

UNITED STATES PATENT OFFICE.

CHARLES A. ADDE, OF LOCK HAVEN, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO THOMAS H. HARMON AND ARTHUR A. HARMON, OF SAME PLACE.

SIZING COMPOSITION.

SPECIFICATION forming part of Letters Patent No. 606,951, dated July 5, 1898.

Application filed November 26, 1897. Serial No. 659,829. (No specimens.)

To all whom it may concern:

Be it known that I, CHARLES A. ADDE, a citizen of the United States, residing at Lock Haven, in the county of Clinton and State of Pennsylvania, have invented certain new and useful Improvements in Sizing Compositions, of which the following is a specification.

This invention consists in a novel sizing to be applied to articles preparatory to coating them with aluminium. This sizing is composed of the following ingredients in substantially the proportions mentioned—namely, pure white lead, twenty per cent.; Japan gold-size, fifty per cent.; white vitriol or sulfate of zinc, twenty-five per cent., and ultramarine-blue five per cent.

The manner of compounding the sizing consists in mixing the white lead with a part of the gold-size to the consistency of heavy paste, then adding ultramarine-blue ground with the white vitriol, and then thoroughly mixing the ingredients for about ten minutes, and finally adding the balance of the gold-size and stirring until all are thoroughly mixed and the compound is of the consistency of heavy varnish, when the sizing is ready for use.

The proportions of the several materials may be slightly varied without destroying the result; but I have found the above proportions to produce a very excellent article.

The Japan gold-size is a well-known substance prepared by dissolving a suitable gum,

such as dammar resin, in boiling linseed-oil. Other gums may be substituted, the manner of preparing the gold-size being the same. If too thick, the gold-size is suitably thinned with turpentine.

The sizing is used by applying it like varnish and then dusting or blowing on the aluminium in powdered form. It may also be used as a base for aluminium-leaf.

This sizing dries very hard, and at the same time it is pliable and tough and will not break or peel off. The white vitriol changes the nature of the gold-size, overcoming the gummy effect and causing it to dry hard. The ultramarine-blue and white lead produce a bluish-white tint which will not turn yellow with age. This sizing produces with the aluminium a beautiful and bright effect. The aluminium takes readily and holds well, standing out boldly on the surface.

What I claim is—

An aluminium-sizing consisting of the following ingredients combined substantially in the manner and proportions set forth, viz., fifty parts Japan gold-size, twenty parts pure white lead, twenty-five parts white vitriol and five parts ultramarine-blue.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES A. ADDE.

Witnesses:

GEO. A. BROWN,
R. B. McCORMICK.