

UNITED STATES PATENT OFFICE.

GUSTAV SACHSENROEDER, OF BARMEN-UNTERBARMEN, GERMANY.

PROCESS FOR MANUFACTURING ARTIFICIAL PARCHMENT.

No. 821,434.

Specification of Letters Patent.

Patented May 22, 1906.

Application filed January 27, 1906. Serial No. 298,216.

To all whom it may concern:

Be it known that I, GUSTAV SACHSENROEDER, a subject of the Emperor of Germany, residing at Barmen-Unterbarmen, in the Province of Rhenish Prussia and German Empire, have invented new and useful Improvements in Processes for Manufacturing Artificial Parchment, of which the following is a specification.

The well-known properties of parchment-paper of transparency and capability of readily absorbing moisture are for many uses objectionable. For this reason, in order, for instance, to overcome transparency, the already parchmented paper has been conducted through an aqueous solution of a suitable metallic salt, and then, in order to produce from this a precipitate in the parchment, through a dilute acid or through a solution of a suitable salt. This procedure, however, is a troublesome one, and the product though clouded is by no means perfectly opaque.

The subject of my invention is a process by means of which there can be manufactured in an extremely simple manner not only a parchment which is perfectly opaque, but also one which is opaque and at the same time incapable of absorbing moisture or one which, though transparent, does not absorb moisture.

The new process consists, essentially, in adding to the parchmenting-bath insoluble very finely-divided agents, either elutriated or obtained by precipitation, such as metallic salts, metallic oxides, metal soaps, emulsified paraffin, or mineral oils or emulsions of paraffins or mineral oils in conjunction with substances in a state of fine division. If, for example, barium sulfate is added to the parchmenting-bath, the raw parchment material on being introduced into the parchmenting liquid absorbs simultaneously with the latter the barium sulfate, so that the fibers of the material to be parchmented become enveloped by the same. In this man-

ner there can be introduced into material a relatively large quantity of the opaqueness-promoting barium sulfate or whatever substance has been added to the bath. An intimate and permanent union of the incorporated substances with the parchment-paper is also effected, since the parchment-paper coming from the parchmenting liquid in the course of manufacture is of a sticky character. According to the precise agent added, a white or colored opaque parchment is produced. The addition of metal soaps or of an emulsion of paraffin or liquid hydrocarbons to the parchmenting-bath causes the parchment to repel water and to be incapable of absorbing moisture, the paper in the course of being parchmented being permeated in like manner to that described. This condition can be imparted both to transparent and opaque parchment, depending upon whether the said emulsions are added to the parchmenting-bath alone or in conjunction with substances which bring about opaqueness.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The process of manufacturing parchment-paper, consisting in adding to the parchmenting-bath an agent in a state of fine division which is capable of rendering the parchment-paper unable to absorb moisture, substantially as described.

2. The process of manufacturing parchment-paper, consisting in adding to the parchmenting-bath agents in a state of fine division capable of rendering the parchment-paper both opaque and incapable of absorbing moisture, substantially as described.

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

GUSTAV SACHSENROEDER.

Witnesses:

OTTO KÖNIG,
ADOLF SCHUBERT.