July 22, 1952 R. M. SCHULTZ 2,604,334

CLOTHES CART HAVING A VERTICALLY ADJUSTABLE PLATFORM

Filed Aug. 24, 1948 2 SHEETS—SHEET 1

Fig. 1

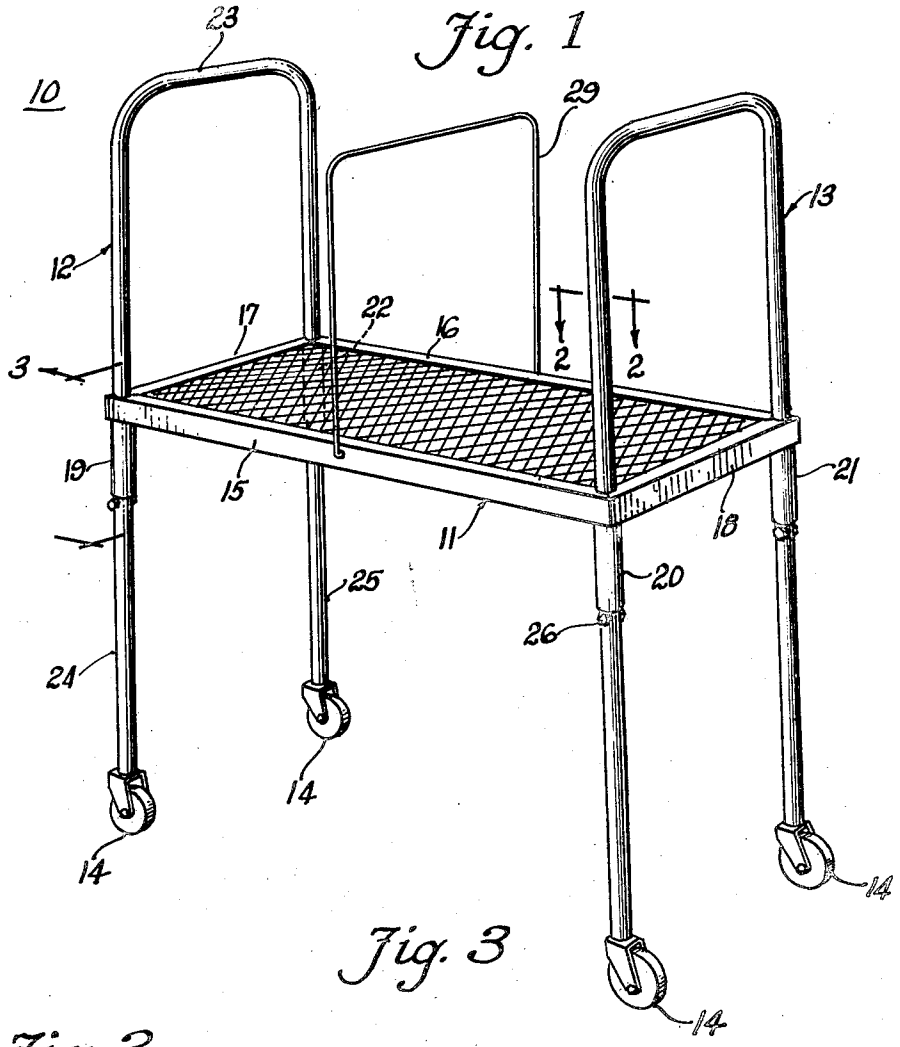
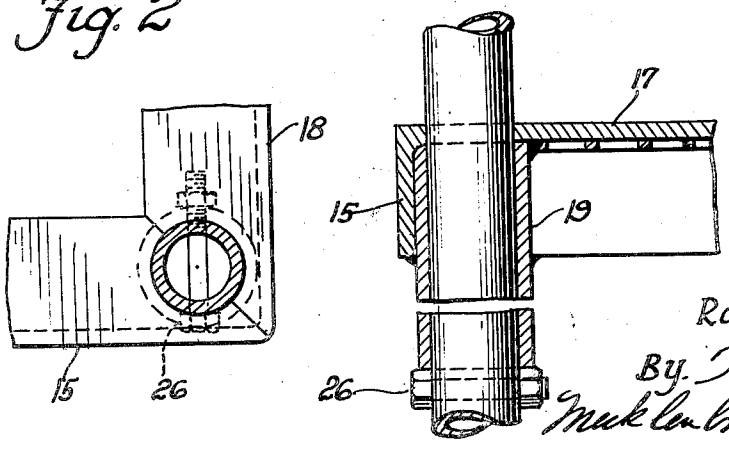


