

UNITED STATES PATENT OFFICE.

HENRY A. COUSINS, OF NEW YORK, N. Y.

ART OF MANUFACTURING INLAID WORK FOR DECORATIVE PURPOSES.

SPECIFICATION forming part of Letters Patent No. 488,540, dated December 27, 1892.

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To all whom it may concern:

Be it known that I, HENRY A. COUSINS, a subject of the Queen of Great Britain, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in the Art of Manufacturing Inlaid Work for Decorative Purposes, of which the following is a specification.

My invention relates to the manufacture of inlaid designs and pictures for domestic and ecclesiastical decorations, and has for its objects, first, to simplify the method of procedure whereby greater cheapness in the cost of production is attained; second, to provide for the easy duplication of any particular design or picture, and third, to insure durability and stability of the design of picture under exposure to extremes of heat and humidity. To accomplish these results and to secure other advantages, my invention consists in a method of procedure, all as will hereinafter more fully appear.

To produce ordinary panels for domestic and ecclesiastical decorations, slabs or other articles of a great variety, as the invention contemplates, I first produce by drawing or transferring the chosen design or picture upon a piece of hard wood or other suitable material, of about three sixteenths of an inch in thickness or thereabout. I then cut through the outlines of the design or picture, preferably by the use of a round wire fret saw or other appropriate tool, producing thereby what I term a templet for the work. The templet thus produced is next laid flat upon a level surface, preferably of glass, and then oiled over the upper or exposed side, in order to render that side non-adherent. Into the saw cuts I then press edgewise bands of metal, such, for instance, as brass, copper, aluminium, zinc, or other equivalent material, of about three eighths of an inch in width. These bands of metal will, when pressed through the wood or templet and down upon the level surface below, extend about half their width above the templet. Any thoroughly impervious cement is next to be spread completely over all, that is, over the templet and over the projecting outline

bands of metal. For this cement, I prefer to use peroxide of manganese one part, pulverized marble or asbestos, one and one half parts, and oxide of zinc one part, which are all thoroughly mixed into a stiff paste with silicate of potash; but other well known strong and permanent cements will answer and may be used in this part of the method. After this body cement has become thoroughly hardened, I detach the wood or templet, leaving the metal strips or bands firmly embedded in the cement and projecting from the surface thereof about half their widths, forming between them cells or cavities for the reception of the colors or colored materials necessary to carry out or complete the design or picture. These cells or cavities are next filled with a finer preparation of the cement above described, or with an equivalent substitute therefor, the same being colored as required. When this is so filled in and perfectly hardened, I cut down and polish the surface thereof after the usual manner of polishing marble.

The templet is capable of use many times over, so that duplicates of any design or picture may be accurately and quickly reproduced.

For a number of similar pieces of work the reduction of cost by my improved method will be readily appreciated. No part of the method requires skilled labor, and there is no part of it but may be accurately and very speedily accomplished.

The slab or other article produced consists wholly of cement filling and the inlaid metal bands or strips, and when the work is properly performed the article will not be affected by any usual exposure to heat, and not at all by moisture.

By the particular method above explained a flat slab is produced, but articles of various curvatures may be manufactured in like manner, so long as the templet will admit of the removal of the bands therefrom.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent of the United States is,

The herein described method of producing inlaid work, the same consisting in filling

cuts in a templet with projecting bands of
metal, embedding in and transferring the
bands of metal to an impervious body of cem-
ent, then filling the cells or cavities between
5 the bands with colored cements of the desired
hues, and finally finishing the article pro-
duced, substantially as explained.

In testimony whereof I have hereunto set
my hand.

HENRY A. COUSINS.

Witnesses:

ROBT. W. WATERBURY,
WM. H. APPLETON.