

UNITED STATES PATENT OFFICE.

HUGO GALLINOWSKY, OF ST. BERNARD, OHIO

TREATMENT OF ARTIFICIAL MARBLE.

1,022,585.

Specification of Letters Patent.

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No Drawing.

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To all whom it may concern:

Be it known that I, HUGO GALLINOWSKY, a citizen of the United States, and a resident of the village of St. Bernard, in the county of Hamilton and State of Ohio, have invented a certain new and useful Improvement in the Treatment of Artificial Marble, of which the following is a full, clear, and exact specification.

My invention relates to improvements on surface treatment of blocks, slabs and casts of artificial marble, whereby the surface portion may be rendered semi-transparent, and more easily and readily adapted for polishing.

The object of my invention is to produce close crystallization or hydration of the surface of the cast, whereby the liquid with which the plaster is formed may be retained in the surface portion, and the surface rendered semi-transparent, very easily polished and bearing a much closer resemblance to natural marbles than under the methods of treatment heretofore in use.

My invention has special reference to the surface treatment of such plaster casts when made from double-burned gypsum, or Keene's cement, and it involves the treatment of the surface after the cast has been formed and obtained a sufficient hardness for the purpose, with a bath of glycerin dissolved in sulfuric acid.

To carry out my process, I make use of a bath of glycerin and sulfuric acid in the following proportions: Into one quart of water three ounces of sulfuric acid are poured and mixed, and two ounces of glycerin are then added, which is immediately dissolved by the sulfuric acid, leaving a certain quantity of free acid in the bath. After the cast of double-burned gypsum or Keene's cement is removed from the mold and has sufficiently hardened, say at the end of ten or

twelve hours, I bathe or sponge the surface of the cast to the point of saturation with the glycerin and acid solution. The cast is then covered up away from the air and left under treatment of the bath for from eight to ten days. The surface of the cast will then be found susceptible of a very high polish with very little labor, with the use of the ordinary polishing powders, and the surface is rendered translucent or semi-transparent, resembling alabaster, but much harder.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. The method of treatment of artificial marble casts of double-burned gypsum, which consists in bathing the surface of the cast to the point of saturation, with a liquid bath composed of glycerin dissolved in a ten per cent. solution of sulfuric acid.

2. The method of treatment of artificial marble casts of double-burned gypsum, which consists in bathing the surface of the cast to the point of saturation, with a liquid bath composed of glycerin dissolved in a ten per cent. solution of sulfuric acid in the following proportions: one quart of water; three ounces of sulfuric acid and two ounces of glycerin.

3. The method of treatment of artificial marble casts of double-burned gypsum, which consists in bathing the surface of the cast to the point of saturation, with a liquid bath composed of glycerin dissolved in a ten per cent. solution of sulfuric acid, and then allowing the cast to remain under the treatment, covered from the air, for from eight to ten days.

HUGO GALLINOWSKY.

Witnesses:

ARTHUR H. EWALD,
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