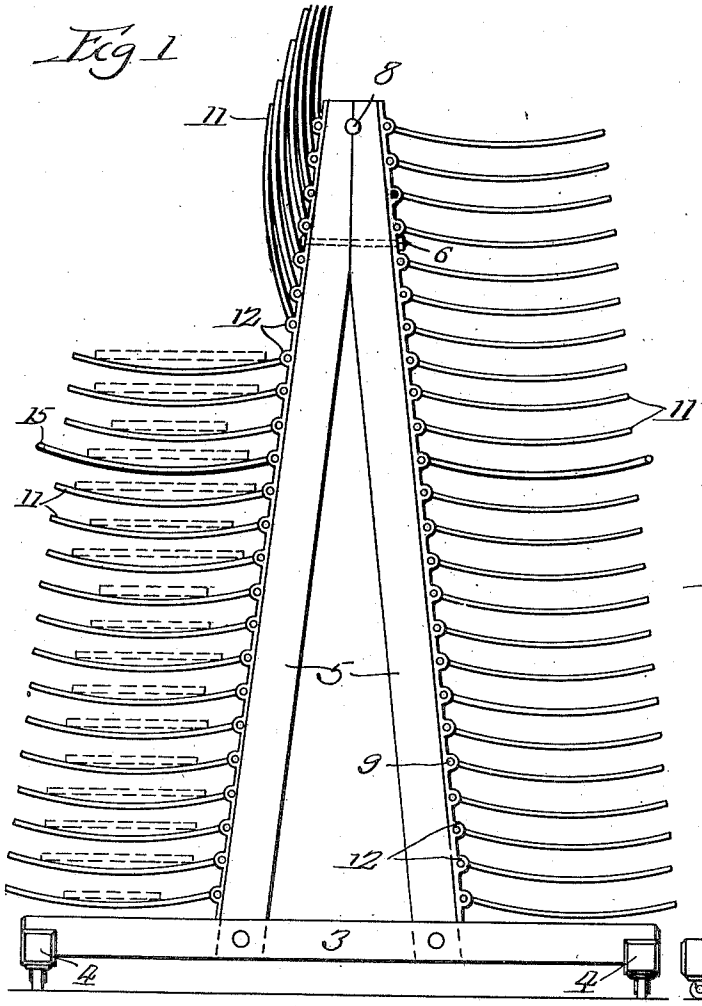


Fig. 2

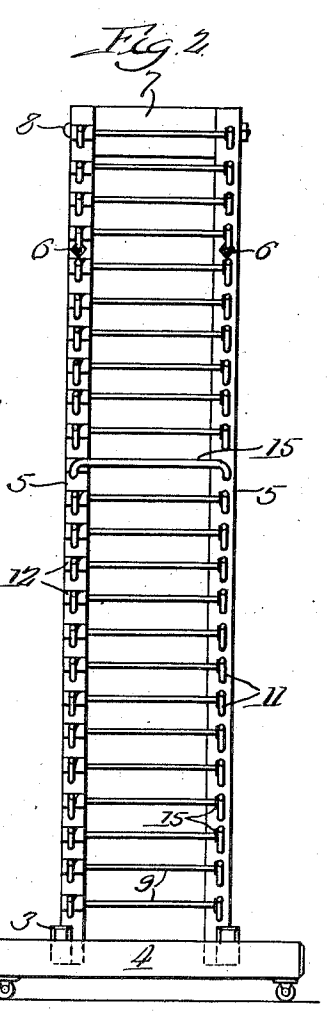
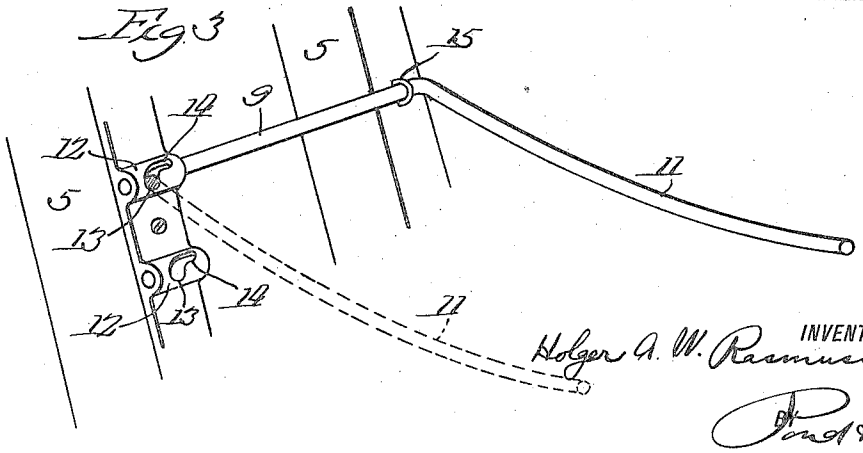


Fig. 3



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DRYING AND TRANSPORTATION TRUCK.

