

vessels; and I do hereby declare that the following is a full and exact description of my process.

Take of paint by grinding pure verdigris in linseed oil, and diluted to a proper consistence to be applied to the sheets of metal, with a mixture of one gallon of linseed oil, and half a pint of a lacker prepared as follows: viz. by boiling together seven and a half gallons of linseed oil, four pounds of shellac, four pounds of red lead, and four pounds litharge until the shellac is dissolved.

Apply this paint with a brush to both sides of the sheet of copper or other metal intended to be used, and when dry, add one or more coats as may be desired. If it is wished that the paint should dry very rapidly, half a pint of spirit of turpentine may be added to every gallon of oil used in diluting the paint. When the paint is perfectly dry and hard, the sheets may be fastened upon the vessel's bottom in the usual manner. This paint may also be applied to metallic sheathing after it has been placed upon the bottoms of vessels; and it may also be applied to but one side of the metal before being fastened upon the vessel's bottom; but it is decidedly preferable to use it as first described.

What I claim as my discovery in the art of protecting the copper, or other metallic, sheathing of vessels from corrosion, is that by the application of a coating of paint, in which verdigris is the principal ingredient, to such metallic sheathing, in the manner above described, such protection will be effectually attained. I do not claim to be the inventor, or discoverer, of the above described paint, nor do I intend to limit myself to its application in the form prescribed, but to use verdigris mixed with oil, or varnish, in any of the modes in which a desirable paint is produced, in which the main body consists of verdigris, limiting myself to its employment for the purpose of protecting the metallic sheathing of ships, or vessels; such application being as I firmly believe new in the arts.

EDWARD M. ROBINSON.

Specification of a Patent for the employment of the Mineral called Basanite, in manufacturing Hydraulic Cement; granted to EBENEZER C. WARNER, City of Albany, State of New York. Patent dated Oct. 6th, 1837.

To all whom it may concern: Be it known, that I, Ebenezer C. Warner, of the City of Albany, in the State of New York, have discovered a new and useful mode of manufacturing Hydraulic Cement by the employment of the mineral called Basanite, Lydian-stone, and commonly called touch-stone. And I do hereby declare that the following is a full and exact description of my discovery.

The said material is to be burned in any convenient mass, in the manner of burning lime in kilns, in layers of wood and pit coal, with the mineral on the top, to a red heat, which may be continued six or eight hours.

After cooling, the said mineral is to be cracked, and then reduced to a fine powder, as impalpable as practicable. For this purpose it should be ground between stones of the ordinary size and kind, or any other process of pulverizing may be resorted to, by which the material may be reduced. This powder is to be mixed with water to a proper consistence for application to the purpose for which it is designed.

The said hydraulic cement, thus prepared, is similar in its qualities, and applicable to the uses of Roman cement (so called,) and being insoluble and indis-

tractable in water, and capable of resisting the action of, and exposure to, frost; thus becoming a paste cement, or mortar, for laying stone which is to be exposed to the action of water; a cement for cisterns, aqueducts, and securing cellars, or other excavations, below the surface of the ground, which require to be secured against the admission of water.

The analysis of Lydian-stone as ordinarily found, is as follows:

Silex	.	.	.	23.
Alumine	.	.	.	15.
Potassa	.	.	.	8.
Lime50
Oxide of iron	.	.	.	18.
Copper	.	.	.	24.
Water, carbon and loss	.	.	.	11.50

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What I claim as my discovery, and desire to secure by letters patent is, a new and useful mode of manufacturing hydraulic cement by the employment of the mineral called Basanite, Lydian-stone, and sometimes touch-stone, as a principal ingredient therein.

EBENEZER C. WARNER.

English Patents.

Specification of a patent granted to FLETCHER WOOLLEY, for his invention of improvements in the manufacture or preparation of materials to be used as a substitute for bees-wax, parts of which improvements are applicable to other purposes. Nov. 11, 1837.

The various substances employed in the different processes of this invention are comprehended under the following heads, and will be referred to in describing such processes numerically.

First, all kinds of animal and vegetable fats and oils, solid at the medium temperature of the surrounding atmosphere, which is about sixty degrees of Fahrenheit, as tallow and other animal fats, and palm oil, cocoa-nut oil, and other like vegetable oils commonly used for giving light by, or in, combustion. Second, all kinds of animal and vegetable elains and oils, liquid at the medium temperature of the surrounding atmosphere, as the elain of tallow, palm oil, cocoa-nut oil, seal, whale, sperm, and other oils used for affording light by combustion. Third, all kinds of naphtha, or coal, tar, oil, caoutchouc naphtha, or caoutchouc oil, gas oil, vegetable naphtha, or vegetable tar naphtha, and any other like naphthas or oils used as aforesaid, and commonly sold for that purpose. Fourth, pyroligneous naphtha or ether, correctly named pyroxylic spirit, sulphuric ether, and all other spirits or ethers of like nature. Fifth, all mixtures of the substances included under head the third, with those substances included under head the fourth, as two parts of coal naphtha or caoutchouc naphtha, with about six more parts of pyroxylic spirit. Sixth, resinous bodies and resins, as caoutchouc resin, mastic, copal, shel-lac, and others, and combinations of them with each other, as one part resin and four parts shel-lac melted together. Seventh, mixtures of the substances included under the heads third, fourth, and fifth, with the substances included under head the sixth, as thick solutions of copal in spirits, ethers, or naphthas, &c., and caoutchouc in naphthas formed by processes already known to the public. Eighth, certain solid bodies