May 12, 1942. L. E. SCHWALBE 2,282,891

PALLET FOR HOLLOW BLOCK MOLDING MACHINES

Filed Dec. 10, 1938

Fig. 1.

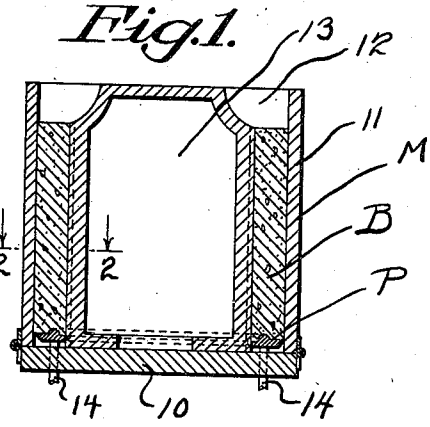


Fig. 2.

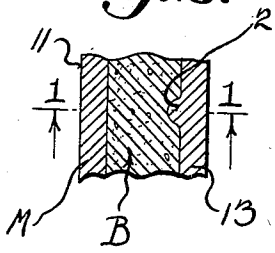


Fig. 3.

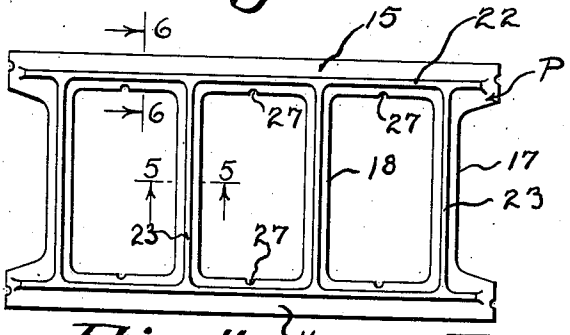


Fig. 5.

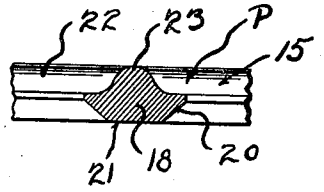


Fig. 4.

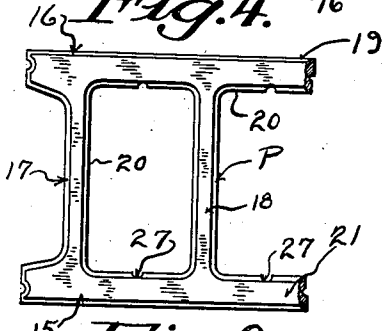


Fig. 7.

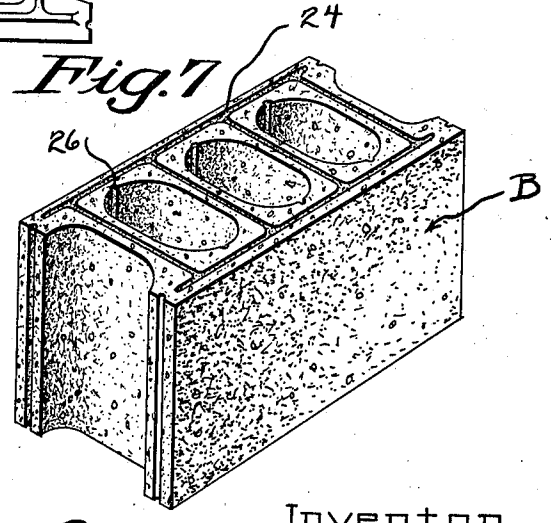


Fig. 8.

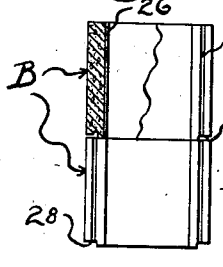
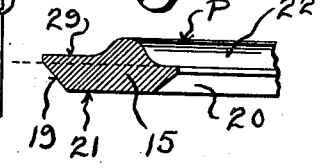


Fig. 6.