1,275,983. Specification of Letters Patent. Patented Aug. 13, 1918.

Application filed April 9, 1917. Serial No. 160,753.

To all whom it may concern:

Be it known that I, HOLGER A. W. RASMUSSEN, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Drying and Transportation Trucks, of which the following is a specification.

This invention relates in general to trucks, and has more particular reference to drying and transportation trucks, especially adapted for use in furniture and piano factories and in other places where it is desired to stack for drying a large number of panels and coated strips or sections of wood or the like which have been varnished, painted or similarly coated, and to transport the same from one place in the factory to another.

In the present invention, I have aimed, primarily to provide a drying and transportation truck of improved construction so designed as to be capable of carrying in a limited space a large number of freshly painted flat pieces in such manner that the finished surfaces will not be marred by contact with the supporting means. Such a truck is of special advantage where it is desired to finish flat pieces on both sides and to stack them in a rack for drying, since much time and labor are saved in comparison with the old method, wherein the pieces were finished on one side and placed in a rack until dry and then finished on the opposite side so that the freshly finished side would not be marred by contact with the supporting arms of the rack.

One of the features of my improved drying rack and truck is the provision of tiers of supporting arms constituting racks, each supporting arm of which is curved so as to present a concave upper side which constitutes a supporting surface upon which flat pieces of varying widths may rest only on their extreme edges, so that both sides of the piece may dry without being marred in any appreciable manner by the supporting rack.

Another feature is the mounting of the racks in such manner that they may be swung upwardly out of operative supporting position and retained in such inoperative position. By this means the operator may commence stacking pieces on the bottom rack and successively move the next higher rack down into supporting position so that the coated pieces may be quickly stacked without interference with the racks above.

Further features of my invention reside in the novel construction of the truck and rack, whereby the same may be produced at a comparatively low cost and will effectually serve the purposes desired.

Referring now to the accompanying drawings,

Figure 1 is a side elevation of a drying truck embodying my improvements;

Fig. 2 is an end elevation of the truck; and

Fig. 3 is a detail perspective view illustrating the mounting of one of the racks.

While the truck which I have illustrated is designed especially for carrying a large number of wood panels or flat pieces of wood to be painted or coated on both sides, it should be understood that my invention comprehends the carrying of any number of substantially flat pieces which have been coated on both sides and are required to be so supported in a rack for drying that their coated surfaces will not be marred.

The truck and rack supports are of very simple construction, consisting of a pair of parallel base pieces 3 secured at their ends to cross bars 4 equipped with suitable casters or any wheel supports, and a central standard in the form of uprights 5 secured in spaced relation at their lower ends to the base piece 3 and converging upwardly and being rigidly secured together by bolts 6 and held in rigid spaced relation by a block 7 and the bolt 8, in the manner clearly shown in the drawings. The supporting arms are mounted directly upon the uprights 5 in spaced relation so as to constitute two tiers of racks inclined toward the center of the truck so that the load will be centrally carried and the truck may be transported from place to place without danger of tipping. The individual racks in each tier are formed by rack bars or arms pivotally mounted on the bars 5 at both ends of the truck. These rack bars or arms project laterally from the standard in spaced relation and are curved concavely on their upper sides so that a flat piece which has been coated on both sides may be positioned directly on the curved surfaces of the rack and will rest only at its extreme edges on the rack surface, and since the supporting arms are comparatively narrow and preferably in the form of round metal rods, the engagement will be so small

so as not to noticeably mar the finish. The rack bars are also pivotally mounted so that they may be individually swung from a horizontal operative position to a raised or upright inoperative position, the mounting being so designed that the racks will be retained in their upright positions until released therefrom. The rack arms or supports are in the present instance each formed of a rod bent to U-shape so as to provide a pivot portion 9 and a pair of arms 11. These are each curved or shaped so as to provide concave or centrally depressed upper supporting surfaces for the purpose mentioned above. The means for pivotally securing the racks to the bars 5 may be of any suitable construction, although it is preferred to provide a pivotal mounting which will serve also to retain the racks in upright position. For this purpose, a tubular bearing 12 is provided for one end of each rack and is shaped to provide a slotway having a seat 13 and a longitudinal way 14, through which slotway one of the arms 11 passes, as shown in Fig. 3. The other end of the cross or pivot portion 9 of the rack may be pivotally secured to the other bar 5 by any suitable means, such as a common staple 15. By reason of this construction, each rack, when its arm 11 is resting on its seat 13, will be supported in operative position, and by swinging the rack upwardly and moving it sidewise so that its portion disposed in the slotway will enter the portion 14 thereof, the rack will be held in upright or inoperative position.

