

UNITED STATES PATENT OFFICE.

BERNARD PIFFARD, OF HEMEL HEMPSTEAD, ENGLAND.

MANUFACTURE OF VARNISH.

SPECIFICATION forming part of Letters Patent No. 441,853, dated December 2, 1890.

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To all whom it may concern:

Be it known that I, BERNARD PIFFARD, gentleman, a subject of the Queen of Great Britain, residing at Hill House, Redbourn Road, Hemel Hempstead, in the county of Herts, England, have invented certain new and useful Improvements in the Manufacture of Varnishes, of which the following is a specification.

10 This invention has for its object improvements in the manufacture of varnishes.

I produce in the first instance the lead salts of the isomeric acids constituting colophony, and I add beeswax to the colophony previous
15 to the application of heat. This prevents the deterioration of the color of the colophony and improves the varnish made from the lead salts. I prefer to proceed as follows: I take rosin and mix it with the lead oxides (preferably litharge) in the proportion of two rosin
20 and one lead oxide, and I add one-twelfth to one-sixth of beeswax. In place of beeswax I can employ other bodies of a waxy nature, as paraffine. To this mixture I apply a heat
25 of about 250° in an oven till combination is obtained, stirring frequently. When combination is complete, the heat should be kept up till the excess of oxide has subsided, and the supernatant liquid should then be passed
30 off, allowed to cool, and ground to a fine pow-

der. I then mix the powder with rectified benzole or rectified turpentine or other solvent in the proportion of two parts, by weight, of the lead salt to three parts, fluid measure, of the solvent. I then raise the mixture to
35 boiling heat and keep it at that heat till the liquid becomes transparent, but no longer. The reason for continuing the heat till clear is that some one or other or others of the colophonates are not so soluble as the other
40 or others. They must all be dissolved together. The varnish may be used hot or cold, according to circumstances, and hardens rapidly.

What I claim is—

1. A varnish consisting of colophonate of lead, wax or waxy matter, and a solvent, combined substantially as described. 45

2. The herein-described process of manufacturing varnishes, which consists in mixing
50 colophony with lead oxide and wax or waxy matter, then fusing the mixture, then drawing off the clear liquid portion, and afterward dissolving it in a solvent.

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Witnesses:

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