E. CLARK.

Parting White Lead.

No. 1,231. Patented July 11, 1839.

Fig. 1.

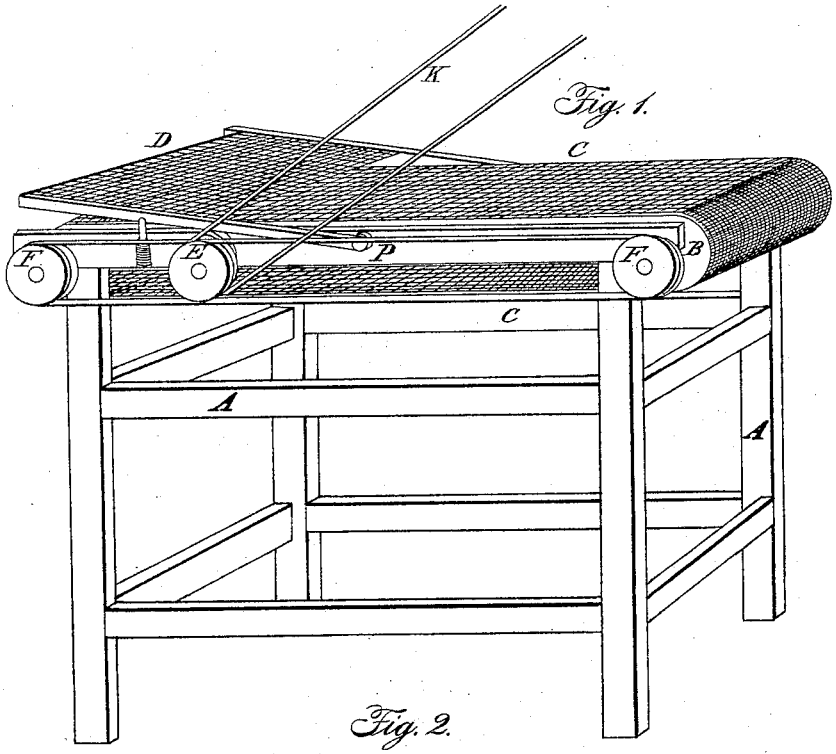


Fig. 2.

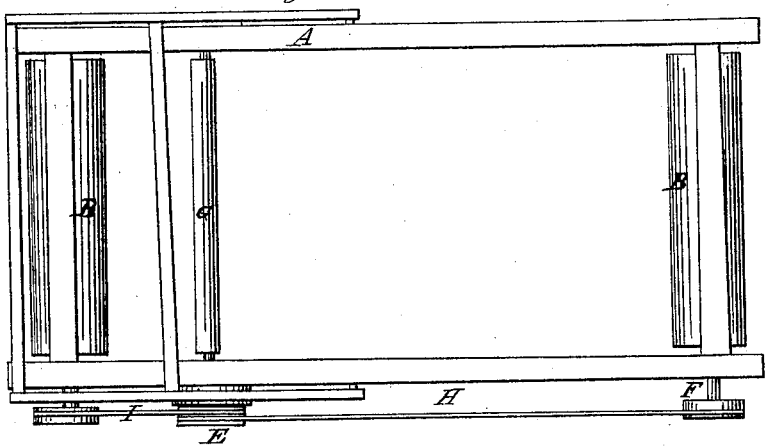
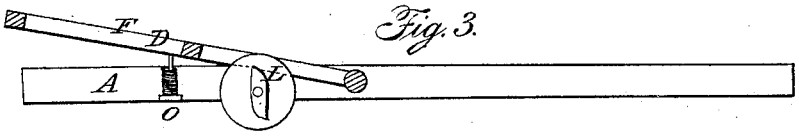


Fig. 3.



Witnesses:

Owen G. Warren.

William C. Collins.

Inventor:

Edward Clark

UNITED STATES PATENT OFFICE.

EDWARD CLARK, OF SAUGERTIES, NEW YORK.

MODE OF SEPARATING THE OXID OF LEAD FROM THE METAL IN THE MANUFACTURE OF WHITE LEAD.

Specification of Letters Patent No. 1,231, dated July 11, 1839.

To all whom it may concern:

Be it known that I, EDWARD CLARK, of Saugerties, county of Ulster, and State of New York, have invented a new and useful Machine for the Purpose of Separating the Corroded from the Uncorroded Lead in the Process of Making the Carbonate of Lead; and I do hereby declare that the following is a full and exact description.

This invention is called "Clark's lead parting machine No. 2." Its nature consists in passing the partially corroded lead on an endless wire or canvas cloth apron under a whipper, the quick and violent operation of which upon it, separates the carbonate of lead from the metallic lead.

To enable others skilled in general machinery to make and use my invention I proceed to describe its construction and operation.

I make a substantial framework somewhat similar to that of a common table frame—but with side and cross bars, as seen in the annexed drawing, which makes part of this specification.

The frame may be five or six feet long and two or three feet wide as I usually build them, or of any desirable dimensions. In each end of this frame work I affix a roller of about ten inches in diameter, more or less, according as wire cloth or any other cloth is used. If the endless apron be of wire, the rollers must be large; if of cloth they may be much smaller. The length of these rollers, marked in the drawings B, will be that of the inside of the frame. Upon the shafts of these rollers are pulleys F (or they may be cogwheels if desirable) to receive and communicate the power from the driver E. The rollers B should rise some two or three inches or less above the frame work. To prevent the sagging or curving of the endless apron, smaller rollers are placed at appropriate intervals under it to support the weight of the lead. (See G, Figure 2.)

A frame work about two feet long, and sufficiently wide to play freely over the sides of the main frame work of the machine, is furnished on its underside, with whippers of wire, or of wire netting, and at one end is attached by means of small bolts, to the main machine at the point P.

D represents this frame work for the support of the whippers. The sides, which are secured by the bolts to the main machine, are sometime curved downward so as to allow the whole surface of the wires or wire netting, to strike simultaneously on the endless cloth.

A shaft and roller G, Fig. 2, passes across the machine under the whipper, and is furnished with a cam at each end, L, Fig. 3. The design of these cams is by this rotary motion to raise the whipper frame work. The spring O, Fig. 3, is for bringing the whipper down with some force upon the endless cloth.

Outside the cam is pulley E which receives its motion and power from the engine by means of the band K. There are other bands H and I, connected with E, for turning the rollers B and the endless apron.

When the machine is put in motion, the partially corroded lead is placed on the endless apron and conveyed under the whipper and the carbonate of lead or corroded lead is soon separated from the metal, while the latter is delivered by means of the endless cloth at the opposite end of the machine, to be again subjected to the corroding process. The entire machine is inclosed, to confine the dust, and prevent its deleterious effect on the health of the workmen.

The following is a more particular description of the drawing.

Fig. I, perspective view; Fig. II, plan; Fig. III, the arrangement of cam and whipper.

A, the frame; B, rollers for the endless apron; C, endless apron, here represented of wire cloth; D, the whipper of coarse wire cloth; E, driving pulley; F, pulleys upon the rollers; G, one of the rollers for sustaining the endless apron; H, band connecting E with F; I, band for similar purpose; K, main band; L, the cam; O, the spring; P, hinging point of the whipper rods.

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

The separation of the corroded parts of the lead from the metal during the process of manufacturing white lead, by means of the apparatus herein described consisting of the endless cloth C, passing over the rollers B, B, in combination with the spring whipper D, moved by the cam L, the whole being arranged as herein specified.

EDWARD CLARK.

Witnesses:

CHARLES BRACKETT,

EDWD. V. R. CREHORE.