It will be manifest by reference to the drawings that a large number of flat pieces may be mounted on the racks and carried thereby in such manner that their coated surfaces may dry evenly and without being marred or blemished by the rack. It will also be evident that flat pieces of different widths might be equally well and advantageously supported by the rack, as is plainly seen by reference to Fig. 1, which shows in dotted lines a number of flat pieces of different widths mounted on the left hand tier of racks. Before stacking, all of the racks in one tier except the lowermost one are moved to inoperative position. This enables the operator to place a piece on the lower rack without interference with the rack next above. When the piece has been placed on the rack the next rack is swung down to position and loaded, and so on, each succeeding rack is filled.

Handles are provided at opposite ends of the truck to enable the same to be easily and conveniently moved about. These handles, preferably formed integral with one of the racks, are formed of heavier rod than is employed for the other racks, the outer ends of the rack rods being joined so as to form a cross piece or handle 15. It will be obvious that an operator may grasp the handle 15 at either end of the truck and move the same about on its wheels or casters to any position. This greatly facilitates the handling of large numbers of flat pieces which have been coated on opposite sides in the manner described, and by so supporting the pieces both sides may be coated at one time and the pieces may be quickly placed on the racks without being marred, to remain there until dry. It should be understood that while I have shown and described one practical embodiment of my improvements, the details of construction thereof might be changed without departing from the spirit and scope of the invention as expressed in the appended claims.

I claim:

1. A drying rack of the character described comprising an upright standard, and a tier of racks mounted on the standard, each rack having horizontally spaced upper supporting surfaces each of which is centrally depressed providing downwardly inclined surfaces so that when a freshly coated article is positioned, coated side down, on a rack the article will rest on said surfaces at only spaced points of contact and the intermediate portions of the supporting surfaces will not mar the coated surface of the article.

2. In a drying rack comprising an upright standard, a plurality of drying racks, each formed of a single rod shaped to provide a pair of spaced arms joined by a cross portion, means pivotally securing the cross portions of the arms to the standard in vertically spaced relation so as to present a tier of racks, the arms of each rack being shaped to provide centrally depressed upper supporting surfaces so that a freshly coated article may be positioned, coated side down, on the supporting arms of a rack and will rest thereon only at spaced points of contact, whereby the intermediate portions of the rack arms will not mar the coated surface, and means whereby the pivoted racks may be swung into and out of operative position.

3. A drying and transportation truck comprising a truck equipped with an upright standard, and a tier of racks mounted on the standard, each rack constructed to provide a plurality of downwardly converging supporting surfaces of similar contour with respect to a horizontal plane so that when a freshly coated article is positioned, coated side down, on a rack the article will rest on the supporting surfaces only at spaced points of contact and the intermediate portions of the supporting surfaces will not mar the coated surface of the article.

4. In a truck of the character described, an upright standard, and a tier of racks each of which has spaced supporting members shaped to provide concave supporting

surfaces, and a cross portion joining the outer ends of said spaced members and serving as a handle adapted to be engaged for moving the truck about.

5. A drying and transportation truck of the character described comprising a truck equipped with an upright standard, a plurality of racks each having laterally spaced supporting arms shaped to provide centrally depressed supporting surfaces and a cross portion joining the supporting arms, means pivotally securing the cross portions of the supporting arms to the standard, and means holding the supporting arms in horizontally disposed position and permitting the arms to be swung upwardly to an inoperative position.

6. In a truck of the character described, a tier of racks, each rack of which is formed of a U-shaped rod, and means for pivotally securing the cross portion of the rack to the truck, including a slotway through which one of the rack arms passes, and which is shaped to determine the operative and inoperative positions of the rack.

7. A drying and transportation truck of the character described comprising a truck equipped with an upright standard, a plurality of racks each having a pair of laterally spaced supporting arms shaped to provide centrally depressed supporting surfaces and a cross portion joining each pair of supporting arms, and means pivotally securing the cross portion of each rack to the standard in vertically spaced relation so as to present a tier of racks, said means being shaped to hold the racks in horizontal supporting position and to allow the racks to be swung upwardly to an inoperative position and thence to be moved sidewise longitudinally of the pivot axis of the cross portions to secure the rack in said inoperative position.

HOLGER A. W. RASMUSSEN.