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1,661,044

C. LAWRENCE

CONCRETE BUILDING BLOCK

Filed Dec. 2, 1927

Fig. 1.

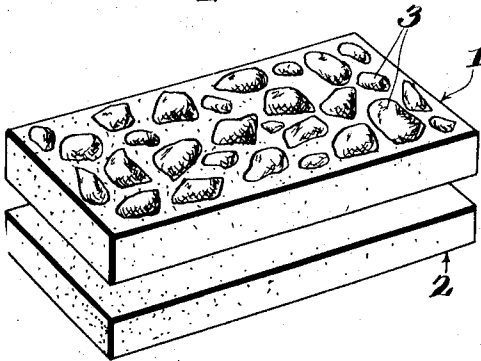


Fig. 2.

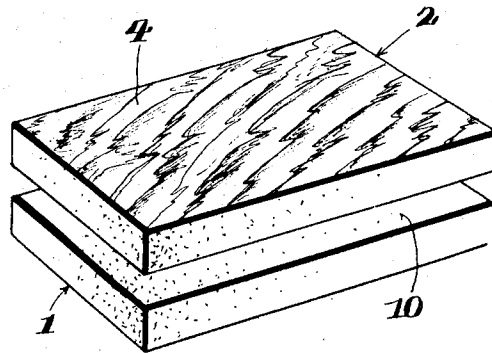


Fig. 3.

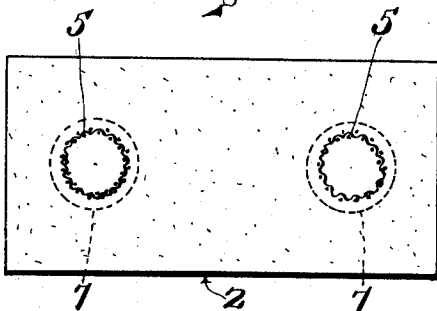


Fig. 4.

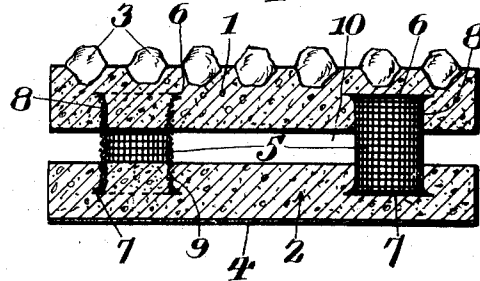


Fig. 5.

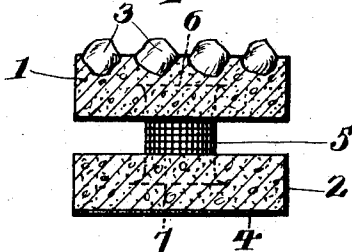
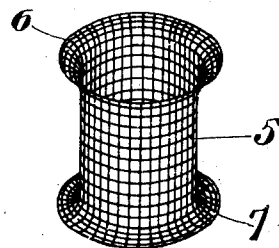


Fig. 6.



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CONCRETE BUILDING BLOCK.

Application filed December 2, 1927. Serial No. 237,262.

This invention relates to that type of building blocks constructed of concrete, cement or other analogous composition, and has for its object to provide in a manner as hereinafter set forth, a block of such class so constructed and arranged to provide, when one or more courses of the blocks are laid, an inner and an outer wall will be formed having a continuous air chamber therebetween thereby overcoming dampness and heat which is common to ordinary concrete block walls.

A further object of the invention is to provide, in a manner as hereinafter set forth, a building block consisting of an inner and an outer wall forming member connected together in spaced relation, and with the coupling means constructed and arranged to provide for uniform contraction and expansion in every direction before and after the wall forming members are laid in position, so that the blocks or the walls formed thereby are less likely to crack and break, as is the case when metallic tie rods are employed to couple the wall forming members together.

Further objects of the invention are to provide, in a manner as hereinafter set forth, a building block which is comparatively simple in its construction and arrangement, strong, durable, compact, thoroughly efficient in its use, conveniently handled, and comparatively inexpensive to set up.

With the foregoing and other objects in view the invention consists of the novel construction, combination and arrangement of parts as hereinafter more specifically described, and illustrated in the accompanying drawings, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which fall within the scope of the claims hereunto appended.

In the drawings wherein like reference characters denote corresponding parts throughout the several views:

Figure 1 is a perspective view of a concrete block in accordance with this invention looking towards the outer side thereof.

