

P. NEFF.

SCRAPERS FOR LAMP BLACK APPARATUS.

No. 176,477.

Patented April 25, 1876.

Fig. 1.

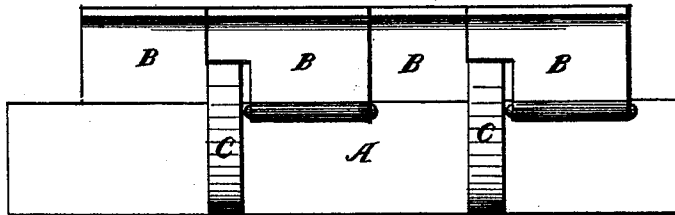
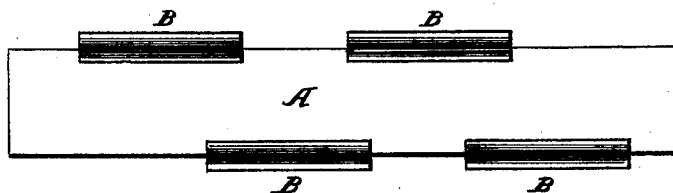


Fig. 2.



WITNESSES

C. J. Nottingham
F. O. McClear

By

INVENTOR

Peter Neff
By Leggett and Leggett
Attorneys.

UNITED STATES PATENT OFFICE

PETER NEFF, OF GAMBIER, OHIO.

IMPROVEMENT IN SCRAPERS FOR LAMP-BLACK APPARATUS.

Specification forming part of Letters Patent No. **176,477**, dated April 25, 1876; application filed September 3, 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 Manufacturing 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.

It is necessary, or at least very desirable, in the manufacture of lamp-black, that the surfaces upon which the deposits of lamp-black are made may be provided with brushes or cleaners to readily and quickly remove the deposits. These cleaners or scrapers, if they are made rigid in character, will not readily conform to the inequalities of the surface and successfully remove the deposits. It is important in machinery for the manufacture of lamp-black that such brushes or cleaners should be provided, because the surfaces are to a greater or less extent subject to unequal heating by the flame which is intercepted by the surfaces, which is liable to cause local warping or derangements of the depositing-surfaces.

With such end in view my invention consists in vertical spring-pressed metallic scrapers, having flanged working extremities, and loosely hinged to opposite sides of a supporting cross-bar, in rows affording alternate space intervals between their respective scrapers.

In the drawings, Figure 1 is a side elevation, and Fig. 2 a plan view.

A is a scraper of sheet-metal construction, and extending vertically upward from its supporting connection on the rigid cross-piece B. It is hinged loose and free at its engaging-point, so that while firmly secured it yet admits of an easy reciprocating movement in a plane at right angles to the longer diameter of the cross-bar. The upper or working extremity of the scraper flares out squarely on either side thereof, so as to present a plane surface to the face of the depositing-surface. It is also thus provided with a double-edged cleaning extremity. A spring, C, finding base engagement in the cross-piece, is brought forward and up, so as to bear against said cross-

piece as a fulcrum, forming a lever of the first order. It engages in any suitable manner with the upper extremity of the scraper, and acts upon it as the weight to be operated.

It is apparent that the character of the depositing-surface is immaterial to my invention. It may be either concave, convex, flat, with depending caps or guards at its edges, or any other suitable form employed in the manufacture of lamp-black. This scraper may be attached to a car, which car is made to traverse on suitable ways beneath or adjacent to the depositing-surface. In such cases there should be some suitable spring-work for pressing the scraper snugly against the surface.

If the surface be concave or convex, or of any other peculiar shape, then of course the scraping-edge may be made to conform therewith.

The scraper, it will be observed, is located upon a suitable support, B, and a spring, C, serves to press the scraper against the surface.

As before stated, these scrapers may be employed upon suitable traveling cars, so as to travel beneath the depositing-surface with the said cars, in order that the deposits, as scraped from the surface, will fall into and be collected by the car; but it is not absolutely necessary, as it is manifest that if there be a common receptacle beneath the burners, into which the lamp-black may fall, these scrapers with out the car may be caused to traverse beneath and in contact with the surfaces, scraping off and dropping the deposits into the common receptacle below.

It is immaterial with what character of lamp-black apparatus these scrapers are employed. They may be either employed with apparatus where the burners are erected beneath the depositing-surfaces, or where the burners descend from above, or where they project simply through the depositing-surface from behind.

Where the scrapers are employed in connection with a car, the car should be made to traverse the length of the depositing-surfaces by means of wire to draw the same; or if a car is not employed, then similar wires may be attached directly to the brushes or scrapers themselves, as no injury will result to them by coming under the influence of any burner.

Scrapers or brushes of the nature herein described will serve to remove the lamp-black without polishing it against the surface. It is, therefore, in a proper condition to be bolted readily through a proper bolting-cloth.

This effect is only produced by brushes or scrapers that will yield and prevent the polishing or caking that would interfere with proper bolting.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. Spring-pressed metallic scrapers loosely hinged to opposite sides of a supporting cross-bar, in rows having alternate space intervals

between their respective scrapers, substantially as and for the purpose described.

2. Vertical spring-pressed metallic scrapers, having flanged working extremities, and loosely hinged to opposite sides of the cross-bar, in rows affording alternate space intervals, 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.