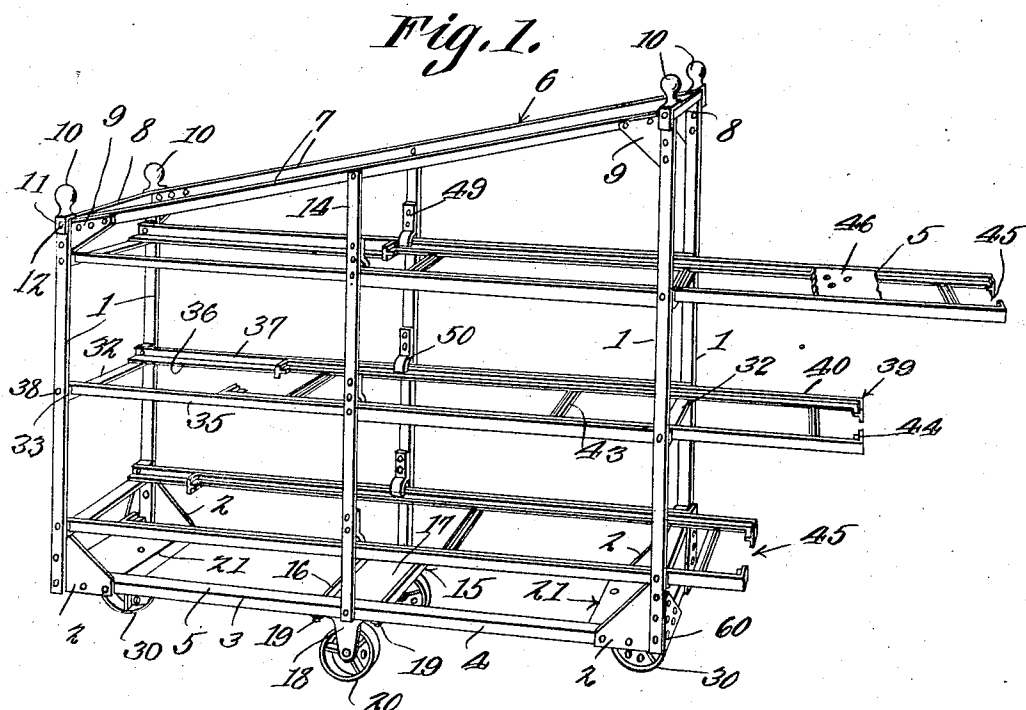
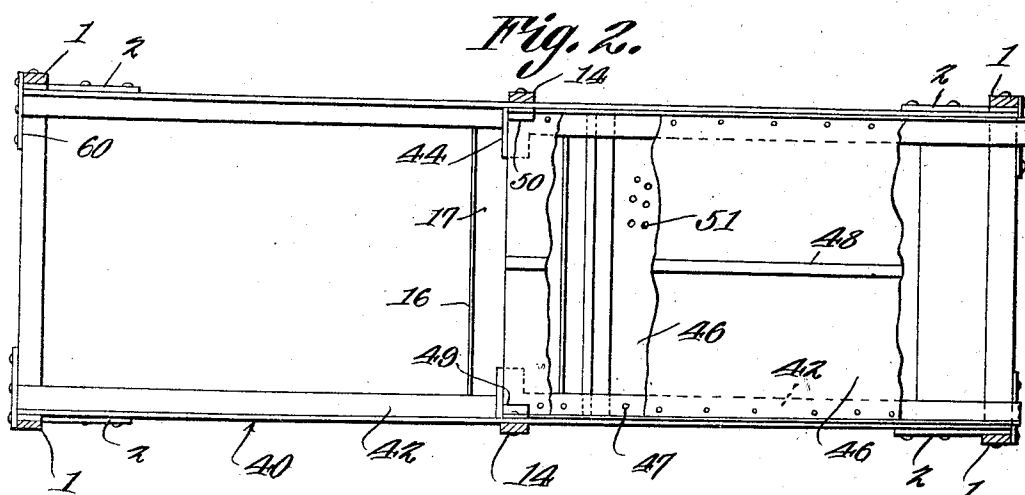


1,242,779.

F. DAVIS.
PORTABLE RACK.
APPLICATION FILED SEPT. 12, 1916.

Patented Oct. 9, 1917.
2 SHEETS—SHEET 1.



