UNITED STATES PATENT OFFICE.

EMIL TUGENDREICH, OF JERSEY CITY, NEW JERSEY.

CORK.

No. 908,909. Specification of Letters Patent. Patented Jan. 5, 1909.

Application filed April 5, 1907. Serial No. 366,641.

To all whom it may concern:

Be it known that I, EMIL TUGENDREICH, about to become a citizen of the United States of America, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Corks, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to improvements in cork wood or composition cork and is adapted for use as a substitute for cork.

In carrying out my invention I make a hot solution of chrome alum of bichromate of potash by mixing about four parts of boiling water to about one part of the chrome alum or the bichromate of potash. I then prepare a solution comprising from about six to seven parts of boiling water to one part of glue, to which I add about ten per cent. (10%) of glycerin. In this latter solution I add cork shavings or ground cork as may be found preferable and thoroughly mix the same into the solution, after which the chrome alum solution or bichromate of potash solution, first prepared, is added and the whole worked in together. The mass is then preferably poured upon a slab and rolled by hot rolls into the desired thickness or shape or may be placed in molds and compressed or otherwise manipulated as found convenient, after which the product is preferably left to dry in the sunlight for a period of not less than one half hour.

Where it is desired to color the product anilin dye may be mixed with the glue and glycerin solution before the chrome alum or bichromate of potash is added. The solution formed from the chrome alum has a purple appearance, while the solution formed from the use of bichromate of potash has a yellow appearance, so that the proportions of anilin dye used will vary accordingly. The clippings, cuttings, trimmings or waste may be reground and used over again without in any way impairing the quality of the product, so that the process is practically without waste. The rolling or forming of the mass should, of course, be carried on before the material dries and sets, after which it will be found to present a uniform, tough and durable substance almost as light as the natural cork and possessing the additional advantages of being both fire proof and water proof in quality. The material thus formed is excellently adapted for insulating and padding purposes and may be used for floor covering, mats, corks, wheel tires, life preservers, filling and various other purposes in the arts wherein a durable, water proofing, fire proofing and non-poisonous material may be desired.

Where the material is adapted for use in corks for bottles containing acids etc. it has been found preferable to prepare a hot solution of paraffin in which the corks are dipped and coated prior to use.

The natural cork may be said to form the body of the product and may in some cases be mixed with sand, hair or other foreign ingredients for hardening or thickening the product according to the class of work for which it is to be used. The glue solution is adapted as a binder and the addition of glycerin adds to the elasticity of the product where desirable and the bichromate of potash or chrome alum solution may be said to be the fixing bath for setting the mixture after the same has been thoroughly combined.

Various modifications may be made without departing from the spirit of the invention.

Having described the invention what I claim as new and desire to secure by Letters Patent is:

The process of making composition cork consisting in making a hot solution of bichromate of potash in the proportion of about four parts boiling water to about one part bichromate of potash, a separate solution of about six parts boiling water to one of glue adding about seven tenths of one part glycerin, adding as much cork to said separate solution as it will thoroughly cover, adding said bichromate of potash solution, thoroughly mixing and drying same together, and said material formed into shape for use.

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

EMIL TUGENDREICH.

Witnesses:

LOUISE ENDERLE,

THOMAS A. HILL.