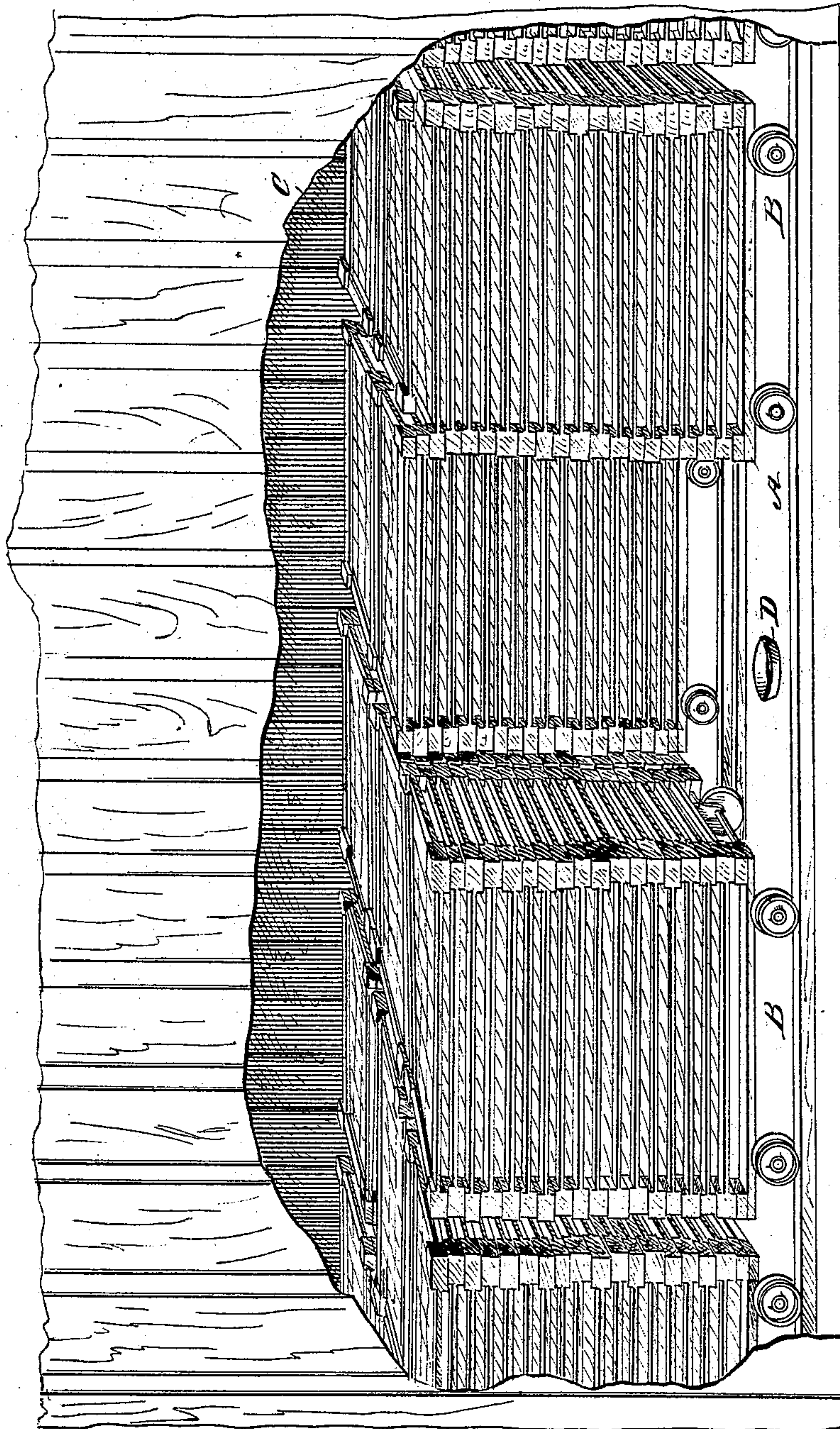


(No Model.)

J. E. KUNITZ.
PROCESS OF BLEACHING GLUE.

No. 540,500.

Patented June 4, 1895.



WITNESSES:

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JOHN ERNST KUNITZ, OF SANTA CRUZ, CALIFORNIA.

