

UNITED STATES PATENT OFFICE.

WILLIAM P. DARLING, OF BUFFALO, NEW YORK.

IMPROVEMENT IN MATERIAL FOR MOLDS AND CORES.

Specification forming part of Letters Patent No. **174,356**, dated March 7, 1876; application filed November 15, 1875.

To all whom it may concern:

Be it known that I, WILLIAM PAUL DARLING, of Buffalo, in the county of Erie and State of New York, have made certain Improvements in Constructing Molds and Cores for Metallic Castings, of which the following is a specification:

My invention consists in the use of pulverized gas-carbon, dampened with flour-water or molasses-water, or other similar and suitable fluids, as a substitute for pulverized coke or sand in the construction of molds or cores for casting metal.

In making these molds or cores the quantity of fluid that is commingled with the pulverized gas carbon should be sufficient, after suitable stirring and working, to reduce the mass to a proper consistency. The mold or core is then formed of this material in the same manner as from sand, &c.

When steel is to be cast the pulverized gas-carbon and flour-water molds and cores should

be baked the same as dry-sand molds or cores are baked for the purpose of getting them free from moisture.

The advantages of the use of this gas-carbon are that castings made in molds or around cores thus constructed are more solid, less porous, smoother, and truer than castings made in any other molds from any other combination of material with which I am acquainted.

I claim—

Pulverized gas-carbon treated with flour-water, molasses-water, or other similar fluids, as a material for molds or cores for casting metals, as specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

W. P. DARLING.

Witnesses:

J. R. DRAKE,
T. H. PARSONS.