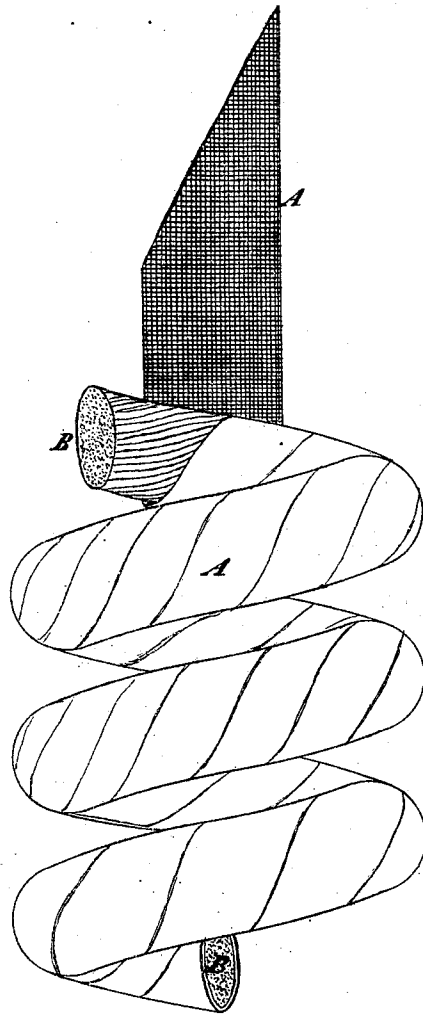


GEORGE GWYNN.

Improvement in Piston Packing.

No. 123,891.

Patented Feb. 20, 1872.



Witnesses
Fred. Harmer
R. E. Kabeer

George Gwynn

UNITED STATES PATENT OFFICE.

GEORGE GWYNN, OF NEW YORK, N. Y.

IMPROVEMENT IN PISTON-PACKING.

Specification forming part of Letters Patent No. 123,891, dated February 20, 1872.

Specification describing certain Improvements in Packing, invented by GEORGE GWYNN, of the city, county, and State of New York.

This invention consists in a novel preparation of the fabric of which the packing is composed in part or in whole, whereby it is not only made close and durable, but when applied to a rod or working-part, avoids heating, and is self-lubricating.

The accompanying drawing represents a roll packing of spiral form, applicable to stuffing-boxes and other purposes, the same being constructed in accordance with the invention.

A is the prepared fabric, which may either be used for gasket or roll-packing. This fabric, which may be made of linen toweling or cotton sheet, I treat to give it the properties hereinbefore mentioned, with a composition made up of paraffine, India rubber, lead, zinc, graphite or plumbago, wood, sawdust, and quicksilver. Thus, I take of paraffine, two pounds; India rubber, four ounces; lead, one and one-half pounds; zinc, eight ounces; graphite or plumbago, eight ounces; fine hard-wood sawdust, (box-wood or *lignum vitæ*,) eight ounces; and quicksilver, one ounce.

To prepare this composition, the zinc is first melted in a close retort, and the quicksilver added by introducing it through a suitable cock or valve, taking care to keep the temper-

ature low enough to prevent evaporation of the quicksilver. When cold this mixture is reduced to powder, and the plumbago having been pulverized, and the lead filed up into powder, all these are mixed with the saw-dust. The paraffine and rubber are melted together and mixed, and are spread with a spatula over the fabric while the latter is laid upon a table heated by steam or otherwise. The powdered ingredients are then rubbed with a roller or or other suitable implement into the coating of paraffine and India rubber, and the fabric is ready for use. The proportions of the several ingredients of the composition may be to some extent varied without materially affecting its efficiency, but I believe that the best results may be obtained from the proportions specified. B is a core, made of hemp, cotton, or other fibrous material, having its fibers either straight or twisted upon which the strip of prepared fabric A is wound spirally.

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

The woven fabric A, cut and prepared with the composition substantially as herein specified, in combination with the core B, for the purpose set forth.

GEORGE GWYNN.

Witnesses:

FRED. HAYNES,
R. E. RABEAU.