Oct. 21, 1952 R. O. HAMMER 2,614,688

SHEET PACKAGE AND SKID THEREFOR

Filed Dec. 14, 1949 2 SHEETS—SHEET 1

FIG. 1.

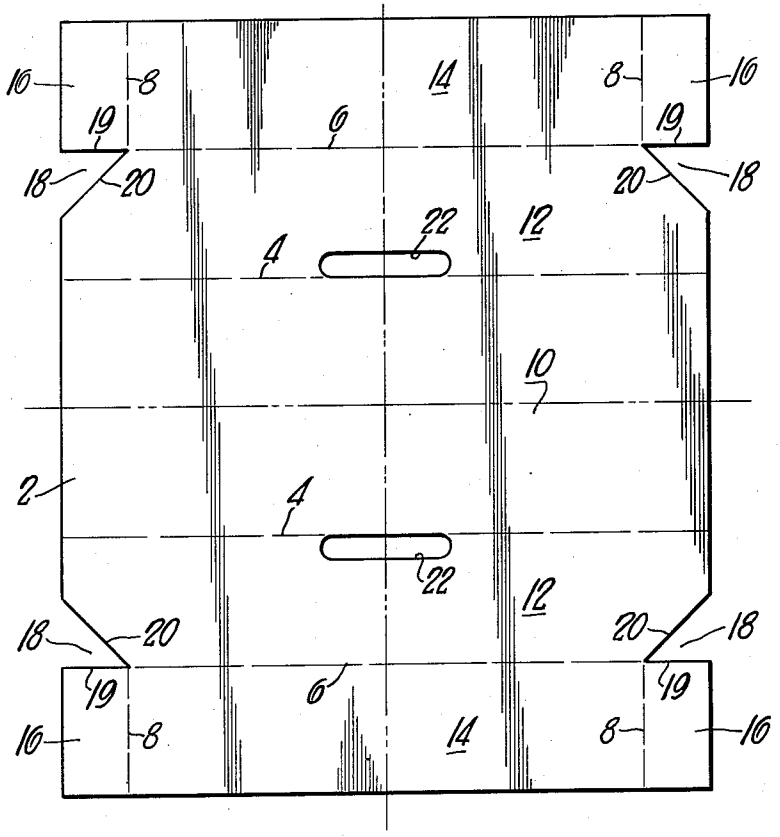


FIG. 2.

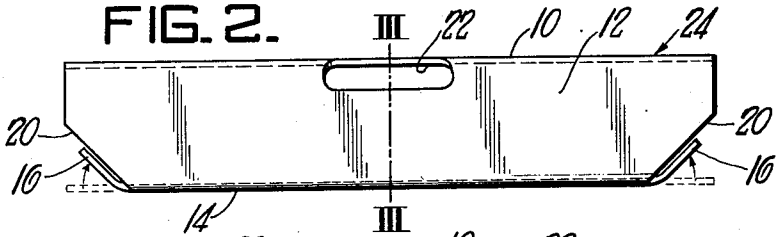
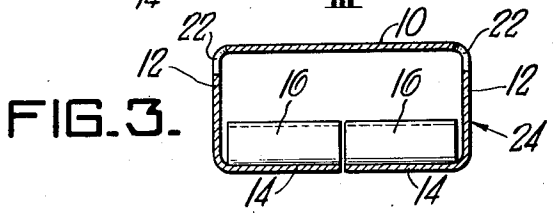


FIG. 3.



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FIG. 4.