Witnesses

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by

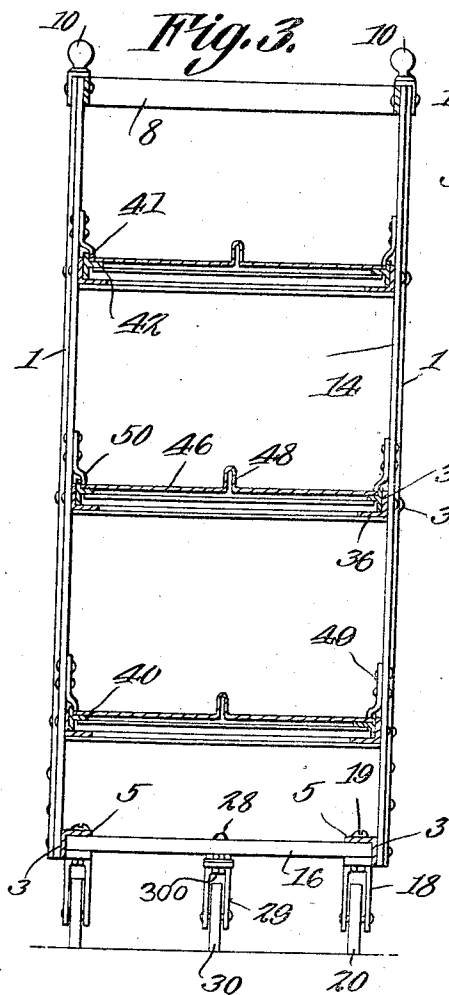
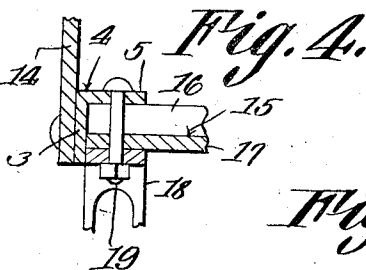
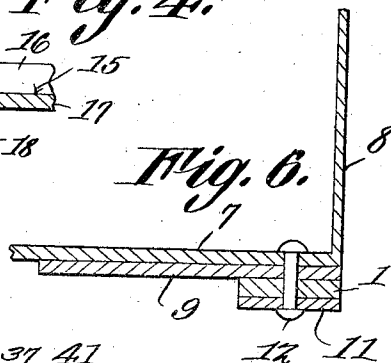
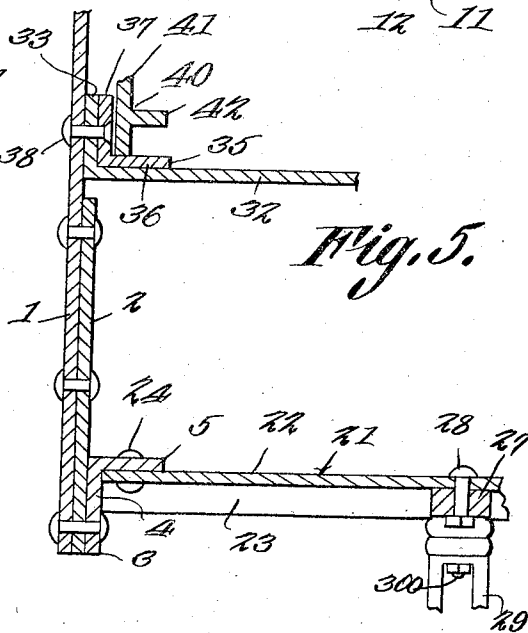
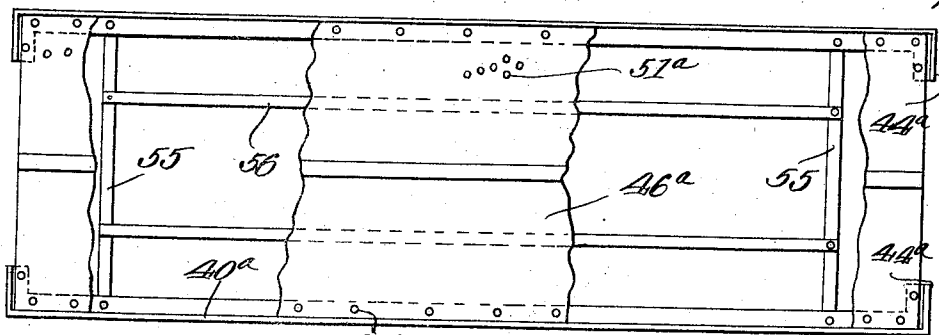
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2 SHEETS—SHEET 2.



Witnesses

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UNITED STATES PATENT OFFICE.

FRANK DAVIS, OF PAWTUCKET, RHODE ISLAND.

