

S. BLAU.
Manufacture of Bone-Black.

No.155,919.

Patented Oct. 13, 1874.

Fig. 1.

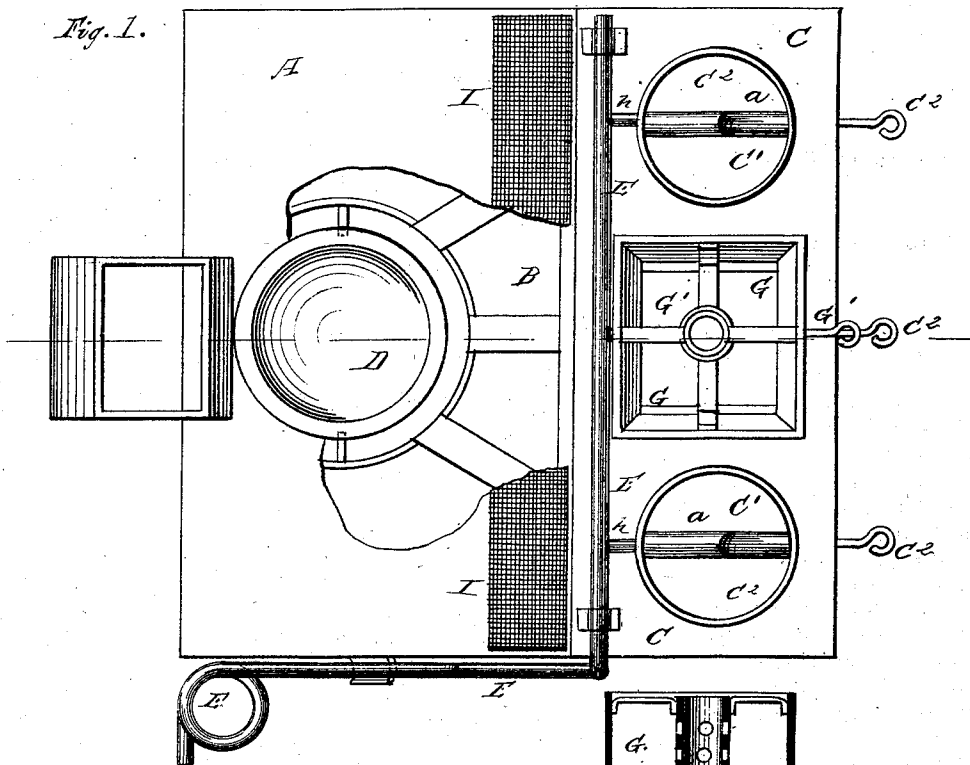
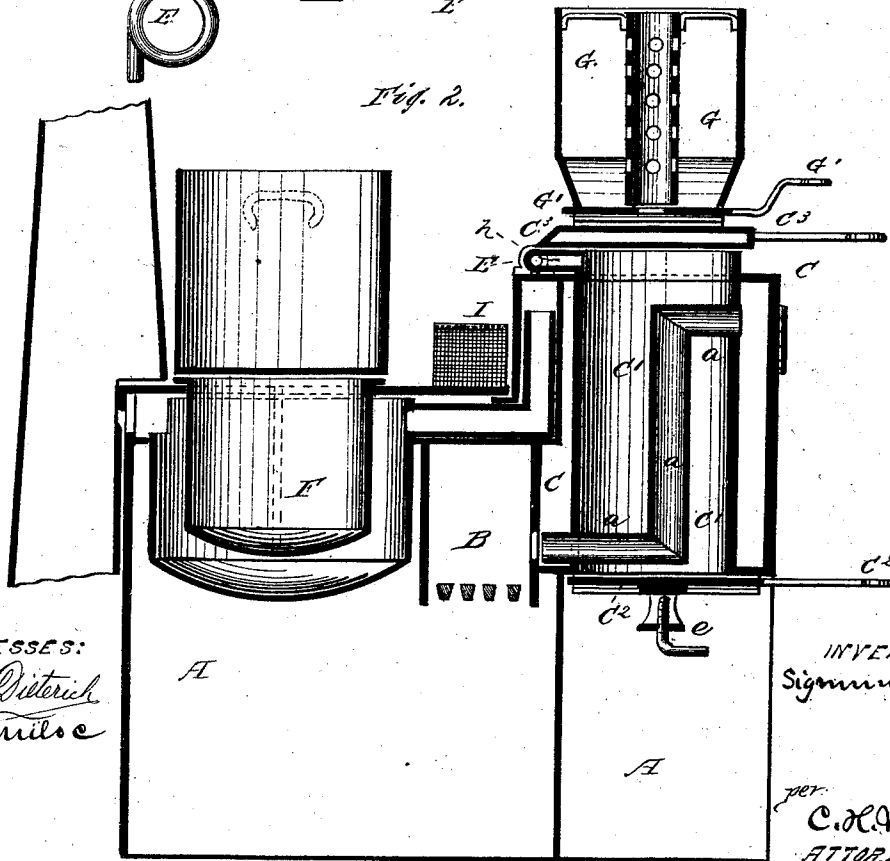


