Oct. 21, 1952 C. E. MILLER 2,614,689

KNOCKDOWN TYPE PLATFORM FOR METAL SHEETS AND THE LIKE

Filed Oct. 30, 1950

FIG. 1.

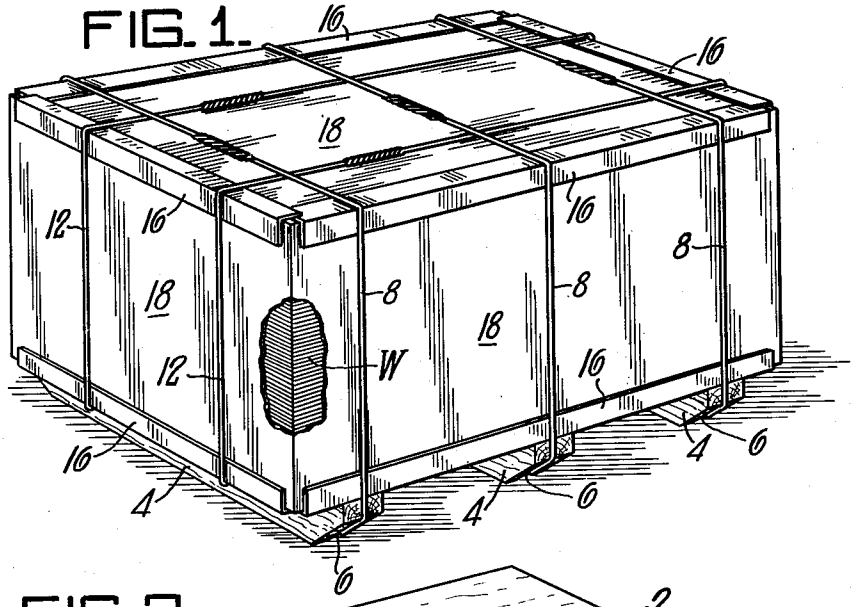
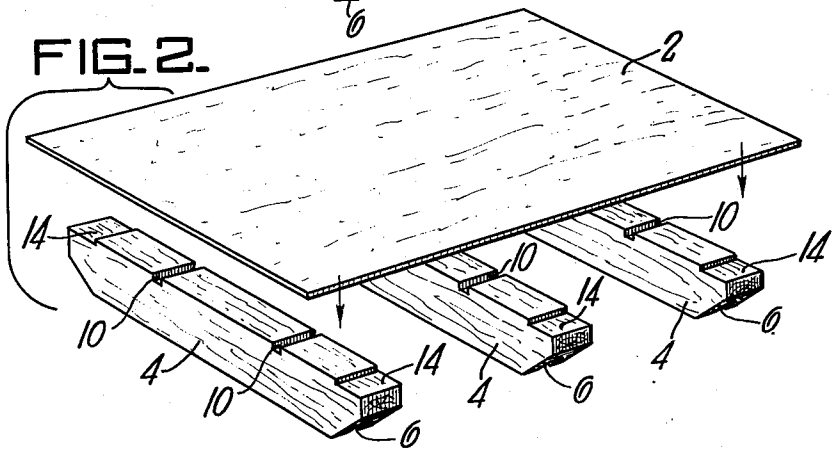


FIG. 2.



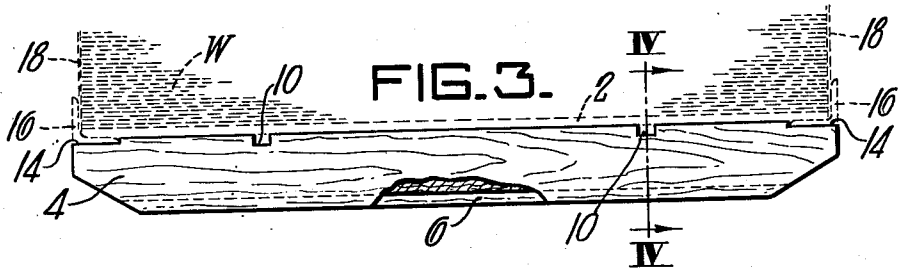
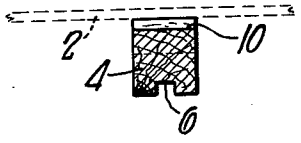


FIG. 3.

FIG. 4.



Inventor:
CHARLES E. MILLER,
by: Donald G. Dalton
his Attorney.

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KNOCKDOWN TYPE PLATFORM FOR METAL SHEETS AND THE LIKE

Charles E. Miller, Pittsburgh, Pa., assignor to United States Steel Company, a corporation of New Jersey

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1 Claim. (Cl. 206—60)

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The present invention relates to packaging devices for sheet products or the like and more particularly to a knock-down type support platform for handling sheet materials.

Prior to my invention, sheet or plate products, such as tin plate, terne plate, black plate, etc., were piled on wooden skids or pallets for shipment and storage. The conventional skid was made up of a plurality of wooden runners arranged in spaced parallel relation and a series of elongated base members which were nailed transversely across the top of the runners. The conventional skids were made up in various sizes depending on the dimensions of the product to be shipped or stored thereon. It was usual practice to make up a number of skids in anticipation of future production and hold them in storage until required. The number that could be thus made up in advance was limited because of the space needed to store the skids which were bulky in nature. The bulky nature of the items also caused an economic loss since this discouraged re-use of returned skids by the shipper. This was due to the fact that the shipper in most instances did not have the quantity of space required to devote to dead storage of the various size skids returned until he had production orders on which he could apply them. There was not much that could conveniently be done to alter the skids to suit other sizes since the runners and base members were nailed permanently together. Any effective alteration would amount to virtual reconstruction of the skid.