PORTABLE RACK.

1,242,779.

Specification of Letters Patent.

Patented Oct. 9, 1917.

Application filed September 12, 1916. Serial No. 119,695.

To all whom it may concern:

Be it known that I, FRANK DAVIS, a citizen of the United States, residing at Pawtucket, in the county of Providence and State of Rhode Island, have invented a new and useful Portable Rack, of which the following is a specification.

The device forming the subject matter of this application is a portable rack adapted to be employed primarily for transporting bobbins.

The invention aims to improve the construction of the truck frame, to improve the construction of the shelves which slide upon the frame, to provide novel means whereby the sliding movement of the shelves on the frame may be limited and, generally, to improve and to enhance the utility of devices of that type to which the present invention appertains.

With the above and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings:—

Figure 1 shows in perspective, a truck constructed in accordance with the present invention;

Fig. 2 is a horizontal cross section of the truck;

Fig. 3 is a vertical section of the truck;

Fig. 4 is a fragmental vertical section taken intermediate the ends of the truck;

Fig. 5 is a fragmental vertical section showing the manner in which the corner posts are connected with other parts of the structure;

Fig. 6 is a fragmental horizontal section taken adjacent the top of the truck and at one corner thereof; and

Fig. 7 is a top plan view showing a modification in the sliding shelves.

In carrying out the present invention there is provided a truck frame including corner posts 1. Secured to the inner faces of the corner posts 1 adjacent their lower ends are brace plates 2, attached to the vertical depending flanges 3 of base rails 4

which preferably are in the form of angle members, including inwardly projecting flanges 5. The numeral 6 indicates a top frame including side members 7 and end members 8. Brace plates 9 are interposed between the side members 7 of the top frame and the corner posts 1, as clearly shown in Fig. 6, the brace plates being secured to the posts 1 and to the side members 7 of the top frame. Mounted on the corner posts 1 are knobs 10 whereby the truck may be rolled about manually. The knobs 10 have extensions 11 overlapping the outer faces of the corner posts 1. Certain of the securing elements 12 which unite the brace plates 9 with the side members 7 of the top frame 6 may pass through and engage the extensions 11 of the knobs 10, thus to hold the knobs in place. Disposed midway between the corner posts 1 are intermediate posts 14, the lower ends of which are attached to the vertical depending flanges 3 of the base rails 4, the upper ends of the intermediate posts 14 being secured to the side members 7 of the top frame 6.

The invention comprises an intermediate cross bar 15 preferably in the form of a channel. The intermediate cross bar 15 includes upstanding flanges 16 and a base 17. The channel or cross bar 15 extends beneath the horizontal flanges 5 of the base rails 4. Abutting against the base 17 of the intermediate cross bar or channel 15 are brackets 18. Securing elements 19 attach the brackets 18 to the base portion 17 of the channel 15 and to the horizontal flange 5 of the base rail 4. Journaled on each bracket 18 is a ground wheel 20.

The invention includes a pair of end cross bars 21 which preferably are in the form of channels, each including a top 22 and depending flanges 23. As shown in Fig. 5, the end cross bars 21 extend beneath the horizontal flanges 5 of the base rails 4 and are attached thereto by securing elements 24. Brackets 27 lie between the depending flanges 23 of the end cross bars 21 and are located adjacent the median plane of the truck frame. The brackets 27 are attached to the tops 22 of the end cross bars 21 by means of securing elements 28. Each bracket 27 carries a depending shaft 300 on which is mounted for rotation, a depending frame 29 having a ground wheel 30. The ground wheels 30, therefore, are swiveled to

the truck frame for horizontal swinging movement, so that the truck frame may be swung around sidewise, without difficulty. The truck frame includes a plurality of transverse supports 32, the ends of which are upturned as shown at 33. The upturned ends 33 of the supports 32 abut against the inner faces of the corner posts 1 as shown best in Fig. 5. Resting on the supports 32 are tracks 35 each including a horizontal flange 36 and a vertical flange 37. The vertical flanges 37 of the tracks 35 and the ends 33 of the supports 32 are connected with the corner posts 1 by means of securing elements 38.

