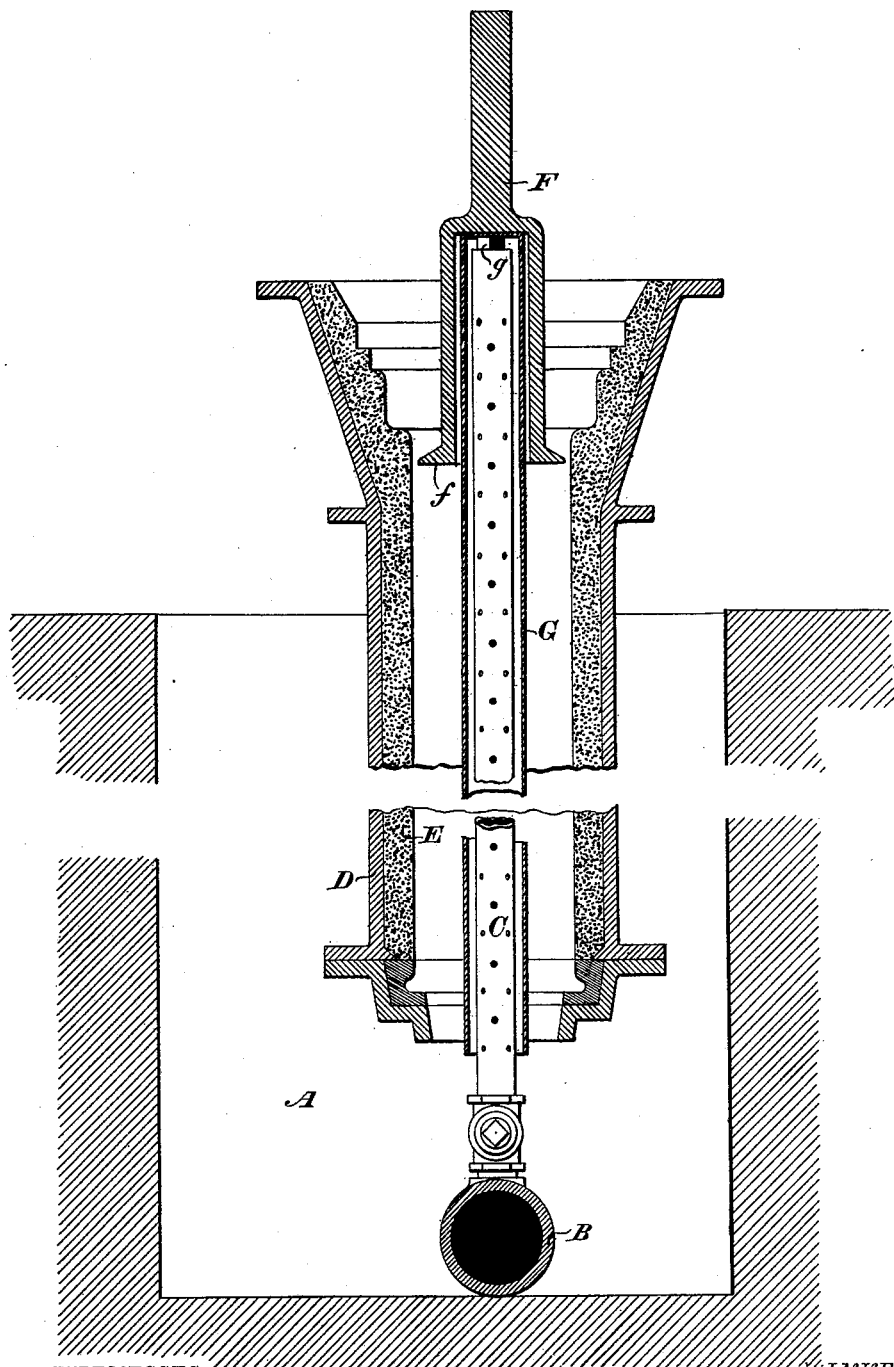


N. K. WADE.
BLACKWASHING DEVICE.

No. 190,697.

