

March 18, 1941.

G. D. SHANAHAN ET AL

2,235,647

PORTABLE PLATFORM

Filed Jan. 30, 1939

2 Sheets-Sheet 1

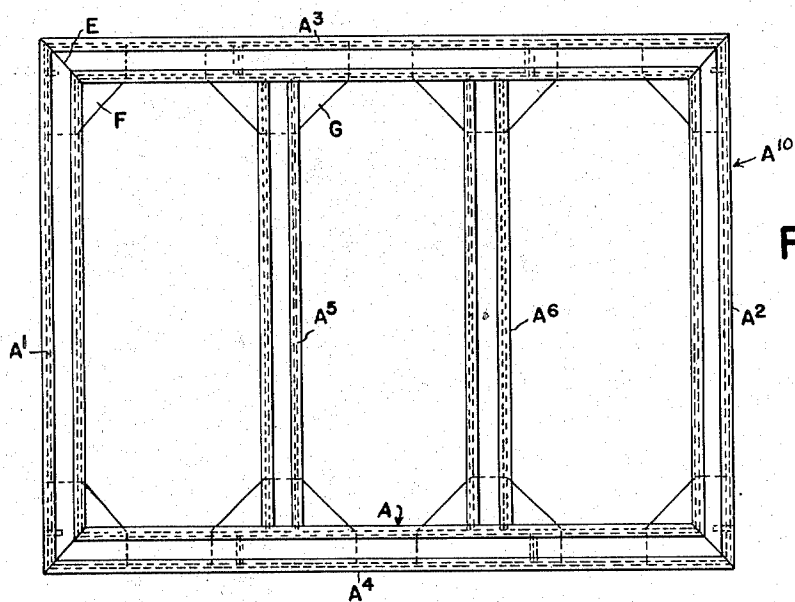


FIG. 1.

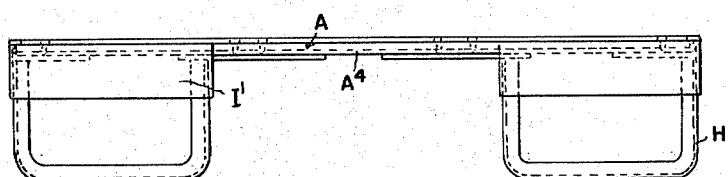


FIG. 2.

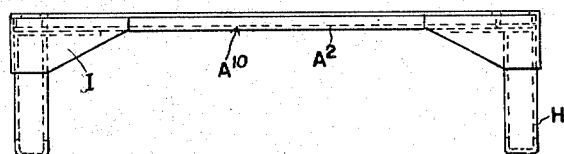


FIG. 3.

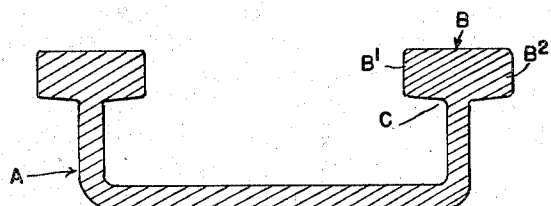


FIG. 4.

