

UNITED STATES PATENT OFFICE.

CARL KÖSTER, OF COLOGNE, GERMANY.

PROCESS OF MANUFACTURING VENEERS.

SPECIFICATION forming part of Letters Patent No. 523,582, dated July 24, 1894.

Application filed March 22, 1894. Serial No. 504,699. (No specimens.)

To all whom it may concern:

Be it known that I, CARL KÖSTER, a subject of the King of Prussia, residing at Cologne, (Cöln,) in the Province of Rhenish Prussia, Kingdom of Prussia, and German Empire, have invented new and useful Improvements in Processes of Manufacturing Veneers, of which the following is a specification.

According to the process which forms the subject matter of this present invention, the veneers are cut from a block which is composed of a mass obtained by mixing together suitable substances and which is formed either from a series of differently colored layers or by uniting a series of differently colored rods or by uniting colored pieces of the mass of different forms according to the nature of the work to be produced which may consist either in veneers with a grain resembling the grain of certain kinds of wood, or veneers imitating mosaic work or veneers imitating marble.

The production of veneers with a wood grain which is as near as possible alike to the grain of natural wood, is based upon the conception, that the block from which the veneers are cut, can be formed by placing round a suitable core a series of concentric layers of the mass, which layers correspond to the year rings of the natural wood. In other words a block is produced in a manner similar to that in which the trunk of a tree grows in nature. If the layers succeed each other according to the nature of the wood to be imitated in suitable alternation of the coloration and the block is cut transversely into veneers, such veneers show on their faces a configuration precisely like the natural wood grain.

The mass which can be used successfully for the production of blocks for veneers having the natural wood grain can be prepared as follows: (The parts are by weight.) Three parts of glue boiled in water are mixed while hot with one part of glycerin and into this mixture is introduced a sufficient quantity of fossil meal to produce a paste of such consistency that the same after having been colored by the addition of suitable coloring matters, can be layed on by means of a suitable brush. For the core I can use with advantage a knotty stick of wood to the surface of which is applied a layer of the above described mass in about three successive coats. The layer

thus obtained is dried and then a second layer of the mass is applied in a slightly different hue or color, which is again dried and in this manner a successive series of concentric layers is applied, the hues or colors of which are alternately darker and lighter, until a thick block is obtained which resembles a portion of the trunk of a tree free from bark. By suitable manipulations in addition to the coloration the imitation of different kinds of wood is improved; for instance an oak grain closely resembling the natural oak grain is obtained, if in each layer of the mass after the same has been applied to the core, small rills are formed which run in a longitudinal direction and which can be readily produced by means of a brush formed of stiff bristles so that when the layer has become dry, the next layer enters into these rills thereby producing in the first layer small spots of a different hue or color.

From the block formed as above described veneers of any desirable thickness can be cut which can be readily applied to any desired surface by means of glue or other suitable adhesive substance.

After my veneers have been applied and permitted to dry for about twenty-four hours, they can be treated like ordinary veneers, that is to say, they can be oiled, ground, waxed, polished or lacquered.

My veneers can be cut as thin as paper and applied to all kinds of moldings such for instance as picture frames or they can be cut into layers or plates of sufficient thickness for parquetry such as inlaid floors and these plates being very pliable can be readily applied to old, uneven floors all rugged spots existing in the floor after my plates have been laid, being easily removed by means of a plane.

Floors of great durability can be obtained by using thin veneers made according to my invention which are formed into layers of the required thickness, being secured together by oil or lac which permeates the thin veneers, rendering the mass hard and impermeable to moisture.

Mosaic veneers are obtained from blocks formed of a series of rods of different colors which are placed lengthwise against each other and united by glue or other suitable

adhesive. These blocks are cut transversely to the length of the rods into plates of the desired thickness.

Marbled veneers are obtained from blocks which are best formed in molds in which pieces of the mass in different colors are collected and united in such a manner that a cross section of the block has the appearance of marble.

The various articles formed of my veneers hardly exceed in cost the application of a good coat of paint in imitation to wood grain or to marble and they are much superior in their close resemblance to nature and in durability. They can be easily freshened up and damaged portions can be repaired so as to obliterate all traces of the damage.

The various articles formed by or covered with my veneers can hardly be distinguished from those where natural wood is used. Furthermore from my veneers when cut in suitable thickness various ornaments can be produced by pressing.

What I claim as new, and desire to secure by Letters Patent, is—

1. The within described process of producing veneers which consists in applying to a

core successive concentric layers of a plastic mass in contrasting colors until a block of suitable thickness is obtained, then cutting this block in a direction transversely to the length of its core in sheets or plates of the required thickness substantially as described.

2. The process herein described of producing veneers having imitations of natural wood grain, which consists in preparing a wooden core, applying to said core successive concentric layers of a plastic mass in contrasting colors, drying the layers while building up the whole mass, and finally cutting through the layers and wooden core in a direction transversely to the longitudinal axis of the core to form sheets or plates of the required thickness, substantially as set forth.

3. A new composition of matter consisting of glue, glycerin and fossil meal substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

CARL KÖSTER.

Witnesses:

FRANZ HEURER,
CARL MITTAG.