## United States Patent Office.

ROSSITER OWENS, OF OLEAN, NEW YORK, ASSIGNOR OF ONE-HALF TO HIM-SELF AND DAVID S. ABBOTT, OF SAME PLACE.

## PROCESS OF TREATING LEATHER.

SPECIFICATION forming part of Letters Patent No. 536,966, dated April 2, 1895.

Application filed May 7, 1894. Serial No. 510,396. (No specimens.)

To all whom it may concern:

Be it known that I, Rossiter Owens, of Olean, in the county of Cattaraugus and State of New York, have invented a new and Improved Process of Treating Leather, of which the following is a full, clear, and exact description.

It is generally understood that oak tanned sole leather is better and worth more in the narket than hemlock sole leather, the cost of the increased value of the oak tanned leather being due perhaps as much to its better appearance as to its actual worth.

The object of my invention is to produce a very simple and inexpensive process by which hemlock leather may be made substantially equal in appearance to the leather tanned with oak bark.

In carrying out my invention I incidentally treat the leather so as to give it an increased weight, and this increase in weight pays for the cost of treatment.

To these ends my invention consists of a process which will be hereinafter described and claimed.

In treating the leather I take the dry sides of leather, after they have been through the usual tanning process, and place them in an ordinary drum wheel with a quantity of 36 strong gambier liquor of about 40° strength and revolve the wheel for a few minutes, or until the liquor is absorbed by the dry leather. The gambier liquor gives to the leather increased weight, and after it has absorbed the 35 liquor it is placed for a few minutes in a solution of sal soda formed by dissolving one hundred and twenty pounds of sal-soda in five hundred and fifty gallons of water, which solution prepares it for the next operation, which 40 consists in bleaching the leather in a solution of oxalic acid, formed by dissolving sixty pounds of oxalic acid in five hundred and fifty l

gallons of water after which it is thoroughly washed in clean cold water and then dried, when it has a beautiful oak color which is 45 more or less light according to the strength of the oxalic acid solution and the length of time it has been subjected to the acid.

By treating the leather with the sal-soda solution, the sal-soda contained in the leather, 50 will in a measure neutralize the action of the oxalic acid on the leather and thereby prevent it from injuring the quality of the leather.

In carrying out my process canaigre extract may be used instead of gambier liquor; with 55 the same result, and I reserve to myself the right to use any suitable liquor which will give the increased weight to the leather.

While I prefer to treat the leather with gambier or other suitable liquor for the pur- 60 pose set forth, yet such treatment can be dispensed with if desired.

Having thus described my invention, I claim as new and desire to secure by Letters. Patent—

1. The herein-described process of treating leather, which consists in subjecting it to a solution of sal soda and then bleaching it in oxalic acid.

2. The herein-described process of treating 70 leather, which consists in subjecting the leather to a solution of sal soda, bleaching the leather in oxalic acid, and then washing the leather in water.

3. The herein-described process of treating 75 leather, which consists in subjecting the leather to a solution to increase its weight, then treating it with sal soda, then bleaching it in oxalic acid, and finally washing it with water.

ROSSITER OWENS.

Witnesses:

HUGH A. COBB, GEO. D. THURBER.