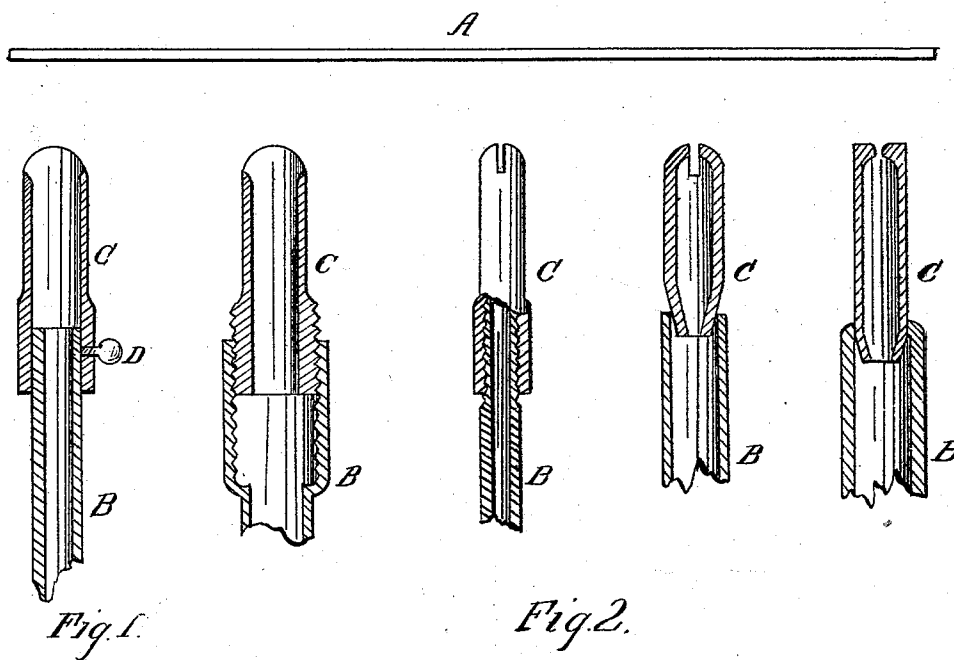


P. NEFF.

MANUFACTURE OF LAMP-BLACK.

No. 172,046.

Patented Jan. 11, 1876.



WITNESSES
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UNITED STATES PATENT OFFICE.

PETER NEFF, OF GAMBIER, OHIO.

IMPROVEMENT IN THE MANUFACTURE OF LAMP-BLACK.

Specification forming part of Letters Patent No. **172,046**, dated January 11, 1876; application filed August 31, 1875.

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 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 improvements in mechanism for the manufacture of lamp-black from gas or other carbureted gases from the earth, and more particularly to burners employed in such manufacture.

My invention consists in employing, in connection with the depositing-surfaces, burners that may be adjusted nearer to or farther from the surface to produce greater or less deposits or different grades, as may be desired.

In the drawing, Figure 1 represents a burner made adjustable up or down, so as to bring it nearer to or farther from the depositing-surface. Fig. 2 represents variations of same.

A is the depositing-surface. B is a pipe leading to the burner. C is the burner. It is made adjustable up or down upon the pipe B in any suitable manner. That shown in the drawing is simply by a sleeve movement, being set at any desired point by the set-screw D; but, instead of employing the sleeve mechanism there shown, the said burner may be provided with a female screw, so as to be raised or lowered by screwing over the male screw upon the pipe B.

I do not limit myself to any particular means for raising or lowering the burners upon the pipes, so as to bring them nearer to or farther from the surface A, but desire it to be understood that any means whereby the burner is shifted to a higher or lower position upon the pipe B, so as to bring the said burner nearer to or farther from the depositing-surface A, may be employed without departing from the principles of my invention. Or, also, instead of shifting the burners themselves to or from the surface A by running them up or down upon the pipe B, the said pipe, with its burners, may be made so as to be adjusted up or down bodily through small

limits, and thus accomplish a substantially similar result; and I do not know that apparatus has ever before been employed in the manufacture of lamp-black wherein different grades may be produced at different times upon the same surface and from the same burners by making the said burners adjustable through narrow limits to or from the said surface; and thus create different degrees of combustion.

In apparatus of this nature I do not limit myself to any particular kind of burners. There may be employed the wide, open-mouth burners, such as shown in the drawings, or there may be employed burners with small mouths and what are known as bat-wing burners, or burners of any other nature, whether with metallic or lava or any other style of tip.

It is also understood that this apparatus of adjustable burners is not limited to apparatus with any particular style of depositing-surface. Such surface may either be concave, convex, flat, or of any other suitable style, and, in connection with the said burners, there may or may not be employed separate and independent apparatus for collecting the deposits from the waste products of combustion that pass beyond the surface A. It should be observed that the flame always burns against the surface A, and the adjustments referred to are, therefore, made to alter the distance between the burner and the surface upon which deposits are made, within the limits of the length of the flame.

What I claim is—

1. The process of manufacturing lamp-black of different grades by varying the extent of impact of the flame from a burner against a depositing-surface, substantially as described.

2. In an apparatus for the manufacture of lamp-black, the combination, with a depositing-surface, A, and gas-pipe B, of burner C, adjustable upon the said pipe to or from the surface A, substantially as and for the purpose described.

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

PETER NEFF.

Witnesses:

E. CLIFFORD NEFF,
D. L. FOBES.