

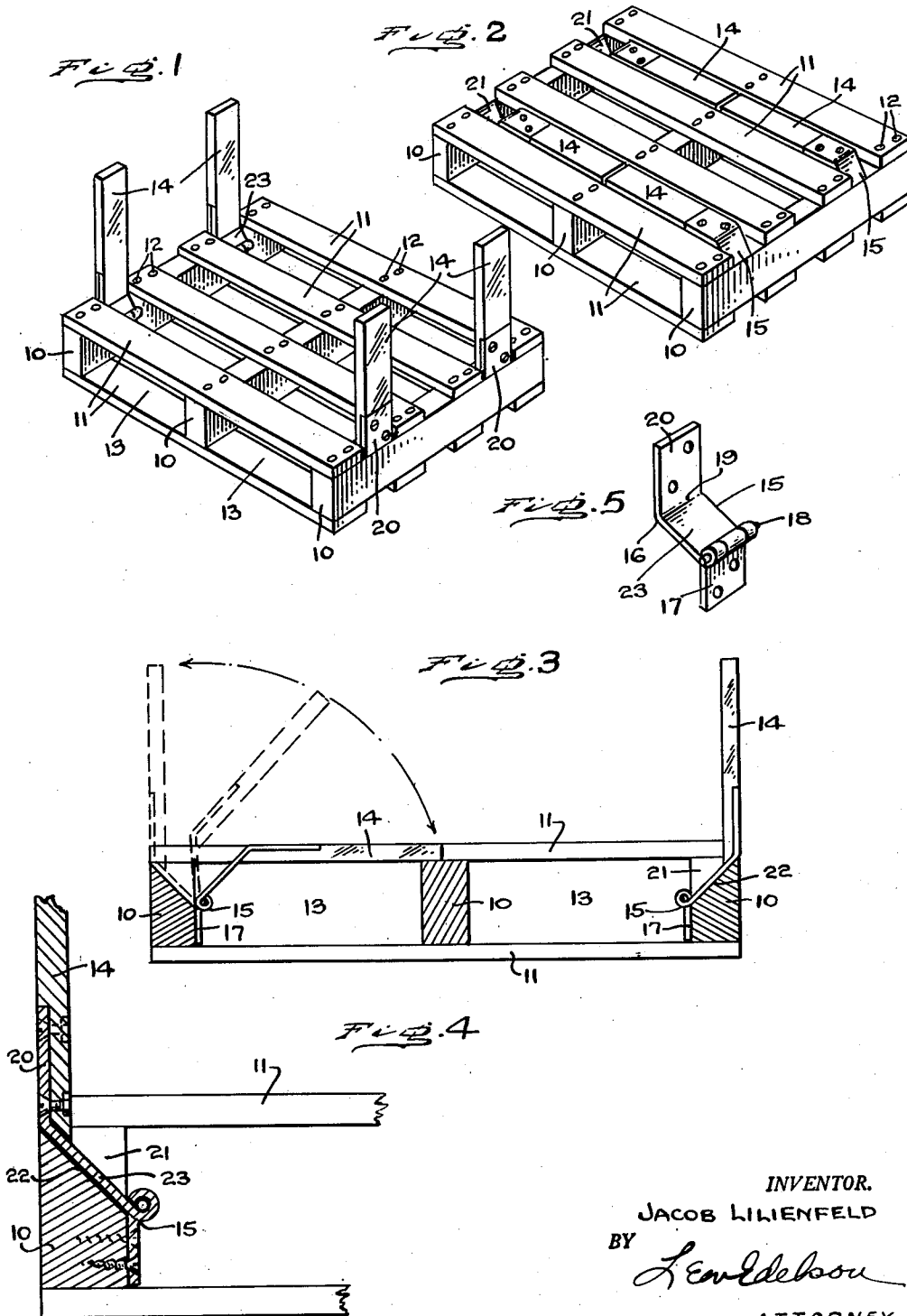
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PALLET CONSTRUCTION

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PALLET CONSTRUCTION

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This invention relates generally to pallets of the type adapted for use in warehouses, and more particularly to certain improvements therein for rendering the same especially applicable for the storage of large and heavy articles, such as, mattresses, bed-springs and the like, stacked on edge upon the pallet so as to facilitate individual selection of any one of such articles from a group thereof.

It has long been a problem in the warehouse storage of mattresses and the like, particularly by dealers engaged in the sale thereof, to conveniently select as desired any particular one of such articles, this for the reason that it has been customary to store the same flat-wise one upon the other on pallets without seriously attempting in any way to sort the same according to color, quality, style, etc. This objectionable condition arises primarily because of the fact that each dealer maintains on hand a relatively small quantity of such articles which are identical in respect to color or quality or style, thus necessitating resort to piling all such articles one upon the other indiscriminately in order to conserve valuable floor space.

Obviously, it would be desirable to stack identical articles of the character aforesaid in individual piles on pallets so that as any one of a given color, quality or style is desired for delivery to a customer, it could readily be removed from the top of the pile without difficulty. However, this would entail the use of so many different piles, certain of which might include but only a few of a given article, that the floor space required would be prohibitive.