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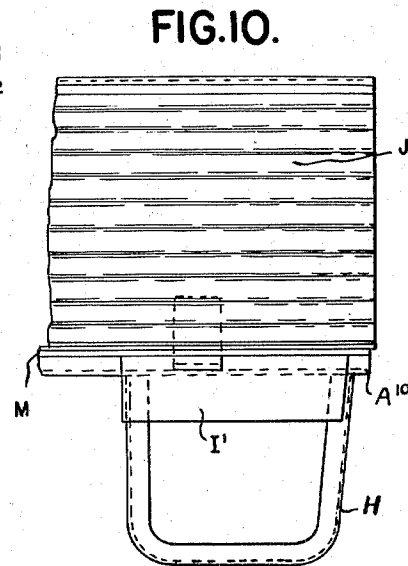
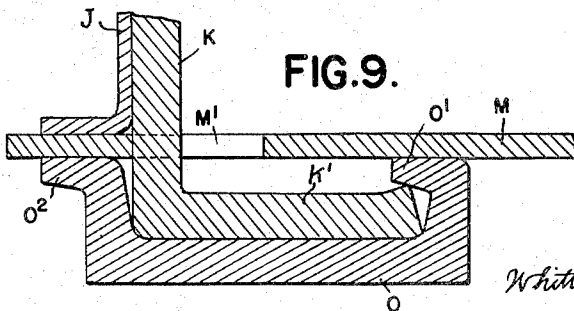
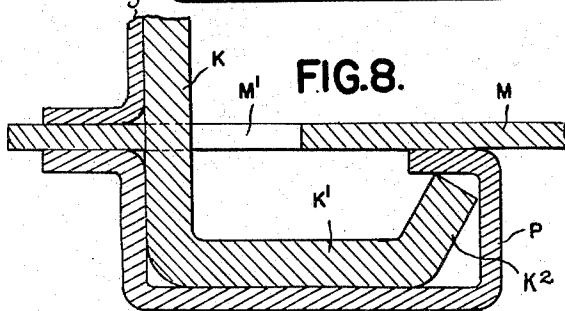
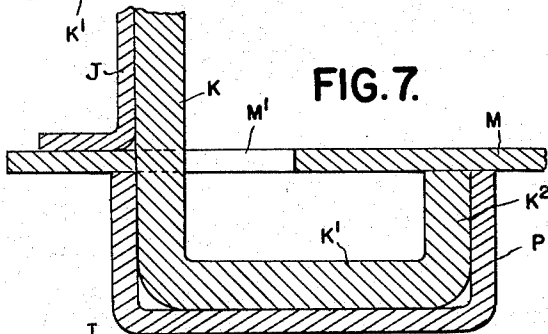
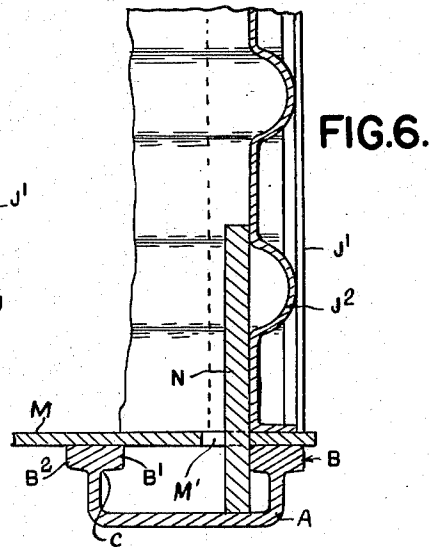
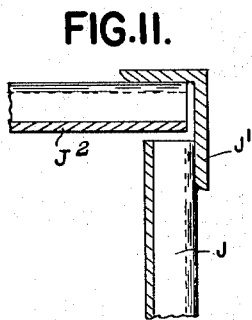
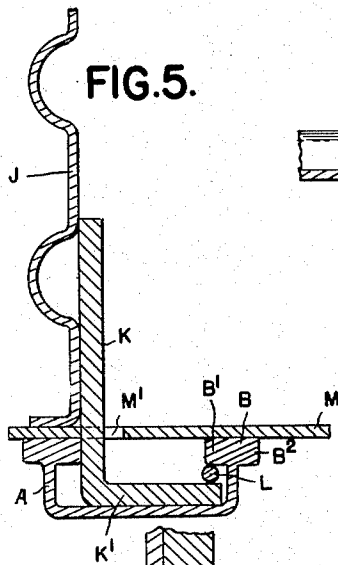
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2 Sheets-Sheet 2



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2,235,647

PORTABLE PLATFORM

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Application January 30, 1939, Serial No. 253,652

9 Claims. (Cl. 248—120)

The invention relates to portable platforms, such as are used in manufacturing establishments for the handling of manufactured articles or raw material. It is the object of the invention to obtain a construction which is particularly adapted for use in connection with electric or mechanical lift or elevating trucks during transportation via railroads or highway vehicles. It is a further object to obtain a fairly light weight construction which may be used either as a platform or a knockdown box container and which can be readily returned to the shipping point. Still further, it is an object to obtain a construction which facilitates quick attachment and detachment of articles mounted on the platform, and also facilitates the easy handling of the platform or container. With these objects in view, the invention consists in the construction as hereinafter set forth.

In the drawings:

Figure 1 is a top plan view of our improved portable platform;

Figure 2 is a side elevation of our portable platform;

Figure 3 is an end elevation of our portable platform;

Figure 4 is an enlarged cross section through one of the channel bars;

Figures 5 and 6 are vertical sections illustrating a construction of container mounted on the platform;

Figures 7, 8 and 9 are vertical sections showing different modifications;

Figure 10 is a side elevation of a portion of the platform with the container mounted thereon;

Figure 11 is a horizontal sectional view through a corner of the container.

One of the important features of the invention is a construction which facilitates the securing to the platform of articles of various sizes and shapes, which are to be transported. This is accomplished by forming the platform of channel members and preferably members having undercut upwardly opening channels. As shown in Figures 1 to 4, the platform is constructed of channel members A having T-shaped heads B forming inwardly and outwardly extending flanges B', B², and providing undercut channels C. These bars are cut to lengths for forming the ends A', A² and the sides A³ and A⁴ of a rectangular frame A¹⁰ with mitered corners E. There are also a plurality of parallel cross bars A⁵, A⁶ which extend across between the bars A³ and A⁴. These members may be secured to each

other either by welding or by the use of gusset plates F at the four corners, and double gusset plates G between the cross members A⁵ and A⁶ and the side members A³ and A⁴. The platform is further provided with suitable supporting legs, which as shown at H, are U-shaped and formed of bent channel bars. Their upper ends are secured to the bottoms of the frame members or to the gussets F and G, and they are further reinforced by gusset members I and angle extensions I' thereof. Thus the completed platform will be strong and light and is provided with the upwardly opening undercut channels extending completely around the margin of the frame, as well as along each of the transverse members. This facilitates the attachment of the article or articles to be transported, through the use of fastener devices (not shown), which are engageable with the undercut channels. Furthermore, as all of the marginal members of the frame are channeled, this facilitates the engagement therewith of lifting means.

