## United States Patent Office.

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## PROCESS OF TANNING HIDES.

SPECIFICATION forming part of Letters Patent No. 564,106, dated July 14, 1896.

Application filed November 19, 1895. Serial No. 569,432. (No specimens.)

To all whom it may concern:

Be it known that I, John Charsley Rogers, of Cuero, in the county of Dewitt and State of Texas, have invented a new and useful Improvement in Processes of Tanning Hides, of which the following is a specification.

The object of my invention is to provide an improved process of tanning hides in an expeditious and economical manner, and to produce a fine quality of leather; and it consists

in the steps hereinafter named.

If the hides are green, they are trimmed and rinsed, but if dried or what is known as "flint" 15 they are to be first soaked and then trimmed. The hides are then limed in the usual way for ten to fifteen days, and when in proper condition they are taken out, soaked all night in water, and after being haired are again 20 rinsed in cold water. The hides are then ready to be "bated," which is effected in three operations. The first part of the "bate" is a weak solution of sulfuric acid in water. The hides are placed in this for a period of time 25 varying from five to thirty minutes, after which the surplus flesh is sufficiently plumped and softened to be easily removed with a fleshing-knife. This does away with and takes the place of the usual fleshing and lime flesh-30 ing and breaking. The second part of the bate consists of a solution in which every twelve gallons of water has added to it two table-spoonfuls of soap-powders and enough floating soap to give the water the milky cast 35 of soapsuds. The hides are rinsed in this from three to five minutes, and when taken from this are placed in cold water for twentyfour to forty-eight hours. They will then be slick and soft, and are then taken and worked 40 over on a table with a steel "slick" on the grain side to remove any fine hair and murrain. The hides are then ready for the third part of the bate, which toughens them, giving them a clear slick appearance on the grain, 45 and bringing the hides into a gristle-like consistency. This bate consists of a solution of salt of a strength of from 50° to 70° Barkometer test. In this the hides are placed for from five to thirty minutes, and after being so taken out are allowed to thoroughly drain before going into the tanning solution. The

hides are next placed in the tanning-vats separately and covered with "black-jack" bark, and then a solution poured over them composed of alum and water of a strength of 40° 55 until they are fully covered.

In fourteen days the hides are thoroughly tanned without any changing of barks or rais-

ing of hides.

The hides after being taken from the tan-60 ning liquor are rinsed in cold water, and may be leached in salt water for five to twenty minutes, or may be leached in a weak solution of sulfuric acid, or may be simply scoured with water without leaching. All hides after 65 being leached are scoured and hung out to dry.

Having thus described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is—

1. The process herein described of tanning hides consisting in subjecting the "limed" and "haired" hides to a threefold bating process; the first bate being a weak solution of sulfuric acid to soften and plump the 75 flesh, and then removing the flesh; the second bate being of soapsuds, followed by soaking in cold water and "slicking;" the third bate being a solution of salt to toughen the hides; then packing the hides in the tanning-vats 80 with bark and covering them with a solution of alum and water substantially as and for the purpose described.

2. The process herein described of tanning hides consisting in subjecting the limed and 85 haired hides to a threefold bating process; the first bate being a weak solution of sulfuric acid to soften and plump the flesh, and then removing the flesh; the second bate being of soapsuds, followed by soaking in cold 90 water and slicking; the third bate being a solution of salt to toughen the hides; then packing the hides in the tanning-vats with bark and covering them with a solution of alum and water, then leaching the hides in 95 salt water, or its described equivalent, then scouring and drying substantially as and for

the purpose described.

JOHN CHARSLEY ROGERS.

Witnesses:

WM. WAGNER, JOHN C. MAYNE.