United States Patent Office.

DAVID HISLOP FERGUSON, OF MONTREAL, CANADA.

DECORATIVE BUILDING MATERIAL.

SPECIFICATION forming part of Letters Patent No. 598,883, dated February 8, 1898.

Application filed October 28, 1896. Serial No. 610,339. (No specimens.)

To all whom it may concern:

Be it known that I, DAVID HISLOP FERGU-SON, a subject of the Queen of Great Britain, residing at 314 Board of Trade Building, in the city of Montreal, Province of Quebec, Dominion of Canada, have invented a certain new and useful Decorative Building Material to be employed in the construction and decoration of buildings and for other purposes, of which the following is a specification.

This invention has for its object to provide a material in imitation of marble and other decorative stone and which will be both fire and water proof, lighter than stone, a good non-conductor of heat or sound, and an imitation so perfect as to be indistinguishable from the genuine marble when on the wall; and it has for a further object to provide a material which, like marble when sawed into veneers and jointed, will form a regular pattern on both sides of the joint, owing to the variegations and markings being alike all through the material and on its surfaces.

Briefly speaking, the invention consists in the production from a fibrous mineral material of a new decorative material which will be cheap, light, durable, non-conducting of heat or sound, and fire and water proof.

I am aware that imitations of marble have 30 been made previous to my invention, but these have been mostly surface-paintings on paper and on slabs built up of marble-dust, plaster-of-paris, or such pulverulent materials, which from their nature are not well 35 suited for the purpose, as I find it is practically impossible to make the different colors run into one another without blending, as is found in the genuine marble, whereas with a fibrous or flocculent material this difficulty 40 is entirely obviated and different colors may be freely mixed and made to run into one another without blending, each color standing out clear and distinct, as in the natural marble.

In carrying out my invention I use any suitable mineral fibrous material, preferably asbestos, which after having been fiberized by the usual process and while still dry is divided into masses, and each mass is separately and distinctively colored by the addition thereto of a sufficient quantity of dry pigment of the color desired to produce the de-

sired intensity of the shade of coloring required to imitate the markings of the natural stone, and this operation is repeated to pre- 55 pare each of the various colors necessary to the perfect imitation of the coloring of the stone it is sought to imitate. In some instances it is necessary to mix two or more parts of these separately-colored masses of 60 fiber to produce graining effects, and this result is easily obtained, as the flocculent character of the material readily admits of the colored masses of fiber mixing freely without blending, and the effects of small or large 65 grain can be produced by the use of shorter or longer fiber. When mixed with the said pigments in such quantities and colors as are required to form the slab and color of the marble desired to be imitated, I introduce 70 the mixture into a mold the size and thickness of the slab or other form of article I desire to make through an aperture left in the edge of the mold, if a slab, (or any suitable opening, if any other article,) first with one 75 colored material and then with others, as may be necessary to produce the variegations of the marble to be imitated, packing it down while filling to get it compact. When the mold is filled and properly packed, I take off 80 one of the flat sides of the mold and moisten the article or slab with a weak solution of silicate of soda, then remove it from the mold, and set it away to dry. When dry, I immerse it in a solution of calcium chlorid, 85 which converts the mass into artificial stone, when it is again dried and finished by polishing, or the slab may be split with an ordinary saw into veneers and these backed up to any required thickness with Portland or other ce- 90 ment, or the veneer may be cemented to a thin slab of slate, metal, wood, or asbestosboard, as may be desired, according to the purpose for which it is intended.

Sometimes it may be necessary in making 95 very large slabs or other articles to reinforce the cement backing, which I do by embedding in the cement a wire-netting or coarse-jute fabric to strengthen it and permit of its safe carriage and handling; but I wish it to be understood that I do not confine myself to the foregoing process, as I may vary the methods of making or use other binding materials so long as they produce the specified invention.

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Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

A decorative material in imitation of marble or other ornamental stone, capable of being divided into veneers by sawing, composed of hardened mineral fibrous masses separately and distinctively colored, the colors and mark-

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ings extending through the material so that both surfaces and all parts between the sur- 10 faces shall have similar colors and markings as in the natural stone.

DAVID HISLOP FERGUSON.

Witnesses:

R. T. HOPPER,

J. M. Rosevear.