

J. CUDDY.

Making White Lead.

No. 105,431.

Patented July 19, 1870.

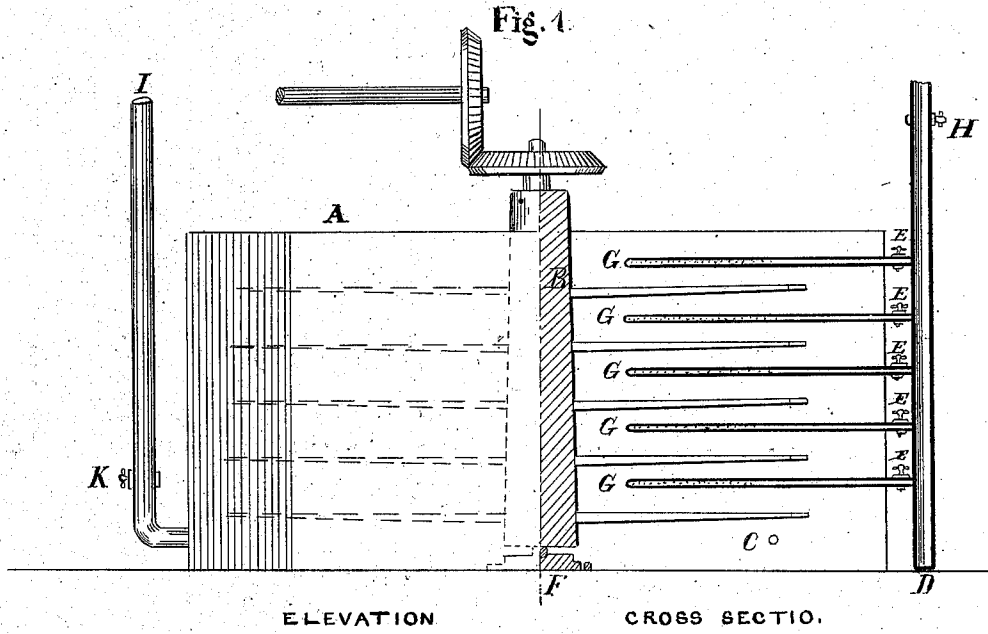
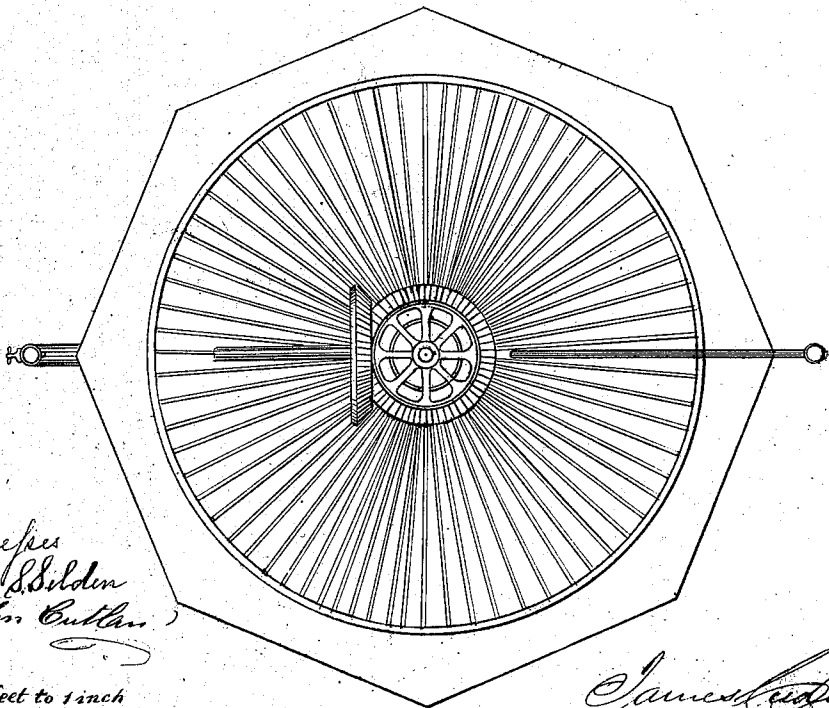


Fig. 2.



Witnesses  
Geo. S. Selden  
John Cutler

Scale: 2 feet to 1 inch

James Cuddy  
Inventor.

# United States Patent Office.

JAMES CUDDY, OF PITTSBURG, PENNSYLVANIA.

Letters Patent No. 105,431, dated July 19, 1870.

## IMPROVEMENT IN THE MANUFACTURE OF WHITE LEAD.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, JAMES CUDDY, of Pittsburg, in the State of Pennsylvania, have invented an Improvement in the Manufacture of White Lead; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists in an economical and rapid method of converting metallic lead into white lead.

My invention further consists in a revolving table or set of tables, or shelves, attached to an upright revolving shaft within a chamber, and upon which thin sheets of metallic lead are spread; and of an apparatus for sprinkling vinegar over the same during the process of corrosion and conversion into white lead.

In order to enable others to practice my invention, I will now proceed to describe a mode of carrying the same into effect, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 is an elevation and cross-section of an apparatus which may be used for carrying my invention into effect.

Figure 2 is a ground plan of the same.

A is a chamber, built of brick, stone, wood, or any other suitable material, with a large door that is used when filling or emptying the same, and small doors that are occasionally opened when tests, to show the progress of corrosion, are required to be taken out.

B is a vertical revolving shaft, with one or more shelves or tables made of slats of wood, attached at fixed distances, upon which are spread the sheets of metallic lead; they are then oxidized by a jet of steam from the pipe C, when they are ready to receive a shower of vinegar from the pipe D, through the stop-cocks E E E E, as shown in the drawing.

The shaft B stands upon a pivot which is set into a step, F, and which may be driven by miter, bevel, or spur gearing, or any other mechanical arrange-

ment is now thrown into gear, and commences turning round, when the stop-cocks E E E E are opened, and through the horizontal pipes G G G G, (which are perforated with small holes throughout their length, and are closed at the ends,) a light shower of vinegar is thrown equally over the lead upon each or all of the shelves, while the shaft continues revolving, and the lead upon one or more shelves can thus be treated with its required portion of vinegar, or the contents of the whole of the shelves can be sprinkled simultaneously.

The lead upon the shelves or tables having received the shower of vinegar, the revolving shaft is thrown out of gear, and a supply of carbonic-acid gas is driven into the chamber by a blast-cylinder, or any of the usual mechanical means, through the pipe K, and these operations are continued until the corrosion of the metallic lead is completed.

Whenever the contents of the shelves again require to be sprinkled with vinegar, the shaft is thrown into gear and started revolving, and when the lead has been sufficiently moistened then thrown out of gear as before.

I do not claim any particular form of chamber. It may be square, circular, hexagonal, or octagonal, but I prefer the latter as being of a good shape for building in brick, which I consider the best material for this purpose.

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

The apparatus above described for sprinkling the vinegar on the sheets of lead, in combination with the horizontal revolving shelves or tables, substantially as and for the purpose described.

JAMES CUDDY.

Witnesses:

GEO. S. SELDEN,  
JOHN OUTLAN.