

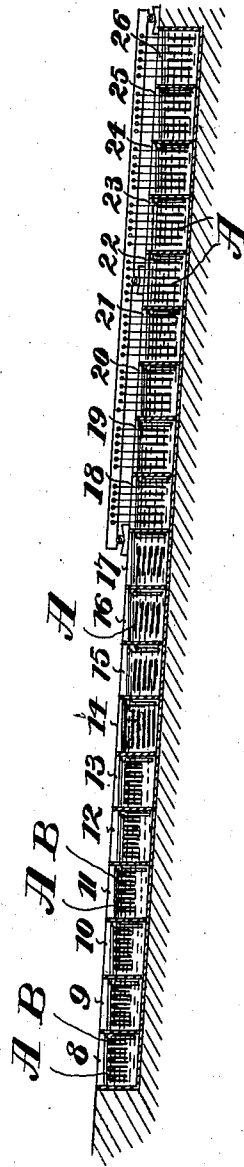
J. FORSTER.

TANNING.

APPLICATION FILED APR. 29, 1911.

1,028,563.

Patented June 4, 1912.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH FORSTER, OF WARRINGTON, ENGLAND.

TANNING.

1,028,563.

Specification of Letters Patent.

Patented June 4, 1912.

Application filed April 29, 1911. Serial No. 624,024.

To all whom it may concern:

Be it known that I, JOSEPH FORSTER, a subject of the King of Great Britain and Ireland, and a resident of Warrington, in the county of Lancaster, England, have invented new and useful Improvements in Tanning, of which the following is a specification.

This invention primarily relates to the treatment of hides or butts in the process of tanning, the process preferably being carried out in pits so relatively arranged that the tanning liquor flows from one to another throughout a descending series, the uppermost pit of the series having the strongest liquor which becomes weaker and weaker as it successively flows through lower pits until it emerges in a spent condition from the lowest. The butts or hides to be tanned are first placed in the lowest pit and are moved successively through the ascending series of pits as the tanning proceeds until they reach the highest.

The accompanying drawing illustrates how this invention may be carried into effect.

It illustrates a horizontal vertical section of a series of tanning pits disposed according to this invention.

Numerals 8 to 26 indicate a series of pits which rise progressively throughout the series from 26 the lowest to 8 the highest. Each pit overflows into the next lower one at any required and adjustable rate so that liquid which is put into the highest pit eventually passes into and finally flows out of the lowest pit. Preferably the pits are so formed or provided at their outlet ends that the overflow is from the bottom of one pit to the top of the next lower one.

The butts properly treated washed and prepared for tanning are first put in the lowest pit 26, which, as already explained, contains the weakest or about spent liquor, owing to such liquor in its downward pas-

sage through the series of pits having been exhausted by the butts in the higher pits. As the tanning proceeds the butts are placed successively at proper time intervals in the higher pits meeting in each a stronger liquor than they had been subjected to before, this treatment being continued until the butts are about tanned through, which, in the series of pits illustrated has happened in pit No. 18. From 26 to 18 the butts are preferably suspended by or from their upper edges and are agitated in the manner and by the means described in my British patent specification No. 22,103 of 1896. In pits 17 to 14 inclusive the butts are treated in the flat or horizontal and superimposed condition to take out any wrinkles or creases. After being sufficiently treated in the flat or horizontal condition the butts are then passed through the rest of the series of pits in which they are "dusted" with, or have sprinkled upon them, solid tanning material. During such "dusting" the butts A are hanging saddlewise over sticks B, flesh sides outward, so that the grain sides cannot be injured by coarse ground tanning material.

What I claim is:—

The process of tanning which consists in progressively passing the butts through a series of ascending tan pits each of which overflows into the next lower pit, such butts being first treated while suspended from their edges, later in the flat or superimposed condition, and finally by being dusted while hanging saddlewise flesh side outward, substantially as hereinbefore described.

In witness whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOSEPH FORSTER.

Witnesses:

WILLIAM GEO. HEYS,
JOHN O'CONNELL.