No. 759,010. PATENTED MAY 3, 1904.

H. S. PALMER.

HOLLOW BUILDING BLOCK.

APPLICATION FILED JULY 24, 1903.

NO MODEL.

Fig. 1.

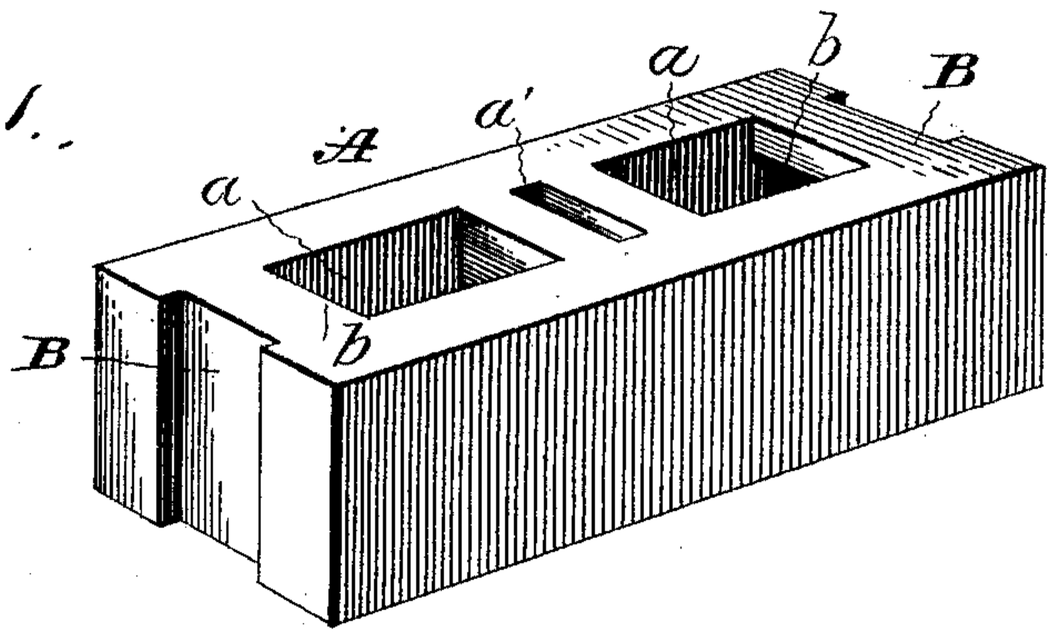


Fig. 2.

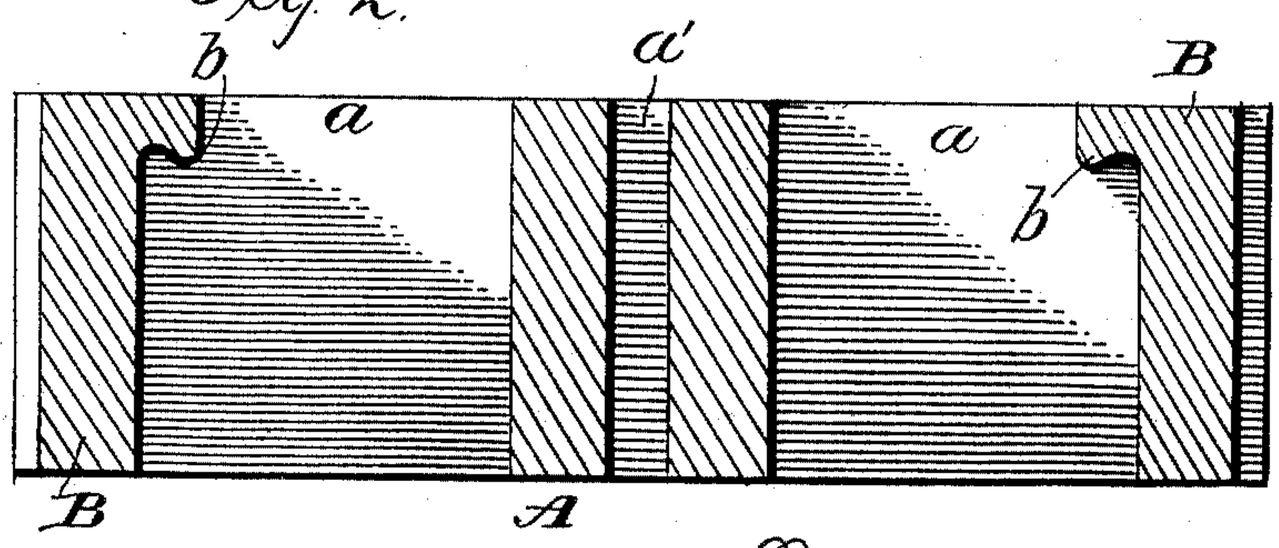


Fig. 3.

