

Aug. 27, 1935.

C. C. WHITTIER

2,012,798

BUILDING MATERIAL

Filed Feb. 23, 1931

Fig. 1.

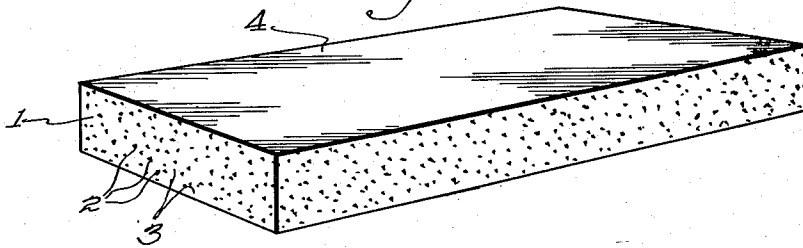


Fig. 2.

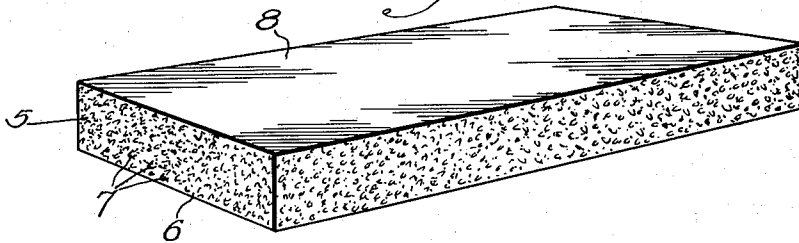


Fig. 3.

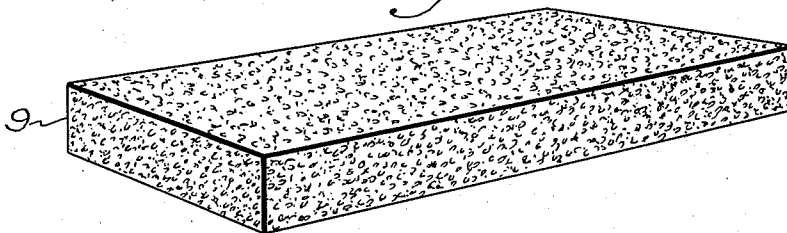
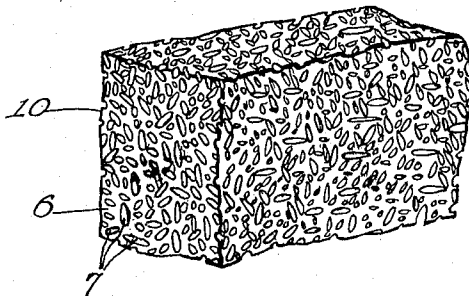


Fig. 4.



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UNITED STATES PATENT OFFICE

2,012,798

BUILDING MATERIAL

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Application February 23, 1931, Serial No. 517,643

1 Claim. (Cl. 72—37)

This invention relates to building materials of a plastic or moulded character, and especially to the internal structure and external finish thereof, and to the method of producing same.

5 The main objects of the invention are to provide a building material of new and improved character, better adapted for insulating quality, acoustic properties, ready decorative effects, low cost of materials and simplicity of construction methods.

10 The structural and mechanical features of this invention are illustrated by the accompanying drawing, in which:

15 Figure 1 represents a unit of one embodiment of the material of dense form, and having one of its faces glazed.

Fig. 2 represents a unit of porous material, one face of which is glazed.

20 Fig. 3 represents a similar unit without any glaze.

Fig. 4 is a much enlarged fragmentary detail view showing the porous or cellular material of the units represented in Figs. 2 and 3.

25 Referring more in detail to the drawing, the unit 1 of Fig. 1 consists of heat treated building material comprising granular heat resistant elements or particles 2 in combination with a binder of clay 3. This product is made by mixing the appropriate granular material, as for instance, crushed glass, silica, quartz, granite, sand, metallic filings, asbestos fibers, or the like, together with clay and then subjecting to heat treatment sufficient to rigidify the same for building purposes. The front (top) face of this unit 1 is glaze finished, as indicated at 4.

35 Referring to Fig. 2, the unit 5 here shown is formed by mixing together clay 6 and heat destructible particles of matter, for example seeds or bits of wood, then molding to desired form and then subjecting the mixture to heat sufficient to destroy said particles, leaving hollow cells, pores or cavities 7.

40 If a finish coating is needed for any purpose,

the product is then covered with glaze or weather proof material on as many sides as desired, as indicated at 8. The unit 9 of Fig. 3 is similar to unit 5 except that it has no finish coating.

5 In the magnified fragment 10, of Fig. 4, the cavities or cavernules 7 are more clearly defined. They occupy about twenty-five per cent of the volume.

10 The destructible particles or materials above referred to may be used in greater or less percentage and may also include many appropriate objects such as meal of all kinds, bark, coal, coke, peat straw, hair etc., according to convenience, cost and desired density, texture and appearance,—porous or cellular.

15 The destructible hydrocarbon particles form, by combustion, cavities in which the products of combustion are retained, as distinguished from cavities formed by bloating. The effects of this combustion characterize the product herein described.

20 The finish material may be of glaze, enamel, appropriate plastic, asphaltum, paint or the like, and may be variously decorated, for instance in flat colors, art designs or in polychrome.

25 This invention being variously illustrated, it is to be understood that some of the details may be altered or omitted without departing from the spirit of the invention as defined by the following claim.

I claim:

30 A substantially hard and non-bloated, heat-treated ceramic block having a body or cellular structure provided with a plurality of closed cavities formed by the combustion of hydrocarbons distributed substantially uniformly throughout its volume, and having throughout the ceramic material comminuted granular heat-resistant strengthening elements intimately mixed therewith, said block body having rough-
40 mixed surfaces formed by open partial cavities therein.

CHARLES C. WHITTIER.

CERTIFICATE OF CORRECTION.

Patent No. 2,012,798.

August 27, 1935.

CHARLES C. WHITTIER.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 1, second column, line 33, the claim, for "or" read of; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 24th day of September, A. D. 1935.

Leslie Frazer

(Seal)

Acting Commissioner of Patents.