Patented May 15, 1877.



WITNESSES

INVENTOR

Wm. A. Skinkell
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By *his* Attorneys.

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UNITED STATES PATENT OFFICE.

NICHOLAS K. WADE, OF COLUMBUS, OHIO, ASSIGNOR TO HERBERT R. SMITH, OF SAME PLACE.

IMPROVEMENT IN BLACKWASHING DEVICES.

Specification forming part of Letters Patent No. **190,697**, dated May 15, 1877; application filed March 30, 1877.

To all whom it may concern:

Be it known that I, NICHOLAS K. WADE, of Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Blackwashing Pipe-Molds, of which the following is a specification:

My invention relates to certain improvements especially adapted for use in connection with the invention of Herbert R. Smith, of Columbus, Ohio, as shown and claimed in his application, filed simultaneously herewith, and entitled "Improvements in the art of molding and casting pipe, and in apparatus therefor."

The objects of my invention are to deflect the blackwash as it is poured into the mold toward and against the inside or walls of the mold; to distribute the blackwash evenly over the inner surface of the mold; and to protect the mold-heating jet-pipe or perforated tube in the center of the mold (forming part of the invention and application of said Herbert R. Smith above mentioned) from the blackwash, thus preventing the clogging or closing up of the perforations or jet-openings through which passes the hot air or gas for drying the molds.

The subject-matter claimed will hereinafter specifically be designated.

In the accompanying drawing, which is a view, partly in elevation and partly in vertical central section, my improvements are shown in connection with a pit or chamber A, a gas or hot-air-supply pipe, B, a perforated tube or branch pipe, C, and a flask, D, and mold E, all as shown and described in the above-mentioned application of Herbert R. Smith.

A hollow dasher or deflector, F, fits loosely over the upper end of the perforated central pipe C and serves to deflect the blackwash outward against the inner sides of the mold, as well as distribute it evenly all around, as is well understood. In this way the gas or hot-air tube would be protected sufficiently but for the splashing of the blackwash. To prevent all possibility of clogging the jet openings or outlets of the tube C it is incased from top to bottom, or throughout that portion of its length which is perforated,

with a removable casing or covering pipe, G, which fits loosely around the tube. This covering-pipe is shown as closed at its upper end and resting upon a plug, *g*, which closes the end of the tube C. Obviously, however, the casing might be supported in suitable manner at its lower end upon the tube or upon the supply-pipe B.

The dasher F, it will be observed, is provided with an annular deflecting flange, *f*, at its lower end, has a handle by which to place it in position when the blackwash is to be poured into the mold, and to remove it when the mold has been blacked, and admit of the removal of the casing-pipe G to allow of the drying of the mold, as fully set forth in the hereinbefore-referred-to application of Herbert R. Smith.

The dasher is hollowed out to receive the tube C and casing G a distance sufficient to allow the deflector-flange *f* on its lower edge to project down into the cylindrical part of the flask, for a purpose well understood.

Obviously, instead of the casing G and dasher F being separate and distinct from each other, they might be made together, the casing forming a continuation of the dasher, thus facilitating adjustment.

The surplus blacking which would escape at the bottom of the flask, and be lost in the absence of suitable provision for its retention, can be collected in a pan made to fit around the heating-pipe C and placed under the mold during the blackwashing.

I claim as my invention—

1. The hereinbefore-described hollow dasher or blackwash-deflector, adapted to fit over and be supported by the pipe which passes through the flask and mold, as set forth.

2. The hereinbefore-described covering-pipe, in combination with the perforated pipe in the center of the flask and mold, as set forth.

3. The combination, substantially as hereinbefore set forth, of the flask, the jet-pipe therein, the covering-pipe, and the dasher.

In testimony whereof I have hereunto subscribed my name.

NICHOLAS K. WADE.

Witnesses:

C. O. RAND,
T. P. OGDEN.