When it is desired to provide a box container, this may be formed of either flat or corrugated sheet metal side and end plates J and J² held together at their corners by vertically extending angle bars J'. As shown in Figure 11, the bars J' are welded to the side plates J and overlap the end plates J². The box is secured in position by depending bars K and N, respectively, secured to the side and end plates J and J² and extending into the channel frame members. One or more of the bars K may be provided with angle flanges K' in contact with the bottom of the channel and extending underneath one of the inwardly extending flanges B' of the T-shaped heads B. A cylindrical key or locking member L welded or otherwise rigidly secured to the flanges K' is engageable with the underside of the flanges B' to hold the flanges K' in position. A bottom closure M for the receptacle is first laid upon the top of the platform and may be secured to the channels A thereof. Such closure M is provided in registration with the interior of the upwardly opening channels A with apertures M' that receive the member K and N carried by the side and end plates J and J², respectively.

In place of the rolled channel bars, the frame members may be formed of pressed sheet metal channel members P, as shown in Figures 7 and 8. Also, in place of channel members having T-heads, members O having an inwardly extending flange O' at one side and an outwardly extending flange O² at the opposite side may be used as shown in Figure 9. In place of the locking key

L the flanges K' of the members K may be provided with upturned end portions K² as shown in Figures 7 and 8. All of the various modifications have the common feature of providing upwardly opening channels in the load carrying surface of the frame, which facilitate the attachment of other members thereto or the engagement of the platform with the lifting devices.

What we claim as our invention is:

1. A portable platform comprising an assembly of bars, each having an undercut upwardly opening channel therein, said bars being rigidly attached to each other with their upper faces substantially in a common plane.
2. A portable platform comprising a substantially horizontal frame formed of load supporting channel-shape members rigidly secured together substantially in a common plane, the channels of said members extending completely around the margins of the frame and provided at their upper edges with load carrying portions, said channels being provided beneath said load carrying portions with means for receiving anchorage means for the load.
3. A portable platform comprising a substantially horizontal frame formed of upwardly opening load carrying channel-shape members rigidly secured together, the upstanding webs of the upwardly opening channel-shape members having T-shape heads for supporting the load and for cooperating with the channels of said members for holding anchorage means for the load.
4. A portable platform comprising a substantially horizontal frame formed of upwardly opening load carrying channel-shape members rigidly secured together, one upstanding web of each upwardly opening channel-shape member being inverted L-shape in cross section whereby the horizontal part of each L forms a support for the load and cooperates with the upright part of the L for holding anchorage means for the load.
5. A portable platform having two sets of channel-shape members, one set comprising spaced longitudinally extending members, and the other set comprising spaced transversely extending members rigidly secured to said longitudinally extending members, one set of channel-shape members being provided at their upper edges with means for supporting a load, and the other set of channel-shape members being provided at their upper edges with lateral portions overhanging and cooperating with the channels of said members for holding anchorage means for the load.
6. A portable platform having a substantially

horizontal frame formed of load supporting bars rigidly secured together and provided with upwardly opening channels, one side wall of each channel being provided longitudinally thereof with an inwardly projecting portion for holding in the channels anchorage means for the load.

7. A portable platform comprising a substantially horizontal frame, and depending supporting legs therefor, the frame being formed of an assembly of longitudinally extending and transversely extending bars rigidly secured to each other, substantially horizontal gusset plates bridging the joints between and secured to the lower faces of said longitudinally extending and transversely extending bars, the legs being substantially U-shape and opening upwardly toward the frame, the upright arms of the U's having their upper ends abutting and rigidly secured to the undersides of said horizontal gusset plates and vertical gusset plates secured to the upright arms of said legs and to the outer sides of the bars of said frame.

8. A portable platform comprising a substantially horizontal frame, and depending supporting legs therefor, the frame being formed of an assembly of bars rigidly secured to each other, substantially horizontal gusset plates bridging the joints between and secured to said bars, the legs being substantially U-shape and opening upwardly toward the frame, the upright arm of the U's bearing against and rigidly secured to the horizontal gusset plates, and substantially vertical gusset plates secured to the upright arms of said legs and to the bars of said frame.

9. A portable platform having a substantially horizontal rectangular frame formed of two longitudinally extending and two transversely extending load supporting bars rigidly secured together in substantially a common horizontal plane and provided with upwardly opening channels, the ends of the channels in said longitudinally extending bars registering with and opening into the ends of the channels in said transversely extending bars so that the channels of said bars extend completely and continuously around the frame, the upper edges of said channels constituting load carrying portions, one side wall of each of said channels being provided longitudinally thereof with an inwardly projecting portion for holding in the channels anchorage means for the load.

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