

UNITED STATES PATENT OFFICE.

WILLIAM T. BAUSMITH, OF LUDLOW, KENTUCKY, ASSIGNOR OF ONE-HALF
TO MATTHEW H. BENTLEY, OF SAME PLACE.

CORE COMPOUND.

SPECIFICATION forming part of Letters Patent No. 270,625, dated January 16, 1883.

Application filed November 27, 1882. (No specimens.)

To all whom it may concern:

Be it known that I, WILLIAM T. BAUSMITH, a citizen of the United States, residing at Ludlow, in the county of Kenton and State of Kentucky, have invented certain new and useful Improvements in Core Compounds, of which the following is a specification.

The object of my invention is to furnish a compound wherewith molders can so strengthen core-sand as to enable castings to be freed therefrom in the most perfect and expeditious manner, and without causing the core to "blow" or "scab."

The preferred formula for preparing said compound is as follows: two hundred pounds of pine-flour, one hundred pounds of kaolin, twenty pounds of resin, twenty pounds of coke, fifteen pounds of charcoal, and fifteen pounds of ashes. These ingredients are ground separately, being reduced to a fine powder capable of passing through a No. 20 sieve, said ingredients being then poured into any suitable agitator or mixing-machine, where they are thoroughly incorporated together. This thorough mixing of the ingredients completes the manufacture of the compound, which is then used as follows: For brass castings about two pounds of the compound are mixed with one bushel of core-sand; but for iron castings about three pounds of the compound are mixed with one bushel of core-sand. These proportions, however, are not arbitrary, but may be

varied to suit the peculiar conditions of various sands or the views of the molders.

The pine-flour herein referred to is obtained by grinding up spruce-pine; but where this ingredient cannot be procured ordinary flour may be substituted therefor; but the former article is preferred on account of its containing so much pitch. Again, instead of kaolin loam-sand may be used, provided it contains considerable iron, this ingredient being known to molders as "iron-loam sand." Coal-ashes are generally used; but where wood-ashes can be obtained at a reasonable rate the latter should be employed.

It is evident the exact proportions of the several ingredients may be considerably varied without departing from the essential feature of my invention, as the pine-flour and resin are not always of the same strength, and the nature of the kaolin is materially modified according to the situation where it is procured.

I claim as my invention—

The herein-described core compound, consisting of pine-flour, kaolin, resin, coke, charcoal, and ashes, substantially in the proportions specified.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM T. BAUSMITH.

Witnesses:

JAMES H. LAYMAN,
RANKIN D. JONES.