

UNITED STATES PATENT OFFICE.

HUBERT W. MORGAN, OF WESTFIELD, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND EDWIN R. LAY, OF SAME PLACE, AND JAMES T. MORGAN, OF WINSTED, CONNECTICUT.

PREPARATION OF WHALEBONE.

SPECIFICATION forming part of Letters Patent No. 261,623, dated July 25, 1882.

Application filed February 3, 1882. (No specimens.)

To all whom it may concern:

Be it known that I, HUBERT W. MORGAN, of Westfield, in the county of Hampden and State of Massachusetts, have invented a new and useful Preparation of Whalebone, of which the following is a description and specification.

My invention has for its object the preparation of whalebone in a more or less liquid form, so that it may be used either in a somewhat thin solution as a sizing, and applied to articles in one or more coats to give such articles elasticity and toughness, or it may be used in a less liquid form, or of the consistency of a more or less thick paste, and mixed with other articles either in a pulp form or in a powdered form pressed into any desired shape by means of suitable dies. For this purpose I use the shavings, cuttings, and waste pieces of whalebone, such as are found in most large whip-manufactories and other establishments where the working of whalebone is extensively carried on, and which are now thrown away or used for land dressing as unfit for any purpose connected with the arts; and I take any alkali—preferably that known in commerce as “potash,” as being both available and cheap—and dissolve it in water in any desired proportions to make a strong solution of the potash. I take any desired quantity of this potash solution—say a quart—and heat it, and place therein, say, a half-pound of the whalebone cuttings or shavings, more or less, according to the consistency of the mixture desired, and when thus heated the potash solution will quickly dissolve the whalebone-shavings, forming a sizing or liquid whalebone which may be applied to any article with a brush in any desired number of coats, each coat being dried before another is applied.

For different purposes in the arts this liquid preparation of whalebone will be required to be of various degrees of consistency, according as the fancy and the purpose of the person using it may require, and if this preparation is applied to any substance which is comparatively non-elastic it will be rendered permanently elastic thereby. Take as an example the manufacture of whips, of which the tip portions of the better class are made of whalebone strips. These strips must be of the best quality and free from checks or seams, and

in being worked down to the proper form and size there is a great waste. Instead of making these tips of the solid whalebone, I may make them of strips of leather of the proper form and size, and then apply any desired number of coats of this liquid preparation of whalebone to the leather tips, which will thereby be rendered permanently elastic, and the cost will be but a very small proportion of the cost of the solid whalebone tips; or, instead of making the tips of solid leather, I may make the whalebone preparation of a much thicker consistency—that of a thick paste—and of a somewhat plastic character by adding a larger quantity of the whalebone cuttings or shavings to the given quantity of the potash solution, and then adding thereto fine cuttings of leather or leather ground up into a pulp, so that the whole mixture may be sufficiently tough and hard to take the form of a die, and I may then form these tips by pressing this leather-and-whalebone mixture in dies made for that purpose. Tips so made will possess all the elasticity and toughness required, and equal to whalebone tips, with a great saving in the cost of manufacture.

This mixture is equally applicable to many uses in the different arts, and may be made at a very trifling cost, as the immense amount of whalebone waste in cuttings and shavings produced in all large whalebone-working establishments is now thrown away as worthless, and by the use of this invention all this waste may be made available in the production of elastic articles from material which is not in itself elastic, and is very much cheaper than whalebone. This solution of whalebone may have added to it any desired water-proof substance—such as gum-shellac or other desired substance of similar nature—so that when applied it will resist the action of moisture or dampness.

Having thus described my invention, what I claim as new is—

A new compound or liquid preparation of whalebone, consisting of whalebone dissolved in an alkali, substantially as hereinbefore described.

HUBERT W. MORGAN.

Witnesses:

T. A. CURTIS,
CHAS. H. WOOD.