

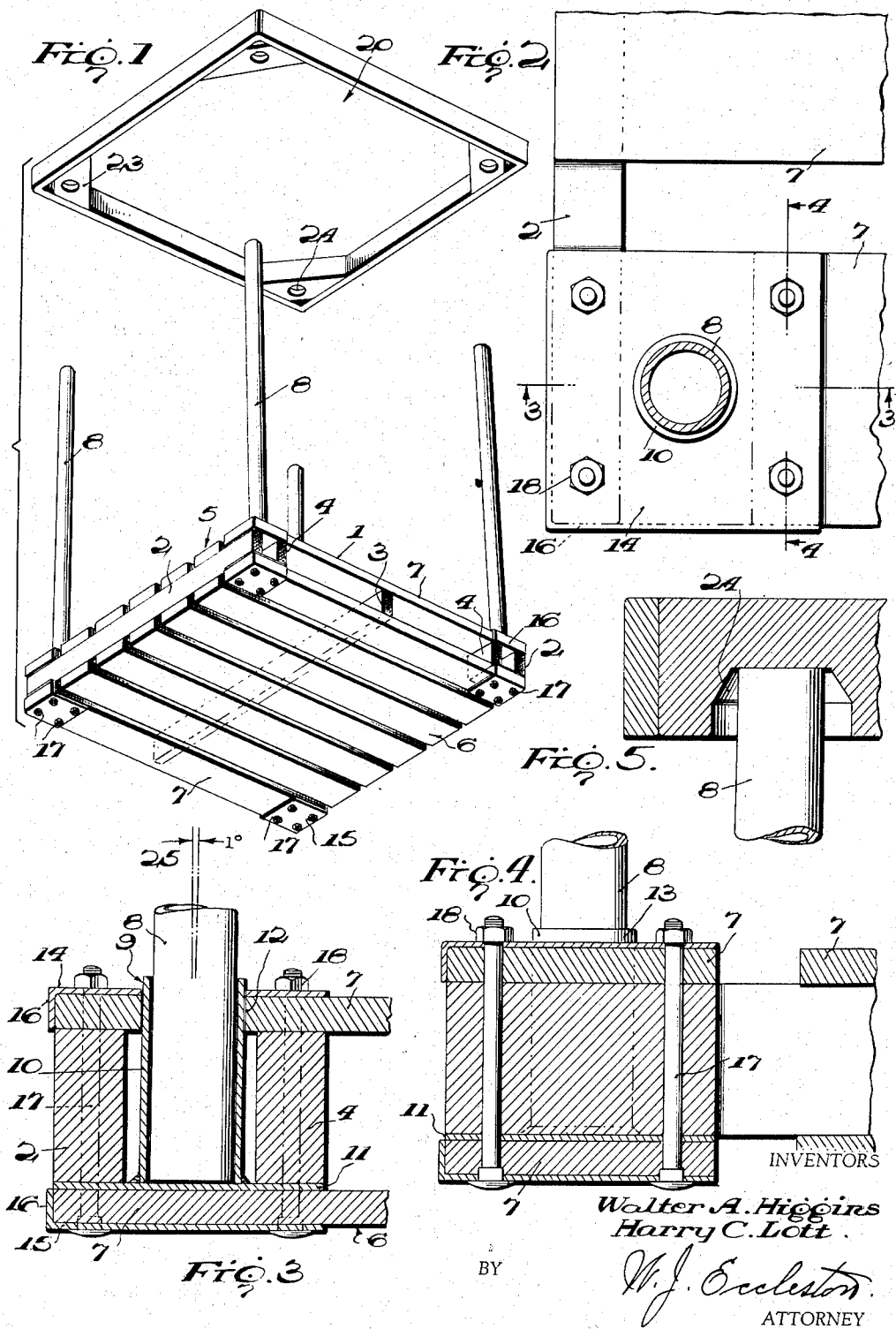
Jan. 27, 1959

W. A. HIGGINS ET AL

2,870,980

WAREHOUSE PALLETS

Filed Nov. 1, 1955



1

2,870,980

WAREHOUSE PALLETS

Walter A. Higgins, Adamsville, R. I., and Harry C. Lott, Millmont Park, Pa.

Application November 1, 1955, Serial No. 544,386

3 Claims. (Cl. 248—120)

(Granted under Title 35, U. S. Code (1952), sec. 266)

The invention described herein, if patented, may be manufactured and used by or for the Government for governmental purposes, without the payment to us of any royalty thereon.

This invention relates to warehouse pallets generally and has for its primary object to provide a pallet with four corner-posts which will serve to maintain a load (such as rolls of paper or the like) on the upper surface of the pallet body against accidental removal.

Another object of the invention consists in providing a warehouse pallet in which the corner-posts, while readily removable, are firmly secured to the pallet body so as to resist any normal pressures from the load carried by the pallet.

A still further object of the invention resides in the provision of a pallet in which the upper or free ends of the corner-posts are securely tied together so as to insure adequate resistance to shifting of the pallet load.

Another object of the invention consists in the provision of warehouse pallets which may be readily stacked one upon another regardless of the character of the loads supported on the pallets.

Other objects and advantages of the invention will be apparent from the following description taken in connection with the accompanying drawings, in which,

Figure 1 is a perspective view of the novel warehouse pallet with the roof or cover shown detached;

Figure 2 is an enlarged fragmentary plan view of one of the four corners of the pallet;

Figures 3 and 4 are vertical sectional views taken on the lines 3—3 and 4—4 of Figure 2; and,

Figure 5 is an enlarged detail of the joint between the cover and one of the corner posts of the pallet.