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PALLET FOR HOLLOW BLOCK MOLDING MACHINES

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Application December 10, 1938, Serial No. 244,913

4 Claims. (Cl. 25—41)

This invention appertains to molded building blocks, and more particularly to a novel pallet bed-plate for a hollow concrete block-molding machine.

Generally, pallets are made from grey iron, and the same are of a heavy character, and are difficult and clumsy to handle. Many hundreds of pallets of this type are broken daily in a single concrete block-molding plant. It has been proposed to make the pallets of pressed steel, but these pallets are also highly objectionable, in that the same soon become twisted and warped out of shape.

It is, therefore, one of the primary objects of my invention to provide novel means for constructing the pallet, whereby the same can be of a light weight, and economically formed from malleable iron.

Another object of my invention is to provide a pallet having its inner and outer edges beveled to facilitate the cleaning thereof, and to form inclined surfaces to facilitate the quick guiding thereof in the mold box over the cores.

A further object of my invention is to provide a pallet having formed on its upper surface ribs to mold mortar key grooves in the block, the ribs being so placed as to reinforce the pallet.

A further important object of my invention is to form the pallet with a smooth, flat, lower surface, whereby the same will rest evenly on the floor of the mold box, or on the floor pins, and will be held against tilting so that the blocks formed will have plain lower faces.

A still further important object of my invention is to provide means for reinforcing the pallet, and at the same time to construct the pallet in such a way as to form an offset in the bottom outer edges of a formed block, whereby to prevent injury to such edges.

With these and other objects in view, the invention consists in the novel construction, arrangement, and formation of parts, as will be hereinafter more specifically described, claimed, and illustrated in the accompanying drawing, in which drawing:

Figure 1 is a transverse, sectional view through a concrete block-molding machine, showing my novel pallet in use, the view being taken on line 1—1 of Figure 2, looking in the direction of the arrows.

Figure 2 is an enlarged, fragmentary, horizontal, sectional view through the block-molding machine, taken on the line 2—2 of Figure 1 looking in the direction of the arrows.

Figure 3 is a top plan view of my novel pallet.

Figure 4 is a fragmentary bottom plan view of my pallet.

Figure 5 is an enlarged, fragmentary, detailed, sectional view through the pallet, taken on the line 5—5 of Figure 3, looking in the direction of the arrows.

Figure 6 is a similar view, taken on the line 6—6 of Figure 3, looking in the direction of the arrows.

Figure 7 is a detailed, perspective view of one of the blocks formed by a molding machine, using one of my pallets.

Figure 8 is a detailed view showing a pair of blocks laid one upon the other, with one of the blocks partly broken away and in section, the view illustrating blocks formed when using one type of my pallet having a reinforced, thickened outer edge.

Referring to the drawing in detail, wherein similar reference characters designate corresponding parts throughout the several views, the letter M indicates a fragment of a concrete block-molding machine, and P one of my novel pallets for use in connection therewith. The machine M can be of any preferred make, character, or size, and, as shown, the same includes a floor 10, and side and end walls 11 and 12. Hollow metal cores 13 are adapted to rest at spaced points on the floor 10, and the pallet P is adapted to rest upon the floor, or upon floor pins 14.

My novel pallet P is constructed from malleable iron to reduce breakage, and the pallet is constructed in such a way that the same can be made of a light weight metal. Hence, the pallet can be made economically, and still be formed from malleable iron.

As illustrated, my pallet is of an open framework construction, and thus the same includes spaced, parallel, longitudinally extending side rails 15 and 16, and these rails are joined by transverse end rails 17 and intermediate transverse rails 18. The rails 17 and 18 are equi-distantly spaced, and three openings of equal size are thus formed in the pallet to receive the cores 13.

