

UNITED STATES PATENT OFFICE.

ALFRED NAPIER FORD, OF LONDON, ENGLAND, ASSIGNOR TO THE NEW
WIRE WOVE ROOFING COMPANY, (LIMITED,) OF SAME PLACE.

WATER-PROOF COMPOSITION FOR ROOFING, &c.

SPECIFICATION forming part of Letters Patent No. 423,042, dated March 11, 1890.

Original application filed July 22, 1889, Serial No. 318,308. Divided and this application filed December 18, 1889, Serial No. 334,217. (No specimens.) Patented in England December 19, 1887, No. 17,442; in France June 13, 1889, No. 198,913; in Belgium June 20, 1889, No. 86,711, and in Canada August 1, 1889, No. 31,844.

To all whom it may concern:

Be it known that I, ALFRED NAPIER FORD, a subject of the Queen of Great Britain, residing at London, England, have invented a new and useful Water-Proof Composition for Roofing and other Purposes, (for which I have obtained patents in Great Britain, No. 17,442, dated December 19, 1887; in France, No. 198,913, dated June 13, 1889; in Belgium, No. 86,711, dated June 20, 1889, and in Canada, No. 31,844, dated August 1, 1889,) of which the following is a specification.

This invention relates to an improved composition which when applied, as hereinafter set forth, to wire, textile, or other fabric shall render such materials water-proof and adaptable for use for roofs for buildings and erections, covers for vans, railway and other carriages, for building sheds, for covering damp walls and floors, and as a substitute for leather for splash-boards, loin-covers, driving-belts, boxes, trunks, and traveling-bags, chairs, cushions, tarpaulins, and for water-proof material generally; also, for pipes for conveying water and other purposes and as a material for advertising purposes.

In carrying out my invention I make a composition by mixing and combining stearine-pitch, oil, and soap in about the following proportions, namely: I take one hundred pounds, or thereabout, of the hard pitch obtained as a residuum by stearine-manufacturers and add to it twenty-five pounds of boiled linseed-oil, or thereabout, and five pounds, or thereabout, of old and well-dried soap. The oil, however, instead of being actually boiled, may be heated to a temperature short of the boiling-point, at which temperature it is kept for about ten (10) hours. I then melt all these together in a suitable vessel and at a temperature sufficient for effectually fusing the same and driving off all adventitious moisture, after which I find it advantageous to add thereto about one gallon of petroleum-oil to each twelve gallons of the mixture, and the composition is then strained through a strainer, so as to free it from the unfused particles of matter, and is then ready to be applied to fabrics for the above-stated purposes.

My composition when so made may be applied in various ways to wire-netting, woven fabrics, and the like to render such material water-proof and to adapt it for a variety of purposes.

When a material suitable for roofing and cognate purposes is to be rendered water-proof, I take wire-netting of a suitable mesh and a thin fibrous or textile fabric—such as canvas—and pass them together through a pair of rollers, the wire-netting being uppermost, my above-named composition in a heated liquid state being fed onto the surface of the wire-netting as it and the fabric are passed between the rollers.

When it is desired to manufacture tarpaulin and similar material, I employ canvas or like fabric without the wire-netting and pass it through a trough filled with the melted composition and having a revolving roller under which the material passes, and it is then led through rollers, as above stated.

Having now particularly described and ascertained the nature of the said invention and in what manner the same is to be performed, I declare that I do not in this application claim a material or materials so coated with or treated by my improved composition as to be rendered water-proof, as this forms the subject-matter of my application for a patent for materials for roofing, &c., filed by me July 22, 1889, Serial No. 318,308, and of which this is a divisional application; but

What I do claim is—

1. A composition for waterproofing, formed by the admixture of stearine-pitch, oil, and soap, in about the proportions and for the purposes above set forth.

2. A composition for waterproofing, formed by the admixture of stearine-pitch, oil, soap, and petroleum-oil, in about the proportions and for the purposes above set forth.

ALFRED NAPIER FORD.

Witnesses:

G. F. REDFERN,

JOHN E. BOUSFIELD,

Of the firm of G. F. Redfern & Co., 4 South Street, Finsbury, London, Patent Agents.