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UNITED STATES PATENT OFFICE.

WILLIAM C. FISHER, OF MIDDLETOWN, CONNECTICUT, ASSIGNOR TO RUSSELL MFG. CO., OF MIDDLETOWN, CONNECTICUT, A CORPORATION.

UNWOVEN BRAKEBAND FACING.

Application filed August 23, 1919. Serial No. 319,504.

To all whom it may concern:

Be it known that I, WILLIAM C. FISHER, a citizen of the United States, residing at Middletown, in the county of Middlesex and State of Connecticut, have invented a new and useful Improvement in Unwoven Brakeband Facings; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an improvement in brakeband facings, the object being to produce, at a low cost, a facing of superior durability and efficiency.

With these ends in view, my invention resides in a flexible, unwoven asbestos fiber brakeband facing comprising asbestos fibers combined with ground cork cohered by a superficially applied phenolic condensation product, the bulk of which remains upon the surface of the asbestos fibers and ground cork in the form of a hard skin.

In carrying out my invention, I combine, in a pulp, unwoven asbestos fibers with a filler of ground cork, casein and magnesium oxide, or other equivalent materials. In this mixture the asbestos fibers will predominate. The materials chosen for the filler are selected with reference to imparting elasticity and the required frictional quality to the finished band. Such a pulp is made after the manner of making paper mill-board into sheets, preferably produced in long lengths in rolls. The sheet material thus produced is subjected to high pressure and heat to give the material the required density. After such compression, the sheet material is given a surface coating of a phenolic condensation product which solidifies and toughens the material, but leaves it sufficiently pliable to accommodate it to all the flexures to which brakebands are subjected in use. Preferably, the application of the described surface coating is accompanied by heat, though this is not essential. The resulting dense, pliant, and tough brakeband facing, although entirely unwoven, has the necessary tensile strength and the required frictional quality.

I claim:—

As a new article of manufacture, a flexible unwoven asbestos fiber brakeband facing, comprising asbestos fibers combined with ground cork, cohered by a superficially applied phenolic condensation product, the bulk of which remains upon the surface of the asbestos fibers and ground cork in the form of a hard skin.

WILLIAM C. FISHER.

Witness:
A. L. PRATT.