

June 30, 1970

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3,517,828

RACK STACKING GUIDE

Filed Aug. 13, 1968

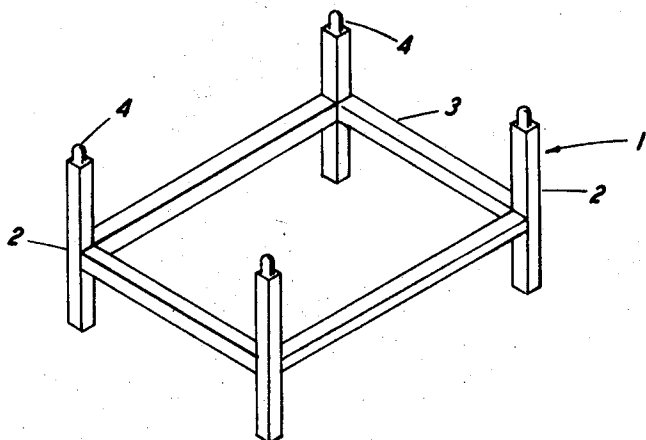


FIG. 1

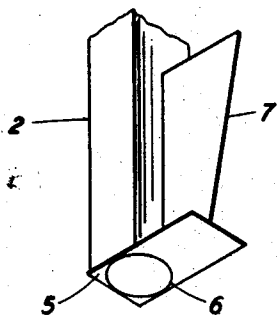


FIG. 2

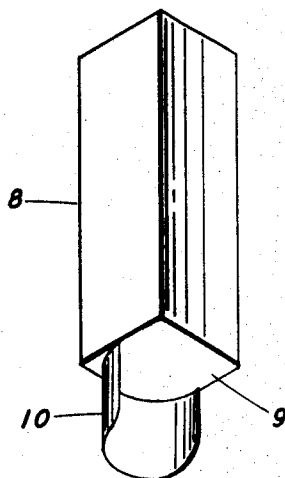


FIG. 3

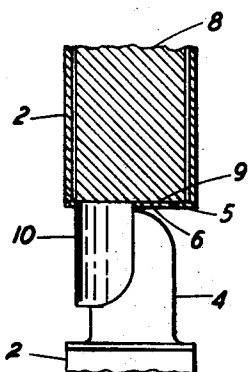


FIG. 4

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RACK STACKING GUIDE

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Filed Aug. 13, 1968, Ser. No. 752,224

Int. Cl. B65g 1/14

U.S. Cl. 211-177

2 Claims

ABSTRACT OF THE DISCLOSURE

A rack with hollow legs in which a plunger having a scoop on the end thereof is inserted to be activated by a nipple on the upper end of each of said legs to permit alignment of the racks for stacking.

This invention relates to a new and useful article of manufacture.

Generally this invention relates to new and useful structure for stacking racks.

More specifically, this invention relates to an art where heavy beams of yarn are contained and which racks are handled by fork-lifts in order to be stacked for storage or shipment.

Heretofore it has been a problem for the fork-lift operator to align the legs of the racks that are being stacked and each containing a heavy beam of yarn.

It is the primary object of this invention to provide a more positive means to facilitate the stacking of these racks.

It is another object of this invention to provide simple and sturdy structure that will accomplish the same final stacking position without interference thereto by the new stacking structure.

These and other objects of this invention will become more apparent from referring to the drawings in which:

FIG. 1 represents generally the essentials of one of the racks to be stacked; and

FIG. 2 shows the bottom of one of the legs of the above noted racks; and

FIG. 3 shows the essentials of the instant invention; and

FIG. 4 shows the relationship of the invention to one of the legs of the well-known rack.

FIGURE 1

FIG. 1 shows the essentials of the presently used rack 1 generally, having the plurality of legs 2 and the leg connecting members 3 on which may rest a beam of yarn (not shown). On the top of each leg 2 there is an upstanding nipple 4.

FIGURE 2

FIG. 2 shows the bottom surface of each leg 2 on which there is fixed a foot plate 5 having a plate hole 6 bored therein and as in many cases may have a reinforcing web 7. It should be understood at this point, then, that the problem in stacking the heavy racks, each containing a beam of yarn, is that the lower surface or plate hole 6 in the legs 2 of the upper rack 1 must be centered over the nipple 4 (FIG. 1) fixed to the upper

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surface of the leg 2 of the lower rack 1 and then the fork lift is lowered, whereupon the nipple 4 will protrude into plate hole 6 thereby insuring proper alignment of the legs and a proper stack. It should be obvious that, to a fork-lift operator, much of this structure is hidden to his view and therein lies the problem. It is with solving this problem of alignment of which this invention is concerned.

FIGURE 3

FIG. 3 shows a plunger 8 which may be of solid or hollow construction but having a solid bearing plate 9 at the lower end thereof and a scoop 10 fixed to the bearing plate 9 of the plunger 8.

FIGURE 4

FIG. 4 shows the relationship of the legs 2 of the upper rack still on a fork-lift as it overlies the lower rack just prior to a final seating. Upper leg 2 has within its hollow the plunger 8 which has the scoop 10 fixed to its lower end and which scoop 10 protrudes through the plate hole 6 in foot plate 5 of the lower end of the upper rack leg 2. The upper surface of leg 2 of the lower rack has the nipple 4 fixed thereto and is shown in position with the upper rack—to be stacked thereon—in place. When the fork-lift operator has centered two sets of the legs just as shown he lowers the fork and the nipple 4 will protrude through the plate hole 6 in foot plate 5 to bear against bearing plate 9 of the plunger 8 thereby forcing the plunger 8 and scoop 10 to recess into the upper leg 2 whereby nipple 4 will also extend through plate hole 6 and into the upper rack leg 2 to give a final sturdy interlocked and aligned stack as presently desired in the art.

Having thus disclosed and described my invention;

I claim:

1. A rack and stacking guide comprising: a rack having a plurality of hollow legs; a plunger slidable in at least each of two of said legs; said plunger having a scoop fixed to the lower end thereof; a nipple on the upper end of said legs; means on the lower portion of said legs to limit the outward movement of said plunger and forming a hole to receive the nipple of a leg of a rack therebelow whereby said scoop is extendable through said hole to provide easy and rapid alignment of said hole and said nipple for stacking of racks.

2. The rack and stacking guide of claim 1, wherein the limiting means comprises a foot plate having a plate hole therein on the lower end of said leg.

References Cited

FOREIGN PATENTS

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U.S. Cl. X.R.

214-10.5