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O. A. PEDERSEN

MOLD FOR BUILDING BLOCKS

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Fig. 1

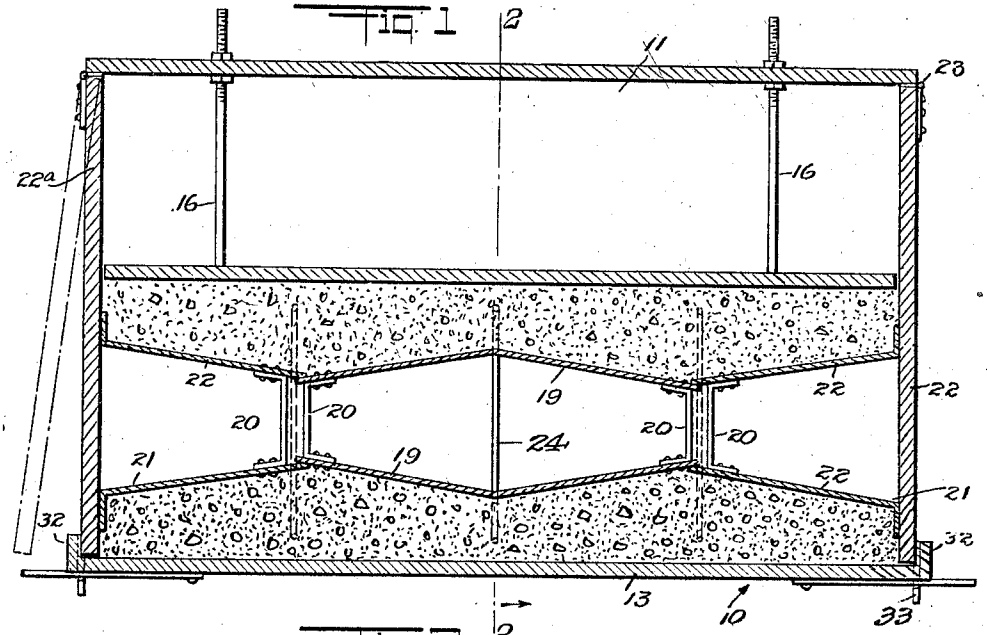
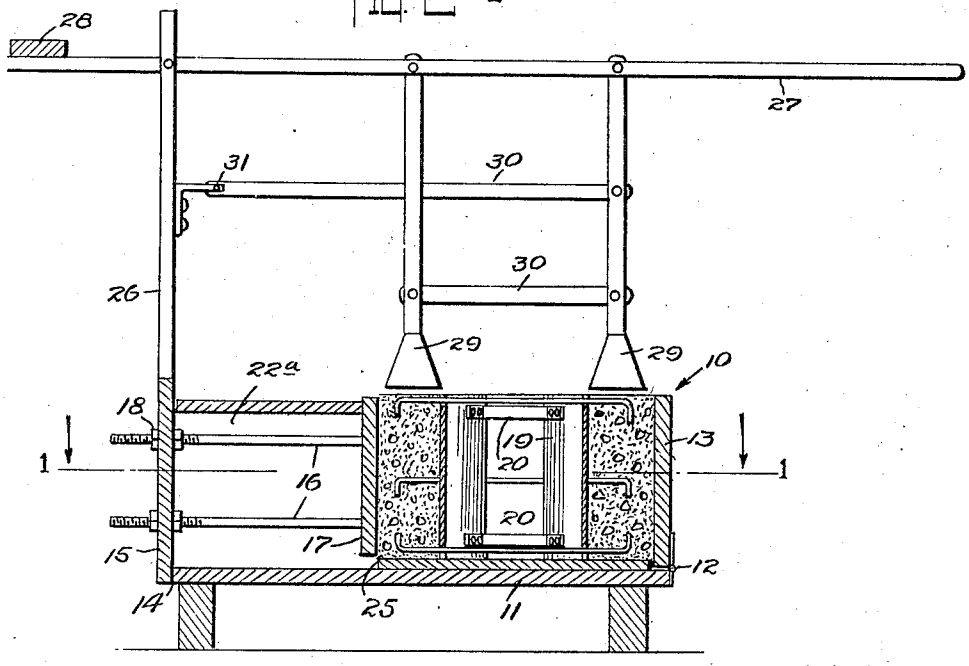


Fig. 2



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UNITED STATES PATENT OFFICE.

