

UNITED STATES PATENT OFFICE.

CONRAD SCHILD, OF IONIA, MICHIGAN.

IMPROVEMENT IN COMPOUNDS FOR WELDING AND REFINING STEEL.

Specification forming part of Letters Patent No. **150,621**, dated May 5, 1874; application filed April 30, 1874.

To all whom it may concern:

Be it known that I, CONRAD SCHILD, of Ionia, county of Ionia and State of Michigan, have invented certain new and useful Improvements in Compound for Welding, Refining, and Reinstating Steel, of which the following is a specification:

The nature of my invention consists in a compound used for welding, refining, and reinstating steel, composed of the ingredients and substantially in the proportions hereinafter set forth.

The ingredients of my compound are as follows: Three ounces carbon; four ounces sulphate of iron; six ounces copperas; three ounces litharge; three ounces saltpeter; three ounces prussiate of potash; three and a half ounces red oxide of iron; three and a half ounces black oxide of manganese; four drams iodide of potassium; four ounces pulverized charcoal; one pound common salt; twenty pounds pulverized clay or sand. These ingredients, with the exception of the clay or sand, are pulverized by any suitable means, and thoroughly mixed together in a vessel without regard to order of precedence. The clay or sand is then heated to about 100° Fahrenheit, after which the other mixture is mixed therewith by means of a hoe or other suitable means.

This mixing or intermingling of the ingredients should be of the most thorough character, so that the various articles will be perfectly blended together. The composition or compound is then in the shape of a powder, and is ready for use. It is applied in the usual manner by sprinkling the powder over the parts to be welded, and then giving them the proper heat in the forge-fire. It is also used for refining and reinstating steel.

I do not confine myself to the exact proportions of the ingredients herein mentioned, as they may perhaps be varied without materially affecting the properties of the compound.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The within-described compound, consisting of the ingredients substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my invention, I hereunto affix my signature this 30th day of April, 1874.

CONRAD SCHILD.

Witnesses:

HENRY N. MILLER,
THOMAS BYRNE.