

No. 709,530.

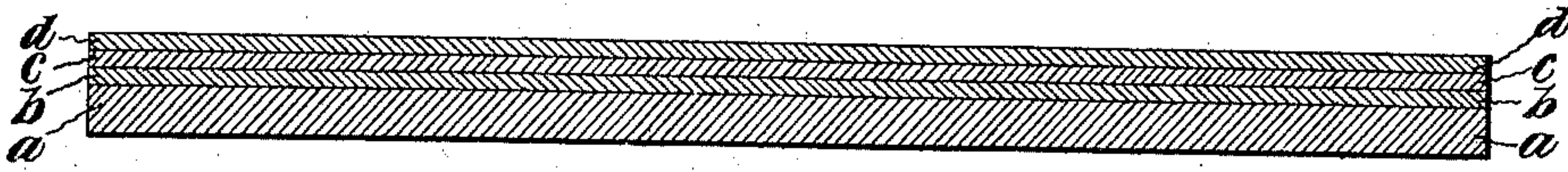
Patented Sept. 23, 1902.

D. WIESER.

MANUFACTURE OF ENAMELED METAL PLATES.

(Application filed Apr. 14, 1902.)

(No Model.)



Witness:
Attest:

W. Sommers

Inventor:
By Daniel Wieser.
Atty.

UNITED STATES PATENT OFFICE.

DANIEL WIESER, OF ZURICH, SWITZERLAND, ASSIGNOR TO H. SULZBACH & CO., OF ZURICH, SWITZERLAND, A FIRM.

MANUFACTURE OF ENAMELED METAL PLATES.

SPECIFICATION forming part of Letters Patent No. 709,530, dated September 23, 1902.

Application filed April 14, 1902. Serial No. 102,943. (No specimens.)

To all whom it may concern:

Be it known that I, DANIEL WIESER, a citizen of the Republic of Switzerland, residing at Zurich, Switzerland, have invented new and useful Improvements in the Manufacture of Enameled Metal Plates, of which the following is a specification.

The use of enameled metal plates as wall-coverings is already known, but hitherto they have been wanting in the property or capability of being bent when required without the enameled colored surface receiving injury.

The improved method of manufacture hereinafter described enables metal plates for covering surfaces to be made which plates even when sharply bent show no injury, so that sharp corners may be covered with the plates, and thus the corners may be quite free from joins; but that my invention may be fully understood I will describe the same in detail, reference being had to the accompanying drawing, which shows a section of a metal plate treated in accordance with my process, drawn to an enlarged scale.

The foundation material *a* of the plates is zinc—that is to say, a metal which does not rust. It must be rolled fine and smooth, so as to lie smoothly on the wall. These zinc plates *a* are coated with a mixture *b* of zinc-white and oil-varnish, the plates being passed between a pair of rubber rollers, to which the color is fed in a similar manner to that in which ink is fed in printing, and the plates are then dried in an oven at about 80° centigrade. The plates thus prepared are then provided with a coating of a lacquer color *c*, somewhat freely rubbed down with grease, after which they are again dried at about 80° centigrade. This second coating is then ground dull, and this is an essential point for the good manufacture of the coated plate. This dull grinding is effected by means of very fine pumice-stone powder, which, mixed with

water, is applied on a wool pad. The dull-ground plates after this treatment may be printed with the pattern. For this object the pattern *d* in question is conveyed onto a lithographic stone and the treatment proceeds as usual in lithographic printing, except that sheet-metal-stamping fly-presses are employed on account of the greater pressure required. Permanent colors must of course be used. The plates are then again dried in an oven or stove at about 80° centigrade, and then the impressed picture is coated with greasy copal lacquer and finally again dried in a stove for about eight hours at about 80° centigrade.

Having now particularly described and ascertained the nature of my said invention, I declare that what I claim is—

1. The method of enameling metal plates consisting in coating the plates with a mixture of zinc-white and oil-varnish, then drying them, coating the plates thus dried with greasy lacquer color and again drying them, then rubbing said plates with fine pumice-stone mixed with water, then printing them with permanent colors.

2. The method of manufacturing enameled metal plates consisting in coating fine and smooth rolled metal plates with a mixture of zinc-white and oil-varnish, then drying them, coating the plates thus dried with greasy lacquer color and again drying them, then grinding them dull by means of fine pumice-stone powder mixed with water, printing the dull-ground plates with permanent colors, drying the printed plates, then coating with greasy copal lacquer and finally drying them.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DANIEL WIESER.

Witnesses:

C. A. DIETRICH,
A. LIEBERKNECHT.