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MOLD FOR BUILDING BLOCKS.

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To all whom it may concern:

Be it known that I, OSCAR A. PEDERSEN, a citizen of the United States, and a resident of the city of New York, in the county of Bronx and State of New York, have invented certain new and useful Improvements in Molds for Building Blocks, of which the following is a full, clear, and exact description.

Among the principal objects which the present invention has in view are: to construct a hollow concrete block for use in building construction which, while being light in weight will be capable of sustaining considerable weight; to provide an apparatus for the formation of the blocks, through the medium of which the blocks can be made quickly and with a minimum amount of labor; to provide a mold which can be quickly knocked down for storing, and which, when in use, can be adjusted to form various sized blocks.

Drawings.

Figure 1 is a sectional plan view taken on the line 1—1 of Figure 2 showing the block in the course of construction together with the adjustable mold in which it is formed.

Figure 2 is a sectional elevation taken on the line 2—2 of Figure 1 showing the method of adjusting the mold to form various sized blocks and also the means used to tamp the concrete in order to make the same solid and force the moisture therein to the exterior.

Description.

Referring to the drawings, 10 designates in its entirety a block forming mold comprising a base 11, to one edge of which is hinged as at 12, a wall forming member 13 adapted to extend the length of the mold. To the opposite edge 14 of the base there is fixed a supporting member 15, through which there is adapted to pass partially threaded rods 16 carrying at their ends a wall forming member 17 extending the length of the mold. Nuts 18 on the inner and outer sides of the member 15 allow of adjusting the rods to move the member 17 to form a narrow or wide block.

It is desirable that air passages be formed in the blocks in order to dissipate any moisture coming through that portion of the block which will be exposed to the elements. Metallic inserts are provided, which when withdrawn leave an air passage, said inserts comprising a center member 19, the walls of which are angularly disposed and are held in fixed relation by the channel members 20. The end inserts 21 comprise angularly disposed walls 22, said walls being also connected by channel members 20, and adapted to slightly overlie the walls of the center member 19 in order to prevent the concrete from gaining access to the space between the channel members. The outer ends of the end inserts 21 abut wall members 22^a which are hinged to the supporting member 15 as at 23. Tie rods 24 may be employed to connect the opposite sides of the block and may be disposed at the outer edge of the block or at the center, provision being made in the latter case for the withdrawal of the inserts by providing slots therein. The ends of the rods are bent to grip the concrete.

A footing member 25 may be used to form the block upon, so that the same may be readily moved out of the mold.

An upright 26 extending from the support 15 has pivoted at its upper end an operating lever 27 which is suitably counterbalanced as at 28. The lever has pivoted thereto and overlying the mold two tampers 29, which are held in spaced relation by the members 30, one of which is suitably pivoted as at 31 to the upright 26.

It is to be understood that any number of tampers might be used and that they could be adjustable relatively.

In operation, when the block has been finished and is partially dry, the wall member 13 is swung down, and the projecting ends 32 thereon disengage the end members 22^a, and they in turn are swung outwardly carrying with them the end inserts 21. The center insert 19 is then drawn out of the block, the block is removed and the mold again made ready for concrete.

A suitable latch 33 may be provided on the member 13 for maintaining it in closed positions.

Claims.

1. A block forming mold comprising front, rear and end walls, said end walls being hingedly mounted for horizontal swinging movements into and out of operative position and said rear wall being positioned between the end walls and adjustable towards and away from the front wall,

and means for forming an opening in a block being molded, said means including sections connected with said end walls and movable therewith outwardly of a formed block when the end walls are swung to their inoperative positions.

2. A block forming mold comprising a bottom, front, rear and end walls, the end walls being hingedly mounted for swinging outwardly to an inoperative position, and inserts for forming air passages in a block formed in the mold, said inserts including an intermediate insert tapered towards its ends, and end inserts each having spaced wall elements secured at their ends to one of said end walls and extending from the end wall in converging relation and adapted for overlapping engagement with the intermediate insert, the end inserts being moved out of a formed block when the end walls are swung to an inoperative position.

OSCAR A. PEDERSEN.