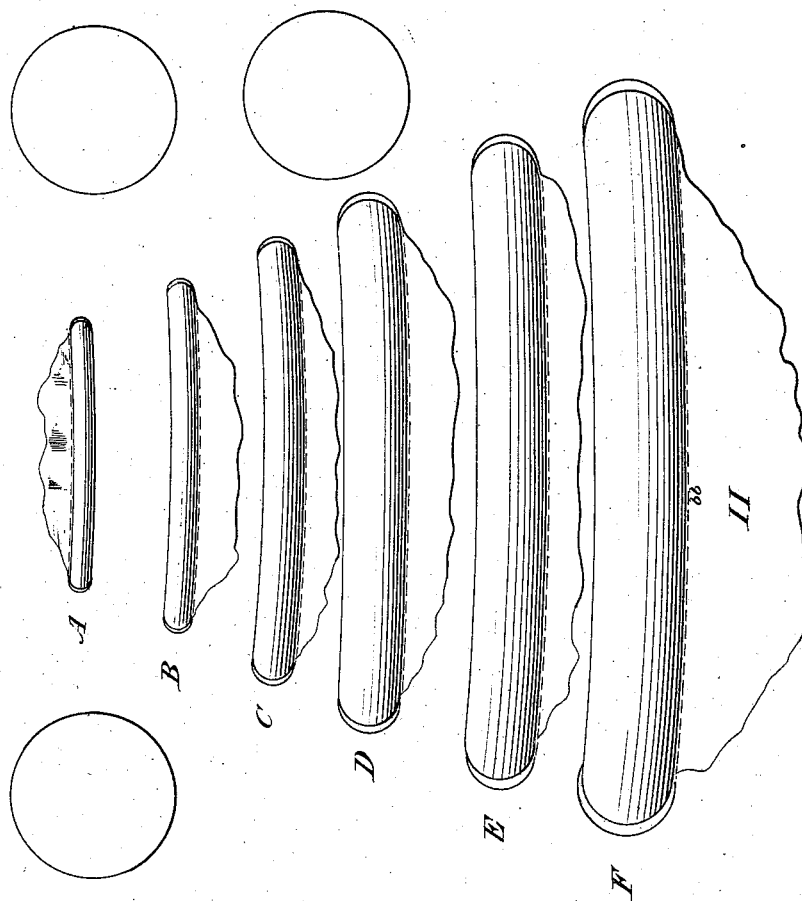


W. H. Miller;
Steam-Engine Packing.

N^o 45,261.

Patented Nov. 29, 1864.



Witnesses.

Ph. Hooper

W. B. Gordon

Inventor:

William Hartley Miller

UNITED STATES PATENT OFFICE.

WILLIAM HARTLEY MILLER, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN FIBROUS PACKING FOR STEAM-ENGINES.

Specification forming part of Letters Patent No. 45,261, dated November 29, 1864; antedated April 3, 1863.

To all whom it may concern:

Be it known that I, WILLIAM HARTLEY MILLER, of Philadelphia, in the county of Philadelphia, in the State of Pennsylvania, have invented a new and Improved Mode of Making Fibrous Packing for Steam-Engines and other purposes; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in preparing any of the usual forms of packing-yarn by saturating it with a paste-like or oily substance to prevent leakage of steam or water through the joints in which it is used, and of covering the whole with canvas or other fabric, sewed or otherwise secured, rendering the surface secure and uniform.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and mode of operation.

I manufacture my packing-yarn in any of the known forms; and in order to prevent leakage and from other causes, I add to the "yarn" a "paste" or oily "substance" by saturation or admixture. This paste or substance, in general, compose of a mixture of pulverized charcoal, molasses, and tallow, in such proportions as will form a paste suitable for saturation. Around the yarn thus prepared I place a covering of cloth or canvas or other fabric, securing it by sewing by hand or machine stitching, or by pasting the edges, thus presenting a uniform surface on my now improved packing. I make it of several diameters, as one-fourth, three-eighths, one-half inch, and so on up to two or more inches in di-

ameter, and make it of any required length from inches to hundreds of feet, winding in coils, as is usual with packing-yarn. It is used in the same manner as the usual form of packing-yarn, with this difference: It is made to suit the different diameters of the spaces it is intended to fill.

A, B, C, D, E, and F represent sections of as many different diameters or sizes of the improved packing, and shows the manner of "machine-stitching" through the canvas. By this means I will secure the fibers with a uniform surface, with any required diameter required in packing.

I I represent the edges of the canvas or covering projecting beyond the line of stitching *b b*.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The application to the packing-yarn of a substance which will make it more efficient, using for that purpose the aforesaid chemical compound or any other substantially the same and which will produce the intended effect.

2. The application to the packing-yarn of a cloth or canvas, or other fibrous covering prepared as herein described, or any other substantially the same and which will produce the intended effect.

3. The application of either of the above, separately and without reference to each other, as herein described, or any other substantially the same and which will produce the intended effect.

WM. HARTLEY MILLER.

Witnesses:

P. W. SHEAFER,
A. B. COCHRAN.