F. BURCHARTZ.

HOLLOW BUILDING BLOCK AND METHOD OF MAKING SAME.

APPLICATION FILED JUNE 4, 1912.

1,054,670. Patented Mar. 4, 1913.

Fig. 1

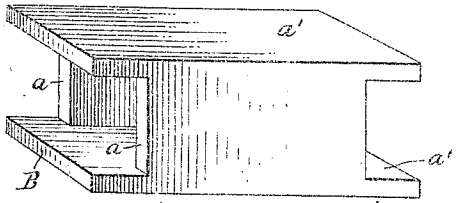


Fig. 2.

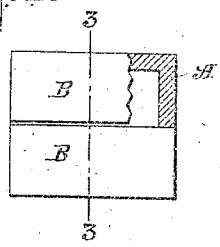


Fig. 3.

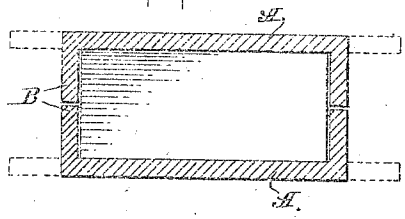


Fig. 5

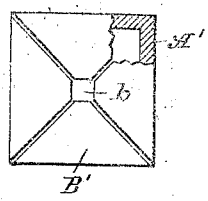


Fig. 4.

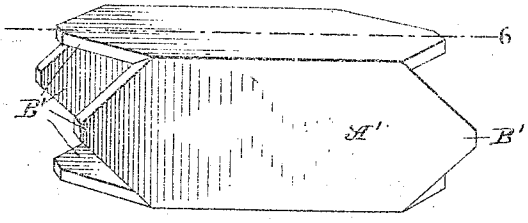
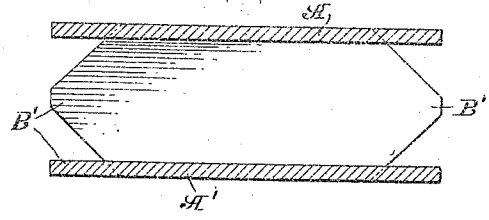


Fig. 6.



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HOLLOW BUILDING-BLOCK AND METHOD OF MAKING SAME.

1,054,670. Specification of Letters Patent. Patented Mar. 4, 1913.

Application filed June 4, 1912. Serial No. 701,479.

To all whom it may concern:

Be it known that I, FERDINAND BURCHARTZ, a citizen of the United States, and resident of the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Hollow Building-Blocks and Methods of Making Same, of which the following is a specification.

My invention relates to hollow building blocks and has for its object to produce a block of this description in such a manner that all parts thereof will be integral and will form a hollow structure of any desired form and dimension.

Other objects of my improvements will appear in the description hereinafter and the features of novelty will be pointed out in the appended claims.

Reference is to be had to the accompanying drawings in which—

Figure 1 is a perspective view of one form of my improved block showing same before final completion; Fig. 2 is an end view partly broken away of the completed block; Fig. 3 is a longitudinal section thereof on the line 3—3 of Fig. 2; Fig. 4 is a perspective view similar to Fig. 1 of another form of my improved block; Fig. 5 is a view thereof similar to Fig. 2; and Fig. 6 is a longitudinal section on the line 6—6 of Fig. 4.

Referring more particularly to Figs. 1, 2 and 3 of the drawings the block comprises an open ended blank or unit A which may be of any desired dimensions and of any cross-sectional configuration. In order to close or cover the open ends of said blank I provide the same with extensions B which in the illustration are formed integral with two opposite walls of said unit and extend toward the axis of the said unit so as to substantially cover the open ends thereof as shown clearly in Figs. 2 and 3. In the form of block shown in Figs. 4, 5 and 6 the open ended blank A′ instead of being provided at opposite ends with two extensions is provided with four extensions B′ of substantially triangular shape and formed integral with the walls of the blank, said extensions all extending toward the axis of the block so as to substantially cover the open ends of the block as illustrated best in Fig. 5. It is, of course, to be understood that if desired only a single extension may be provided at each end of the blank, in which case this single extension would be of sufficient dimensions to extend completely over the open ends so as to substantially cover the same; or if desired, and the cross sectional form of the blank, which may be of any desired configuration, makes it necessary, more than four extensions may be incorporated in the structure. In all cases a hollow block is secured in which all parts are preferably integral and in which the interior is substantially closed against the entrance of any concrete, or other coalescent material which may be used in connection with blocks of this description as the same are utilized for their intended purposes.