Fig. 3

Fig. 2



INVENTOR
Roy M. Schultz
By. Thiess, Olson & Klenk
Mecklenburger. Attys

July 22, 1952 R. M. SCHULTZ 2,604,334

CLOTHES CART HAVING A VERTICALLY ADJUSTABLE PLATFORM

Filed Aug. 24, 1948 2 SHEETS—SHEET 2

Fig. 4

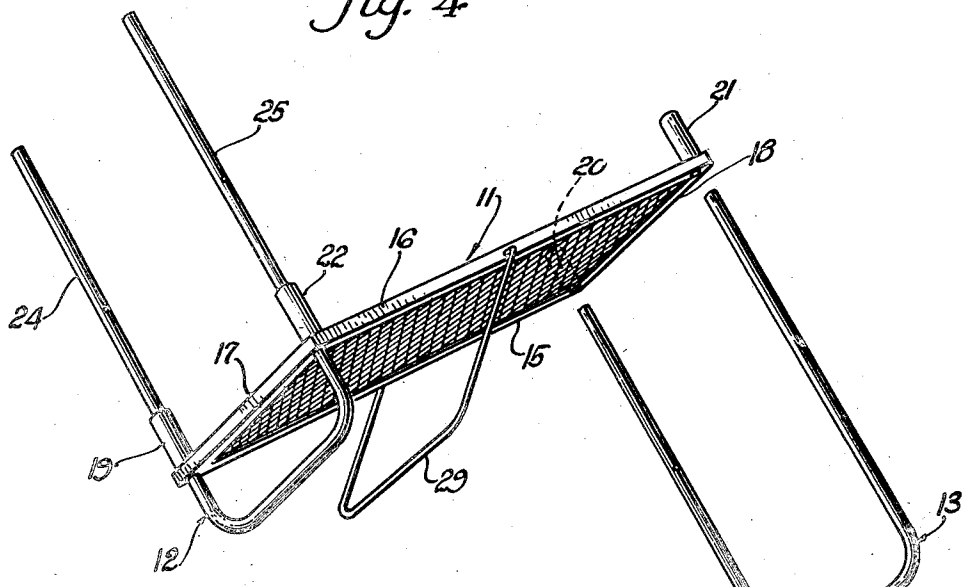


Fig. 5

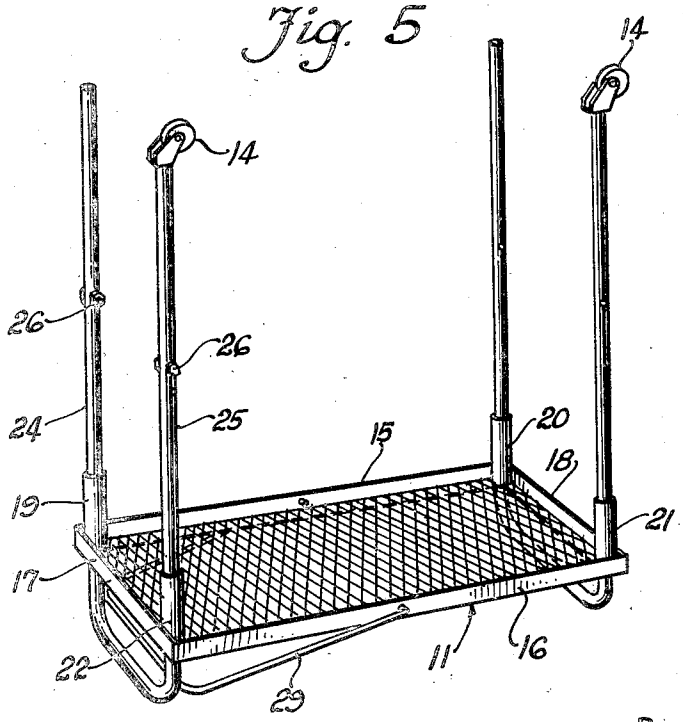
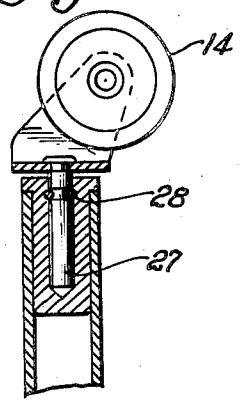


Fig. 6



INVENTOR
Roy M. Schultz
By Theiss, Olson & Mecklenburger. Attys

Patented July 22, 1952 2,604,334

UNITED STATES PATENT OFFICE

2,604,334

CLOTHES CART HAVING A VERTICALLY ADJUSTABLE PLATFORM

Roy M. Schultz, Chicago, Ill., assignor to David A. Freeman Corporation, Chicago, Ill., a corporation of Illinois

Application August 24, 1948, Serial No. 45,917

3 Claims. (Cl. 280—43)

1

This invention relates to demountable carts, and it is an object of the invention to provide an improved cart of this character.

