

# UNITED STATES PATENT OFFICE.

REINHARDT LEHNDORFF, OF DETROIT, MICHIGAN.

## IMPROVEMENT IN COMPOSITE ROOFING.

Specification forming part of Letters Patent No. **136,840**, dated March 18, 1873.

*To all whom it may concern:*

Be it known that I, REINHARDT LEHNDORFF, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in a Compound for Covering the Roofs of Railway Cars and Buildings; and I do declare that the following is a true and accurate description thereof.

The nature of this invention relates to a composition of materials for covering the roofs of railway cars and buildings, and the method of applying the same; and it consists in the composition of materials in or about the proportions, and applied in the manner, hereinafter set forth.

In a suitable kettle I place ten gallons of boiled linseed-oil, and add thereto, when heated, eight pounds of Venetian turpentine. To the above I add the following mixture: Burnt umber, one part; dry ore-paint, three parts; yellow ochre, three parts. I stir of the above mixture into the oil and turpentine such a quantity as to make a mass of the consistency of thin putty. This compound I spread with a trowel on the roof-boards to the depth of one-fourth of an inch, and then stretch over it a covering of coarse burlaps or other fabric of a loose and open texture, nailing it, after stretching, under the edges of the roof. I then take a tool like a wooden paddle with a bent handle and move it to and fro, pressing the fabric until the compound oozes up through it, and it is thus embedded in the mass. When the surface is dry, I apply a coat of paint, and

sand it or not, as preferred. The surface soon hardens, and will resist the action of the elements, while the body of the mass under the fabric always remains soft and flexible, yielding to the expansion and contraction of the roof.

Precaution must be taken to protect the mass, while finishing the roof, by providing pieces of heavy straw-board for the operator to stand on.

Litharge, or its equivalent, may be used in lieu of the umber, and either the ochre or ore-paint may be omitted by doubling the quantity of the remaining ingredient, but better results are obtained by using both.

My improved roof-covering is more especially intended for railway cars, as its expense is too great to warrant its use on buildings generally.

Before applying the compound the roof-boards should be treated with a coat of oil, to prevent the absorption of the oil in the compound.

I claim as my invention—

The compound for covering roofs, composed of the ingredients in the proportions herein set forth, and adapted to a fabric of loose texture, in the manner and for the purpose set forth.

R. LEHNDORFF.

Witnesses:

H. F. EBERTS,  
H. S. SPRAGUE.