The blocks are made from a plastic material such as clay, terra cotta, or any other similar material which may be drawn or forced through a die. The material is fed into a die in the usual manner and leaves the same in the form of a continuous rectangular tube which is cut into the desired lengths; while the material is still plastic a portion of opposite walls *a* is cut away inwardly for a distance from opposite ends to form the unit or blank A and so as to leave the other walls *a′* extending beyond said cut away portions to form the extensions B as shown in Fig. 1. These extensions B while the material is still plastic are bent inwardly toward the block or in other words toward each other as shown in Figs. 1 and 2 so as to extend over and substantially cover the open ends of the blanks A. After this has been done the block in this condition is baked or fired or otherwise brought to its rigid finished condition. It will be seen by referring to Figs. 2 and 3 that the free edges of the said extensions B do not contact with each other before the baking or other finishing operation has taken place but instead are spaced from each other to a slight degree. The space between said ends permits a circulation of air within the block and also provides for any physical changes which may take place in said block during the finishing operation.

In Figs. 4, 5 and 6 the block material may be formed into a tubular unit in the same way as in Fig. 1 and is cut away inwardly for a distance from each end to form the substantially triangular shaped extensions

B', the apices of the triangles being located at the free ends of said unit as is clearly shown in Fig. 4. These extensions B' are similarly bent inwardly toward each other or toward the axis of the block as shown in Fig. 5 so as to substantially cover or close the open ends thereof. In this form also it will be noted that the apices of the extensions B' are blunt and not sharp and leave the free spaces *b* as well as spaces between the adjacent edges of said extensions. These spaces similarly provide for a circulation of air within the block and for any physical changes which may occur during the finishing operation. It is, of course, to be understood that the material may be formed into tubular or open ended units in other ways than by passing through a die and that portions of the material may be removed therefrom in a manner other than by means of a cutting machine. It will further be readily apparent that the block material may be removed from for instance the form shown in Fig. 1 in such a manner as to form only a single extension at each end of the block, these single extensions in this case being sufficiently large to substantially cover the open ends of the unit. In addition to this, if the cross sectional shape of the units makes it necessary the block material may be removed in a way to produce more than four extensions as in Fig. 4 and the shape of the flaps may be varied to cause the same when bent over to substantially cover or close the open ends of the block. In some instances it may also be found advisable to form the extensions of whatever kind they may be only at one end of a unit so as to substantially only close this one end, the other end being left open or closed in some other way as by being placed in contact with a wall of a building.

My improved block owing to its strength and minimum dead weight is particularly adapted for use in constructing floors and ceilings although it may be found equally useful in connection with other structures.

Various changes in the specific forms shown and described may be made within the scope of the claims without departing from the spirit of my invention.

I claim:

1. The method of making hollow building blocks of plastic material which consists in extruding plastic material through a die to form a tube of polygonal or circular cross section, cutting said tube into desired lengths and then cutting away a portion from each end of the severed lengths to form integral extensions of the polygonal or circular body portion, and then, while the material is still plastic, bending said extensions over the open ends of said body portion, then baking or firing the block.

2. A hollow building block of circular or polygonal cross section formed by extruding plastic material through a suitable die to form an open end blank, then cutting away a portion of the side wall thereof to leave end extensions, said extensions being bent over the open ends of the blank to form the end walls of the block, said block being hardened by baking or firing.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

FERDINAND BURCHARTZ.

Witnesses:

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