PROCESS OF BLEACHING GLUE.

SPECIFICATION forming part of Letters Patent No. 540,500, dated June 4, 1895.

Application filed October 25, 1894. Serial No. 526,948. (No specimens.)

To all whom it may concern:

Be it known I, JOHN ERNST KUNITZ, of Santa Cruz, in the county of Santa Cruz and State of California, have invented a new and Improved Process of Bleaching Glue, of which the following is a full, clear, and exact description.

My invention relates to a process for bleaching glue, and it has for its object to provide a means whereby fresh-cut glue may be bleached by subjecting it to the action of sulphur fumes, rendering the dried glue more soluble than heretofore and serving to preserve it longer in the carpenter's pot, in addition to destroying any bad odors if the glue is made from impure material.

Another object of the invention is to provide a means whereby the glue, no matter how inferior the material of which it may be made, may be given a milk-white shade in an economic and expeditious manner.

The invention consists in the novel steps of the process as will be hereinafter fully set forth and claimed.

Reference is to be had to the accompanying drawing, forming a part of this specification, which represents a portion of the interior of a bleaching-room and a perspective view of the frames used in the process of bleaching.

In the manufacture of white glue it has heretofore been the custom to mix finely divided zinc white with warm glue liquor. If such glue should be subjected to sulphurous acid gas when the glue is fresh cut and spread on nets, the zinc white would be dissolved, forming sulphite of zinc, and the glue would become transparent. In the event, however, a solution of subacetate of lead (tribasic lead acetate) is added to the warm glue, and the product sulphurized when placed on nets, for example, sulphite of lead will be formed, which being a white powder infinitely fine and divided in the glue, will turn the same milk white.

In carrying out the process, for about one-thousand pounds of glue liquor I preferably employ one and one-half pounds of sugar of lead and two pounds of white lead (carbonate of lead) in fine powder. The acetate of lead is dissolved preferably in a wooden pail full of hot glue liquor. To this is added the two pounds of white lead. The mixture is well

stirred and rendered fine with a little more glue liquor. Subacetate of lead will be the result, as part of the acetic acid will unite with the carbonate of lead. The pail full is well mixed with the one-thousand pounds of glue liquor, which is then run into the coolers. The white lead must be mixed in earthenware or wood. The subacetate is used because it is much more sensitive to sulphurous acid than acetate of lead.

The advantage of this process is that a fine-appearing opaque glue can be made by it, in less time and with less macerating of the glue stock in lime and soda and with less washing and cleansing, than a glue requires that is whitened by zinc oxide.

It will be understood that the strength of the glue depends entirely upon the character of the material employed, but with the above process a fine white glue may be made from the most inferior stock, namely, sole-leather fleshings, without much labor and time.

The glue, treated preferably as above set forth, when fresh cut, is placed for example on nets A. These nets are provided with frames extending above and below the net proper, whereby the frames or nets may be built up upon a car B, for example, and a space will occur between the ends, as shown in the drawing. The cars loaded with the nets containing the glue may be run into the bleaching room C, and the glue subjected to the fumes of sulphur by burning the same in pans D, so placed that the fumes of the sulphur may reach the glue to the best advantage.

I desire it to be understood that glue made under the usual process and subjected when fresh cut to the action of sulphur fumes, will be bleached also to a greater or less extent, will be rendered more soluble than heretofore, and will be likewise antiseptic.

Four or five pounds of sulphur are sufficient for a one-thousand cubic foot room, and no metallic nets should be used.

Sulphurized glue may be dried in the sun without becoming insoluble, but unsulphurized glue cannot be so treated.

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

1. The herein described process of bleach-

ing glue, which consists in applying to the liquid glue subacetate of lead and sulphurizing the mixture when cold and cut, as and for the purpose set forth.

- 5 2. The herein described method of bleaching glue, which consists in mixing with the liquid glue subacetate of lead, cooling the same, spreading the fresh-cut glue on reticulated or

perforated supports, and sulphurizing the said fresh-cut glue, as and for the purpose to set forth.

JOHN ERNST KUNITZ.

Witnesses:

GERALDINE MEYRICK,
OTTO G. KUNITZ.