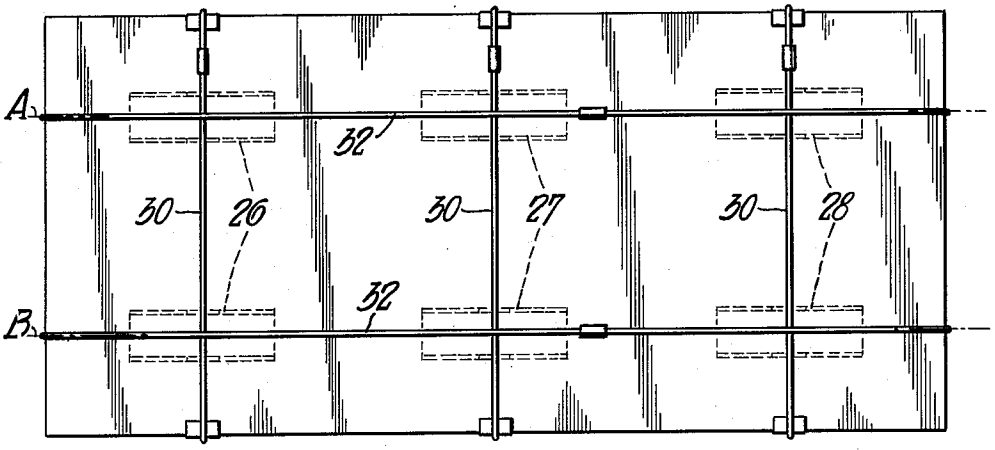
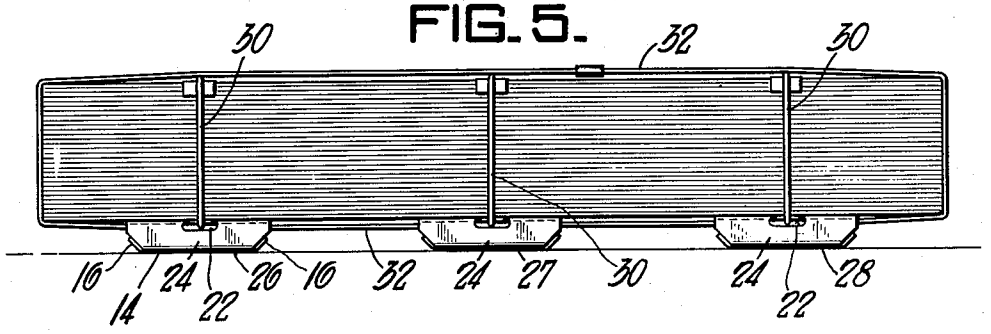


FIG. 5.



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UNITED STATES PATENT OFFICE

2,614,688

SHEET PACKAGE AND SKID THEREFOR

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Application December 14, 1949, Serial No. 132,845

2 Claims. (Cl. 206—60)

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My invention relates to a metal skid for packaging flat rolled sheet material for handling and shipment, and in particular to a skid formed from sheet metal.

At present wood skids are used for the above purpose, generally two 4 x 4 timbers of about the same length as the sheet material to be packaged. The timbers are placed in spaced apart parallel relationship, the sheets piled thereon and the package bound together by several steel straps or wires passed around the bundle in both longitudinal and transverse directions. A large stock of timbers must be kept for this purpose. The weight and variety of sizes involved makes it uneconomical to return wood skids to the shipper for re-use. The procedure is wasteful, moreover difficulties are often encountered in handling the packages at their destination due to shifting of the skids during loading and shipment.

It is an object of the present invention to provide a relatively small sheet metal skid which may be used in multiples as required by the length of the sheet material and which is adapted to be bound to the stack or pile of sheets by the shipping straps or wires.

Another object is to provide a package of sheets which may be handled from any side with a conventional lifting tractor.

A further object is to provide a method of making such a skid and package therefrom.

These and other objects will be made apparent in the following specification when read in conjunction with the attached drawings wherein:

Figure 1 is a plan view of the unformed skid blank of the present invention;

Figure 2 is a side elevation of a skid formed from the blank shown in Figure 1;

Figure 3 is a cross section through the skid taken along the line III—III of Figure 2;

Figure 4 is a plan view of a completed package of sheets showing the manner in which the skids of the present invention are used; and

Figure 5 is a side elevation of the package shown in Figure 4.

