

Dec. 8, 1959

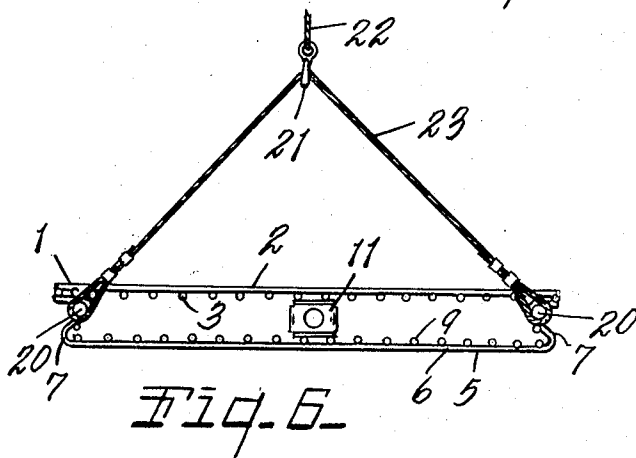
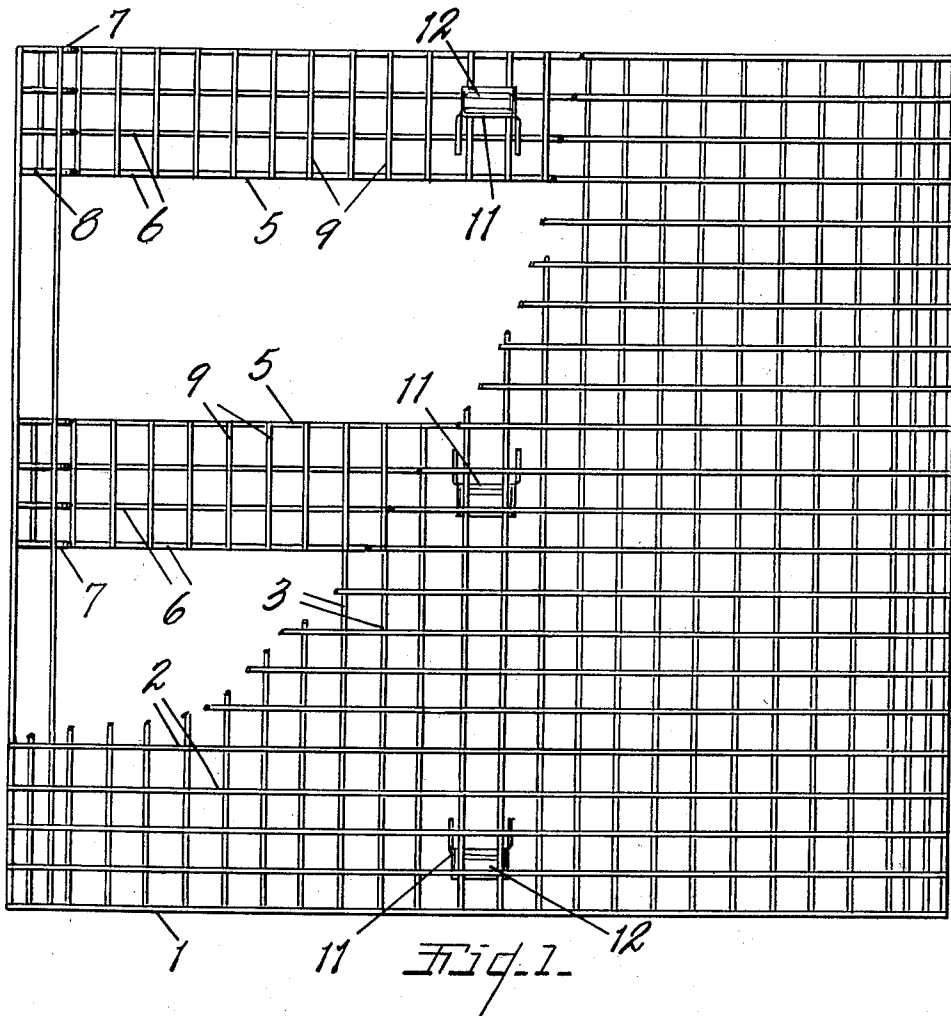
V. R. ROMERO

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MATERIALS HANDLING PALLET

Filed Sept. 15, 1955

2 Sheets-Sheet 1



INVENTOR.
Victor R. Romero
BY
Charles Earl
Attorney.

