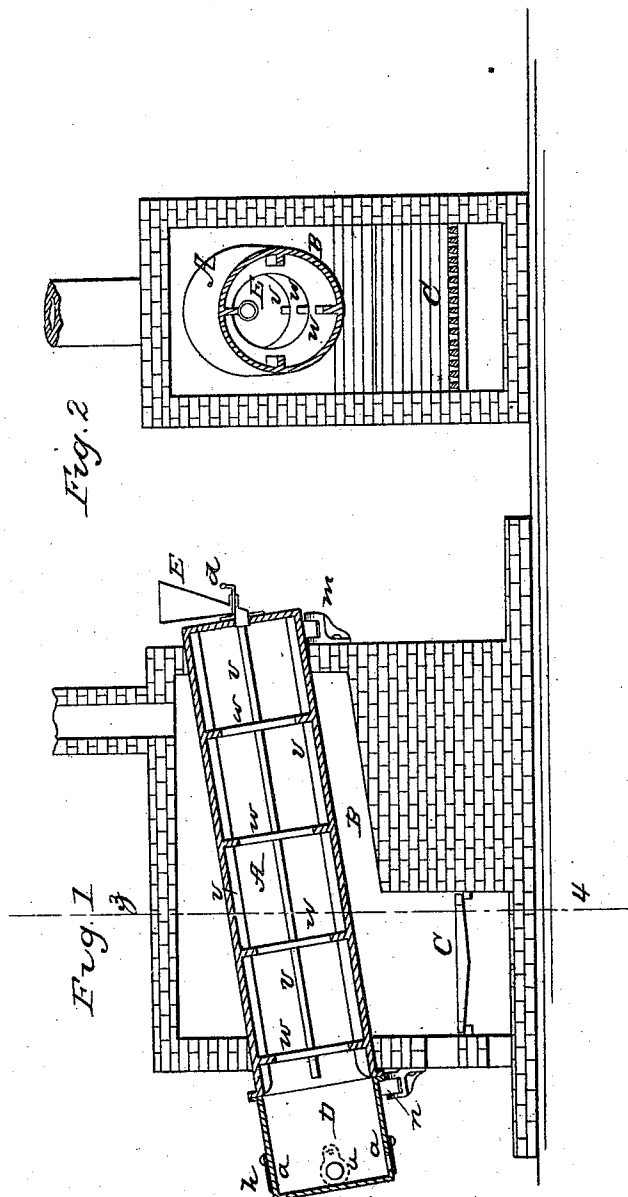


Bone Black Oven.

Patented Aug. 19, 1862.



INVENTOR
William C. Miller

UNITED STATES PATENT OFFICE.

WILLIAM MOLLER, OF NEW YORK, N. Y.

IMPROVED OVEN FOR REBURNING BONE-BLACK.

Specification forming part of Letters Patent No. 36,230, dated August 19, 1862.

To all whom it may concern:

Be it known that I, WILLIAM MOLLER, of New York, in the county and State of New York, have invented a new and useful Improvement in Bone-Black Ovens; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure I represents a longitudinal section of my improved oven, and Fig. II shows a section at the line III IV, Fig. I.

Similar letters represent similar parts.

The nature of my invention consists in the arrangement of circular and longitudinal ribs or flanges in the inside of a circular retort, so as to divide the inside surface into compartments, which prevents the bone-black from sliding over the surface when the retort is turned around and causes the bone-black to be turned over, so as to bring every particle in contact with the surface acted upon by the heat of the fire.

In the accompanying drawings, A represents a cylindrical retort incased in an oven, B, provided with a fire-place, C, and so arranged that the fire and gases shall surround the greater part of the retort. This retort is laid on an incline, being higher on the back end, to cause the bone-black to move gradually to the forward end, and is supported on rollers *m* and *n*, attached to the outside of the walls on the front and back of the oven, so as to be capable of revolving. On the inside of this retort longitudinal ribs *v* are cast on or fastened to the same, as well as circular ribs or flanges *w*, crossing the ribs *v* and forming combined cavities or compartments over the whole inner surface of the retort A.

Into the after end of the retort a stationary hopper, E, is fixed to introduce the bone-black into the retort while revolving. This hopper

is provided with a suitable slide or gate, *d*, to regulate the amount of supply or to stop the same when desired. On the forward end of the retort A a cylindrical cap-piece, D, is attached, provided with openings *a*, having suitable slides or gates, *h*, to open or close the same. The bone-black, after having been washed and cleared from all soluble impurities by water or any other chemical solution, is introduced, through the hopper E, into the retort A, and is prevented from falling or sliding directly through the same on account of the circular flanges *w*. By the revolving of the retort the longitudinal ribs *v* prevent the sliding of the bone-black over the surface and cause the same to be regularly turned over, so as to bring every particle in contact with the heated sides of the retort. From the inclined position of the retort the bone-black will gradually fall from the upper compartments into the next lower one until the same arrives in the cylindrical cap-piece D, where the black is cooled and then drawn off through one of the openings *a*. The circular ribs or flanges *w* prevent, likewise, the moisture from passing over the whole surface of the heated retort, as the same will be retained and evaporated in the upper compartments.

I do not claim, broadly, a revolving horizontal retort; but

What I claim as my invention, and desire to secure by Letters Patent, is--

The arrangement of circular and longitudinal ribs or flanges on the inside surface of a revolving retort, dividing the said surface into compartments, in the manner and for the purpose substantially as specified.

WILLIAM MOLLER.

Witnesses:

HENRY E. ROEDER,
CHAS. MCCARTHY.