With particular reference to the drawings, the unformed skid blank 2 of Figure 1 may be any grade of sheet steel readily available; sheet mill rejects being a convenient source of material. The material is preferably 11 or 12 gage, but heavier metal can be used if forming equipment of adequate capacity is available. Metal lighter than 12 gage, however, should not normally be used for reasons of strength. The length of the blank is substantially equal to the girth of the

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skid to be formed therefrom and the width of the blank is equal to the length of the skid. The lines 4, 6 and 8 in Figure 1 represent bend lines and define the top portion 10, side portions 12 and bottom portions 14 and 16 of the finished skid. The lines 8 are spaced from the longitudinal edge of the blank by an amount equal to about half the height of the finished skid. Oppositely disposed, right triangular shaped notches 18 are made in the side portions 12, one leg of each right triangle lying along the edge of the blank, the other along the line 6. The necessary cuts indicated by the reference numbers 19 and 20, are made to terminate at the intersection of bend lines 6 and 8, and preferably to make an angle of about 45° at this point. A transverse slotted hole 22 is punched in each of the side portions 12 adjacent bend line 4 at about the longitudinal center line of the blank.

A skid 24 is formed by bending the blank 2 downwardly at right angles at the bend lines 4, then inwardly at the line 6 so that the ends of the blank abut at about the center of the bottom of the skid. The portions of the bottom identified by the reference number 16 are bent upwardly about bend line 8 so as to incline at about the same angle as the miter-cut 20 in the side portions 12. This construction provides a substantially open-ended rectangular box section having oppositely disposed transverse slotted holes 22 in the sides near the top thereof and having the front and rear edges of the bottom chamfered.

At least four of the skids 24 are used in making a package of sheets, the number being increased in multiples of two as required by the length and the weight of the material of the package. I have found that six skids provide a particularly convenient and adequate support for most sizes of sheet material shipped. In a package using six skids as shown in Figures 4 and 5 the skids are arranged in pairs 26, 27 and 28, the skids of each pair being spaced apart and aligned with respect to their transverse axes, i. e., the slotted holes 22 in the skids of each pair are aligned. The pairs of skids are spaced apart end-wise in two parallel rows A and B, the skids in each row being aligned length-wise. The exact spacing depends upon the size of the sheet material, and is such as will provide a stable package. A transverse tie wire or strap 30 is threaded through the slotted openings 22 of the skids in each pair. Longitudinal wires or straps 32 are threaded through the open ends of the skids in each row. The sheets are then piled on the skid

arrangement so as to center thereon and the tie wires or straps are brought over the top of the pile and tightened and secured in any conventional manner. The skids are thus securely bound to the bundle of sheets and are an integral part of the package, consequently shifting of the skids during handling and shipment is avoided. The use of multiple spaced skids provides a package which may be lifted from any side by a fork-type tractor. This feature greatly facilitates the handling of the package. Because of their relatively light weight and small size, the skids are readily handled and stored, and can be returned to the shipper for re-use.

While I have shown and described a specific embodiment of my invention, I do not wish to be limited exactly thereto except as defined in the scope of the appended claims.

I claim:

1. A package comprising a plurality of sheet-metal skids, each having two parallel sides with oppositely disposed slots therein and substantially open ends, said skids being arranged in pairs with the oppositely disposed side slots of each pair in alignment, said pairs being arranged in a spaced end to end arrangement to form two substantially parallel rows, a stack of sheets supported on said skids, tie wires passing through the aligned slots of each pair of skids and encompassing the pile of sheets and tie wires passing through the open ends of the skids in each row and encompassing the pile of sheets.

2. A package comprising a plurality of sheet-metal skids, each formed from a single metallic sheet to provide a top, two sides, a bottom and substantially open ends, said sides of each skid having oppositely disposed slots located adjacent the top thereof, said skids being arranged in pairs with the oppositely disposed side slots of each pair in alignment, said pairs being arranged in a spaced end to end arrangement to form two substantially parallel rows, a stack of sheets supported on said skids, tie wires passing through the aligned slots of each pair of skids and encompassing the pile of sheets and tie wires passing through the open ends of the skids in each row and encompassing the pile of sheets.

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