Figure 2 is a like view of a block looking towards the inner side thereof.

Figure 3 is a plan looking towards the inner face of either one of the wall forming members provided by the blocks.

Figure 4 is a longitudinal sectional view of a block.

Figure 5 is a cross sectional view thereof.

Figure 6 is a perspective view of one of the tie members.

A building block, in accordance with this invention, includes a pair of parallel wall forming members coupled together in spaced relation. Each of said members is formed from a molded concrete body of the desired length, width and thickness. Preferably each member is of rectangular contour. The means for coupling the members together and for maintaining them in spaced relation consists of one or more tubular, foraminous metallic ties having flaring ends embedded within the members.

In the drawings the block includes inner and outer wall forming members referred to generally at 1, 2 respectively. Preferably the member 1 is of greater thickness than the member 2, but the width and length of member 1 corresponds to the width and length of member 2. The outer face of member 1 can be ornamented in any suitable manner and by way of example is shown as ornamented with particles of stone 3 embedded therein and projecting therefrom. The outer face of member 2 can be ornamented in any suitable manner and by way of example is illustrated as marbleized as indicated at 4. It is to be understood, however, that the outer faces of members 1 and 2 can be free of ornamentation if desired.

Members 1 and 2 are coupled together and maintained in spaced relation, as well as being connected in parallelism by one or more tubular, foraminous metallic tie members 5 of appropriate length, open at each end and further having each end flaring as indicated at 6, 7. Each tie member is embedded for a portion of its length in the member 1, as indicated at 8 and for a portion of its length in the member 2 as indicated at 9. The flaring ends 6 and 7 of tie member 5 provide means for anchoring the member to the wall forming members 1 and 2. Preferably the member 5 extends into each of the wall forming members for a distance approximately half the thickness of the latter. The tie members 5 couple the wall forming members 1, 2 together, in a manner to provide a continuous air space 10 therebetween. The tie members 5 are formed in a manner to

provide for the expansion and contraction before and after the blocks are laid in the wall of a building, so that the blocks and walls are less likely to crack and break as is the case when solid iron or steel rod ties are employed for coupling purposes, but further the foraminous tie members are lighter, more economical, and make the expansion and tension strain uniform in every direction, and permits of the use of dry sand as a means for making the hollow space or air chamber between the wall forming members during the molding thereof, and when the wall forming members become dry the sand will fall out or be blown or washed out. Although the wall forming members are shown with squared edges, yet it is to be understood that the edges can be beveled or rounded.

20 The construction of the block, provides when one or more courses of the blocks are laid, inner and outer walls having a continuous air chamber therebetween thereby preventing dampness and heat common to ordinary concrete walls.

It is thought the many advantages of a concrete block, in accordance with this invention can be readily understood, and although the preferred embodiment of the invention is as illustrated and described, yet it is to be understood that changes in the details of construction can be had which will fall within the scope of the invention is claimed.

What I claim is:

35 1. A building block comprising a pair of opposed wall forming members, and one or more tubular, foraminous coupling members arranged between and each having the ends thereof embedded in the opposed faces of the wall forming members for coupling them together in spaced relation.

40 2. A building block comprising a pair of

opposed wall forming members, and one or more tubular, metallic foraminous coupling members arranged between and each having the ends thereof embedded in the opposed faces of the wall forming members for coupling them together in spaced relation, the said one or more coupling members having flaring ends.

3. A building block comprising a pair of opposed wall forming members, and one or more tubular, metallic foraminous coupling members arranged between and each having the ends thereof embedded in the opposed faces of the wall forming members for coupling them together in spaced relation, the said one or more coupling members having flaring ends, and having such ends spaced from the outer faces of said wall forming members.

4. A building block comprising a plurality of spaced, opposed wall forming members, spaced, metallic, tubular coupling members for connecting the wall forming members in spaced relation, said coupling members being independent of each other, foraminous throughout and each having the ends thereof embedded in a pair of opposed wall forming members.

5. A building block comprising a plurality of spaced, opposed wall forming members, spaced, metallic, tubular coupling members for connecting the wall forming members in spaced relation, said coupling members being independent of each other, foraminous throughout and each having the ends thereof embedded in a pair of opposed wall forming members, and each end of each of said coupling members being opened and flared.

In testimony whereof, I affix my signature hereto.

CHARLES LAWRENCE.