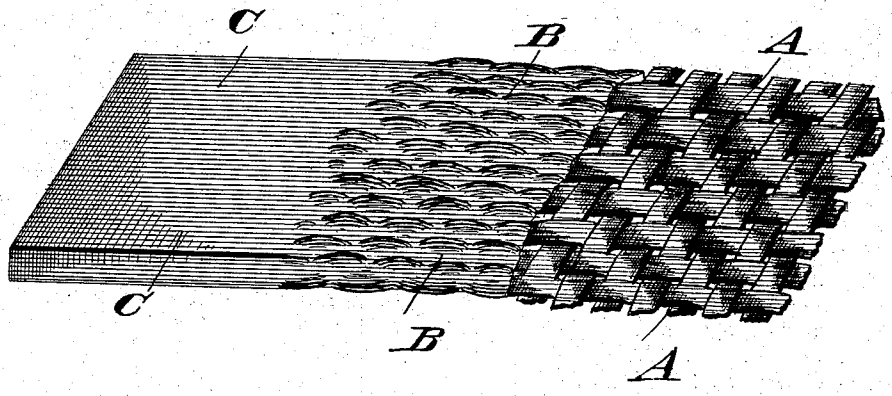
(Model.)

W. A. FRIES.

ASBESTUS JOINT PACKING.

No. 295,748. Patented Mar. 25, 1884.



Witnesses:
Phil. C. Dietrich
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Inventor:
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UNITED STATES PATENT OFFICE.

WILLIAM ARMSTRONG FRIES, OF PHILADELPHIA, PENNSYLVANIA.

ASBESTUS JOINT-PACKING.

SPECIFICATION forming part of Letters Patent No. 295,748, dated March 25, 1884.

Application filed April 30, 1883. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM ARMSTRONG FRIES, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Asbestus Joint-Packing for joints of pipes and vessels subjected to fluid-pressure and heat, and in the new and useful product resulting from such process; and I do hereby declare the following to be a sufficiently full, clear, and exact description thereof to enable others skilled in the art to make and use the said invention.

My invention relates to that class of packing made wholly or the main part of asbestus, and has for its object the more convenient handling of the packing material, and in the applying of it to the joints of apparatus for containing fluids exposed to heat, and also the greater durability of joints.

The nature of this invention consists in a fabric of spun asbestus yarns, which may be either woven, looped, or braided together, and then saturated or coated with a flexible agglutinating water-proof compound or composition, and afterward compressed into a flat sheet or tape, susceptible of being readily cut and formed into flat gasket-packings.

In making these fabrics I use the same kind of yarn for warp as I do for weft. They are then impregnated with any suitable water-proof material which will agglutinate or seal the parts of the fabric to each other, preventing raveling of the packing when cut, and which will not destroy the pliability of the cloth or affect injuriously the metal surfaces of the joint.

The drawing shows the packing as prepared in perspective.

The process of preparing packing, as I have practiced it in this invention, consists in making ordinary cloth and gasket tape by weaving or braiding them out of spun asbestus yarn, which may be either pure asbestus or other mineral fiber; or said yarn may have a central core of organic fiber; or said yarn may be of asbestus or other mineral fiber, combined in mixture with organic fibers—such as cotton, wool, jute, hemp, linen, silk, &c.—but, for convenience of description, I will designate them by the term "asbestus yarns." The fabric so made is immersed in or coated with any suitable water-proof material which will agglutinate or seal the parts of the fabric to each other, preventing raveling of the packing when cut, and which will not destroy the pliability of the cloth, and which may be composed of paraffine-wax, plumbago, tallow, spermaceti, waxes, or resins, which may be used alone or two or more combined together. To saturate or coat the fabric, I immerse it in the compound in a fluid state, and thus thoroughly saturate it. It is then passed through rollers, pressing down all unevenness and closing the interstices in the fabric. It is then passed through a solution of the compound and between rollers or scrapers, which relieve it of the superfluous composition. The resultant packing can be readily cut with shears or a knife, and if the cloth is cut bias into strips, you can easily crimp them into gasket-rings, as can also the braided tape; or they can be cut as ordinary sheet gasket-packing. They are applied and used as ordinary gasket-packings.

Having fully described my invention, what I desire to claim and secure by Letters Patent is—

As an article of manufacture, a gasket-packing consisting of flat woven, braided, or looped fabric made from hard-spun asbestus yarn, saturated or coated with a flexible agglutinating and flexible water-proof composition or compound, substantially as and for the purpose set forth.

WM. ARMSTRONG FRIES.

Witnesses:

GEO. H. COLKET,

LINN WHEELER.