No. 727,055. PATENTED MAY 5, 1903.

K. ARNOLD.

PACKING FOR STUFFING BOXES.

APPLICATION FILED AUG. 28, 1902.

NO MODEL.

Fig. 1.

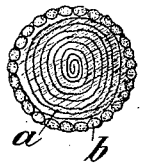


Fig. 2.

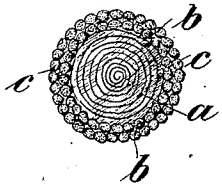


Fig. 3.



Fig. 4.

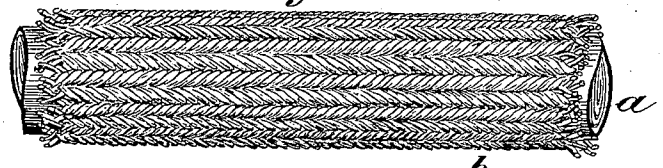
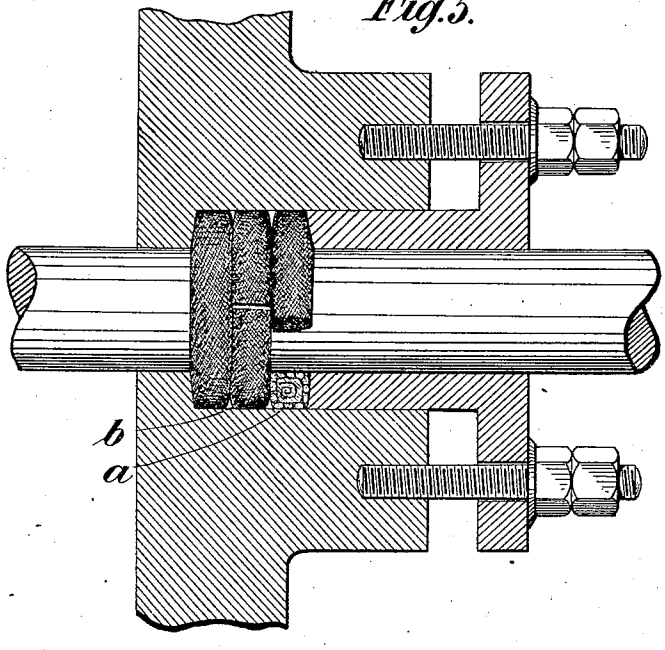


Fig. 5.



Witnesses:-

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 727,055. Patented May 5, 1903.

UNITED STATES PATENT OFFICE.

KARL ARNOLD, OF RIGA, RUSSIA.

PACKING FOR STUFFING-BOXES.

SPECIFICATION forming part of Letters Patent No. 727,055, dated May 5, 1903.

Application filed August 28, 1902. Serial No. 121,351. (No model.)

To all whom it may concern:

Be it known that I, KARL ARNOLD, workmaster at Riga, a subject of the Emperor of Russia, residing at Asyl street 24, Riga, in the Grand Duchy of Livonia and Empire of Russia, have invented certain new and useful Improvements in Packing for Stuffing-Boxes, of which the following is a full, clear, and exact description.

This invention has reference to packing for use in the stuffing-boxes of engines, and has for its object and effect to provide a packing which shall possess a large lubricating capacity and at all times make a steam-tight joint.

Drawings illustrating my invention are annexed hereto, in which—

Figures 1 to 3 are sections showing three different constructions of packing according to my invention. Fig. 4 is a side elevation, and Fig. 5 shows a stuffing-box in section, provided with my packings.

The core *a* of the packing consists of asbestos, talc, and hemp. For this core asbestos paper is used, made half of asbestos and half of light spar. This kind of composition of the core makes it very absorbent for lubricating-oil, and therefore is preferable to a pure hemp core.

The asbestos paper in its dry state is cut into strips of any desired width, which are saturated with melted cattle tallow and an admixture of mineral cylinder oil or grease, which renders the packing more flexible, and after being so saturated the strips are wound into rolls by machine or by hand. The core *a* so made is then spun over, and during this process of spinning over light spar in a dry state and graphite in flakes and in equal quantities is added, which increases the lubricating capacity. After the spinning over of the cover *b* has been effected the rolls are covered with a mixture consisting of three parts tallow and one part paraffin of low quality, and after this coating has dried they are brushed over with flake-graphite.

In connection with the process above described it is possible to use up in spinning asbestos threads of much shorter length and then effect a second spinning over *c* while allowing graphite to run in. In consequence of this mode of manufacture the packing can be produced very cheaply in comparison with its efficacy and lubricating capacity.

In addition to the composition above described the core may also consist not only of asbestos paper, but also of other kinds of paper which are very spongy and absorbent, such as filtering-paper or soda-celluloid paper.

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

Packing for stuffing-boxes, comprising a highly-absorbent and flexible core formed of strips of asbestos paper, light spar, talc and hemp, saturated with tallow and mineral oil or grease and wound into roll form, said core being inclosed by a spun cover incorporated with light spar and graphite in the process of spinning, and coated with a mixture of tallow and paraffin, brushed over, after drying, with flake-graphite, substantially as described.

In witness whereof I subscribe my signature in presence of two witnesses.

KARL ARNOLD.

Witnesses:
K. A. PERSSOUS,
VI WICHMANN.