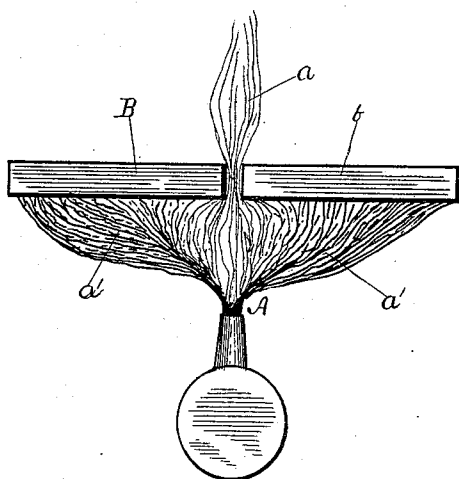


(No Model.)

S. P. WENSTRAU & E. R. BLOOD.
PROCESS OF MAKING LAMP BLACK.

No. 478,268.

Patented July 5, 1892.



Witnesses

S. M. Robbins
J. P. P. P.

Inventors.

E. R. Blood
S. P. Wenstrau

By *the* Attorneys

Halluck & Halluck

UNITED STATES PATENT OFFICE.

SWAN P. WENSTRAU AND ERASTUS R. BLOOD, OF LUDLOW, PENNSYLVANIA,
ASSIGNORS TO MARTHA P. BLOOD, OF SAME PLACE.

PROCESS OF MAKING LAMP-BLACK.

SPECIFICATION forming part of Letters Patent No. 478,268, dated July 5, 1892.

Application filed December 4, 1888. Serial No. 292,673. (No specimens.)

To all whom it may concern:

Be it known that we, SWAN PETER WENSTRAU and ERASTUS R. BLOOD, citizens of the United States, residing at Ludlow, in the county of McKean and State of Pennsylvania, have invented certain new and useful Improvements in Processes of Making Lamp-Black; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to the manufacture of lamp-black; and it consists in certain improvements in the process of making lamp-black from the flame of a gas-jet or lamp by impinging the same against a depositing or condensing-plate. As is well known, the carbon-bearing part of a flame called the "middle envelope" incloses the inner dark cone, which is made up of unconsumed gases. When this flame is impinged against a condensing-plate, it is flattened and the inner dark cone lies next to the plate, while the outer part of the flame, including the carbon-bearing or middle envelope, assumes an inverted umbrella-like shape. The gases in the inner dark cone escape between the plate and the top of the flattened carbon-bearing or middle envelope, and thereby hold the latter away from the condensing-plate, so that the carbon therein to a greater or less extent is not deposited upon the plate.

The object of our invention is to withdraw the gases in the inner dark cone from the flame before they can pass between the flattened part of the middle envelope and the condensing-plate.

To that end the nature of the invention consists of a new and improved method of

making lamp-black, which will be fully set forth in the specification and pointed out in the claim, reference being had to the accompanying drawing, in which the figure represents one form of device for carrying out our improved method.

Referring to the drawing, A marks a gas-jet flame, and B a condensing or depositing plate with the flame impinging upon it and having a centrally-located vent through which the gases in the inner dark cone *a* of the flame escape. The part of the flame marked *a'* represents the outer part of the flame, including middle envelope, and is flattened by being impinged upon the condensing-plate. The gases contained in the inner envelope, instead of escaping between the condensing-plate and the carbon-bearing or middle envelope, as heretofore, pass through said opening *b*, leaving the carbon-bearing or middle envelope to deposit all or nearly all the carbon therein upon said condensing-plate—an advantage not heretofore secured and resulting in a product of fine quality.

What we claim as new is—

The process of making lamp-black by depositing the particles of carbon from a flame, which consists in conducting away the gases contained in the inner dark cone of the flame and permitting the outer part of the flame, including the carbon-bearing or middle envelope thereof, to impinge against a depositing-surface.

In testimony whereof we affix our signatures in presence of two witnesses.

SWAN P. WENSTRAU.
ERASTUS R. BLOOD.

Witnesses:

ALTA BLOOD,
GUST LEAF.