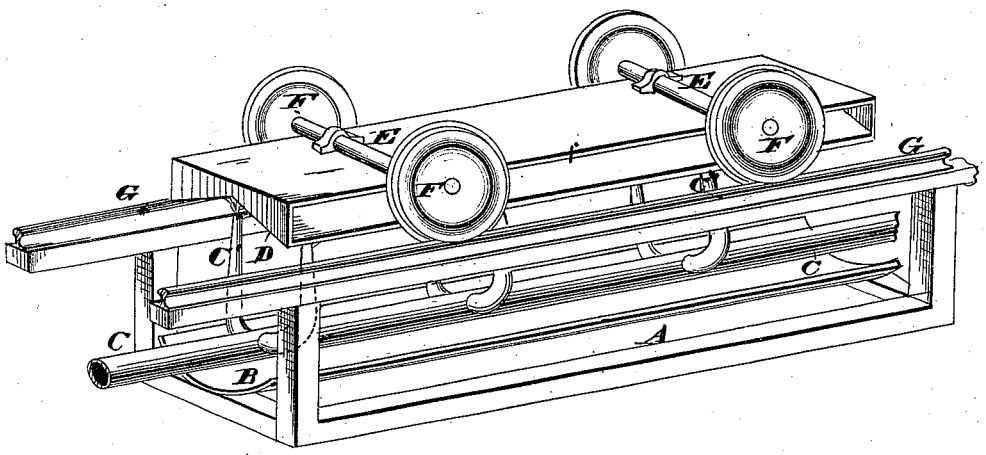
P. NEFF.

Machinery for Making Lamp-Black.

No. 197,395. Patented Nov. 20, 1877.



WITNESSES

Ed. A. Nottingham.

A. M. Bright.

INVENTOR

Peter Neff.

By Seegett and Seegett.

ATTORNEYS

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

PETER NEFF, OF GAMBIER, OHIO.

IMPROVEMENT IN MACHINERY FOR MAKING LAMP-BLACK.

Specification forming part of Letters Patent No. **197,395**, dated November 20, 1877; application filed July 13, 1877.

To all whom it may concern:

Be it known that I, PETER NEFF, of Gambier, in the county of Knox and State of Ohio, have invented certain new and useful Improvements in Machinery for the Manufacture of Lamp-Black; and I 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improved mechanism for use in the manufacture of lamp-black; and consists in making the depositing-surfaces movable or traveling, so as to be capable of motion relatively to the fixed burners.

In the drawing the figure is a perspective view of a machine embodying my invention.

A is a suitable frame-work or support; B, an apron for collecting the lamp-black that may drop from the depositing-surfaces; C, a pipe, through which oil or other carbonaceous matter, such as natural or other gas, &c., may be conveyed and burned, separately or by mixture together, from the burners C′. D is the depositing-surface, located above the burners and within suitable proximity thereto. E is an axle; F, the wheels of a car or carriage, which supports the depositing-surface D; G, a railway or suitable track or channel, upon which or within which the wheels of the carriage run.

Heretofore the depositing-surfaces employed in the manufacture of lamp-black have been made stationary, or at least stationary during the time that the deposit has been made upon them. There are, however, some difficulties experienced in depositing-surfaces of that character. The flame burning upon the surface will soon heat the surface to such an extent as to render the deposit less effective. So, also, a different grade of lamp-black is deposited where there are different intensities of heat, or where the temperature of the surface varies at different points.

The object of my invention is to construct the depositing-surface in such a manner that it may be kept in motion or be moved at will relatively to the burners while the deposit is being made thereon. This may be effected in many ways. The depositing-surface D may be suspended or attached to any sort of carriage, either straight or curved, and either sliding or in the nature of a wheel-vehicle.

I would have it understood that I limit myself to no particular kind of carriage or movable support for causing the surface D to move relatively to the burners; but any convenient structure or construction may be employed, and they may be made to operate either by hand or by machinery. If the depositing-surface is made circular in form, so as to travel around on a circular railway, then the different parts of the surface would be brought successively in contact with each burner. If made straight, however, the motion would have to be reciprocating.

Of course, I do not limit myself to any particular style of depositing-surface. It may be flat, or flat with dependent permanent flanges, or it may be flat with dependent movable flanges. So, also, it may be convex or concave, and it may or may not be provided with a chamber for water upon the upper side; the particular principle of my invention being a construction whereby the depositing-surface is made movable or capable of being moved with respect to the burners.

Another advantage in this construction is, that the surfaces may be brought alternately over the flame and over spaces where there is no flame, so that one portion of the depositing-surface may be cooling while lamp-black is being deposited upon other portions. In this way a greater deposit can be obtained, and at the same time the deposit will be of a more uniform and even character.

Another advantage is, that a stationary scraper may be employed for removing the carbon as the surface is moved over it, instead of necessitating a movable scraper and collecting-car, or its equivalent. Moreover, while this construction greatly facilitates the deposit of carbon from the flame of carbonaceous matter, or oil, or gas, whether manufactured or natural gas, whether burned separately at different burners, or together at the same burners, at the same time the amount of carbonic-acid gas for smothering the flame is better regulated, because the surfaces can be so moved as to maintain at all times the proper temperature

for that purpose. So, also, in the use of any character of impinging flame, whether direct, horizontal, inverted, or oblique, the impingement is better controlled, avoiding the burning of the carbon to an ash or scale, and bringing out the pure quality of the carbon in its richness of tint and soft fibrous character.

I do not claim such a movable surface as is in the nature of a revolving horizontal cylinder.

What I claim is—

1. In a machine for the manufacture of lampblack, a depositing-surface made movable relative to the burners, substantially as and for the purposes described.

2. In machinery for the manufacture of lampblack, a depositing-surface attached to a car or vehicle, whereby it may be moved relatively to the burners, substantially as and for the purposes described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

PETER NEFF.

Witnesses:
ELIZABETH L. WOOD,
REBEKAH NEFF.