

# UNITED STATES PATENT OFFICE.

WILHELM MATT, OF NEW YORK, N. Y.

## ARTIFICIAL STONE FOR VENEERS, &c.

SPECIFICATION forming part of Letters Patent No. 266,493, dated October 24, 1882.

Application filed August 2, 1882. (Specimens.)

*To all whom it may concern:*

Be it known that I, WILHELM MATT, a resident of the city, county, and State of New York, have invented a new and useful Composition of  
5 Matter or Artificial Stone for Veneers, Molded Articles, &c.; and I do hereby declare that the following is a full and exact description thereof.

My invention relates to a new composition of matter for use as a veneer or artificial surface for wood, plaster, papier-maché, ceramics, &c. It is obtained in the best manner by first soaking six pounds of the best clear glue in six pounds of soft water for from six to eight hours, and then dissolving it completely by applying  
10 thereto a gentle heat and stirring it. In the meantime about three-fourths of a pound of white rosin is dissolved in one and one-half pound of boiled linseed-oil under the influence of heat, and the hot solution of oil and rosin is  
20 slowly poured into the dissolved glue, the mixture being thoroughly stirred to render it of uniform consistency and to keep down the foam, which will at first arise, the stirring being continued so long as air-bubbles make their appearance. To the hot solution of glue, oil, and  
25 rosin produced as above I add one-fourth pound of glycerine and one pound of paper-pulp as produced in a paper-mill, and thoroughly stir and agitate the mass by suitable mechanical devices until the fibers are equally distributed therein. The compound is then passed through a fine sieve of brass wire with the aid of a coarse brush, to remove any coarse particles which may remain therein, and is stiffened to the proper consistency by the addition thereto  
35 of French chalk, china-clay, or other equivalent thickening material. The compound admits of being colored by the addition of suitable pigments as taste, fancy, and the character of the work to be produced therewith may require. The pasty compound thus produced is made ready for use as a veneer by being rolled out upon a hard slab into thin sheets, which are united to the surface to be covered  
45 by coating both the sheet of composition and the surface to be veneered each with a film of hot glue in thin solution, and then pressing the two together, as in the ordinary process of veneering in wood. In this manner not only all  
50 manner of wood surfaces may be veneered with

the compound, but it may be applied to plaster walls, to papier-maché, and, in fact, to all surfaces to which the glue will adhere. The composition will harden within twenty-four hours and become as hard as stone, and presents a smooth finished surface which admits  
55 of receiving a very high polish. This polish may be produced by first rubbing down with pumice-stone and oil of turpentine and finishing with sandarac polish in the customary manner. Applied to a wooden surface, it adheres thereto so closely as to become apparently an integral part thereof.

For producing an imitation of marble with the compound, the suitable colors are each  
65 mixed separately with finely-pulverized steatite or kaolin, and, having been thoroughly incorporated therewith and sifted, are each placed in a separate heap upon a marble slab. The center of each heap is hollowed out to receive a quantity of the hot fluid solution of  
70 glue, oil, or rosin, paper-pulp, and glycerine, sufficient to reduce the mass to a pasty condition. When the several colors are thus made ready, each in the form of paste of proper consistency, they are kept ready for use by  
75 unfolding them in a damp cloth. When required for use the separate masses of color are steamed until heated through and through and fully softened, and are placed upon the marble slabs  
80 in rolls, which are properly laid together and interfolded, rolled out with a suitable metallic roller, folded and again rolled into a thin sheet, which will finally become veined in a beautiful imitation of marble.

I am aware that glue, rosin, linseed-oil, paper-pulp, and whiting have been heretofore combined to produce a composition of matter for forming molded ornaments, as set forth in Letters Patent No. 246,391, dated August 30,  
90 1881, and No. 250,257, dated November 29, 1881; but said compositions are not adapted for use as a veneer, because of the relative proportions of the ingredients and the nature thereof. In the proportions specified in said  
95 patents the ingredients named produce a composition which is so far brittle and non-elastic as to be wholly unsuitable for use as a veneer, and which, when applied to a wooden or other surface in a thin sheet, will crack and peel off  
100

therefrom. My invention differs from said patented compositions and from all others of a similar character, in that, when properly applied, as herein described, to any suitable surface, it will adhere thereto so firmly as to become homogeneous therewith and form thereon an extremely hard coating, admitting of high polish, and which will not break or peel off, but will in some cases be even more durable than the body of the article. This difference is due, first, to a radical difference in the proportions of such of the ingredients as are common to both, and especially in the proportion of glue employed therein, which in my invention amounts to some two hundred per cent., whereas in the patented compositions above named the percentage in one is but fifty and in the other one hundred per cent. of the entire quantity. It is due, secondly, to the addition of glycerine to the compound, whereby, in connection with the increased proportion of glue, the compound becomes tough and elastic; and it is due, thirdly, to the substitution of steatite or kaolin for whiting, whereby the tendency to brittleness in the composition is still further obviated.

Although I have herein given the propor-

tions of the several ingredients named which I deem adapted to produce the very best effects, I wish it to be understood that said proportions admit of being varied within certain limits without departing from my invention, and I contemplate the admixture of said ingredients in such proportions under substantially the conditions named as shall produce a compound possessing the essential characteristics of my composition which adapts it specially for veneering, as herein set forth.

I claim as my invention—

A composition of matter for veneering, produced by the admixture, substantially in the proportions and manner herein described, of a solution of glue with rosin, linseed-oil, paper-pulp, glycerine, and steatite or its equivalent, substantially in the manner and for the purpose herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILHELM MATT.

Witnesses:

P. H. VANDER WEYDE,  
DANIEL R. GARDEN.