The outer marginal edges of the pallet are beveled, as at 19, and the inner edges of the pallet bond the side rails 15 and the transverse rails 17 and 18 are also beveled, as at 20. The beveled edges 19 and 20 form inclined guide surfaces, and thus when the pallets are placed in a machine, the pallets will readily guide themselves into place in the mold box and over the cores 13. I lay great stress on the beveled edges 19 and

20, as these edges are practically self-cleaning, and the edges tend to space the pallets one from the other when the pallets are stacked in the yard. Thus, a workman can quickly and easily grasp the desired number of pallets, and can readily drop one pallet at a time in a series of mold boxes.

Particular attention is also called to the fact that the pallet is provided with a smooth, flat, lower face 21. Hence, the pallet will lie flat on the floor 10 of a mold box, or evenly on the floor pins 14. The advantage of this will be more fully hereinafter set forth.

The upper face of the pallet is provided with longitudinally extending ribs 22 on the side rails 15 and 16, and transversely extending ribs 23 positioned on the upper faces of the transverse rails 17 and 18. These ribs 22 and 23 form grooves 24 in the bottom face of concrete blocks B (shown in Figures 7 and 8). The grooves 24 form mortar key grooves, and thus a number of blocks B can be readily bonded together, and the ribs 22 and 23 are so placed on the pallet as to reinforce the pallet. It is to be noted that the ribs 22 are located closer to the inner edges of the longitudinal side rails 15 and 16 than to the outer edges of said longitudinal side rails.

Where attempts have been made to use pressed steel pallets, it has been necessary to press the plates up to form reinforcing ribs, and the pressing up of the ribs form grooves in the lower face of a pallet. The walls of the grooves resting on the pins 14, tend to slide or cant the pallets to one side or the other, and thus pallets of this type will not rest flat in the mold box.

In accordance with my invention, I also form beads 25 on the outer sides of the cores 13, and these beads form grooves 26 in the block B. These grooves 26 allow the breaking of a block at desired points, when necessary or desirable. To permit a pallet to readily slide on the cores having the members 25, the inner edges of the pallet are notched, as at 27.

The block shown in Figure 7 has a flat lower surface, but it is proposed, however, to offset the lower longitudinal edges of the block so as to protect said edges against chipping and breaking.

In Figure 8 a pair of blocks B are shown, and these blocks have their lower outer longitudinal edges offset or rabbeted, as at 28, and thus these edges will set above the adjacent block and be prevented from chipping.

In order to form the offset edges in the blocks, the side rails 15 and 16 can be formed thicker on the outer sides of the ribs 22 than on the inner side. This is clearly shown in Figure 6, and the thickened portion of the pallet is indicated by the reference character 29.

Obviously, various other changes in details can be made without departing from the spirit or the scope of my invention, but what I claim as new is:

1. A pallet of open framework construction, comprising spaced parallel side rails and transversely extending connecting rails, the inner and outer edges of all of said rails being beveled inwardly and downwardly, the lower faces of the rails between said beveled edges being of a flat smooth formation.

2. A pallet formed from malleable iron comprising spaced parallel side rails and equi-distantly spaced connecting transverse rails, the lower faces of said rails being formed flat and smooth, molding and reinforcing ribs formed on the upper faces of the side and transverse rails.

3. A pallet of an open framelike construction comprising spaced parallel longitudinally extending side rails and equi-distantly spaced transversely extending connecting rails, the inner and outer edges of said rails at the lower surface thereof being inclined downwardly and inwardly to form guide surfaces and relatively sharp scraping edges, and reinforcing and molding ribs formed on the upper faces of the rails.

4. A pallet for hollow block-molding machines comprising spaced parallel longitudinally extending side rails and equi-distantly spaced transversely extending connecting rails, reinforcing and molding beads formed on the upper faces of the longitudinally extending side rails and connecting transverse rails, the ribs on the side rails being spaced between the edges of said side rails, and said rails on the outer sides of the ribs being of a greater thickness than the rails on the inner sides of the ribs.

LESTER E. SCHWALBE.