

UNITED STATES PATENT OFFICE.

JOHN B. WANDS, OF MEMPHIS, TENNESSEE.

FABRIC FOR ROOFING, BELTING, &c.

Specification forming part of Letters Patent No. **29,423**, dated July 31, 1860.

To all whom it may concern:

Be it known that I, JOHN B. WANDS, of Memphis, in the county of Shelby and State of Tennessee, have invented a new Improved Fabric suitable for Covering Roofs, for Machine-Belting, Hose, and for other Purposes; and I do hereby declare that the following is a full, clear, and exact description of the same.

My improved fabric consists of canvas or other woven goods saturated with what is known to manufacturers of stearic acid as "residuary gum"—that is to say, the residuary pitchy matter resulting from the manufacture of such acid.

This fabric is made by passing the woven goods through the gum while the latter is kept in a melted state by heat, and afterward pressing it between rollers to force the melted gum into or between the fibers and take off any excess from its surface. The woven goods may be of any width and thickness, according to the purpose for which the fabric is to be used, and when hose is to be made the goods should be woven double—that is to say, in tubular form.

The apparatus employed in the manufacture of this fabric may be variously constructed; but I will briefly describe that which I commonly employ. The vessel in which the saturation with gum is effected consists of a pan or boiler, of semi-cylindrical form, arranged horizontally in a suitable setting of masonry, with a fire-place below it. Within and near the bottom of the said vessel, entirely submerged in the gum, there is arranged a pair of horizontal rollers, between which the goods pass from a horizontal guide-roller arranged near one side of the vessel. From these rollers the goods pass up to pair of rollers above the vessel, and

from thence over a horizontal table to another pair of rollers, from whence they pass to a take-up roller, on which they are rolled up. As the goods pass over the horizontal table I sprinkle them with sand and powdered soapstone, or with soapstone alone, according to the purpose for which the fabric is intended. If it is intended for covering roofs, I sprinkle it over first with a layer of sand and then with a layer of soapstone; but for hose and belting I only use the soapstone, the object of the sand being to give hardness to the fabric, and the object of the soapstone being mainly to prevent the layers of the fabric from sticking together when rolled up or folded. The last pair of rollers press the sand and soapstone, or the soapstone alone, into the gum to make it combine therewith and lie smoothly on the fabric, which is then ready for immediate use. When the fabric is used for roofing it is applied and secured by nailing it to its place in the same manner as any other roofing-cloth.

I am aware that the residuary gums herein mentioned have been heretofore proposed to be employed for covering floor-cloths, paper, and other material. I therefore do not claim broadly the use of such gums, my invention consisting only in the fabric made in the manner I have described.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

As an improved article of manufacture, the within-described fabric, made of canvas, and the residuary gum of stearic acid, as herein set forth.

JOHN B. WANDS.

Witnesses:

I. PARROTT,
W. W. RITCHIE.