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METHOD FOR THE MANUFACTURE OF DUTCH TILES OR SLABS HAVING A LUSTROUS SURFACE AND ARTICLE PRODUCED THEREBY.

No Drawing.

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To all whom it may concern:

Be it known that I, GIOVANNI MADDALENA, a subject of the King of Italy, residing at Niederurnen, Switzerland, have invented a Method for the Manufacture of Dutch Tiles or Slabs Having a Lustrous Surface and Article Produced Thereby, of which the following is a specification.

The present invention relates to improvements in a method for the manufacture of Dutch tiles or slabs having a lustrous surface and used for covering walls and the like.

The improved method comprises applying to slabs made of asbestos-cement when they are still fresh and soft, a coating of a mixture of a liquid paste of lime and pulverized marble and thereafter a coating of a mixture of milk of lime and a soap solution without an excess of free soda, and smoothing then the surface of the slabs.

The method may be carried into effect in the following manner: The fresh made soft slabs of asbestos-cement are placed horizontally upon a working table and are uniformly covered by means of a large brush with a thin layer or coating of a mixture of thin paste of lime and pulverized marble in a proportion of five parts by volume of the thin paste of lime to one part by volume of pulverized marble. After the above mentioned mixture has been applied it is smoothed by means of a flat iron or a polishing sleeker until the surface appears to be perfectly smooth.

As said mixture is applied to the slabs when the latter are still in their soft state this mixture is united to the slab by the simultaneous binding action so that it adheres firmly and does not peel off.

As soon as the first procedure is finished a further coating of the mixture consisting of, for instance, 4 parts by volume of milk of lime and $1\frac{1}{2}$ parts by volume of a soap solution without an excess of free soda is uniformly applied with a brush to the slab and on the top of the first layer. The soap solution that contains no free soda is produced by dissolving for instance 1 part by weight of Venetian soap in 5 parts of water. In order to accelerate the formation of the solution the soap is finely divided up and mixed with the water, which is then heated.

After the second mixture has been applied to the slab it is left to dry during a period

of say 15—20 minutes whereafter the treated surface of the slab is smoothed by means of a hot, almost red hot, flat iron or the like. This smoothing procedure is continued until the surface of the slab is completely smooth and appears to be glazed.

In order to provide the slabs or tiles with a decorated surface, i. e. to give the latter the appearance of marble or majolica, to imitate the grain of wood thereon and so on, the necessary colours are added to the first and second mixture whereby any desired pattern effect may be obtained.

Such color effects may advantageously be obtained by using colored instead of white comminuted marble. These colored marbles are calcareous and enter into a sort of chemical combination with the milk of lime.

The slabs manufactured according to the described process may be utilized in the same size in which they are manufactured, or they may be sawed in a known manner like ordinary slabs of asbestos-cement when the slabs are dry.

Slabs manufactured according to the above described method may be utilized for covering walls of kitchens and bathrooms, for tile stoves, roofings, tops of dressing tables and the like. Another feature of the slabs consists in the fact that they are electrically insulating.

I claim:

1. A method for the manufacture of Dutch tiles or slabs having a lustrous surface, comprising applying to a slab made of asbestos-cement when it is still fresh and soft a coating of a mixture of liquid paste of lime and pulverized marble, applying thereafter a coating of a mixture of milk of lime and a soap solution without an excess of soda, and smoothing the surface thus treated.

2. A method for the manufacture of Dutch tiles or slabs having a lustrous surface, comprising applying to a slab made of asbestos-cement when it is still fresh and soft a coating of a mixture of a liquid paste of lime and pulverized marble, smoothing this coating applied, applying thereafter a coating of a mixture of milk of lime and a soap solution without an excess of soda, and smoothing the surface thus treated.

3. A method for the manufacture of Dutch tiles or slabs having a lustrous surface, comprising applying to slabs made of

asbestos-cement when they are still fresh and soft a coating of a mixture of paste of lime and pulverized marble, applying thereafter a coating of a mixture of milk of lime
5 and a soap solution without an excess of soda, leaving the coating to dry, and smoothing the surface of the slab thus treated by means of a hot, almost red hot, iron.

4. A method for the manufacture of
10 Dutch tiles or slabs having a lustrous surface, comprising applying to slabs made of asbestos-cement when they are still fresh and soft a coating of a mixture of a liquid
15 paste of lime and pulverized marble, smoothing the coating applied, applying thereafter a coating of a mixture of milk of lime and a soap solution without an excess of soda, leaving the coating to dry, and smoothing the surface of the slab thus treated by means
20 of a hot, almost red hot, iron.

5. A method for the manufacture of Dutch tiles or slabs having a lustrous surface, comprising applying to a slab made of asbestos cement when it is still fresh and soft a coating of a mixture of a liquid paste
25 of lime and pulverized marble, applying thereafter a coating of a mixture of milk of lime and a soap solution without an excess of soda, adding colouring matter to at least one of said mixtures for obtaining pattern
30 effects, and smoothing the surface thus treated.

6. An asbestos-cement slab having a surface of milk of lime and comminuted marble.

7. An asbestos-cement slab having a hard-
35 ened covering of calcium hydrate and comminuted marble and a lustrous finishing coat of soap and calcium hydrate.

In testimony whereof I affix my signature.

GIOVANNI MADDALENA.