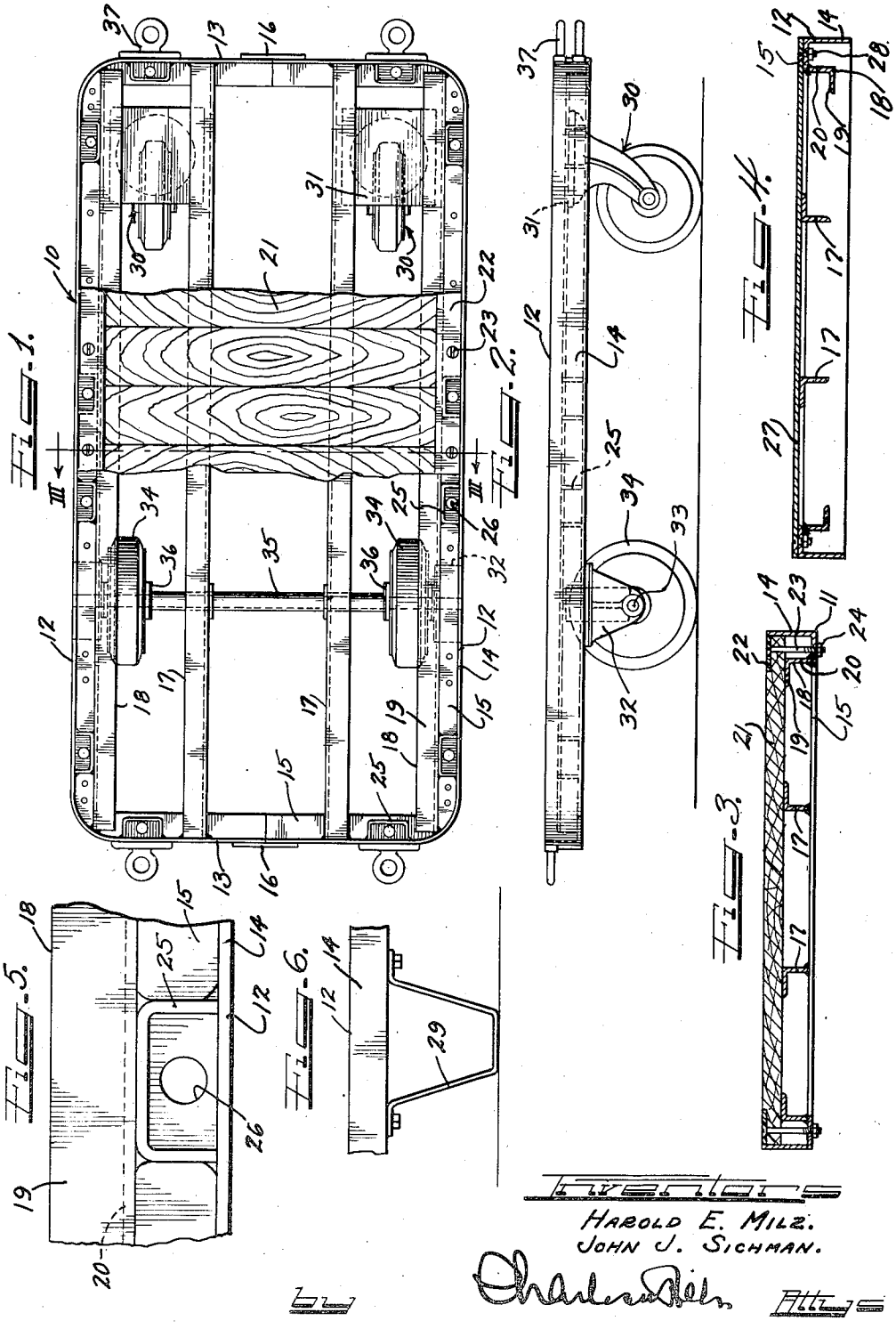
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PLATFORM CONSTRUCTION

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PLATFORM CONSTRUCTION

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The present invention relates in general to a platform, and is more particularly concerned with improvements in a fabricated frame for the platform which may be constructed from light stock members in such a way as to provide an extremely strong rigid structure especially adapted to withstand impact and load forces.

It is a further object of the herein described invention to provide an improved platform frame of such construction that a flooring of one type may be utilized in one position of the frame and a flooring of a different type utilized in an inverted position of the frame.

Another object of the invention is to provide an improved frame for platforms having novel fabricated frame forming parts of standard stock material, which are reinforced and strengthened in a novel manner by pocket forming members.

Still another object is to provide a frame structure of stock materials, wherein the parts of the frame are so associated as to form a novel flooring support.

