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METHOD OF PRODUCING HIGH FIRE-PROOF MATERIALS

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Generally high fire-proof materials from silicon carbide are produced in such a manner that silicon carbide of various granulation is mixed with 3% or more of ball clay and burnt. In such materials f. i. stones, cements and the like many demands must be claimed in regard to durability and stability against heating and the like. Above all, the materials shall be very compact and contain as few air spaces as possible in order to resist well the attack of aggressive gases of vapours.

Now it has been found a method which increases considerably the application value of this materials. The method consists in the formation of glasslike fused masses within and outside of the materials by which, above all, the apparent porosity is diminished and the tight-

ness increased. According to the invention a small amount of titanium oxide is added to a known mixture of for instance granulated silicon carbide and 3% or more of ball clay whereupon the material is burnt. It has been found that 1% of titanium oxide in the mass is specially advantageous. More or less amount of this substance does not give more favourable results. If the mass does not contain iron oxide, for instance from the contamination of silicon carbide, it is favourable to add it also in an amount of about 1%. Materials according to the invention have a considerably larger durability than a mass not containing titanium oxide.

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