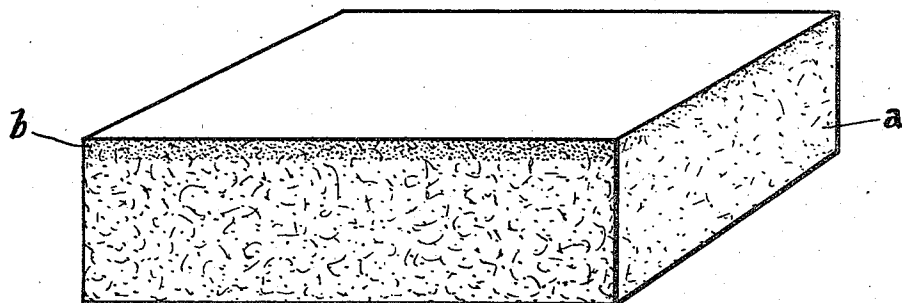


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ARTIFICIAL STONE SLAB, PLATE, AND THE LIKE.
APPLICATION FILED AUG. 22, 1907.

1,139,934.

Patented May 18, 1915.



WITNESSES

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FRANZ MUSIL EDLER VON MOLLENBRUCK, OF LINZ-ON-THE-DANUBE, AUSTRIA-HUNGARY.

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1,139,934.

Specification of Letters Patent.

Patented May 18, 1915.

Application filed August 22, 1907. Serial No. 389,736.

To all whom it may concern:

Be it known that I, FRANZ MUSIL EDLER VON MOLLENBRUCK, a subject of the Emperor of Austria-Hungary, residing at Linz-on-the-Danube, in the Empire of Austria-Hungary, have invented new and useful Improvements in Artificial-Stone Slabs, Plates, and the like; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to the manufacture of slabs, plates and the like of artificial stone provided with a colored coating or layer. Such slabs, plates or the like of cement and sand or cement and fibrous substances are usually colored throughout the whole mass. They cannot, however, be commercially manufactured in this way since the coloring materials are relatively expensive and the permeation of the slabs or plates throughout their whole thickness by the coloring material frequently injuriously affects their strength. By printing, applying or cementing a colored cement layer or coating upon the surface of the plate or the like it was found not to be possible to permanently secure the coating, even when the connection of the said coating with the mass was effected while the latter was not completely hardened, the reason being that the difference in the condition of tension between the relatively thin and brittle colored layer and the box or body of the slab or plate and the climatic changes to which such plates would be subjected would quickly cause the colored layer to crack or peel off.

Now, this invention has for its object to obviate the above described disadvantages and to this end artificial stone plates, slabs or the like of cement and fibrous materials are provided with a color coating or layer consisting of hydraulic binding substances and fibrous materials. Such a colored layer is characterized by high elasticity and resistance and can be applied in a very thin state, as by reason of the fibers which are present in the material there is no liability of portions of the coating cracking or peeling off. By attaching the body of the slab or the like and the coating in a known way at a period at which the plate and layer are not completely set the separation of the whole colored plate from the ground layer

is prevented and so a colored artificial stone plate or the like is obtained which is durable in every sense.

The coating or layer of hydraulic binding materials, fibers, substances and coloring matter can be manufactured in any convenient way.

The body or base plate can also be colored with a cheaper coloring substance than the coating in order to present the same appearance as the latter. Furthermore, the body, base plate or the like can have substituted for the cement a pulverulent body, such for example, as carbonate of lime, in order that the said base plate and the coating shall have, as far as possible, the same co-efficients of expansion.

It will be obvious that the mass of the coating can have added to it filling materials, chemical admixtures or substances for increasing or decreasing the binding or hardening properties or substances for increasing the watertight and elastic properties of the plate without in any way affecting the essential feature of the invention. The coating can also have incorporated with it glazing materials and the hydraulic binding material may be partially replaced by other binding materials, such as gypsum. It is obvious that a block made with either of these binding materials will not be seriously affected by fire and may be classed among the fire resisting building materials. It will also be seen that the fibrous materials will be thoroughly coated and impregnated with the other materials forming the base and colored surface of the block and that they will not materially affect the general properties of the same, their main function being that of assisting in the coherence of the colored surface of the main body of the block.

In order that my invention may be clearly understood I have illustrated it in the accompanying drawing, which shows a perspective view of my improved artificial slab or plate.

Referring to the drawing, *a* represents the main body of the slab which is composed of cement and fibrous materials and *b* the thin color coating or layer which consists of hydraulic binding substances, fibrous material and coloring matter, the said body *a* and color coating *b* being constructed and united as above set forth.

Having now particularly described and

ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. An artificial stone slab or plate consisting of a main body and an outer colored layer united therewith, the said main body being composed of a fibrous material and a hydraulic binding material, the said outer layer being composed of fibrous material, the same hydraulic binding material and coloring matter, the fibrous material of the main body extending into and being set in the binding material of the outer colored layer, and the fibrous material of the outer colored layer extending into and being set in the binding material of the main body.

2. An artificial stone slab or plate consisting of a main body and an outer colored

layer united therewith, the main body being composed of a fibrous material and a hydraulic binding material, the said outer layer being composed of fibrous material binding material and coloring matter, the binding material of the main body and of the outer colored layer having substantially the same coefficient of expansion and contraction, the fibrous material of the main body extending into and being set in the binding material of the outer colored layer and the fibrous material of the outer colored layer extending into and being set in the binding material of the main body.

FRANZ MUSIL EDLER VON MOLLENBRUCK.

Witnesses:

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