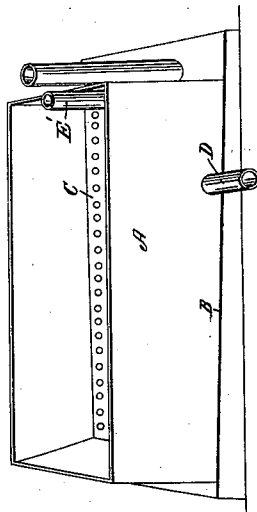
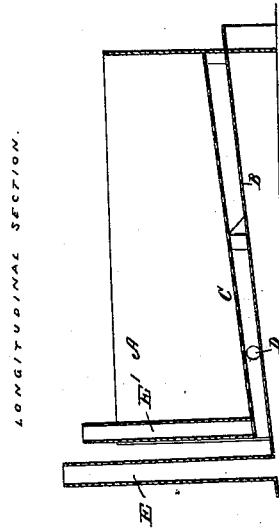


E. WILLIAMS.

Ash Leach.

No. 559.

Patented Jan'y 9, 1838.



UNITED STATES PATENT OFFICE.

ELIJAH WILLIAMS, OF WESTFIELD, NEW YORK.

APPARATUS FOR LEACHING ASHES.

Specification of Letters Patent No. 559, dated January 9, 1838.

To all whom it may concern:

Be it known that I, ELIJAH WILLIAMS, of Westfield, county of Chautauqua, and State of New York, have invented a new and useful Improvement in Apparatus for Preparing and Leaching Ashes by Means of a Calefactory Leach, and that the following is a full and exact description thereof, reference being had to the annexed drawings of the same, making part of this specification.

Crude ashes are to be boiled about one hour in a sheet iron or copper boiler or calefactory leach A, the manner of constructing and using which is the following: The boiler or leach A, should be made of sheet iron or copper, or it may be cast; the sides may be constructed of plank; the bottom must be made of iron or copper and set on an arch B, for use; the boiler or leach should be about twelve feet long, four feet wide and two feet deep, with a strainer C, over the whole surface placed about four inches from the bottom; and a tube D, leading from the cavity under the strainer for the purpose of letting off the lye; also a safety tube E, leading from the same cavity

up and out at the top for the purpose of letting off the steam and doubling over the weak lyes; the size of the machine may be increased or diminished as required.

The manner of using it is as follows; fill the boiler about half full of water or weak lyes; make a fire in the arch and cause the water to boil; now put in the ashes and continue the boiling and doubling until the lye is of sufficient strength to draw off; now constantly apply water until the strength is entirely out of the ashes; this calefactory leach may be used to good advantage for boiling and leaching tan bark, or for other purposes.

I do not claim the leaching by means of boiling water, nor do I claim the use of a strainer upon which to place the ashes to be leached. But

What I do claim is—

The use of a boiler like that herein described, furnished with a safety tube, for the purposes set forth.

ELIJAH WILLIAMS.

Witnesses:

ERASTUS R. SOUTHWICK,
ADIEL S. MOSS.