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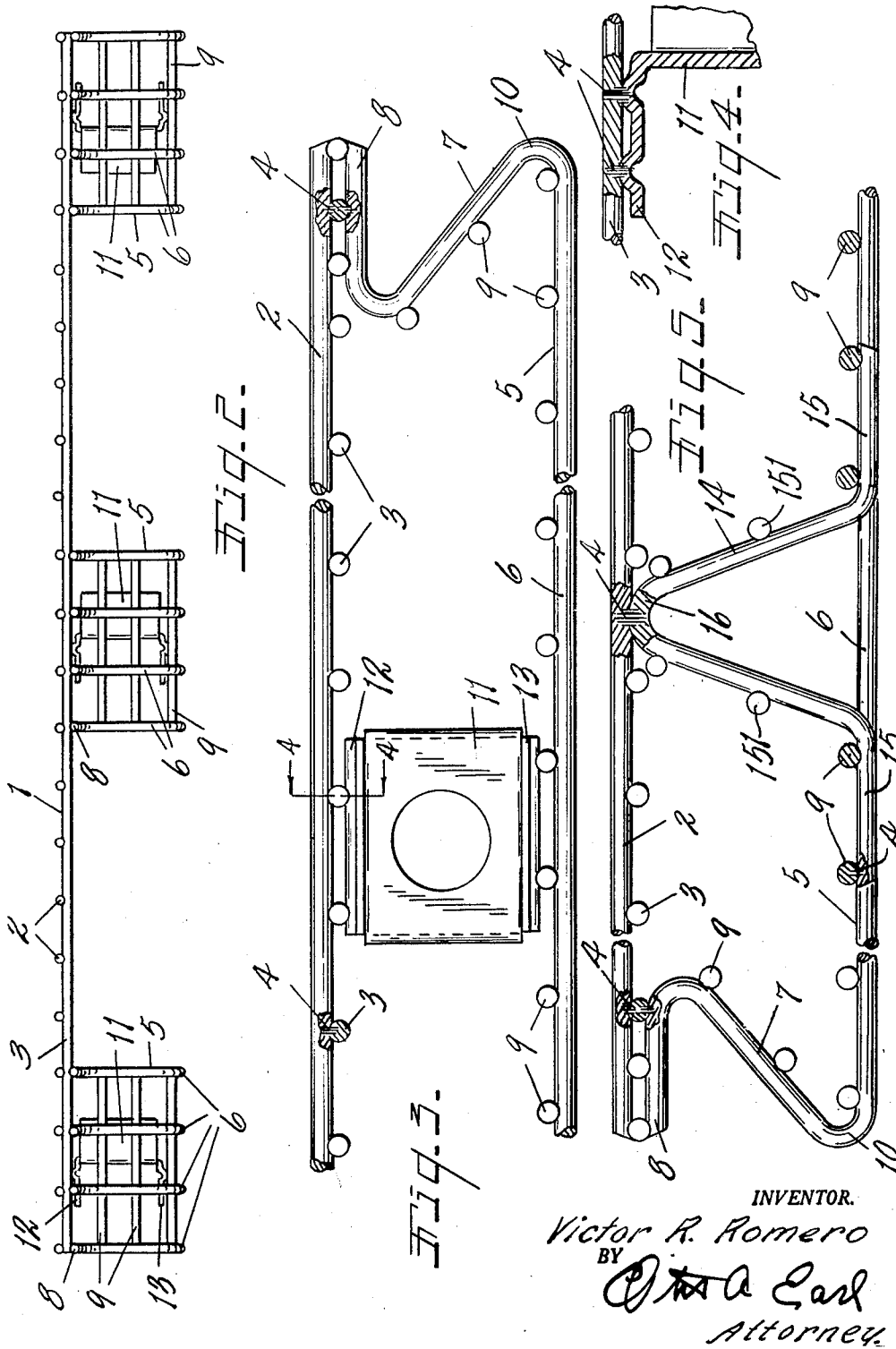
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MATERIALS HANDLING PALLET

Victor R. Romero, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich., a corporation of Michigan

Application September 15, 1955, Serial No. 534,573

6 Claims. (Cl. 248—120)

This invention relates to materials handling pallets well adapted for use in grocery stores, warehouses, and the like.

