

UNITED STATES PATENT OFFICE.

MAX LICHTENBERGER, OF NEW YORK, N. Y., ASSIGNOR TO LOUIS
WERTHEIMBER, OF NEW YORK, N. Y.

PROCESS OF PREPARING WOOD AND THE PRODUCT THEREOF.

SPECIFICATION forming part of Letters Patent No. 754,782, dated March 15, 1904.

Application filed June 25, 1903. Serial No. 163,083. (Specimens.)

To all whom it may concern:

Be it known that I, MAX LICHTENBERGER, of the borough of Brooklyn, county of Kings, and State of New York, have invented a new and useful Process of Preparing Wood and the Product Thereof, which is fully set forth in the following specification.

My invention relates to a process of preparing wood sawdust; and its object is to provide an improved material which may be used for decorative purposes and especially in the manufacture of various novelties.

In carrying out my invention I may use any wood which is capable of being bleached and susceptible of taking a color in a dye-bath. I begin with ordinary sawdust obtained from any suitable wood. I have found in practice that light-colored woods are better adapted to the purposes of the invention and have successfully used maple, white pine, and chestnut, although such woods as ash, hickory, and oak may be used. Sawdust from such wood in its usual condition may be used as the basis for treatment by my process; but in order to obtain a better and more satisfactory article the sawdust is passed through a grinding-machine for the purpose of breaking up and reducing any small pieces of wood which may be mixed with the sawdust and to reduce the particles of the mass to a substantially uniform size. Any suitable grinding-machine may be used, such as that for grinding meat and vegetables. After being so reduced the sawdust is sifted through sieves, if necessary, to obtain a still more uniform mass.

The sawdust after being subjected to the mechanical operations above described is put into a suitable vat and subjected to the action of any well-known bleaching agent. I have used for such purposes a solution of one pound of soda-ash to ten pounds of chlorid of lime and ten gallons of water. One gallon of a solution so prepared in ten gallons of water is sufficient to bleach about one-half barrel of sawdust. The sawdust is allowed to stand in the bleaching solution until the desired bleaching action is completed—usually about six

hours, according to the particular wood used. During the bleaching action the mass may be stirred, if found necessary or desirable. The bleaching solution is then run off from the mass in any suitable manner, as by throwing the mass upon suitably-arranged sieves. The bleached sawdust is then dried in any suitable way by exposure to the air or in any well-known hot-air or steam drier.

The above operations prepare the sawdust for the final operation of dyeing. To effect this, a bath is prepared by dissolving the desired quantity of dyestuff in water and the sawdust allowed to remain in the bath until the desired shade of color is obtained, usually from five to ten minutes. During the dyeing operation the mass may be stirred, if necessary. Any coloring-matter having an affinity for the wood may be used; but I prefer what are commonly known as "anilin" colors, as by their use brilliant shades may be produced. After dyeing to the desired shade the mass is removed from the dye-bath and dried in any suitable manner.

The product obtained by the process above described may be applied to a variety of purposes. By mixing the product with any suitable adhesive it may be worked into ornamental designs or may be used as a coating for fancy articles and novelties.

What I claim, and desire to secure by Letters Patent, is—

1. The method herein described consisting in subjecting wood sawdust to the action of a bleaching agent and then subjecting the bleached sawdust to the action of a dye-bath.

2. The herein-described process consisting in subjecting wood sawdust to the bleaching action of chlorid of lime and then to a dye-bath consisting of an anilin coloring-matter.

3. The method herein described consisting in first grinding or reducing to a pulverulent form ordinary wood sawdust then subjecting such sawdust to the action of a bleaching agent and finally dyeing the bleached mass.

4. The herein-described process consisting in reducing ordinary sawdust to a pulverulent

form then subjecting the same to the action of a bleaching agent; drying the bleached mass and finally subjecting it to the action of a dye-bath.

5 5. As a new article bleached and dyed saw-dust.

In witness whereof I have, this 24th day of

June, 1903, signed this specification in the presence of two subscribing witnesses.

MAX LICHTENBERGER.

Witnesses:

JUSTUS W. SMITH,
GERTRUDE FINLAYSON.