In handling clothing during cleaning and pressing thereof there are a large number of operations to be performed at relatively widely separated points, and each operation usually involves transfer of the garments from one place to another. For example, the garments to be cleaned are first collected by operators driving trucks who bring the garments to a receiving station from whence the garments are transmitted to cleaners or washers and thereafter to dryers. From the dryers the garments may move to a spotter who removes spots not removed during the general cleaning or washing operation, and from the spotter the garments move to a presser who finishes them for delivery to the owner. At each point where an operation is performed on the garments, storage facilities such as tables are provided to hold a supply of garments for the operator, and in transferring the garments from one point of operation to another the garments are loaded onto some type of carrier and moved to the next point by cart or by hand and again unloaded.

Each of these operations involves the consumption of time and effort, the expenditure of a considerable amount of which may be saved by eliminating the necessity for loading and unloading the garments in transferring them from one point of operation to another. In pursuance of this, it is proposed to provide a small demountable cart which is provided with casters in order that it may be pushed from one position to another. This cart may be provided with a platform of normal height in order that clothing may be placed thereon and removed conveniently therefrom. Thus, for example, these carts may be placed at a receiving station and the drivers may unload the garments directly thereon, whereupon the garments are pushed to the cleaning machine and unloaded thereinto without need for transferring the articles from a cart to a table. Similarly, when garments are removed from the cleaning machine they may be loaded onto the cart and moved to the dryer also without the need for first placing them on a table and then transferring them to a cart. In this manner stationary table space is preserved and more space becomes available for operations since the carts themselves are used in place of the tables.

In operations of the foregoing character there may be large numbers of carts used and consequently they should be efficient in operation and should be of dimensions so as to conform with the usual scale of operations. That is to say, if

2

normally the machines handle small numbers of garments the carts may be designed to carry relatively small loads, and if the machines are intended to handle heavier loads the carts may be designed larger. Hence, the number of carts may be reduced and those in use may be used at a steady rate rather than being used for a certain length of time and then stand idle for a certain length of time.

Inasmuch as the process of cleaning wearing apparel is a rapid one and must be very expeditiously caried out in order to be profitable, the carts used must not only be efficient, but must be very durable in order that they do not break down during operation. Moreover, the carts preferably are demountable for shipping purposes and relatively easily assembled by unskilled workmen. Accordingly, it is a further object of the invention to provide an improved demountable cart which is durable in service, efficient in operation, and dependable in character.

In carrying out the invention in one form, a demountable cart is provided comprising a platform member, vertically extending tubular sockets or sleeves rigidly attached thereto, a pair of two legged members forming supports for the platform, the legs of the pair of members being received through the sockets, and pin means extending through the legs cooperating with the sockets for determining the height of the platform.

For a more complete understanding of the invention reference should be had to the accompanying drawings in which:

Fig. 1 is a perspective view of a demountable cart embodying the invention;

Fig. 2 is a fragmentary, sectional view taken substantially in the direction of arrows 2—2 of Fig. 1;

Fig. 3 is a fragmentary, sectional view taken substantially in the direction of the arrows 3—3 of Fig. 1;

Fig. 4 is a perspective view of a demountable cart embodying the invention in partially assembled form;

Fig. 5 is a perspective view showing the cart embodying the invention in a more advanced stage of assembly, and

Fig. 6 is a perspective view on a larger scale of one element of the cart.

Referring to the drawings, the invention is shown as comprising a cart 10 having a platform 11 and a pair of end members 12 and 13 supporting the platform, the lower ends of the end members being provided with casters 14.

Platform 11 comprises a pair of side angle-irons 15 and 16, and a pair of end angle-irons

17 and 18 attached to each other at their ends to form a relatively rigid rectangular structure, the members being attached to each other by any suitable means such for example as welding along their adjoining edges.

