

UNITED STATES PATENT OFFICE.

CHARLES M. LINDSEY, OF PITTSBURG, PENNSYLVANIA.

GRINDING AND POLISHING MATERIAL.

SPECIFICATION forming part of Letters Patent No. 373,239, dated November 15, 1887.

Application filed April 1, 1887. Serial No. 233,309. (No specimens.)

To all whom it may concern:

Be it known that I, CHARLES M. LINDSEY, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and Improved Process of Making Grinding and Polishing Material, of which the following is a full, clear, and exact description.

This invention consists in a process of making grinding and polishing material of pulverized steel, suitable for use in glass-houses, machine shops, and elsewhere, and on wheels and otherwise, in the place of emery, substantially as hereinafter described.

In the manufacture of my improved grinding and polishing material or powder I have first taken steel in the rod and, putting it into a furnace, heated it to a temperature of about fifteen hundred (1500) degrees Fahrenheit, more or less, and then taken it out of the furnace and placed it in a vat or bath containing cool or cold water, common salt, and soda, in the proportion of about two (2) quarts of salt

and one (1) pound of soda to each gallon of water; but I do not confine myself to these proportions. This treatment of the steel crystallizes it and makes it very hard. I then pulverize the steel by hammer or otherwise, after which the material is ready to be put up in boxes, bottles, or other packages ready for use.

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

The process herein described of making the within-specified grinding and polishing material composed of pulverized steel, which consists in first heating steel to a high temperature, then immersing it in a bath of cold or cool water, salt, and soda, to crystallize and harden the steel, and subsequently pulverizing the steel crystals, as set forth.

CHARLES M. LINDSEY.

Witnesses:

ISAAC M. PENNOCK,
HENRY C. LYON.