

UNITED STATES PATENT OFFICE.

JEAN ANTOINE SCHWEITZER, OF STAINS, FRANCE.

PROCESS OF MANUFACTURING ARTIFICIAL WHALEBONE.

SPECIFICATION forming part of Letters Patent No. 582,960, dated May 18, 1897.

Application filed April 18, 1895. Serial No. 546,261. (Specimens.) Patented in Belgium March 25, 1893, No. 104,038; in France July 13, 1894, No. 240,022, and in England July 14, 1894, No. 13,596.

To all whom it may concern:

Be it known that I, JEAN ANTOINE SCHWEITZER, a citizen of France, residing at Stains, in the Republic of France, have invented certain new and useful Improvements in Processes of Manufacturing Artificial Whalebone, (for which Letters Patent were granted to me in France, No. 240,022, dated July 13, 1894; in Great Britain, No. 13,596, dated July 14, 1894, and in Belgium, No. 104,038, dated March 25, 1893,) of which the following is a specification.

This invention has reference to a new and improved process of manufacturing artificial whalebone from skins. Heretofore artificial whalebone was made from raw skins after the same had been treated with lime and the hair removed by fermentation or treatment with sulfids. These so-prepared skins lose a considerable degree of their elasticity and do not give good results in the manufacture of artificial whalebone.

To overcome this objection, my invention consists of treating skins so as to render them capable of use as artificial whalebone, and before any other treatment of the skins is resorted to, by first shaving off the hair, next immersing the skins into a bath of potassium bichromate, then stretching and drying the skins without cleaning them in any way, (as by washing,) then dipping the same into a bath of sodium or calcium bisulfite, again stretching and drying the skins, and lastly cutting them into strips, which are used for imitation whalebone. Both of the baths are cold, the first bath consisting of ten per cent. of potassium bichromate and ninety per cent. of water, and the second consisting of ten per cent. of bisulfite of sodium or calcium and

ninety per cent. of water. The skins remain 40
in the first bath from fifteen to twenty minutes and in the second from forty-eight to seventy-two hours. As stated, the hair is simply shaved off and not pulled or torn out 45
of the skins, and this is done so as not to destroy the nerves in the skin. By my treatment of the skins the gelatin and fibrine are preserved in the skin, and thereby a greater permanency and elasticity imparted to the skins. When subjected to test by cooking, 50
not a single atom of gelatin is removed from the skins treated as described, and they can even remain in water for a great length of time without putrifying. Skins treated by this process assume an olive-green color, are 55
quite stiff, cannot become soft, and hence they retain a high degree of elasticity and they do not change either their structure or condition, so that thereby a very close imitation to natural whalebone is obtained. 60

Having thus described my invention, what I claim is—

The herein-described method of making artificial whalebone from skins, consisting in first shaving off the hair, then immersing the 65
skin in a bath of potassium bichromate, then stretching and drying the skins, then immersing them in a bath of sodium or calcium bisulfite and finally stretching and drying the skins, substantially as set forth. 70

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

JEAN ANTOINE SCHWEITZER.

Witnesses:

CHARLES F. THIRION,
DAVID T. S. FULLER.