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P. J. MAUL

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BUILDING BLOCK

Filed Aug. 16, 1930

Fig. 1.

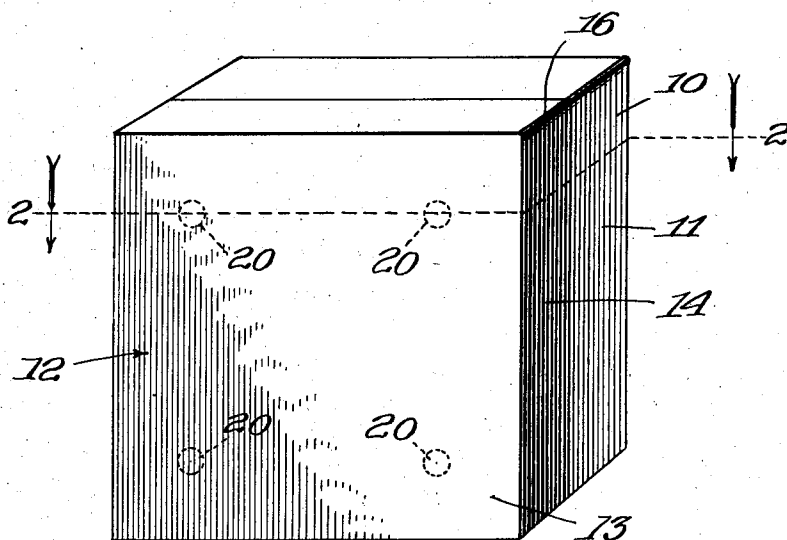


Fig. 2.

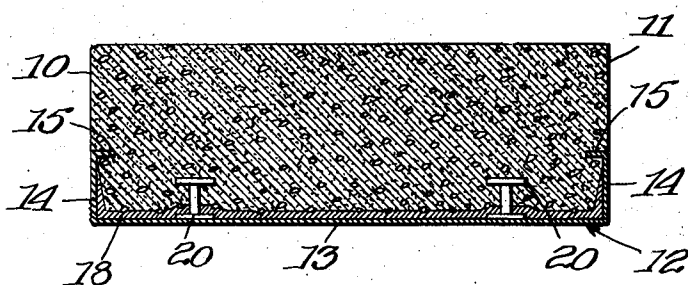
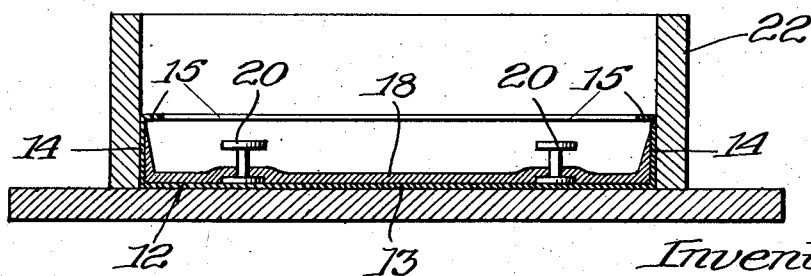


Fig. 3.



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BUILDING BLOCK

Application filed August 16, 1930. Serial No. 475,796.

This invention relates to building blocks, or the equivalent, and a particular object of the invention is to provide an improved concrete block having a protective or ornamental coating on one or more of its surfaces.

One form of the invention is embodied in a block having a body portion formed from concrete, which preferably comprises a suitable mixture of cement and porous burned shale. One face of the block is covered with a sheet metal panel having rearwardly extending flanges, portions of which are turned inward and embedded in the concrete body portion. The inner surface of the sheet metal panel is preferably provided with a coating which adheres to both the sheet metal and the concrete. In larger sized blocks, anchoring devices are preferably secured to the inner surfaces of the sheet metal panels to hold the central portions thereof against movement away from the concrete body portions when the panels are subjected to changes in temperature.

Many other objects and advantages will become apparent as the following description progresses, reference being had to the accompanying drawing, wherein

Figure 1 is a perspective view of a building block which embodies the invention;

Figure 2 is a section taken on line 2—2, of Figure 1, and—

Figure 3 is a section through a mold and illustrates the manner in which the improved building blocks are fabricated.