The invention includes shelves 39 mounted to slide on the tracks 35 longitudinally of the truck frame, the construction being such that the shelves 39 may be pulled out from the ends of the truck frame, as indicated in connection with one end of the truck frame in Fig. 1. The shelves 39 preferably include side bars 40 in the form of T-members, each including a vertical flange 41 and a horizontal flange 42. The lower edges of the vertical flanges 41 slide on the tracks 35, and because the T-members are used, the sliding friction is reduced. The side bars 40 may be connected at intervals by cross bars 43. The extremities of the side bars 40 are extended inwardly toward each other, to form end bars 44, the bars 44 at each end of the shaft being spaced from each other as shown at 45. Resting on the horizontal flanges 42 of the side bars 40 are plates 46 which, if desired, may be perforated as shown at 51. The plate 46 may be attached by means of securing elements 47 to the horizontal flanges 42 of the side bars 40. Intermediate its longitudinal edges, the plate 46 is bent upwardly to form a separating rib 48. Attached to the intermediate posts 14 are keepers 49 having offset extensions 50 which are inside of the upper portions of the vertical flanges 41 of the side bars 40 and engage at their lower ends with the horizontal flanges 42 of the side bars.

On the plates 46 rest a plurality of filling boards of the kind which are used in transporting bobbins. The filling board constitutes no part of the present invention, and no filling boards are shown. However, owing to the fact that the end bars 44 are spaced as shown at 45, the filling boards at the ends of the shelf may be grasped readily for removal. The shelves 39 may be slid endwise, to project beyond either end of the truck frame. The keepers 49 and their extensions 50 prevent the inner ends of the shelves from tipping upwardly, when the outer ends of the shelves project beyond one end of the truck frame, as shown in Fig. 1. Further, the extensions 50 of the keepers 49, coacting with the end bars 44, as indicated

in connection with the uppermost shelf in Fig. 1, limit the outward sliding movement of the shelves.

In Fig. 7 of the drawings, a slight modification in the invention has been shown. In Fig. 7, the side bars of the shelf are indicated by the reference numeral 40^a, the end bars appear at 44^a, and the plate appears at 46^a, the same being secured at 47^a to the side bars, and being perforated, if desired, as shown at 51^a. In this form of the invention, the two cross bars 55 connect the side bars 40^a, and the cross bars 55 are, in turn, connected by the longitudinal bars 56.

The device forming the subject matter of this application will be found to be useful in handling filling boards which carry bobbins. The shelves 39, carrying the filling boards, may be advanced beyond either end of the frame, as indicated in connection with one end of the frame in Fig. 1. The ribs 48 on the plates 46 serve to separate the filling boards in two lines, and the filling boards, when disposed at the ends of the shelf, may be removed readily, because the ends of the bars 44 are spaced apart as shown at 45. The top frame 6 slopes downwardly toward one end of the truck and one end of the structure is lower than the other. On account of this fact, the operator can remove the filling boards readily from the inner end of the upper shelf when said shelf is drawn to the right as shown in Fig. 1, or is drawn to the left, until the parts 44 at the respective ends of the upper shelf engage with the keepers 49.

If desired, the lower end cross bars 21 may be connected with the posts 1 by means of brace plates 60.

A truck constructed in accordance with the present invention can be used for many purposes, but it is of peculiar utility in pouring, doffing and inspecting bobbins. The shelves can be pulled out, permitting an inspection of the bobbins without handling the boards on which the bobbins are mounted, and thus much labor may be saved. A truck constructed in accordance with the present invention and loaded with bobbins may be run into a steamer, to permit a steaming of the bobbins, and all bobbins will be steamed alike, a condition not generally brought about when bobbins are steamed in the usual way.

Having thus described the invention, what is claimed is:—

1. In a device of the class described, a rack including end posts and an intermediate post; tracks connecting the end posts; a rigid shelf mounted to slide longitudinally on the tracks and including side members and end members; a rigid keeper on the intermediate post, the keeper overhanging one side member to prevent the shelf from tipping upwardly at its inner end when

the shelf is advanced as an entity at different times in opposite directions to project beyond either end of the rack, the keeper coacting with both end members, at different times, to limit the outward movement of the shelf in either of said directions.

2. In a device of the class described, a frame comprising upright posts; transverse supports having upstanding ends coacting with the posts; tracks in the form of angle members, each comprising a horizontal flange and a vertical flange, the horizontal flanges resting on the body portion of the support, and the vertical flanges abutting against the upstanding ends of the sup-

ports; securing devices connecting the ends of the supports and the vertical flanges of the tracks with the posts; and a shelf comprising side bars in the form of T-members including a vertical flange slidable on the horizontal flange of the track, and an inwardly projecting horizontal flange.

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

FRANK DAVIS.

Witnesses:

WILLIAM E. BRIDEN,
LILLIE DAVIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."