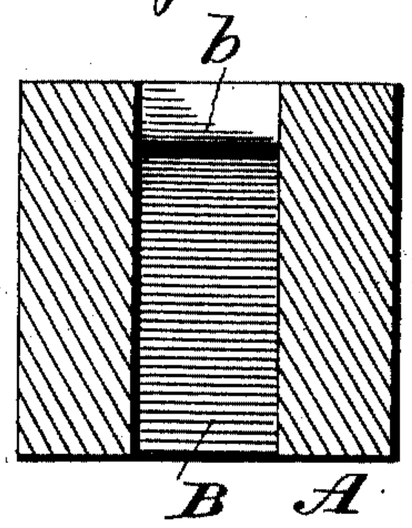
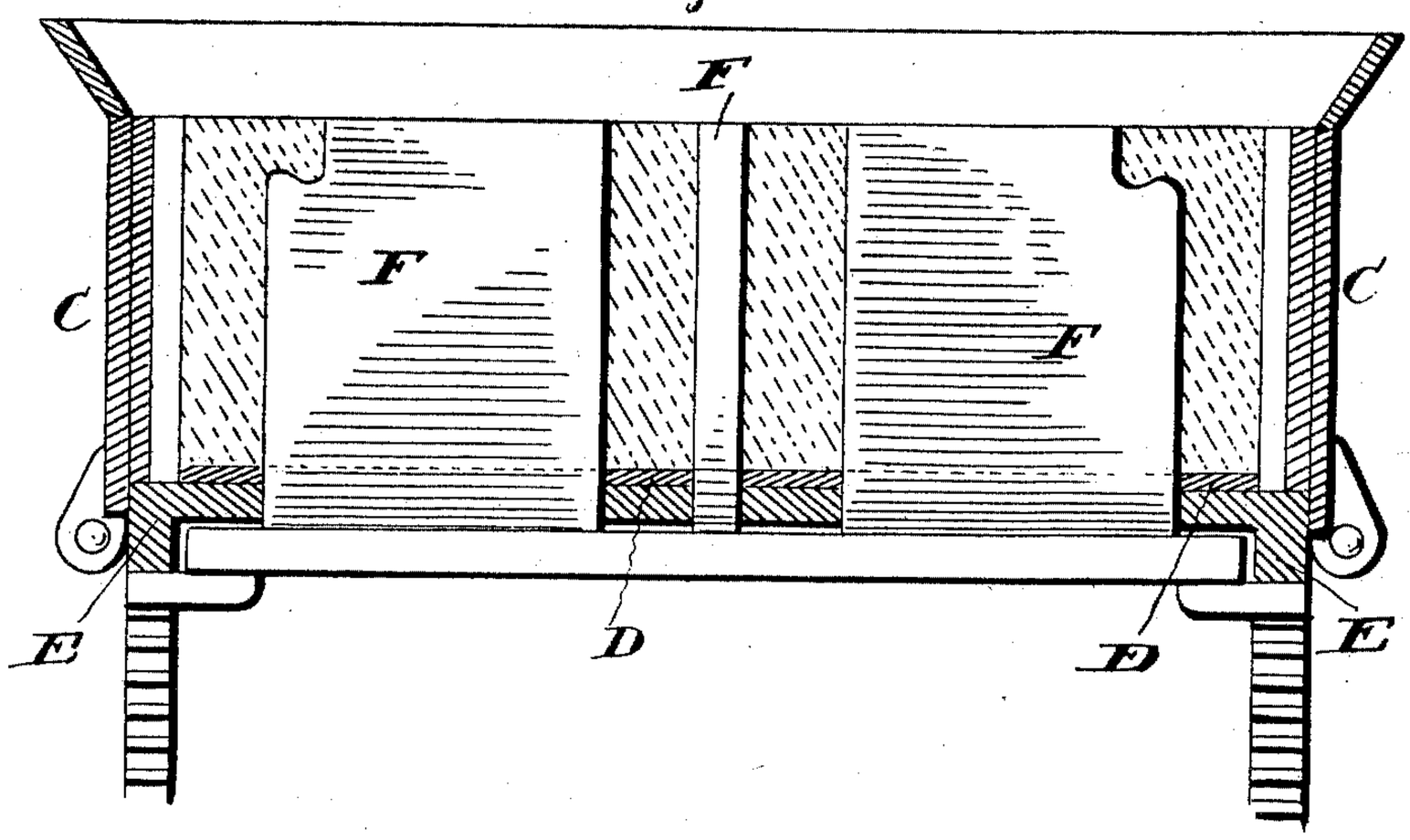


Fig. 4



Witnesses
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No. 759,010. Patented May 3, 1904.

UNITED STATES PATENT OFFICE.