At the corners of platform 11 tubular members or sleeves 19, 20, 21 and 22 are attached by well known means, such for example as welding. Referring to Fig. 3, it will be observed that the sleeve 19 is welded at its top edge to angle member 17 and is also welded to angle member 15 at its bottom edge. In this manner the various angle members of the platform are additionally held together and reinforced. The adjoining ends of the angle members at each corner respectively are provided with semi-circular cutout portions which combine to form a circular hole cooperating with the holes through the various sleeves to receive the supporting legs of the cart.

To complete the platform some form of material, such for example as a screen made of expanded metal, is attached to the underside of the side and end angle members. The screen may be attached thereto by any well known means such as welding. Having the screen attached to the underside of the angle members keeps the ends of the screen completely out of the way so that there is no opportunity for garments to catch thereon.

The supporting members 12 and 13 of the cart are similar to each other and may comprise generally U-shaped members each having a top member 23 and legs 24 and 25. While any type of material may be used for these members, it has been found convenient to use metal tubing bent substantially into the configuration shown, the outside diameter of the tubing being such as to be easily receivable through sleeves 19 and 22, and 20 and 21. The legs 24 and 25 of each end member are provided with holes therethrough, as may be seen best in Fig. 3, and a pin 26, for example a bolt or rivet, may be placed through each hole to provide a support for the platform 11. Thus, when the cart is in its assembled form the two end members 12 and 13 have their respective legs placed through the sleeves, and bolts or pins are placed through the holes in each one of the legs. The various sleeves rest on the bolts thereby determining the height of the cart. In order that the legs may be held sufficiently rigid for all purposes, the various sleeves are of substantial length which may vary from a length equal to that of the sides of the angle members up to lengths of several inches. Bushings may be provided in the hollow legs for easily receiving the vertical studs 27 of the casters.

Assuming that the platform and end members of the cart are unassembled, it is only necessary to place platform 11 on its side, as shown in Fig. 4, and to place the legs of the two end members through the respective sleeves. Thereafter the bolts 26 are placed through the holes as shown and the assembled platform and legs may be placed upside down while the casters 14 are inserted into the hollow ends of the legs. When the structure is turned right-side-up the platform slides down the legs until the lower ends of the sleeves contact the bolts at which point the cart is completely assembled and ready for operation.

During the turning upside down or right-side-up the casters remain in position inasmuch as the studs 27 of the casters may be provided with expanding spring members 28, as is well understood. The expanding spring members bear against the inside of the metal legs and hold the casters in place.

The cart may be conveniently divided into two parts by a U-shaped member or spacer 29 which preferably is formed of a rod-like material bent into the configuration shown. The lower ends of this member are bent inwardly and directed toward each other and may be received into suitably provided holes in the angle members 15 and 16. By virtue thereof, the spacer may be folded to lie down flat if so desired or it may be held up to provide a separator between different batches of material.

Without further elaboration, the foregoing will so fully explain the gist of my invention that others may, by applying current knowledge, readily adapt the same for use under varying conditions of service, without eliminating certain features, which may properly be said to constitute the essential items of novelty involved, which items are intended to be defined and secured to me by the following claims.

I claim:

1. A cart comprising, a platform member including a frame and a grid-like bed attached thereto, vertically extending tubular sleeves rigidly attached thereto at their upper ends and extending downwardly below said platform member, a pair of two legged members forming supports for said platform, the legs of said pairs being received through said sleeves, and pin means extending through said legs cooperating with said sleeves for determining the height of platform, and a divider mounted on said platform in between said two legged members.

2. A demountable cart comprising, a platform member including a rectangular frame and a gridlike bed attached thereto with the periphery of said bed underlying said frame, vertically extending tubular sleeves rigidly attached thereto at their inner ends and extending downwardly below said platform member, a pair of unitary members forming supports for said platform, each one of which includes a pair of projecting end members, one each of said end members extending through each of said sleeves, and pin means extending through said legs and cooperating with said sleeves for determining the height of said platform.

3. A demountable cart comprising a platform member including a rectangular frame and a gridlike bed attached thereto with the periphery of said bed underlying said frame, vertically extending tubular sleeves rigidly attached thereto at their inner ends and extending downwardly below said platform member, a pair of unitary members forming supports for said platform, each one of which includes a pair of projecting end members, one each of said end members extending through each of said sleeves, pin means extending through said legs and cooperating with said sleeves for determining the height of said platform, and a divider mounted on said platform in between said unitary members.

ROY M. SCHULTZ.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
244,073	Powers	July 12, 1881
696,535	Bailey	Apr. 1, 1902
1,303,691	Tempt et al.	May 13, 1919
1,781,754	Grab	Nov. 18, 1930