United States Patent Office.

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IMPROVED FABRIC FOR ROOFING.

Specification forming part of Letters Patent No. 42,910, dated May 24, 1864.

To all whom it may concern:

Be it known that I, Jonathan H. Green, of Christiansburg, in the county of Wapello and State of Iowa, have invented a certain new and useful Article for Roofing and for other Similar Purposes; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention consists in attaching to one or both sides of canvas, of linen or cotton cloth, or of any fibrous material suitable for such purpose, paper so prepared as to make it im-

pervious to moisture or to water.

I saturate the canvas, linen or cotton cloth, or other fibrous material which is designed to furnish the inside or central layer of the fabric with paste, glue, a mixture of asphaltum and benzine, a mixture of coal-tar and benzine, or any other known substance that will cause the paper and cloth to adhere; but I prefer to use a mixture of the settlings of palm or olive oil and asphaltum in equal parts, by weight, melted together, (the heat required is about 212° Fahrenheit,) and when sufficiently cool I dissolve and reduce the mixture to the proper consistency by the use of naphtha or turpentine. To the cloth thus prepared I apply paper which has been saturated with varnish made according to a patent granted to James B. Hodgskin, June 30, 1863, of which varnish Jonathan H. Green was the inventor, he having assigned the invention to the said James B. Hodgskin; or I apply the paper and afterward apply the varnish. Either way answers the purpose, though I prefer the one first mentioned. After the paper is applied, or as a part of the operation by which the paper is applied, I pass the fabric between a pair of rolls or cylinders to bring the paper and cloth into close contact and secure their adhesion throughout all their parts.

Instead of using my patent varnish, any other paint or varnish may be used that will render the paper impervious to the action of water.

When the fabric is used for roofing, for covering boats, vessels, railroad and street cars, or for any purpose where the under side is exposed to the action of moisture, it is necessary that the paper and varnish or paint should be applied to both sides, in order to protect the canvas or other substance used from the deleterious effects of the moisture, which otherwise would cause the cloth to decay, and also might diminish or utterly destroy the adhesion between the cloth and paper; but when it is used for such purposes as will not expose the unprotected side to the action of moisture it will be sufficient to cover one side of the fabric with the water-proof paper.

The uses to which this article of manufacture may be applied are various. It may be used for roofing, for covering boats, vessels, railroad and street cars, or wagons. It may be used in the place of sheet-lead for lining boxes, &c. It may be used instead of leather for covering trunks, preserving them from becoming wet, and it will also wear longer than leather and stand more rough usage without injury. It may be used for sign-boards and for many

and various other purposes.

Having thus fully described my invention, what I claim, and desire to secure by Letters

Patent, is—

An article of manufacture for roofing or other similar purposes, formed by attaching water-proof paper to one or both sides of canvas or other suitable material, substantially as and for the purpose set forth.

JONATHAN H. GREEN.

Witnesses:

CHAS. EDW. STORE, JAMES T. GRAHAM.