## UNITED STATES PATENT OFFICE.

HENRY WILE, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN COMPOUNDS FOR THE MANUFACTURE OF CRUCIBLES.

Specification forming part of Letters Patent No. 192,398, dated June 26, 1877; application filed April 5, 1877.

To all whom it may concern:

Be it known that I, HENRY WILE, of the city and county of Philadelphia, and State of Pennsylvania, have invented an Improvement in Compounds for the Manufacture of Crucibles for the Treatment of Metals, of which the following is a specification:

The invention consists in mixing lithomarge with the ingredients used in compounds for

making crucibles.

To one thousand two hundred and thirty pounds of black-lead, six hundred pounds of German clay, two hundred pounds of sand, and one hundred pounds of ground fire-brick, I add two hundred pounds of lithomarge. After the mixing has been completed, so as to form one homogeneous mass, it is made into masses, each sufficient for a crucible of the required size and weight.

The above ingredients, in the proportions given, when thoroughly worked, will make an excellent compound for the manufacture

I wish it distinctly understood that I do not confine myself to the proportions set forth, knowing that they must vary with the quality and properties of the ingredients, and the judgment and care used in their selection and preparation.

I claim as my invention—

1. Lithomarge, in combination with the ingredients used in forming compounds for the manufacture of crucibles.

2. A crucible compound composed of black-lead, German clay, sand, ground fire-brick, and lithomarge, in about the proportions given.

In testimony whereof I hereunto sign my name in presence of two subscribing witnesses.

HENRY WILE.

Witnesses:

FRANCIS D. PASTORIUS, ALEXANDER J. DIAMOND.