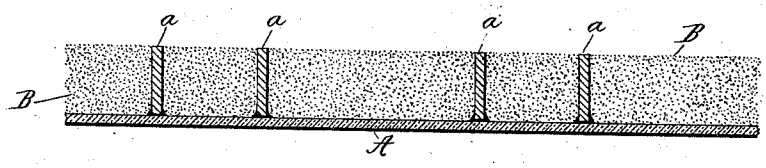
(No Model.)

H. A. COUSINS.

INLAID WORK FOR DECORATIVE PURPOSES.

No. 526,343. Patented Sept. 18, 1894.



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UNITED STATES PATENT OFFICE.

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

INLAID WORK FOR DECORATIVE PURPOSES.

SPECIFICATION forming part of Letters Patent No. 526,343, dated September 18, 1894.

Application filed October 8, 1891. Serial No. 408,106. (No model.)

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, county of New York, and State of New York, have invented certain new and useful Improvements in Inlaid Work for Decorative Purposes, of which the following is a specification.

My invention relates to the manufacture of tiles, slabs, and other articles for decorative purposes, wherein various designs of ornamentation and pictures having outlines formed by metal strips embedded in the material out of which they are produced shall be made to appear; and has for its object the production of work of this nature which shall be, under all probable circumstances of exposure, fire proof and absolutely water proof, in order that the work produced may not be damaged by the elements, and may be unaffected by time and exposure.

The characteristics of the work produced by my invention recommends it especially for use in connection with designs or pictures of a high order of merit and great value, but the cheapness of the materials employed, and the ease with which the work may be produced, commend it as well for the manufacture of all grades of ornamental or decorated articles.

To accomplish the before mentioned objects, my invention includes a facing or filling of peculiar composition (which might, if desired, be used with any backing), and the combination with the said facing or filling, of an impervious backing, all as will be hereinafter first fully described and then pointed out in the claims.

In the accompanying drawing, the single figure represents a sectional view of a fragment of a slab, tile, or other article made after the manner of my invention.

A indicates a backing or foundation of metal, porcelain in biscuit, or other suitable impervious material of any size or shape. Upon this the desired design in outline is produced by drawing or otherwise, and, conforming to the outlines of the design or picture, are located bands or strips of copper, brass, aluminium or of other metal or alloy of the desired thickness, and preferably of about three sixteenths of an inch in width, the same being indicated at *a a*.

To fix the strips or bands in place, if the backing be of metal, I temporarily sustain them by the use of a solution of resin and alcohol or other adhesive compound, and, when so sustained, I sprinkle soldering liquid and granular solder over all and subject the plate to heat sufficiently great to cause the solder to run, by which means the wires or strips are permanently secured in their proper places. If on the other hand the backing be of porcelain or of a vitreous material, I sift powdered glass over the wires or strips and back plate and then subject the whole to the action of heat sufficiently great to fuse the glass, the effect of which will be, like the former, to secure the wires or strips permanently to the back plate A and hold them thereon. The plate is then ready to receive the filling, which is a compound placed or packed in all the cavities between the wires or strips and is represented at B. The compound that I find the most efficient for this filling consists of a suitable base, as, for instance, pulverized marble or asbestos, eighty parts, calcined oxide of zinc thirty-five parts, and sal ammoniac, two parts, the whole being mixed with a solution of chloride of magnesium of about 1.495 specific gravity and colored, as desired, with mineral and chemical pigments of undoubted permanency. Of these ingredients, the proportions may be varied somewhat, but those given have been found to give the best results.

The compound is placed and filled in the cavities and cells in the prepared plate in a manner to complete the design or picture and then allowed to harden. The face of the slab or other article is then ground down and polished in the same way that marble is usually finished. As thus produced, the face and back of the article will be found unchangeable by heat and moisture, and the completed article is therefore durable and substantial, as the objects of the invention require.

The invention, as before suggested, may be used in the manufacture of a great variety of articles, but is especially advantageous in the production of pictures, portraits, panels, altar decorations and other kindred articles, which

it may be desired shall last practically for all time.

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

1. The herein described filling for use in the manufacture of decorative articles of the class named, the same consisting of a suitable base—such, for instance, as pulverized marble—, oxide of zinc, sal ammoniac, chloride of magnesium, and pigments, as and for the purposes explained.

2. In decorative articles of the class named, the combination with a suitable foundation or back having outline strips or bands secured thereon, of a filling composed of a base, oxide of zinc, sal ammoniac, chloride of magnesium, and pigments, compacted in the cavities between the strips or bands, as and for the purposes explained.

In testimony whereof I have hereunto set my hand this 3d day of January, 1891.

HENRY A. COUSINS.

Witnesses:
ROBT. W. WATERBURY,
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