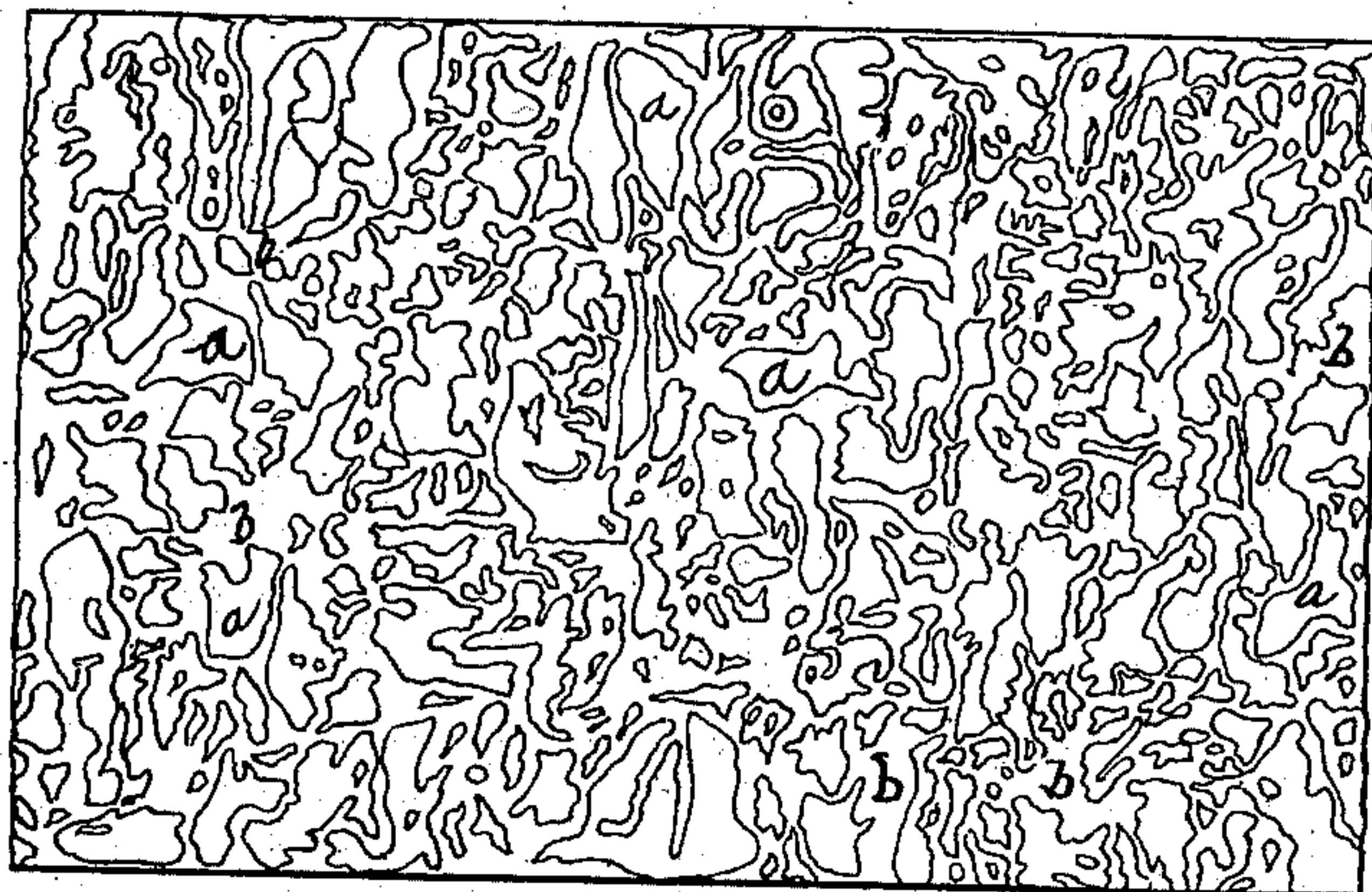


(No Model.)

J. F. EARHART.
PRINTING PLATE.

No. 284,399.

Patented Sept. 4, 1883.



Attest;

F. W. Howard
J. H. Blackwood

Inventor;
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Attorney

UNITED STATES PATENT OFFICE.

JOHN F. EARHART, OF COLUMBUS, OHIO.

PRINTING-PLATE.

SPECIFICATION forming part of Letters Patent No. 284,399, dated September 4, 1883.

Application filed January 25, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. EARHART, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Printing-Plates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is the production of a hard or elastic plate or roller having formed in its surface unorganized irregular depressions or seams, for the purpose of decorative printing on paper, cloth, leather, and other materials. By one process, which I have already made the subject of my application for Letters Patent, I produce a hard, flat, or cylindrical plate having these depressions, without the use of a matrix, by pouring the molten metal directly into a cold casting-box, or into a box first slightly dampened with water, or, after several castings have been made, by cooling the metal by slowly dripping it into the box.

For printing on hard substances—such as wood, iron, tin, zinc, slate, stone, glass, &c.—I make a soft or elastic plate or roller by the following process:

First, a matrix or mold is made of the metal plate already described, in the usual way, from papier-maché, wax, or plaster-of-paris, and then a cast of the matrix is made of rubber, printers' roller composition, or other elastic material. By this manner a fac-simile of the indentured surface of the metallic plate is pro-

duced on the soft or elastic one. When thus completed, either plate is in readiness to be used by putting the same in any ordinary form of press, and then applying the printing-inks of one or more colors in the usual manner; or the printing can be done by hand. Many varied and beautiful effects can be produced by using different plates in connection with different colors or bronzes, one impression being taken over the other.

In the drawing, *a* represents the printing-surface, and *b* the indentures.

I am aware that electrotypes and other plates for printing having high and low places formed on the surface are old, and also that casts have been made of sections of wood, by which imitations of different kinds of wood are printed on paper; but

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

A printing plate or roller made of hard or elastic material, and provided with unorganized and irregular depressions or seams formed in and extending below the surface of the plate in the manner herein set forth, and for the purpose of printing on various substances unorganized and irregular masses of colors, substantially as described.

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

JOHN F. EARHART.

Witnesses:

JOHN W. SIMS,
L. A. SWARTZELL.