Referring to the drawing in greater detail and with reference numerals, the numeral 1 indicates a pallet which is composed of edge stringers 2 and median stringers 3, filler blocks 4, an upper platform 5 and a lower platform 6; these platforms being formed of a plurality of spaced planks 7, which may be nailed or otherwise secured to the stringers 2 and filler blocks 4.

One of the novel features of the present invention, as indicated above, is the sturdy manner in which corner posts are anchored at their lower ends to the body of the pallet. To this end, the corner posts 8 have their lower ends detachably mounted within socket members 9 which are composed of vertically extending metal tubes 10 welded or otherwise connected at their lower ends to plates 11. In installing these socket members a plate 11 with its tube 10 is mounted on the upper surface of the lower platform 6 at each of the four corners. Thereafter the edge runners 2 and filler blocks 4 are mounted upon the plates 11 and with the median runner 3 are secured to the planks 7 of the upper and lower platforms 5 and 6 respectively, by nailing or the like. In this construction the end planks 7 of the upper platform 5 are apertured as indicated at 12 to receive the upper end of the tube 10 of the socket member 9 and allow the

2

tube to extend slightly above the pallet as indicated at 13 in Figure 4.

In order to reinforce these socket members and secure and lock them in their operative positions upper and lower corner plates 14 and 15 are mounted on the respective corners of the upper and lower platforms 5 and 6, and these corner plates are provided with flanges 16 on two of their adjoining edges to engage the edges of the platforms when the plates are in position. These plates are secured to the body of the pallet by means of threaded bolts 17 which are passed upwardly through the bottom plate 15, and planks 7, socket plate 11, runners 2, filler blocks 4, upper plank 7 and plate 14 and receive nuts 18 which are threaded to their upper ends so as to securely clamp the several arts in their operative positions.

The corner posts 8 are of course all the same length and their upper ends are adapted to be received in a frame member 20 which is composed of side flanges 22 and corner blocks 23 which brace the side members or flanges 22 and are provided with recesses 24 which serve as seats for the upper ends of the corner posts 8. This frame member 20 thus serves to interlock the upper ends of the corner posts 8 and hold them firmly against stresses which might be created by a load of rather heavy material as it shifts its weight during transportation or otherwise. In this connection it should be noted that the tubes 10 of the socket members 9 are inclined slightly toward each other from two sides of the pallet as indicated by the reference numeral 25 (Figure 3) which shows about a one degree inclination to the right thereby serving to better resist the forces of a load placed upon the upper platform 5 of the pallet.

From the foregoing description taken in connection with the accompanying drawings it will be apparent to those skilled in the art that we have devised a warehouse pallet that may be uniformly stacked even when loaded with irregular shaped goods, that readily removable corner-posts are provided, that a strong and sturdy socket construction is provided for supporting the corner posts, and that the upper ends of the corner-posts may be interlocked by merely placing a prefabricated frame member on the top thereof.

In accordance with the patent statutes we have described what we now consider to be the preferred form of the invention but inasmuch as various minor changes may be made in structural details without departing from the spirit of the invention, it is intended that all such changes be included within the scope of the appended claims.

We claim:

1. A warehouse pallet comprising a rectangular pallet body composed of a plurality of stringers, upper and lower platforms secured to the stringers, socket members, each composed of a plate and an upstanding tube fixed to the upper surface of the plate, one of said socket members being mounted at each corner of the lower platform with the upper end of the tube extending into an opening formed in the upper platform and the plate disposed under one of the stringers, means for securing each of said socket members in place, said means comprising an apertured plate engaged over the upper end of the socket member and mounted on the upper platform, a lower plate in engagement with the underside of the lower platform at the corners thereof, and threaded means passing through said plates and portions of the socket member for securing the same in position.

2. A warehouse pallet comprising a rectangular pallet body composed of two edge stringers, a middle stringer and filler blocks paralleling said edge stringers, upper and lower platforms secured to the stringers and filler blocks, socket members, each composed of a plate and an upstanding tube fixed to the upper surface of the plate,

3

one of said socket members being mounted at each corner of the lower platform with the upper end of the tube extending into an opening formed in the upper platform and the plate disposed under one of the stringers, means for securing each of said socket members in place, said means comprising an apertured plate engaged over the upper end of the socket member and mounted on the upper platform, a lower plate in engagement with the underside of the lower platform at the corner thereof, and threaded means passing through said plates, stringer, 5 10 filler block and socket member for securing the latter in position.

3. A warehouse pallet comprising a rectangular pallet body composed of a plurality of stringers, upper and lower platforms secured to the stringers, socket members, 15 each composed of a plate and an upstanding tube fixed to the upper surface of the plate, one of said socket members being mounted at each corner of the lower platform with the upper end of the tube extending into an opening formed in the upper platform and the plate disposed under one of the stringers, means for securing each 20 of said socket members in place, said means comprising

4

an apertured plate engaged over the upper end of the socket member and mounted on the upper platform, downturned flanges on two edges of the plate in engagement with the edges of the upper platform, a lower plate in engagement with the underside of the lower platform and in vertical alignment with the apertured plate, upturned flanges on two edges of the lower plate in engagement with the edges of the lower platform, and threaded means passing through said plates and portions of the 5 10 socket member for securing the same in position.

References Cited in the file of this patent

UNITED STATES PATENTS

15	2,579,685	Loose	Dec. 25, 1951
	2,621,879	Lundeen	Dec. 16, 1952
	2,673,700	Eberhardt	Mar. 30, 1954
	2,676,776	Townson	Apr. 27, 1954
	2,700,520	Skubic	Jan. 25, 1955

FOREIGN PATENTS

914,237	Germany	June 28, 1954
---------	---------	---------------