

UNITED STATES PATENT OFFICE.

WILLIAM D. CLIFF AND WALTER CLIFF, OF WORTLEY, NEAR LEEDS,
ENGLAND.

IMPROVEMENT IN MANUFACTURE OF ORNAMENTAL GLAZED BRICKS.

Specification forming part of Letters Patent No. **186,112**, dated January 9, 1877; application filed
March 27, 1876.

To all whom it may concern:

Be it known that we, WILLIAM DEWHIRST CLIFF and WALTER CLIFF, both of Wortley, near Leeds, in the county of York, England, have invented new and useful Improvements in the Manufacture of Ornamental Glazed Bricks, which improvement is fully set forth in the following specification.

This invention relates to improvements in the method of producing ornamental bricks. In carrying our invention into effect we first coat the bricks, before they are baked, with an opaque glaze; then subject them to an intense heat, whereby the glaze is fluxed. The design is then placed upon the glazed surface, and the whole subjected to a moderate heat, whereby the design is fixed.

Copper or other plates, on which the desired pattern is cut or engraved, are covered with the enamel color. When the said patterns have been well and properly filled with the coloring matter, the surplus color is taken away in the ordinary manner, and a sheet of thin paper is placed over the pattern, when, together, they are passed through the rollers of a printing-machine of any suitable or well-known construction. The color or pattern is then fixed upon, or transferred to, the sheet of paper, which sheet of paper is taken away

or removed from the engraved plate, and transferred to the glazed surfaces of the bricks, and the paper is washed or drawn off the bricks, leaving the coloring material on the bricks. The bricks are then passed forward to the kiln, and fired to a good red heat.

We wish it clearly to be understood that we do not claim as new, or as our invention, the use of a printing-press for printing designs to be used in the ornamentation of pottery, for this has been previously used for other purposes, but not as herein described as applied to glazed bricks; nor do we claim the use of enamel colors, for they have been in use for painting and ornamenting by hand on other glazed surfaces; but

What we do claim is—

The method herein described for producing ornamental bricks, by coating them, before baking, with opaque glaze, then firing to an intense heat, then applying to the glazed surface suitable designs in enamel colors, and refiring the bricks to fix the designs, substantially as set forth.

WM. D. CLIFF.
W. CLIFF.

Witnesses:

WILLIAM WARD, *Solicitor, Leeds.*
CHARLES GILLIARD.