

UNITED STATES PATENT OFFICE.

JULIUS BRACE, OF NEW ORLEANS, LOUISIANA.

ASPHALT VARNISH.

SPECIFICATION forming part of Letters Patent No. 228,029, dated May 25, 1880.

Application filed August 24, 1878.

To all whom it may concern:

Be it known that I, JULIUS BRACE, of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and valuable Improvement in the Art of Making Asphaltum Varnish with Petroleum Naphtha and the product thereof; and I do hereby declare that the following is a full, clear, and exact description of the same.

10 This invention has relation to improvements in varnishes derived from asphalt, and especially designed for coating iron and wood work, waterproofing roofing-felt and exposed walls, and for other purposes.

15 The nature of my invention consists in an asphalt varnish made as follows:

I take of the oil derived from the distillation of coal-tar, preferably the products of medium density coming over immediately after the 20 lighter products, and naphtha derived from petroleum of the density of 63° to 70° Baumé, in the proportion of ten to fifteen parts of the former to one hundred parts of the latter sufficient to make a one-gallon mixture; or, in 25 other words, I may take one gallon of the petroleum naphtha and add thereto from ten to fifteen per cent. of the oil, and stir in from four to seven pounds of finely-powdered asphalt until the mixture is of sufficient consistence.

30 This compound should be rapidly agitated from two to three hours, or longer, if requisite, until the entire asphaltic element is dissolved. The varnish should now be allowed a sufficient time to settle, which being completed, it is then 35 ready for use. This intermixture is accomplished without the use of heat throughout the entire process, and produces a varnish that dries very rapidly and will bear a high natural temperature without softening—a defect to 40 which coal-tar pitch varnishes are subject.

Asphalt is known to be readily soluble in the cheap oils of about the density of 70° coming over immediately after the lighter products

of distillation of coal-tar, and with the addition thereto of naphtha derived from petroleum 45 as a diluent a very excellent varnish for the purposes mentioned is produced.

Petroleum naphtha, without this admixture, will neither dissolve nor hold in solution any appreciable quantity of asphaltic substances, 50 and cannot be employed in making varnish from the said substances.

I am well aware that naphtha derived from coal-tar is a solvent of asphalt; but being produced in limited quantities and largely used 55 in the treatment of india-rubber, it is very expensive compared with petroleum naphtha, and is consequently not available for varnish-making purposes, and this improvement will give a readily-applied varnish at a greatly-de- 60 creased cost, as the diluent serves instead of an otherwise necessary amount of the costly solvent. Hence I make no claim to a bituminous varnish formed with coal-tar naphtha; but

What I do claim is—

1. The process of preparing asphalt varnish 65 by dissolving asphalt in the products of distillation of coal-tar coming over immediately after the lighter products, and diluting the tarry liquid thus obtained with the products 70 of petroleum of the density of 63° to 70° Baumé.

2. A varnish composed of asphalt, the products of distillation of coal-tar coming over immediately after the lighter products, and 75 naphtha derived from petroleum of the density of 63° to 70° Baumé, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence 80 of two witnesses.

JULIUS BRACE.

Witnesses:

D. I. DOWERS,
ANDREW HERO, Jr.