Other objects and features of the invention will more fully appear from the following detailed description, taken in connection with the accompanying drawing, which illustrates a preferred embodiment thereof, and in which:

Figure 1 is a plan view of a platform embodying the features of the present invention, the platform being applied in this instance to a truck construction, portions of the platform flooring being cut away to indicate certain constructional details;

Figure 2 is a side-elevational view of the same;

Figure 3 is a transverse sectional view through the platform, taken substantially on line III—III of Figure 1;

Figure 4 is a similar sectional view showing the platform frame in inverted position and the manner in which it is adapted to support a metal flooring;

Figure 5 is an enlarged fragmentary detailed view showing the manner in which the frame side members are reinforced and strengthened, and pockets provided therein, and

Figure 6 is an enlarged fragmentary side view of a portion of the frame side structure, showing the manner in which skid legs may be attached thereto.

As shown on the drawing:

The present invention has been found to be generally advantageous in platform constructions of either the movable or fixed type, and embodies inherent features that make it especially adapted for platforms such as used in trailers, skids, hand trucks and other devices of like nature now widely used in the industrial handling of materials, freight and the like.

For purposes of illustration in the drawing, the invention in the present instance is primarily disclosed as being embodied in a movable platform which forms a part of a trailer or car, although it will be appreciated that the invention may be utilized in the construction of platforms generally.

A trailer, as generally shown at 10, is provided with a frame construction embodying the features of the present invention. This frame comprises a substantially rectangular structure formed of a standard stock material such as an angle-bar. This angle-bar, as indicated at 11, is bent to form sides 12—12 and ends 13—13 on the frame structure, and the angle-bar is so disposed that one of its legs, preferably of greater length than the other leg, forms a peripheral vertical flange 14, while the other leg 15 forms an inwardly extending horizontal flange.

Although it would be possible to construct the sides and ends of the frame structure from a single angle-bar with the ends brought together in abutting relation, it is preferred to provide this portion of the frame structure in two sections and join the ends of these sections in abutting relation by means of securing plates 16—16 which extend over the joints between the sections and are rigidly secured in any appropriate manner as by welding, riveting or the like.

Extending longitudinally of the rectangular frame structure, there are provided a plurality of laterally spaced rail members 17 and 18 which are secured at their ends to the end portions of the rectangular frame. This may be done in any suitable manner as by welding. It will be noted that the rails 18 are disposed outermost and adjacently parallel the side portions on the frame structure 12—12. Moreover, the rail members 17 and 18 are preferably of smaller size than the angle-bars forming the rectangular frame.

As shown in Figure 3, the angle-bar 18 is so disposed as to define a horizontal flange 19 and a vertically disposed flange 20, the latter flange being positioned at the outermost edge of the adjacent flange 15 and paralleling the vertical flange 14 of the angle-bar member forming a side 12 of the frame structure. In this position the flange 19 extends inwardly away from the vertical flange 14 and is disposed below its uppermost edge.

The flange 19 forms a support for the ends of wood flooring members 21 which extend over

the space between the flanges 14 and 20 and have their ends abutting the flange 14.

For securing the flooring in position, a strip 22 is laid over the ends of the flooring members and secured in position by means of suitable bolts 23 provided with nuts 24. By tightening the nuts 24, the strip 22 will coact with the flange 19 to clampingly secure the flooring in position.

Between the sides 12—12, the flooring is supported by horizontally disposed flanges of the rails 17—17.

As is customary in platforms of this type, it is desirable to provide pockets or sockets for removably receiving stakes which may be peripherally disposed around the platform. It will be appreciated that these pockets or sockets may be of any desired shape, depending upon the shape of the stakes being used. In the present construction these pockets are, by way of example only, shown as being formed by U-shaped members 25 which are disposed in the space between the flanges 14 and 20, and welded or otherwise secured thereto as well as to the flange 15, thus acting as reinforcing members to unite and rigidify the frame sides.

When utilizing wooden flooring as shown in Figures 1 and 3, the strip 22 and flooring above the U-shaped members 25 are cut out to provide entrances to the pockets or sockets to enable insertion therein of a stake end. The bottoms of the pockets formed by the flange 15 are provided with suitable drain openings 26, and of course the pocket forming members 25 act to strengthen the angle-bar flange in the region of these openings.

The previous description discloses the use of our improved frame construction in platforms having a wood flooring. This frame construction is readily usable where it is desired to utilize a platform having a metal flooring rather than a wooden flooring. For such purpose, the rectangular framework is merely inverted, as shown in Figure 4, to bring the flanges 15—15 uppermost. In this case the flanges 15—15 form the support for the metal flooring and this flooring as indicated at 27 is secured in place by suitable bolts 28. Where metal flooring is utilized, it is preferable to change the position of the rails 17—17 so that they have horizontal flanges engaging the under surface of the flooring. In this instance, access to the pockets for the stakes would be obtained by cutting out portions of the metal flooring and flange 15 above the members 25.

The improved frame construction may be provided with wheels and casters as shown in Figure 1 or, if desired, may be provided with skid legs 29 as shown in Figure 6.