Fig. 2.



WITNESSES:
P. C. Dietrich
A. H. Mills

INVENTOR:
Sigmund Blau

per
C. H. Watson & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

SIGMUND BLAU, OF NEW YORK, N. Y.

IMPROVEMENT IN THE MANUFACTURE OF BONE-BLACK.

Specification forming part of Letters Patent No. **155,919**, dated October 13, 1874; application filed September 5, 1874.

To all whom it may concern:

Be it known that I, SIGMUND BLAU, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in the Manufacture of Bone-Black; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in certain improvements upon the apparatus for manufacturing bone-black for which Letters Patent No. 153,741 were granted to Salomon Billitz August 4, 1874, as will be hereinafter more fully set forth.

In the annexed drawing, Figure 1 represents a top view of a kiln for manufacturing bone-black, embodying my improvements; and Fig. 2 is a longitudinal vertical section of the same.

A represents the kiln or oven, with fire-chamber B, having the calcining-hearth C at one side, and the scouring-boiler D at the other side. In the calcining-hearth C are set a suitable number of cylinders, C¹. These cylinders have sliding bottoms C², which, when in place, are clamped firmly by fastening-screws *e*. The upper parts of the cylinders are connected, by small pipes *h*, with the coil E. The general features of these parts are substantially the same as described in the patent above referred to. I provide each of the cylinders C¹ with one or more pipes or flues, *a*, so that the products of combustion will pass through them, and thus heat the contents of the cylinders from the center as well as from the outside of the cylinders, thereby expediting the formation of the raw bone into bone-black. On top of each cylinder is a feeding-hopper, G, which should be at all times supplied with raw bones.

The bones in the feeding-hoppers become nearly half burned before they go into the regular cylinders C¹.

As soon as the raw bone is ready to draw the bone-black from one of said cylinders, the cylinder-slide C² is opened, and the bone-black will enter the draw-cylinder placed for its reception, after which the slide is again closed. A slide, C³, at the top of the cylinder is then opened, and at the same time a slide, G', in the bottom of the feeding-hopper is also opened. The bone in the hopper then passes down into the cylinder, after which the slides are all closed air-tight. From the cylinders the fire passes through the pipes *b* to the boiler D. In this boiler the bones are first boiled to remove all fat, and when that is done the bones are taken out and placed on a rack, F, directly above the fire-chamber B, to be dried before being placed in the feeding-hoppers.

The fat, water, &c., are removed from the boiler. The fatty matter may be used in soap manufacture, while the substances in the water are good for-feeding hogs, and other purposes.

The gas from the raw bones in the cylinders passes into the coil E, and may be taken to a purifier and gas-holder, and used as illuminating-gas for factory use.

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

The combination of the cylinders C¹, having bottom and top slides C² C³, with the feeding-hopper G, having bottom slide G', as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnesses.

SIGMUND BLAU.

Witnesses:

ANDREW G. COPSEY,
ROBERT WOLFF.