

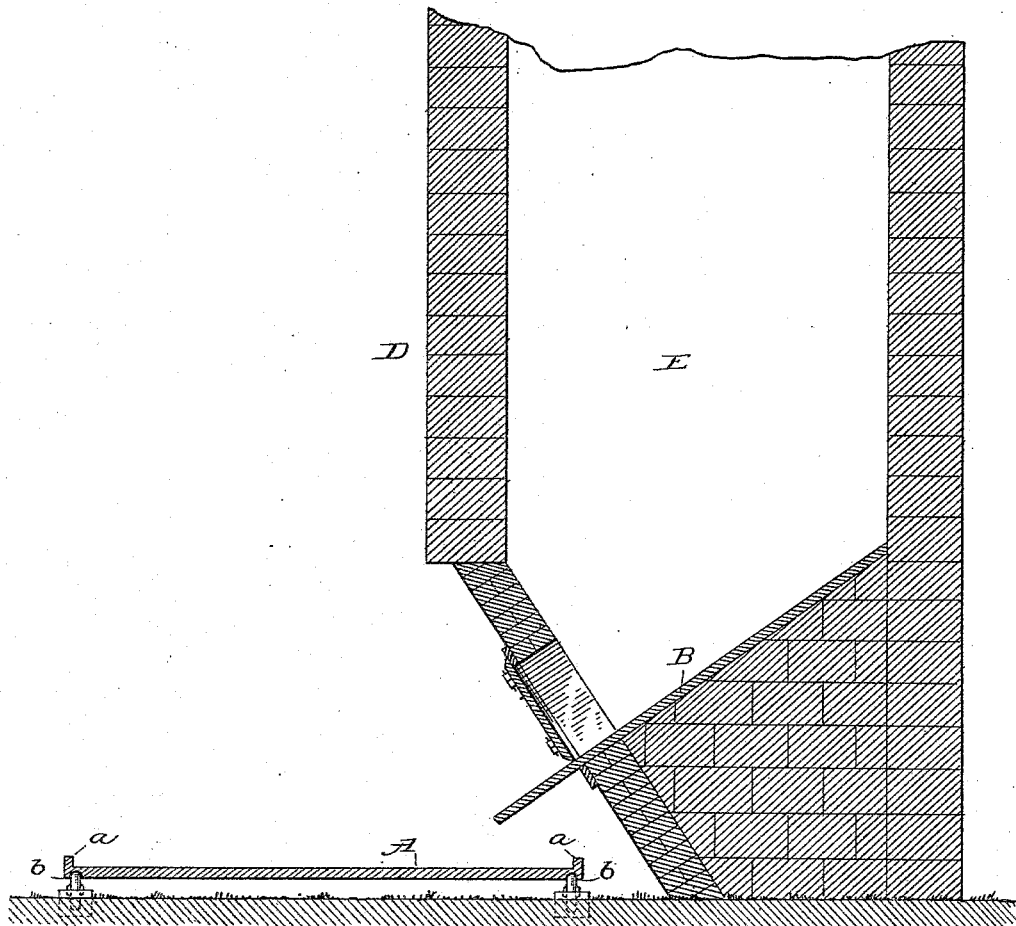
(No Model.)

S. F. ALLEN.

LIMEKILN.

No. 301,421.

Patented July 1, 1884.



Attest:

Walter Donaldson  
J. L. Middleton

Inventor  
Samuel F. Allen  
by Jayce & Spear

Attys.

# UNITED STATES PATENT OFFICE.

SAMUEL F. ALLEN, OF THOMASTON, MAINE.

## LIMEKILN.

SPECIFICATION forming part of Letters Patent No. 301,421, dated July 1, 1884.

Application filed December 7, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL F. ALLEN, of Thomaston, in the county of Knox and State of Maine, have invented a new and useful Improvement in Limekilns; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention is an improved hearth for limekilns; and it consists in replacing the ordinary fixed hearth with a revolving hearth adapted to receive the lime as it falls from the kiln and carry it to one side for removal, thereby accelerating the work and preventing clogging.

Heretofore, as far as I am aware, the fixed hearth has been universally used, and great trouble has been experienced in drawing the lime with such hearths, as the lime falls upon the hearth in a pile, blocking the passage through which it was discharged, necessitating the constant handling of the mass in order to clear the way for the constantly-discharging material. The work of "drawing" or discharging is therefore necessarily slow, and the work is laborious and unpleasant.

The object of my invention is, therefore, to obviate these difficulties, hitherto experienced in this class of labor, by substituting for the fixed hearth a circular revolving hearth or turn-table projecting beneath the kiln or the discharging-aperture, whereby the lime may be discharged upon it, and by reason of its revolution be carried away to one side as fast as it is deposited, and may then be readily removed.

In the drawing I have shown a section of a limekiln with one form of revolving table—the form best known to me.

In the drawing the kiln is represented at D and the barrel thereof at E. A chute or incline, B, is provided at the aperture in the bottom or lower part of the kiln to direct the lime as it is drawn out. Directly beneath this chute I arrange my revolving hearth to receive the lime as it falls from the chute. This hearth is marked A, and is composed of any suitable material, made preferably in circular form. It is provided with an annular flange, *a*, upon its upper edge to keep the lime from scattering. It rests upon a series of rollers placed in suitable bearings at proper intervals beneath it, and working in a groove, *b*, on the under face of said hearth, which serves to keep the hearth in position. In this way it is evident that the hearth may be revolved as the lime is drawn out, and the hearth thus kept clear and the aperture free, as, the lime being constantly removed from before the opening, no clogging is possible.

I wish it to be distinctly understood that I do not limit myself to the precise construction described, as numerous devices may be arranged, perfectly obvious, by which the hearth could be revolved either by hand or power.

What I do claim is—

A hearth for limekilns adapted to be revolved, substantially as described, and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

S. F. ALLEN.

Witnesses:

T. M. RHODES,  
WILLIAM E. SPEAR.