

UNITED STATES PATENT OFFICE.

EWALD TESSEN, OF ROSTOCK, GERMANY.

METHOD OF MANUFACTURING ELASTIC GLUE OR GELATINE.

SPECIFICATION forming part of Letters Patent No. 505,615, dated September 26, 1893.

Application filed July 15, 1893. Serial No. 480,654. (No specimens.)

To all whom it may concern:

Be it known that I, EWALD TESSEN, a subject of the Grand Duke of Mecklenburg-Schwerin, and a resident of Rostock, in the Grand Duchy of Mecklenburg-Schwerin, German Empire, have invented a new and Improved Method of Manufacturing Elastic Glue or Gelatine, of which the following is a full, clear, and exact specification.

My invention has for its object to produce an elastic and durable glue or gelatine which is especially qualified for addition to color, so as to form glue-water-color. Colors containing my improved glue are effectively prevented from shivering off and splitting as well as from any decomposition, in consequence whereof these colors are very durable.

The characteristic feature of my method consists in adding hydrate of potash to the glue or gelatine, which addition on one side prevents the intrusion of bacteria into the glue, on the other causes the fat contained in the glue, to be saponified. Further I add to said glue containing hydrate of potash a weak potash-soap, which, as well known, is very soft and imparts to the glue a lasting elasticity and toughness. Finally I employ chloride of magnesium as addition to the glue for preparing glue-water-color. The chloride of magnesium has the property to attract humidity from the air and thereby to effect, that the color containing a small addition of chloride of magnesium does not dry perfectly and keeps therefore a constant elasticity.

The manufacture of gelatine or glue according to my method is the following: Two hundred kilograms of glue are soaked in water, so that the water is perfectly sucked up by

the glue. On the other side two hundred kilograms of water are heated to 190° Fahrenheit and mixed with five kilograms of a lye of hydrate of potash of 40° Baumé during constant stirring. Thereafter this diluted lye is added to the said quantity of glue and this composition is again heated to 190° Fahrenheit. To this hot gelatine there are added one hundred kilograms of dry chloride of magnesium, until the latter is perfectly dissolved. Besides this, thirty-two kilograms of linseed-oil are weakly saponified with seven kilograms of hydrate of potash of 40° Baumé in cold way to such a degree, that no oil remains on the surface. This latter mass is likewise added to the above said hot gelatine—or glue composition and intimately mixed therewith.

The glue prepared in this manner shows the above mentioned properties and is exceedingly well adapted for the manufacture of glue-water-color.

What I claim, and desire to secure by Letters Patent of the United States, is—

The method of manufacturing elastic glue or gelatine, consisting in first heating the glue and saponifying the fat of the same by adding hydrate of potash, then adding dry chloride of magnesium and finally treating this mixture with potash-soap, substantially as described and for the purpose set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

EWALD TESSEN.

Witnesses:

R. HERPICH,
E. SCHULTZE.