

# UNITED STATES PATENT OFFICE.

DANIEL FORBES, OF MERIDEN, CONNECTICUT.

## POWDER FOR POLISHING GLASS.

SPECIFICATION forming part of Letters Patent No. 262,034, dated August 1, 1882.

Application filed June 19, 1882. (No specimens.)

*To all whom it may concern:*

Be it known that I, DANIEL FORBES, of Meriden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Powders for Polishing Glass; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an improvement in the powder employed in glass-manufacture for polishing glass. This work is done by means of a rapidly-revolving wheel composed of a fibrous material—such, for instance, as the wheel for which Letters Patent were granted to me, dated March 30, 1880, No. 226,054— which carries the polishing-powder. The polishing-powder as heretofore employed is composed of lead and tin, calcined and mixed with a quantity of water into a pasty condition, commonly called "putty." It is applied to the polishing-wheel while revolving, and, owing to the rapidity with which the wheel revolves, (four to five thousand revolutions per minute,) a considerable quantity is thrown off in the form of dust, which is very injurious to the health of the operatives.

The object of my invention is to prepare a powder and give to it a specific gravity so great that it will not rise and mingle with the atmosphere, but, on the contrary, will fall at once, and without imparting any deleterious effects to the surrounding atmosphere; and my invention consists in a powder composed of lead, tin, and copper, in the proportions and manner hereinafter described.

I take sixty parts of lead, thirty of tin, and

fifteen of copper, all calcined, ground, and sifted, so as to be as fine as possible to make it. I mix these ingredients with water to the consistency of soft putty, or about the same consistency as the powder usually employed. The putty thus prepared is applied to the polishing-wheel in the usual manner. Combining the copper with the tin and lead holds the particles together and gives the dust which escapes from the wheel a specific gravity so great that it falls at once upon its escaping from the wheel, and no dust arises from it, as in the use of the lead powder. Again, the copper gives to the surface polished a better or more brilliant appearance than the use of the lead and tin without the copper, so that not only does my invention avoid the health-destroying character of this work, but produces a better result upon the surface polished.

While I have specified the proportions of the ingredients of the powder as sixty of lead, thirty of tin, and fifteen of copper, I do not wish to be understood as confining myself to this precise proportion of parts, as it may be varied to a considerable extent.

What I claim is—

The herein-described glass-polishing powder, composed of lead, tin, and copper, calcined and ground, substantially as described.

DANIEL FORBES.

Witnesses:

GEORGE N. MORSE,  
FREDERICK W. HILL.