In the arrangement shown in Figure 1, casters 30 are shown as being rotatably supported on bearing plates 31 suitably secured to a pair of the spaced rails of the frame.

At the other end of the frame the frame sides may be provided with depending brackets 32 for supporting the respective ends of a shaft 33. Wheels 34—34 are rotatably supported on this shaft adjacent the frame sides, the wheels being retained in spaced relation by means of a suitable spacing sleeve 35 surrounding the shaft and provided at its ends with abutment flanges 36—36.

Where a number of the trucks or platforms are to be connected as a train, the frame ends 13—13 may be provided with any suitable type of coupling fittings. In this instance eye plates 37 are secured by welding or other suitable means to the vertical flange 14 at the ends of the frame structure.

From the foregoing description, it will be apparent that the present invention provides an improved platform construction embodying a novel frame constructed of light stock members in such a way as to provide an extremely strong rigid structure especially adapted to withstand impact and load forces; a frame structure which may be easily adapted by inverting the frame for use with floorings with different types; which makes use of standard stock materials which are reinforced and strengthened in a novel manner by means of pocket forming members; and in which the parts are associated in such a way as to form a novel flooring support.

Now it is, of course, to be understood that although we have described in detail the preferred embodiment of our invention, the invention is not to be thus limited but only insofar as defined by the scope and spirit of the appended claims.

We claim as our invention:

1. In a platform structure a side frame member of generally U-shaped cross-section with one leg of greater length than the other, and a substantially right-angled flange projecting outwardly from the end of the short leg away from the long leg.

2. In a platform structure a side frame member of generally U-shaped cross-section with one leg of greater length than the other, and a substantially right-angled flange projecting outwardly from the end of the short leg away from the long leg, and reinforcing members spaced along said side frame member interconnecting said legs and secured thereto.

3. In a platform structure a side frame member of generally U-shaped cross-section with one leg of greater length than the other, a substantially right-angled flange projecting outwardly from the end of the short leg away from the long leg, and pocket forming members spaced along said side frame member interconnecting said legs and secured thereto.

4. In a platform construction, a preferable frame member of generally U-shaped cross-section with one leg of the U of greater length than the other, a substantially right-angled flange projecting from the end of the short leg away from the long leg, a floor having a marginal portion extending across the open end of the U into abutting relation with the long leg, said flange defining a supporting surface for said floor, a strap on the upper surface of said floor, and means for clamping said flange and strap to said floor.

5. In a platform construction, a preferable frame member of generally U-shaped cross-section with one leg of the U of greater length than the other, a substantially right-angled flange projecting from the end of the short leg away from the long leg, a floor having a marginal portion extending across the open end of the U into abutting relation with the long leg, said flange defining a supporting surface for said floor, a strap on the upper surface of said floor, means for clamping said flange and said strap to said floor, and pocket forming members below the floor extending between and secured to said legs.

6. In a platform construction, a frame member of generally U-shaped cross-section with one leg of the U of greater length than the other, a substantially right-angled flange projecting from the end of the short leg away from the long leg, a floor having a marginal portion extending across

the open end of the U into abutting relation with the long leg, said flange defining a supporting surface for said floor, a strap on the upper surface of said floor, means for clamping said strap and said floor to said flange, and reinforcing members below the floor extending between and secured to said legs.

7. In a platform construction, a preferable frame member of generally U-shaped cross-section with one leg of the U of greater length than the other, a substantially right-angled flange projecting from the end of the short leg away from the long leg, a floor having a marginal portion extending across the open end of the U into abutting relation with the long leg, said flange defining a supporting surface for said floor, a strap on the upper surface of said floor, means for clamping said flange and said strap to said floor, and pocket forming members below the floor extending between and secured to said legs, said floor and said strap having cut out portions providing communication with said pockets.

8. In a platform structure having a frame member comprising a pair of angle-bar members assembled with one set of their legs vertical and their other set horizontal, the horizontal legs extending in the same direction and the vertical legs in opposed direction with the vertical leg of one bar rigidly secured to the horizontal leg of the other to provide a space between the vertical legs, the bars so assembled being reversable as a unit to selectively dispose the horizontal leg of one bar uppermost for providing a support for one type of flooring, and the horizontal leg of the other bar uppermost for providing a support for a different type of flooring.

9. In a platform structure having a frame member comprising a pair of angle-bar members assembled with one set of their legs vertical and their other set horizontal, the horizontal legs extending in the same direction and the vertical legs in opposed direction with the vertical leg of one bar rigidly secured to the horizontal leg of the other to provide a space between the vertical legs, the bars so assembled being reversable as a unit to selectively dispose the horizontal leg of one bar uppermost for providing a support for one type of flooring, and the horizontal leg of the other bar uppermost for providing a support for a different type of flooring, and means secured to said frame member for supporting the frame in raised position.

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