

P. NEFF.  
 Apparatus for the Manufacture of Lamp-Black.  
 No. 221,417.      Patented Nov. 11, 1879.

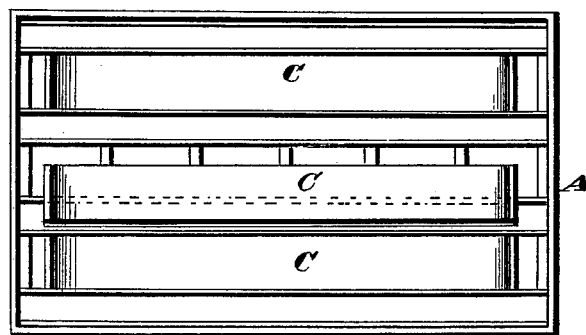
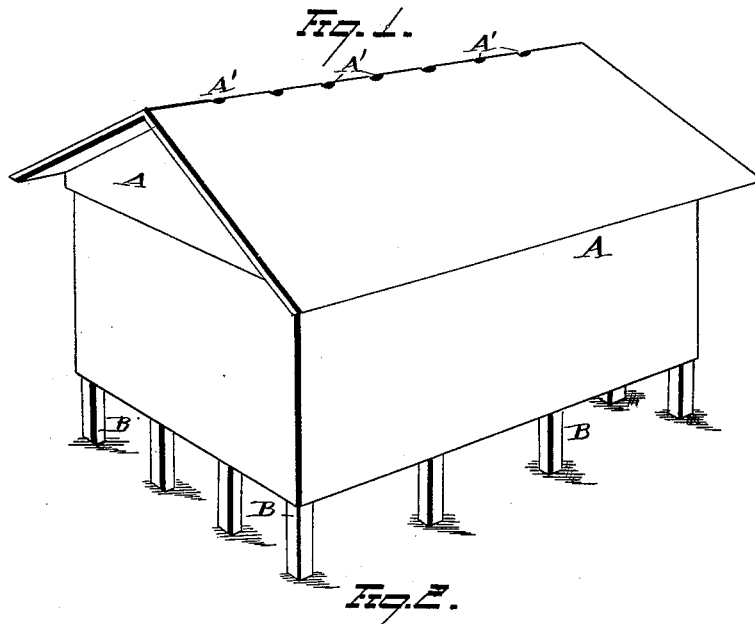
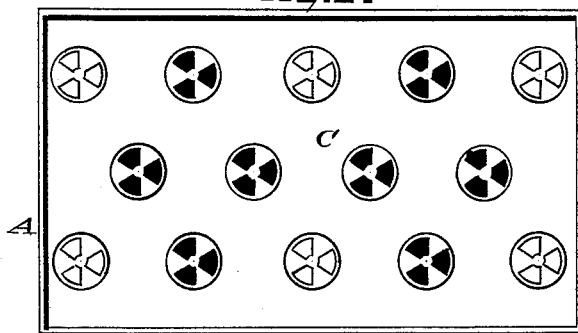


Fig. 3.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

PETER NEFF, OF GAMBIER, OHIO.

## IMPROVEMENT IN APPARATUS FOR THE MANUFACTURE OF LAMP-BLACK.

Specification forming part of Letters Patent No. **221,417**, dated November 11, 1879; application filed May 29, 1879.

### *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 Apparatus 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 the manufacture of lamp-black; and it consists in a room or house constructed as hereinafter described and claimed.

In the drawings, Figure 1 is a view, in perspective, of a burning or collecting room adapted for the manufacture of lamp-black according to my invention. Fig. 2 is a plan view of the same with its roof removed, showing the ventilating-floor. Fig. 3 is a view, showing modifications in the manner of constructing the ventilating-floor.

The object of my invention is to regulate the draft entering the burning-room in such a manner that the flames of the burners shall not be disturbed, and also in order that the carbonic-acid-gas-cushion into which the flames must pass before they can impinge upon the collecting-surface shall not be unduly disturbed, as would be the case were too much draft permitted, or were this draft in any direction other than vertical.

A is the body and roof of any suitable house or compartment, and A' A' are ventilating-orifices, of any character or description whatever, made in the roof or upper portion of the compartment.

It will be observed that I have raised the compartment A, and have placed it upon supports B, so that a free access and movement of air is permitted under the floor C. This floor, as shown in the drawings, is provided with adjustable openings, so that it may be adapted to admit of more or less air from beneath, as may be desired.

This ventilating of the floor may be accomplished in any manner whatever; and I do not in any degree limit myself to the specific construction of this floor, as any construction

will be comprehended in my invention that will enable the manufacturer to regulate and control the admission of air into the compartment through the floor of said compartment, and for this purpose registers, removable planks or doors, or any equivalent device may be resorted to.

It will be seen that the sides or walls of my burning-compartment are closed, so as to prevent admission of air from these parts, my design being to admit air to the chamber only from beneath, and to permit of its escape only from the ceiling or roof, thus securing an upward draft of all the air that is admitted to the compartment; and by lifting the floor C well above the ground, so as to permit free access of air beneath, and by providing ventilating-openings, as shown, a uniform and steady draft within the burning-chamber is secured. By this arrangement the carbonic-acid gas, as it is generated beneath the collecting-surface, is buoyed up and retained steadily and without disturbance against said surface in a manner best adapted to secure the results before mentioned, dependent upon the flame entering said carbonic-acid-gas cushion before impinging against the collecting-surface. If the draft were permitted an entrance from the side, or if for any reason it is prevented from taking an even upward course, it will be manifest that the carbonic-acid gas would either be blown from its proper place, or, from its gravity, would drop away too freely, and thus be lost.

What I claim is—

In the manufacture of lamp-black, a compartment for burning gas or other substance, said compartment formed with close sides, a ceiling having one or more openings, and a floor provided with one or more openings, said floor openings being provided with adjustable devices which regulate the passage of air therethrough, substantially as set forth.

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

PETER NEFF.

Witnesses:

SARAH A. NEFF,  
D. L. FOBES.