

UNITED STATES PATENT OFFICE.

ANDREW J. VOLLRATH, OF SHEBOYGAN, WISCONSIN.

PROCESS OF MAKING ENAMELED IRONWARE.

SPECIFICATION forming part of Letters Patent No. 515,508, dated February 27, 1894.

Application filed April 27, 1893. Serial No. 472,096. (No specimens.)

To all whom it may concern:

Be it known that I, ANDREW J. VOLLRATH, a citizen of the United States, residing at Sheboygan, in the county of Sheboygan and State of Wisconsin, have invented a new and useful Improvement in Processes of Making Enameled Ironware, of which the following is a specification.

The object of my invention is to produce enameled iron ware of a variegated character by an especially simple and effective process, applicable to sheet iron, steel or cast-iron ware.

My process consists in applying to the article of iron ware, either with or without a previously applied foundation coating, an enamel paste of any desired color, drying the paste in the usual way, then applying in patches or figures upon this dried coating an enamel paste of a different color, then again drying, and finally firing the article in the usual way in the muffle.

In carrying out my process any of the well-known enameling compounds may be employed, and they may be colored to suit the fancy of the enameler, the matters of composition and coloring forming no part of my invention.

It is not new to apply patches or figures of enamel paste to a previously fired coating of enamel, and again fire; neither is it new to sift granular enamel upon a wet coating of enamel of another color to produce a speckled or other effect, and then fire. The former necessarily gives inequality of surface, the subsequently applied enamel standing out in relief, and the latter is only applicable where an enamel powder, or dry grains of contrasting enamel of comparatively small size are employed to produce the markings. My process differs materially from both of these processes, because the patches of paste by which I produce the markings are deposited upon a previously dried but unfused paste, and are themselves in the form of a contrastingly col-

ored paste analogous in character to the first paste, though not necessarily of the same composition, and preferably thinner. The resulting product is of peculiar and distinctive appearance, and with a judicious selection of colors it can be made peculiarly attractive. The patches of contrasting enamel may be thrown irregularly upon the previously dried coating of enamel by means of a brush or by hand, and when this is done the result, after firing, is a strikingly natural resemblance to variegated marble.

I have produced entirely satisfactory ware in accordance with my invention by applying the variegated coat directly upon the surface of the iron, the latter being previously prepared by pickling in the usual way; but of course the ordinary foundation coating may be employed, and this may be found desirable in some cases. A peculiarity of my ware is that the variegated coat, though formed of separate pastes, is, owing to the single firing, what is known as a single coat. The patches of contrasting enamel upon application to the absorbent unfused dried paste commingle with the latter, and upon fusion in the muffle there is complete coalescence between the separate pastes, and substantial uniformity of thickness throughout the variegated enamel coating.

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

The process of producing variegated enameled iron ware, which consists in applying to the ware a coating of enamel paste, drying the coating so applied, then applying to the dried coating of enamel patches of figures of enamel paste of contrasting color, and finally fusing in a muffle, substantially as described.

ANDREW J. VOLLRATH.

In presence of—

M. J. FROST,

W. N. WILLIAMS.

It is hereby certified that in Letters Patent No. 515,508, granted February 27, 1894, upon the application of Andrew J. Vollrath, of Sheboygan, Wisconsin, for an improvement in "Process of Making Enameled Ironware," an error appears in the printed specification requiring the following correction, viz: In line 82 the word "of" preceding the word "figures" should read *or*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 6th day of March, A. D. 1894.

[SEAL.]

JNO. M. REYNOLDS,
Assistant Secretary of the Interior.

Countersigned:

JOHN S. SEYMOUR,
Commissioner of Patents.