The main objects of this invention are:

First, to provide a pallet which is of relatively light weight and at the same time is very strong and rigid.

Second, to provide a pallet which may be handled by lifting trucks or pushed or pulled about on its base members which in effect constitutes runners.

Third, to provide a materials handling pallet having these advantages, which is easily kept in a sanitary condition and one which may be quite economically produced.

Other objects and advantages relating to the details and economies of the invention will be apparent from the following description and claims.

Fig. 1 is a fragmentary plan view of a pallet embodying my invention.

Fig. 2 is an end elevational view thereof.

Fig. 3 is an enlarged fragmentary side elevational view.

Fig. 4 is a fragmentary view partially in section on line 4—4 in Fig. 3.

Fig. 5 is a fragmentary side elevational view of a modified form or embodiment of my invention.

Fig. 6 is a fragmentary view illustrating the manner in which the pallet may be handled by a sling.

In the embodiment of my invention illustrated the deck designated generally by the numeral 1 comprises upper series 2 and a lower series 3 of spaced parallel slats. The slats of the embodiment illustrated are formed of wire or light rod. The slats are welded together at their crossing points as indicated at 4 in Fig. 3.

In the deck illustrated the lower or under slats are more closely spaced adjacent the ends of the deck than they are in the intermediate part of the deck (see right hand end of Fig. 1).

I provide a plurality of laterally spaced combined base and leg units generally designated by the numeral 5. These units comprise a plurality of longitudinal bars 6, desirably of wire or light rod stock, having upwardly and inwardly inclined leg elements 7 formed integrally therewith. The leg elements have outwardly projecting arms 8 at their upper ends disposed on the under sides of a plurality of the lower deck slats and secured thereto by welds indicated at 4 in Fig. 3. The longitudinal base bars are rigidly connected by laterally spaced cross pieces 9 fixedly secured thereto. The leg elements 7 are also provided with cross pieces 9 which are desirably disposed on the inner sides thereof. The leg elements are merged into the base bars by outwardly curved nose portions 10 which prevent engagement of the base units with obstructions when the pallet is drawn across the floor or a like surface and also facilitates the pallets riding over an obstruction.

The intermediate legs 11 of the embodiment shown in Figs. 1 to 4 inclusive are formed as metal stampings and comprise upright leg elements having laterally pro-

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jecting arms 12 at their upper and lower ends. The upper arms are disposed on the under sides of a plurality of a lower series of slats and welded thereto as is indicated at 4 in Fig. 4. The lower arms 13 of the intermediate legs are disposed upon and fixedly secured to a plurality of the cross pieces 9 of the legs units.

In the modification shown in Fig. 5 the intermediate leg elements 14 are formed of rod stock conformed to a general A shape. The leg elements are provided with laterally projecting arms 15 which are disposed on the under side of and fixedly secured to a plurality of the cross pieces 9. The leg elements are laterally spaced and connected to provide leg units by the cross pieces 15. The bights 16 of the leg elements 14 are welded as indicated at 4 in Fig. 5 to the undersides of the upper slats of the deck with which they are aligned. With the parts thus formed and connected a very strong and rigid pallet results even though formed of relatively light stock. Also this pallet may be easily kept in a sanitary condition further rendering it well adapted for use in grocery stores, warehouses and the like. The structure may also be very economically produced. The deck is desirably formed of wire stock and welding machines are available permitting it to form in a continuous web and cut into the desired lengths.

The combined base and leg units may also be formed of continuous strips, that is, the longitudinal members advanced longitudinally through a welding machine and the cross members welded thereto; the strips cut into the desired length and then bent to conform to the leg members. The intermediate legs are then attached to the units and the units attached to the deck. The leg units serve as runners if it is desired to drag the pallet along a surface.

The pallets may be picked up by lift trucks from either the sides or the ends. Also the pallet is adapted to be handled by a sling conventionally shown in Fig. 6 in which the sling bars 20 are connected to the link 21 of the cable 22 by four diverging hangers 23, the hangers being connected to the ends of the bars which are of such length as to project at each end of the pallet when the bars are engaged with the legs as indicated in Fig. 6. This further adapts the pallet for use in a wide variety of conditions and handling equipment.

