

UNITED STATES PATENT OFFICE.

JOSHUA SAWYER, OF NORTHFIELD, VERMONT.

IMPROVEMENT IN PROCESSES FOR CLEANING MARBLE, GRANITE, &c.

Specification forming part of Letters Patent No. **145,971**, dated December 30, 1873; application filed August 8, 1873.

To all whom it may concern:

Be it known that I, JOSHUA SAWYER, a resident of Northfield, in the county of Washington and State of Vermont, have invented an Improved Process for Removing Stains, Rust, and other Impurities from Marble, Granite, and other Stone, of which the following is a specification:

This invention relates to that class of processes employed for removing stains, rust, and other impurities and cleaning marble, granite, and other stones—more particularly grave-stones and monuments; and it consists in washing the stone to be cleaned with muriatic and oxalic acids in equal parts, mixed in about the same amount of water as there is of the acids, while the stone is wet with sal-soda.

In carrying out my invention, take one pound of sal-soda and dissolve it in one gallon of water. Apply this wash to the stone freely with a brush, sponge, or otherwise, and, while the stone is wet with sal-soda, in like manner the compound of muriatic and oxalic acids and water should be applied, and at no other time, after which wash the stone with clear water,

and it will be found that all the stains will be removed, and the stone will be as clean as when first polished, and without injury in any way to the stone cleaned.

I am aware that muriatic acid has been used for the purpose of cleaning marble, being mixed with other acid, and then being applied to the stone; and in no previous process, so far as I am aware, has the muriatic acid, or the muriatic and oxalic acids, been applied to the stone while it was wet with sal-soda.

I propose to apply the said acids while the stone is wet with the sal-soda, which prevents all or any injury from the acids to the stone.

I claim as my invention—

The process of cleaning marble, granite, and other stones by washing the stone to be cleaned in muriatic and oxalic acids mixed in water, while the stone is wet with sal-soda, substantially as described and set forth.

JOSHUA SAWYER.

Witnesses:

ORAMEL H. SMITH,
PARKER S. DAW.