HARMON S. PALMER, OF WASHINGTON, DISTRICT OF COLUMBIA.

HOLLOW BUILDING-BLOCK.

SPECIFICATION forming part of Letters Patent No. 759,010, dated May 3, 1904.

Application filed July 24, 1903. Serial No. 166,883. (No model.)

To all whom it may concern:

Be it known that I, HARMON S. PALMER, of the city of Washington, District of Columbia, have invented a certain new and useful Improvement in Hollow Building-Blocks; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a hollow concrete building-block containing an embodiment of my invention. Fig. 2 is a longitudinal section through the same. Fig. 3 is a cross-section thereof, and Fig. 4 a longitudinal section of a machine for molding such blocks.

Hollow concrete building-blocks as made for use are of such size and weight, the weight being from one hundred to a hundred and fifty pounds, as to be unwieldy to handle, especially by the masons or workmen in building walls with them.

The object of my invention, therefore, is to enable these blocks to be readily handled; and to this end my invention consists of a hollow building-block constructed substantially as hereinafter specified and claimed.

To illustrate my invention, I have selected for illustration a hollow building-block such as is shown in my United States Patent No. 674,874, May 28, 1901; but it is to be understood that I do not limit myself to any particular design of block and that my invention is applicable to other blocks than those made in conformity with the invention of said patent.

The block A, as shown, is oblong in form, its greatest dimension being horizontal, and is perforated vertically by two large holes or openings *a*, which extend from near each end of the block near to the center thereof, and a much smaller hole or opening *a'* through the body of material between the two larger openings. On what may be described as the "end walls" of the block, which walls are designated by the letter B, and on the inner side of each of said end walls and at the top of the block is an inwardly-projecting portion or flange *b*, whose under side is undercut or recessed and given a rounded surface, so that the fingers of the hand may readily and conveniently engage therewith by being passed down into the adjacent opening A. Thus provided with a hand-grip at each end and which may be reached through the vertical openings in the block the heavy and unwieldy block may be handled with facility, a man catching hold of it at each end, so that it can not only be conveniently carried, but readily manipulated for placing it in proper position in erecting the wall. Moreover, besides contributing to the facility with which the block can be handled, and thus expediting the doing of the work of building the wall, likelihood of damage to the block by dropping it because of poor or inconvenient hold upon it is obviated. My construction has also the important advantage that it enables the reduction of the weight of the block by enabling the larger portion of the wall thereof, which has the projection, to be made thinner to a degree not practicable for the whole wall, for the reason that a certain area of upper surface of the block must be provided for receiving mortar. All required mortar-receiving surface can be provided with my construction and yet the weight of the block substantially diminished by making the wall below the projection as thin as may be done. Of course each of the inner walls may be given this construction. It will be evident that the inwardly-projecting portion or flanged surface acts as a strengthening-rib. The location of the handles or hand-grips is one that not only materially contributes to the advantageous handling of the block, but is such as to render easy the molding of the block with the handles or hand-grips. This will be evident by a reference to the machine which I have shown for making the blocks, which machine is constructed, essentially, as shown in my United States Patent No. 623,686, April 25, 1899, wherein are employed side and end walls C, a removable bottom plate D, a base or body E, upon which the mold is supported, and vertically-movable cores F for forming the holes or openings in the block. The construction and operation of the machine thus far described are like the machine shown in my said patent and will therefore not need to be described, as that patent contains a full description thereof. For forming the handle or hand-

grips the outer side of each of the cores for forming the openings or holes *a* is near the top of the core and is given a form or shape suitable to produce the overhanging or flanged portions that constitute the handles or hand-grips. Such core, accordingly, is not so long horizontally at its upper end as for the remainder of its height, and it will therefore be seen that in the operation of the machine as the core is moved downward to remove it from the newly-formed block it will readily pass out of the latter.

While I prefer the construction and position of the handles or hand-grips which I have illustrated and described, because of the number of important advantages which are obtained thereby, it is to be understood that I do not restrict myself to such construction and arrangement of the handles or hand-grips.

Having thus described my invention, what I claim is—

1. A building-block characterized by an interior cell or chamber, the side walls of said block being of substantially uniform thickness and the end walls thereof provided with parts projecting inward and serving as handles.

2. A building-block having an opening or chamber, and a flange that projects inward into said chamber at each end thereof, the outer surface of the flange being flush with the outer surface of the wall from which it projects, whereby a handle is provided at each end and the mortar-receiving surface of the block is enlarged.

3. A building-block, of oblong form, having an opening or chamber, and a handle within the chamber at the end thereof, fitted to be engaged by the hand for lifting the block.

In testimony that I claim the foregoing I have hereunto set my hand.

HARMON S. PALMER.

Witnesses:

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