

# UNITED STATES PATENT OFFICE.

JOSEPH TOWNSEND, OF GLASGOW, COUNTY OF LANARK, SCOTLAND.

## DEPILATING AND BATING.

SPECIFICATION forming part of Letters Patent No. 381,730, dated April 24, 1888.

Application filed June 7, 1887. Serial No. 240,553. (No specimens.) Patented in England August 28, 1886, No. 10,987; in Germany June 4, 1887, No. 42,526; in Belgium June 8, 1887, No. 77,759; in Canada June 24, 1887, No. 27,042, and in Austria-Hungary October 21, 1887, No. 22,808 and No. 49,093.

*To all whom it may concern:*

Be it known that I, JOSEPH TOWNSEND, a subject of the Queen of Great Britain and Ireland, and a resident of Glasgow, in the county of Lanark, Scotland, have invented certain Improvements in Treating Hides or Skins, (for which I have obtained British patent, dated August 28, 1886, No. 10,987; Germant patent, No. 42,526, June 4, 1887; Belgian patent, No. 77,759, June 8, 1887; Canadian patent, No. 27,042, June 24, 1887, and Austro-Hungarian patent, No. 22,808, and No. 49,093, dated October 21, 1887,) of which the following is a specification.

My invention has for its object the treatment of hides or skins in an improved manner; and in carrying it out a compound or mixture is made of aluminate of soda or aluminate of potash containing by preference fifty per centum of soda, or an equivalent quantity of potash, and forty per centum of alumina and one gallon of water to each pound of aluminate. The hides or skins are steeped in the mixture or are impregnated with it in any suitable manner, and after a few days of this treatment the hair can be removed. The hides or skins, having by preference been washed with water, are next placed in a solution containing from two to four per centum of boracic acid and are again by preference washed with water. The hides or skins may afterward be tanned in the ordinary way, or they may be otherwise treated.

Instead of treating the hides or skins with boracic acid alone after they have been treated with aluminate of soda or aluminate of potash, they may be treated with a solution containing boracic acid and sulphate of alumina or other soluble salt of alumina, and before treating the hides or skins with aluminate of soda

or aluminate of potash, or after so treating them, silicate of soda or silicate of potash may be used of a strength of about 18° Twaddell. When using aluminate and a silicate, however, it is preferable to steep the hides or skins for some time in the silicate alone, and after draining to steep them in the aluminate, then to wash in water, and after removing the hair to steep in the solution containing boracic acid and a salt of alumina.

I claim as my invention--

1. As an improvement in the treatment of hides or skins, the mode herein described of preparing them for tanning, said mode consisting in subjecting the hides or skins to the action of aluminate of soda or of potash for the removal of the hair, substantially as set forth.

2. As an improvement in the treatment of hides or skins, the mode herein described of preparing them for tanning, said mode consisting in first steeping the hides or skins in aluminate of soda or potash and unhairing them, and then steeping them in a solution containing boracic acid.

3. As an improvement in the treatment of hides or skins, the mode herein described of preparing them for tanning, said mode consisting in first steeping the hides in aluminate of soda or of potash and unhairing them, and then treating them with a solution containing boracic acid and a salt of alumina.

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

JOSEPH TOWNSEND.

Witnesses:

EDMUND HUNT,  
DAVID FERGUSON.