Another disadvantage inherent in the use of the conventional skid was the tendency of the nails used in its construction to work up out of the base members when the loaded skid was moved about on the prongs of a lift tractor. The projecting nails would cause considerable damage to the bottom sheets of the material piled on the skid.

It is, accordingly, an object of my invention to provide a platform support for holding a pile of sheet materials consisting of a solid base member support disposed on transverse runners held together solely by the tie bands securing the pile of sheet materials.

It is another object of my invention to provide a knock-down platform support for sheet materials which can be easily disassembled for compact disposition.

These and other objects will be more apparent after referring to the following specification and attached drawings, in which:

Figure 1 is a perspective view;

Figure 2 is a composite perspective view;

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Figure 3 is a side elevation of a runner of my invention; and

Figure 4 is a cross sectional view taken on the line IV—IV of Figure 3.

Referring more particularly to the drawings, reference numeral 2 indicates a preferred form of supporting base which may be constructed of pressed wood or pressed composition of material. The base support 2 may have a thickness of approximately ¼ inch and other dimensions the same or approximately the same as those of the sheets to be stacked thereon. The base support is strong and rigid and has at least one smooth surface on which the sheets are stacked.

Supporting base 2 rests upon, but is not permanently affixed to, two or more runners 4 which are preferably made of hardwood. A centered lengthwise groove 6 is cut along the bottom of each runner to accommodate crosswise ties 8 which not only help to secure the pile of sheets W, as seen in Figure 1, but also serve to hold the runners in place during handling and shipment. Transverse notches 10 are cut in the top of each of the runners to accommodate lengthwise ties 12.

A notch 14 is cut at the top of each end of each runner to permit the insertion of steel angles 16 which are used to protect the edges of the pile of sheets W, as shown in Figures 1 and 3.

In operation, the runners 4 are positioned on the mill floor and the lengthwise ties 12, which are of sufficient length to embrace the entire package to be made, are laid in the notches 10 across the runners 4. The supporting base 2 is then placed across the runners 4. A large sheet of waterproof paper or other protective covering 18 of sufficient size to cover the entire package intended to be built is laid on the supporting platform 2. The sheets of material to be packaged are then stacked on the supporting base until the desired weight of material is accumulated. The pile is then covered with the waterproof paper wrapping or other protective covering 18 and the angles 16 inserted in position, as shown in Figure 1. The lengthwise ties 12 are then tied around the pile of sheets in the conventional manner. The crosswise ties 8 may then be strung through the grooves 6 and also tied around the pile of sheets. Flat bands or round wires may be used for the lengthwise and crosswise ties and the notches 10 and grooves 6 sized accordingly. The package is now ready for handling with the runners being part of the package and transportable therewith. The runners thus always hold the package raised from the floor to permit easy mechanical handling and transportation thereof.

The danger of nails damaging the sheets piled on the platform is eliminated since no nails are used in the construction of the platform.

After the package reaches its destination and the ties are cut to strip the package, the runners are disengaged and the supporting base 2 remains in place until the sheets are used. As each platform is emptied, the supporting bases are stacked together and the runners are assembled and bundled in compact units convenient to handle and store. The stacked supporting bases and bundled runners may be stored in a comparatively small space until sufficient quantities are accumulated to return to the shipper in car or truck load lots. When the original shipper receives the returned supporting bases and runners, the compact bundles may be conveniently stored in a comparatively small space until he is ready to either use them again as is or to cut them down to smaller sizes to facilitate re-use.

While one embodiment of my invention has been shown and described, it will be apparent that other adaptations and modifications may be made without departing from the scope of the following claim.

I claim:

A shipping package comprising a plurality of elongated runners spaced in parallel relationship, each of said runners having a lengthwise groove in the bottom surface thereof and a plurality of spaced transverse grooves in the upper surface thereof, a flat base member loosely disposed on and supported by said runners, a pile of metal

sheets disposed on and supported by said base member, an angle guard member disposed along the upper side and end edges and lower side and end edges of said pile of sheets for protecting the same, each of said runners having a notch at the top of each end thereof for accommodating the angle guard members disposed along the lower side edges of said pile of sheets, a tie band fitted in each of said lengthwise grooves and extending around said runners, said upper and lower side edge guard members and said pile of sheets for holding said runners in position against the bottom of said base member, and a tie band fitted into each of said transverse grooves and extending around said base member, said upper and lower end edge guard members and said pile of sheets transverse of said first named tie bands for securing said pile on said base member.

CHARLES E. MILLER.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
892,146	Flora	June 30, 1908
1,331,704	Gerberich	Feb. 24, 1920
1,690,873	O'Neil	Nov. 6, 1928
1,835,825	Thierry	Dec. 8, 1931
2,004,626	Hann	June 11, 1935
2,159,622	Sanford	May 23, 1939
2,463,214	Stoner	Mar. 1, 1949