Feb. 7, 1928. 1,658,456

J. B. MEYER

BOTTOM BOARD FOR FOUNDRY FLASKS

Filed July 21, 1927

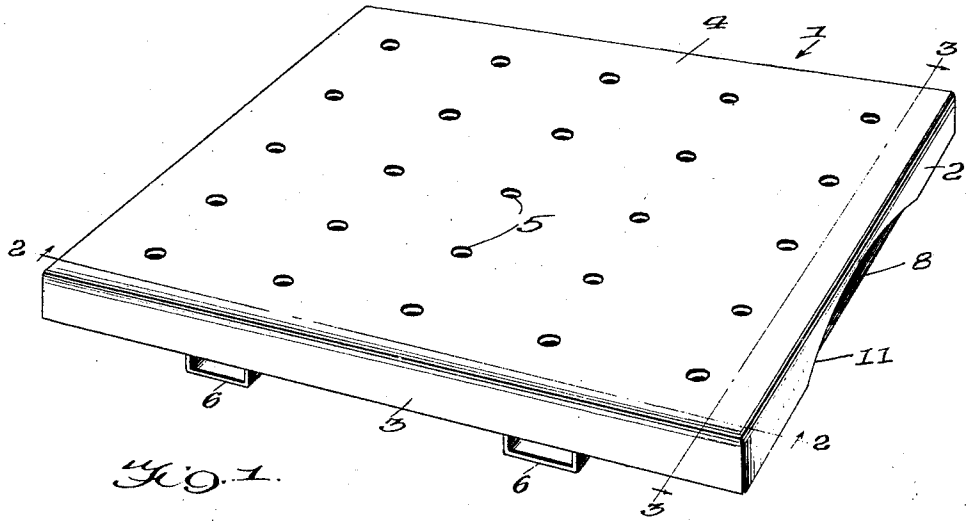


Fig. 1.

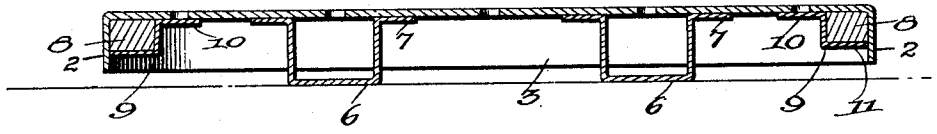


Fig. 2.

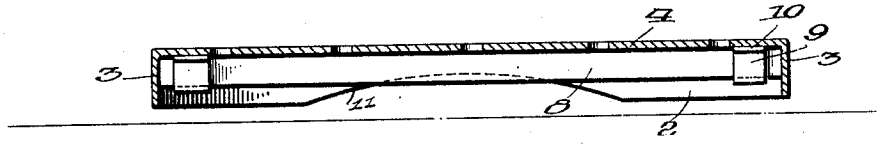


Fig. 3.

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UNITED STATES PATENT OFFICE.

JOHN B. MEYER, OF DUBUQUE, IOWA, ASSIGNOR TO THE ADAMS COMPANY, OF DUBUQUE, IOWA, A CORPORATION OF IOWA.

BOTTOM BOARD FOR FOUNDRY FLASKS.

Application filed July 21, 1927. Serial No. 207,420.

This invention relates to foundry flasks and especially to bottom boards therefor. More specifically the invention pertains to a bottom board for molding flasks, so designed that the operator may more easily lift the board.

In devices of this character it is necessary that the bottom board be of sufficient rigidity and durability to withstand the rough usage to which it is subjected in foundry work, yet comparatively light in weight and relatively inexpensive in production. It is also extremely desirable that the board be so designed that the operator may readily grasp and lift it for transportation from one point to another.

One of the objects of the present invention is the provision of a metallic bottom board for the purposes set forth, which is of sufficient lightness to permit easy transportation, and yet is of sufficient rigidity and durability.

Another object of the invention is the provision of a board equipped with finger grips composed of a material which is an inferior conductor of heat, whereby the operator may more comfortably grasp and lift the board.

Other objects of the invention will be made apparent in the following specifications, when read in connection with the accompanying drawings forming a part thereof.

In said drawings:

Fig. 1 is a perspective view of a bottom board embodying my invention.

Fig. 2 is a section taken on the line 2—2 of Fig. 1, and,

Fig. 3 is a section taken on the line 3—3 of Fig. 1.

Now referring specifically to the drawings, in which like reference numerals indicate like parts throughout the several views, the board comprises a steel plate 1 of rectangular formation, provided with downturned integral flanges 2 on its ends, and 3, 3 on its sides. The top 4 of the board is provided with a plurality of perforations 5 to decrease the weight of the board without sacrifice of durability.

As clearly illustrated in Fig. 2, a plurality of battens 6 extend along the bottom surface of the top 4, the battens being channel-shaped, and provided with flanges 7, 7 which are preferably spot-welded to the lower surface of the top 4. It will be noted that the vertical height of the battens 6 is greater than that of the flanges 2, 2, in consequence of which the lower edges of the flanges 2, 2 are separated from the floor when the plate 1 is resting on said battens.

To the lower surface of the plate 1, and adjacent each of the ends thereof, is secured a finger grip 8, here shown as a wooden strip. It is essential that the finger grip be composed of a material which is practically a non-conductor of heat, for reasons which will hereinafter appear, and the strip 8 may be formed of any suitable material which fulfills such requirements.

The strip 8 is located in the recess formed between the adjacent flange 2, on one side, and the batten 6 on the other side, and is secured in position by means of a Z-shaped clip 9, having one of its flanges 10 spot-welded to the bottom of the board 1, and the other flange extended below and supporting the said strip 8, one of the clips 9 being positioned at each end of said strip. Each of the flanges 2, 2 is provided with an arcuate cut-away portion 11, as illustrated most clearly in Figs. 1 and 3, to permit access of the fingers of the operator when it is desired to shift the board.

It will be understood that bottom boards for foundry flasks are frequently shifted from point to point, and that they are constantly being subjected to considerable heat. Because of the lack of durability of the wooden bottom boards formerly used, and their tendency to warp, the present trend is to the utilization of boards formed of metal. In actual usage of a metal board however, it becomes very hot during the molding work and the operator cannot handle it comfortably. In the present invention it is apparent that the board may be handled without any discomfort whatsoever, the fingers of the operator being inserted through the arcuate cut-away portions 11, and pressing against the bottom of the wooden strips 8 fail to contact any heated metal.

Modifications of the structure herein disclosed may be suggested to those skilled in the art, but my invention covers all em-

bodiments falling fairly within the scope of the appended claim.

I claim:

A bottom board for molding flasks, composed of metal and carrying downturned end flanges provided with slots, a member of low heat conductivity carried on the lower surface of said board, adjacent each of said flanges, and metallic clips secured to said board, each clip embracing one of said members.

In testimony whereof I affix my signature.

JOHN B. MEYER.