Referring to the drawing wherein a preferred form of the invention is illustrated, the reference character 10 designates generally a building block which comprises a body portion 11, formed from concrete and faced with a sheet metal panel or cap 12.

Any suitable mixture of cement and aggregate may be employed to form the body portion 11, but I preferably employ a mixture of suitable cement and porous burned shale. Concrete formed from a mixture of cement and porous burned shale is relatively light and it does not disintegrate when it is subjected to a relatively high temperature.

The sheet metal panel, or cap 12, is preferably formed from a non-ferrous metal, or

a stainless steel. Thus the panel or cap may be formed with advantage from copper, bronze, aluminum, etc., or from an alloy. In this instance, the sheet metal panel 12, comprises a front wall 13, which covers one surface of the body portion 11. Formed integral with the front wall 13, are rearwardly extending flanges 14, which terminate in inwardly projecting flanges 15, embedded in the body portion. The corners formed by the flanges 14, are preferably soldered, as indicated at 16.

As best shown in Figs. 2 and 3, the inner surface of the panel, or cap 12, is coated with an adhesive substance which adheres to both the panel or cap and the body portion 11, the coating being identified by the reference character 18. Any suitable substance may be employed for the coating 18, but I preferably employ a mixture of asphalt and an aggregate, the aggregate being crushed marble, Haydite, or the equivalent, for the purpose. In practice I have found it advantageous to have the aggregate constitute about 20% of the coating 18. The purpose of the aggregate is to stiffen the coating 18, so that it will not tend to fuse and run when it is subjected to summer temperatures, etc.

Soldered or otherwise secured to the inner surface of the front wall 13, are anchoring devices 20, embedded in the body portion 11, in such manner that they prevent movement of the central portion of the wall 13, in a direction away from the body portion. This construction is advantageous when it is embodied in blocks of relatively large dimensions, as the front walls 13, will not buckle when they are heated to relatively high temperatures by the rays of the sun, etc.

The improved blocks are preferably fabricated by employing a mold, or the equivalent, as indicated at 22 in Fig. 3, the panel or cap 12, being placed face downwards in the mold, as shown. The coating 18, may be applied to the panel or cap while it is in the mold, or it may be applied prior to that time. A mixture of the concrete is then poured or tamped, as the case may be, in the mold and permitted to cure, after which the completed block is removed from the mold.

The blocks may be of any suitable dimensions. For instance, the invention has been embodied in a block which was 12 inches high by 12 inches wide, and 4 inches thick.

5 The flanges 14, were $1\frac{1}{2}$ inches in width and the flanges 15, were $\frac{1}{2}$ inch in width. The coating 18, may be of any suitable thickness, but is preferably about one-eighth of an inch. In some instances, I may employ pitch as a
10 substitute for asphalt in forming the coating 18.

The coating 18, not only functions as a binder between the panel 12 and the body portion 11, but also protects the inner surface of the panel from the corrosive action
15 of moisture which may seep through the body portion. Of course, the material forming the coating 18, is preferably heated to a fluid state before it is applied to the panel.

20 Having thus described my invention it is obvious that various immaterial modifications may be made in the same without departing from the spirit of my invention; hence, I do not wish to be understood as lim-
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iting myself to the exact form, construction, arrangement and combination of panels herein shown and described, or uses mentioned.

What I claim as new and desire to secure by Letters Patent is: 70

A building block comprising a body portion of concrete, a sheet metal member covering the front surface of said body portion and provided with rearwardly extending
75 flanges at opposite side edges thereof, said flanges forming portions of the side surfaces of said block and being provided at their rear edges with inwardly extending integral tongue members firmly embedded in said
80 body portion, metallic anchoring devices secured to the back surface of said metal member and firmly embedded in said body portion, and a layer of plastic adhesive material
85 between said sheet metal member and said body portion.

In testimony whereof, I have hereunto set my signature, this 7th day of August, 1930.

PETER J. MAUL.

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