## United States Patent Office.

## LEONARD WATROUS, OF MYSTIC RIVER, CONNECTICUT.

Letters Patent No. 109,475, dated November 22, 1870.

## IMPROVEMENT IN ELECTROPLATING WITH NICKEL THE METALLIC PARTS OF COTTON GINS.

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, LEGNARD WATROUS, of Mystic River, in the county of New London and State of Connecticut, have invented a new and useful Improvement in Cotton-Gins; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same.

The object of this invention is to prevent the saws

and ribs of the saw of a cotton-gin from corroding from dampness or moisture; and
It consists in depositing on the surface thereof a coating of nickel (preferably, but other metal may be used) by means of the electric or galvanic-battery, or have no given by the surface. by any similar process.

I do not confine myself to any particular mode or

process for this purpose.

Cotton-gin cylinders are frequently exposed to the weather, and they attract moisture from the cotton also, and frequently corrode to such a degree between the collars as to render the cylinder unfit for repairs

The nickel coating prevents oxidization, and preserves the saw as well as the ribs between the saw for an indefinite length of time. The nickel coating is so

hard that it resists the wearing action of the fiber,

and keeps the sides of the saws smooth and free from rust, although the gin may be exposed to moisture by use or careless exposure to the weather.

In the ginning of cotton it is quite important that the saw-teeth should be smooth. This condition is secured by the nickel coating, as preventing corrosion of the teeth while the gin is standing idle, or when the saws are exposed, as before stated, preserves the teeth smooth and in working order.

teeth smooth and in working order.

By my process the saw-teeth as well as the plate are most effectually protected, and ill usage and ex-

posure provided for.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent-

A cotton-gin, having the metallic parts thereof nickel-plated, as and for the purpose described.

The above specification of my invention signed by me this 29th day of June, 1870.

LEONARD WATROUS.

Witnesses:

EDWIN WATROUS, D. W. CLIFT.