## United States Patent Office.

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## TANNED SKIN.

SPECIFICATION forming part of Letters Patent No. 379,726, dated March 20, 1888.

Application filed February 11, 1888. Serial No. 263,684. (No specimens.)

To all whom it may concern:

Be it known that I, VICTOR RIVIÈRE, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Tanned Skins; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appearance to make and use the same.

My invention has relation to the treatment of hides and skins after they have been tanned with vegetable tanning-matter and before they have been colored; and the object is to render the skins permanently soft and flexible and water-proof, and at the same time leave a mordant in the skin to combine with subsequent coloring-matter used; and to these ends the novelty consists in the process and the product of the same, as will be hereinafter more fully described, and particularly pointed out in the claims.

In carrying out my invention I first make a neutral or basic solution, of one or one and a balf degree Baumé, of the sesquioxide of chromium, in a suitable vat, and add an excess of the salt, so as to always have three or four inches of the excess in the bottom of said vat. I now take the skins, fresh from the tan-vat, and wash them in warm water, to which has been added an alkali, to neutralize the acid in tanning and to render the skins neutral. I then suspend the tanned skins in the chromium solution from five to fifteen hours, or until the skins

have had deposited in them a sufficient quan- 35 tity of the finely-divided sesquioxide of chromium, as the organic nature of the leather has the property of absorbing the oxide in solution, setting the acid free and depositing the salt in the leather, which forms a mordant for the 40 subsequent coloring process, and so changes the organic nature of the leather as to render it permanently soft and flexible and at the same time water-proof. The skins may now be removed and colored in the usual manner. 45 The sesquioxide solution is then agitated, so that the free acid will combine with a portion of the excess of salt in the bottom and the whole allowed to settle previous to a fresh batch of skins being introduced.

What I claim is—

1. As a new article of manufacture, a skin previously tanned with vegetable tanning-matter and impregnated with the oxide of chromium, as set forth.

2. As a new article of manufacture, a skin previously tanned with vegetable tanning-matter, having its pores impregnated with oxide of chromium and dyed with a color partly combined with the chromium oxide as a mor- 60 dant, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

VICTOR RIVIÈRE.

Witnesses:

HENRY F. GÖKEN, H. J. Ennis.