I have found that the problem is quite adequately solved by stacking the articles of the character aforesaid upon edge upon readily shiftable pallets which differ from those conventionally employed in that said pallets are provided with collapsible side extension members adapted to be raised, as desired, into vertically disposed position to maintain upon each such pallet a plurality of mattresses, box springs or the like arranged on edge. Thus, any given pallet of the present invention is adapted to support a plurality of such articles without discriminating therebetween as to any differences in color, quality or style thereof, any one of said articles being readily removed from the stack thereof on the pallet with a minimum of effort and without requiring any disturbance of the remaining articles stored on the pallet.

Accordingly, it is among the principal objects of the present invention to provide a pallet for

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the purposes aforesaid which is characterized by the provision of side extension arms which are readily disposable in vertical position to support large articles stacked on edge upon the pallet and as readily disposable in horizontal position flush with the upper surface of the pallet to render the same capable for use as a conventional pallet.

Other objects of this invention will appear more fully hereinafter.

The invention consists substantially in the construction, combination, location and relative arrangement of parts, all as will be more fully hereinafter set forth, as shown in the accompanying drawings, and finally pointed out in the appended claims.

In the accompanying drawings:

Figure 1 is a perspective view illustrating a pallet of the present invention with the collapsible supporting arms projecting upwardly therefrom;

Figure 2 is a similar perspective view of the pallet with the collapsible supporting arms disposed in the plane of the upper surface thereof;

Figure 3 is a transverse sectional view of the pallet showing one of said collapsible arms in lowered position;

Figure 4 is an enlarged view of a portion of Figure 3 with the collapsible arm in raised position; and

Figure 5 is a perspective view showing the hinge employed to support and to connect the collapsible arm to the pallet.

Referring now to the drawings, it will be observed that the pallet of the present invention generally comprises a plurality of longitudinally extending laterally spaced parallel cleats 10 (preferably three in number) across the top and bottom edges of which extend a plurality of flat boards 11. Each set of these cross boards 11 lie in a common horizontal plane and are secured to the cleats, as by the securing elements 12, in spaced parallel relation as shown.

The cleats and cross boards are preferably but not necessarily made of wood and the particular number and size of each employed in the pallet may vary depending upon the overall size of the pallet to be employed. The general arrangement of these elements, however, should preferably be such as to provide a pair of longitudinally extending spaces 13 between the top and bottom surfaces of the pallet for accommodation therein of the vertically shiftable lifting fingers of conveying trucks of the type well known for warehouse use, the pallet with its load being thereby shifted to any desired storage position.

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In accordance with the present invention, the pallet is provided with one or more pivoted arms 14 upon each side thereof, the pallet illustrated being shown as provided with two such arms upon either side. Each of said arms 14 is pivotally mounted upon a side cleat 10 with its pivoted end disposed between a pair of adjacent cross boards 11 by means of a suitable hinge 15, such as is shown in Figure 5. Each of these hinges 15 is provided with a pair of angularly related arms 16-17 hingedly secured together by a pin 18, the longer arm 16 being bent, as at 19, so that the outer portion 20 thereof may be swung into a position parallel to but offset from the arm 17 or into a position extending at right angles thereto. The arm 17 of each hinge is adapted for securement to the inner face of each sidemost cleat 10, while the outer portion 20 of the hinge arm 16 is adapted for securement to one of the side arms 14, all as shown most clearly in Figures 3 and 4.

Each of the sidemost cleats 10, in the regions of securement of the hinges 15 thereto, is notched, as at 21, to provide an inclined surface 22 against which the inner portion 23 of the hinge arm 16 may rest when the hinge is swung into the position shown in Figure 4, it being noted that when the hinge is swung into this position the side arm extension 14 extends vertically and is restrained from outward movement beyond the longitudinal side edge of the pallet by the fact that the inclined surface 22 of the hinge-receiving notch 21 serves as a limiting stop for the hinge arm 16.

The side arms 14 are each of a thickness equal to that of the cross boards 11 so that when the former are swung into their lowered positions (as shown in Figure 2 and at the left of Figure 3) they lie substantially flush with the upper surface of the pallet. The length of each side extension arm 14 is preferably such that when in its lowered position its free end rests upon the central longitudinally extending cleat 10.

The side extension arms 14 are preferably made of wood, but they may be formed of any other suitable material, such as metal, in which event they may be of a thickness and width substantially less than those of the cross boards 11. While in the construction illustrated, the side extension arms are arranged in opposed pairs

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so that the free ends of each pair commonly rest upon the central cleat 10, it will be understood that these arms may be arranged in staggered relation so as to provide for greater length of each arm and so increase their vertical extent for higher side support of articles stacked on the pallet.

It will be understood, of course, that the present invention is susceptible of various changes and modifications which may be made from time to time without departing from the real spirit or general principles thereof, and it is accordingly intended to claim the same broadly as well as specifically as indicated by the appended claims.

What is claimed as new and useful is:

1. A pallet comprising spaced parallel cleats, spaced parallel cross boards connecting said cleats and collapsible supporting members hingedly mounted on opposite sides of the pallet upon the end cleats thereof in the space between cross boards and adapted alternatively to lie in the horizontal plane of said cross boards in the spaces therebetween or to extend upwardly therefrom.

2. A pallet comprising spaced parallel cleats, spaced parallel cross boards connecting said cleats and collapsible supporting members hingedly mounted on opposite sides of the pallet upon the end cleats thereof in the space between the same adjacent cross boards and adapted alternatively to lie in the horizontal plane of said cross boards in the spaces therebetween with the ends of said members resting upon the upper face of the center cleat in said space or to extend upwardly from said plane.

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