

(20.)

D. S. Barrett's
Machine for Drawing Lime from the Kiln.
No. 122,550. *fig. 1.* Patented Jan. 9, 1872.

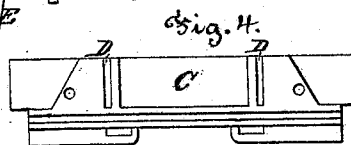
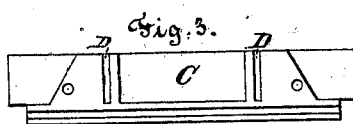
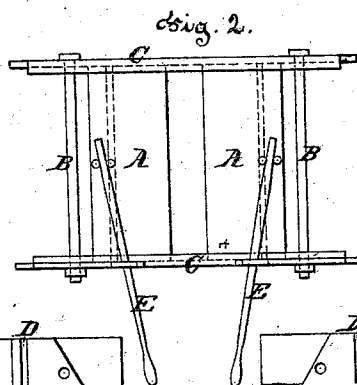
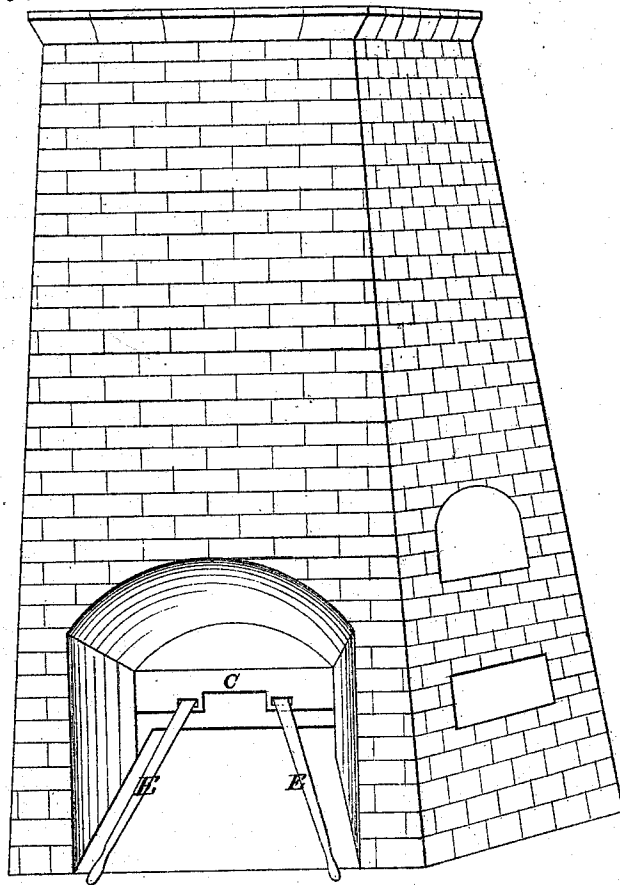
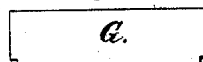


fig. 5.

Witnesses.

Samuel R. Allen.
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UNITED STATES PATENT OFFICE.

DANIEL T. BARRETT, OF PORT BYRON, ILLINOIS.

IMPROVEMENT IN LIME-KILNS.

Specification forming part of Letters Patent No. 122,550, dated January 9, 1872.

SPECIFICATION.

I, DANIEL T. BARRETT, of Port Byron, in the county of Rock Island and State of Illinois, have invented a certain Appliance or Machine for Drawing Lime from Lime-Kilns, of which the following is a specification:

In the drawing, Figure 1 is a perspective view of a kiln, provided with my improved lime-discharging apparatus. Fig. 2 is a plan view of the apparatus and the frame thereof. Figs. 3 and 4 are side elevations of the grooved bars in which the slides work; and Fig. 5, a side view of one of the horizontal cross-bars of the frame.

My invention relates to an improved arrangement of sliding plates in connection with grooved frame-bars, as hereinafter described.

C C are front and back horizontal bars, cast with grooves for the reception of the ends of horizontal sliding doors A A. The front horizontal bar C, perforated at lower side of the same, opposite the outside of horizontal sliding doors A A, as seen in Fig. 2, for the reception of levers E E, and to support and serve as a fulcrum therefor. A A are the horizontal sliding doors with lugs cast upon them at or near the center of the outside of each for the reception of levers E E, said doors fitted into the grooves of horizontal bars C C by working-levers E E to the right and left. The horizontal doors A A are moved and lime is drawn

in quantities limited as desired, and by reversing the action of levers E E the doors A A are closed. The horizontal grooved bars C C should be made of heavy iron castings, and at both ends let firmly into the masonry of the walls of recess of kiln, as seen in Fig. 1, and secured by heavy bolts B B, as seen in Fig. 2. The horizontal sliding doors should also be made of heavy iron castings, all of sufficient weight to support the contents of the kiln. Cross-bars or plates G are arranged with their ends fitting in the grooves D D of the bars C C, so that a square or rectangular opening is formed through which to deliver the lime. It will be observed that the inner ends of the levers E E connect with the plates A A and work in the clear space formed outside the bars G.

I do not claim pivoted or movable plates for discharging lime-kilns; but

What I do claim, and desire to secure by Letters Patent, is—

The side bars C C, provided with horizontal and vertical grooves, the cross-bars G, the rectangular sliding plates A A, and levers E E, all constructed, arranged, and operating as shown and described.

DANIEL T. BARRETT.

Witnesses:

S. W. ALLEN,
S. R. ALLEN.

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