I have illustrated and described my invention in a highly practical embodiment thereof. I have not attempted to illustrate or describe other adaptations or embodiments as it is my belief that this disclosure will enable those skilled in the art to adapt or embody my invention as may be desired.

Having thus described the invention, what is claimed as new and desired to secure by Letters Patent is:

1. A combined base and leg unit for materials handling pallets comprising laterally spaced bars having integral upwardly projecting and inwardly convergingly inclined leg members at their ends, the leg members terminating at their upper ends in integral outwardly projecting horizontally disposed arms adapted to be fixedly secured to the under side of the deck of a pallet, and a plurality of laterally spaced cross members disposed on the inner sides of said runner and leg portions of said base members and on the upper sides of said arms, the portions of the bars between said leg members constituting runners and being curvedly merged into said leg members, said leg member arms being of such length as to permit engagement therewith of sling bars for suspended manipulation of a pallet to which the arms are attached.

2. A combined base and leg unit for materials handling pallets comprising laterally spaced bars having integral upwardly projecting and inwardly convergingly inclined leg members at their ends, the leg members terminating at their upper ends in integral outwardly pro-

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jecting horizontally disposed arms adapted to be fixedly secured to the under side of the deck of a pallet, and a plurality of laterally spaced cross members disposed on the inner sides of said runner and leg portions of said base members, the portions of the bars between said leg members constituting runners, said leg member arms being of such length as to permit engagement therewith of sling bars for suspended manipulation of a pallet to which the arms are attached.

3. A materials handling pallet comprising a deck, and laterally spaced outer and intermediate base units for said deck, the outer base units being disposed with their outer edges substantially flush with opposed edges of the deck, said base units each comprising laterally spaced bars having integral upwardly projecting and inwardly convergingly inclined leg members at their ends, the leg members terminating at their upper ends in integral outwardly projecting horizontally disposed arms fixedly secured to the under side of the deck at opposite sides thereof, and a plurality of laterally spaced cross members disposed on the inner sides of said runner and leg members of said base members, the portions of the bars between said leg members constituting runners for the pallet and being curvedly merged into said leg members, said leg member arms being of such length as to permit engagement therewith of sling bars for suspended manipulation of the pallet.

4. A materials handling pallet comprising a deck, and laterally spaced base units for said deck, said base units each comprising laterally spaced bars having integral upwardly projecting and inwardly convergingly inclined leg members at their ends, the leg members terminating at their upper ends in integral outwardly projecting horizontally disposed arms fixedly secured to the under side of the deck at opposite sides thereof, and a plurality of laterally spaced cross members disposed on the inner sides of said runner and leg members of said base members, the portions of the bars between said leg members constituting runners for the pallet, said leg member arms

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being of such length as to permit engagement therewith of sling bars for suspended manipulation of the pallet.

5. A materials handling pallet comprising a deck, and laterally spaced outer and intermediate base units for said deck, the outer base units being disposed with their outer edges substantially flush with opposed edges of the deck, said base units each comprising laterally spaced bars having integral upwardly projecting and inwardly convergingly inclined leg members at their ends, the leg members terminating at their upper ends in integral outwardly projecting horizontally disposed arms fixedly secured to the under side of the deck at opposite sides thereof, and connecting cross members disposed on the inner sides of said bars, the portions of the bars between said leg members constituting runners for the pallet and being curvedly merged into said leg members, said leg member arms being of such length as to permit engagement therewith of sling bars for suspended manipulation of the pallet.

6. A materials handling pallet comprising a deck, and laterally spaced base units for said deck, said base units each comprising laterally spaced bars having integral upwardly projecting and inwardly convergingly inclined leg members at their ends, the leg members terminating at their upper ends in integral outwardly projecting horizontally disposed arms fixedly secured to the under side of the deck at opposite sides thereof, and connecting cross members disposed on the inner sides of said bars, the portions of the bars between said leg members constituting runners for the pallet, said leg member arms being of such length as to permit engagement therewith of sling bars for suspended manipulation of the pallet.

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