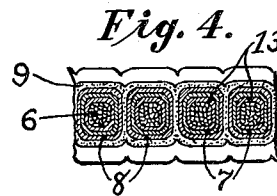
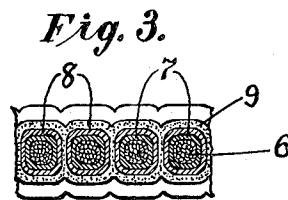
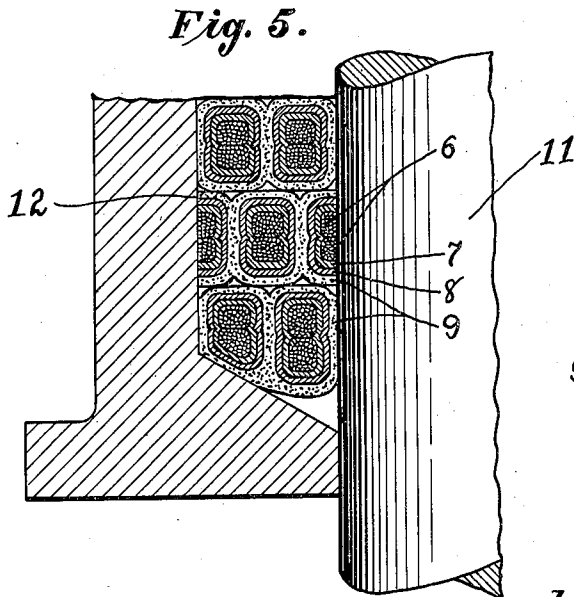
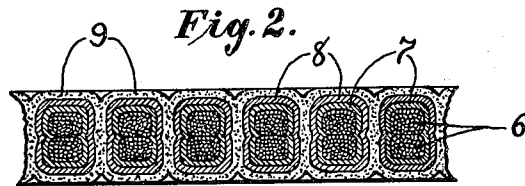
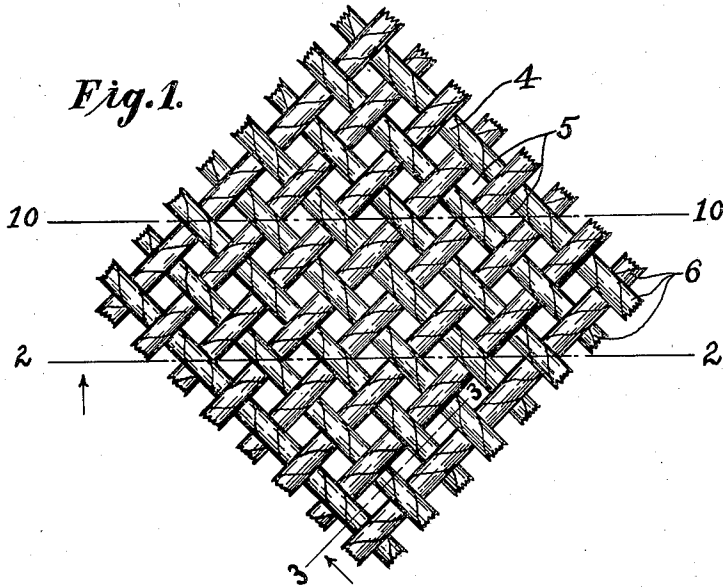


A. P. ANDERSON.
PACKING.
APPLICATION FILED NOV. 9, 1918.

1,342,198.

Patented June 1, 1920.



Inventor:
Andrew P. Anderson
by Wilbur M. Stone.
his Attorney.

UNITED STATES PATENT OFFICE.

ANDREW P. ANDERSON, OF LYNBROOK, NEW YORK, ASSIGNOR OF ONE-HALF TO
WALTER P. TEN EYCK, OF WESTFIELD, NEW JERSEY.

PACKING.

1,342,198.

Specification of Letters Patent.

Patented June 1, 1920.

Application filed November 9, 1918. Serial No. 261,899.

To all whom it may concern:

Be it known that I, ANDREW P. ANDERSON, a citizen of the United States, and a resident of Lynbrook, in the county of Nassau and State of New York, have invented certain new and useful Improvements in Packing, of which the following is a specification.

This invention relates to packing, particularly such as is employed in stuffing boxes of rotating and reciprocating shafts or rods. The object of my improvements is to provide a composite packing of metal and fibrous material, the latter preferably in the form of fabric, whereby the metal and fibrous materials are presented against the moving surface to be packed.

With these ends in view, and others which will appear later herein, my improvements include features which are illustrated in their preferred embodiment in the drawings accompanying this specification, wherein:—

Figure 1 is a plan view of a portion of fabric comprised of threads of fibrous material. Fig. 2 is a section on line 2, 2 of Fig. 1, after the fabric of Fig. 1 has had deposited thereover a succession of metal coatings. Fig. 3 is a similar section to that of Fig. 2, taken on line 3, 3 of Fig. 1. Fig. 4 is a section similar to the section of Fig. 3 but showing a modification thereof. Fig. 5 is a fragmentary sectional elevation of a stuffing box and shaft with a portion of my improved packing in place. The scale of all the figures of the drawing is the same, but that scale is greatly enlarged over actual size.

In the practice of my invention I preferably employ a fabric 4 of loosely woven mesh, so that interstices 5 are had between the threads 6 thereof. The fabric may be dusted with plumbago to provide a surface on which metal may be deposited electrolytically. Said fabric, of suitable width and length, is then placed in or fed through a plating bath and a coating of metal 7, such for instance, as nickel, is deposited thereon, penetrating the interstices between the threads, and entirely surrounding those threads where the whole circumferential surface is exposed, said metal being knit together through said interstices from opposite sides of the fabric, as shown in Fig. 3, and surrounding two threads and binding

them together where those threads cross, as shown in Fig. 2. Then if desired, a second metal 8, such for instance as copper, may be electrolytically deposited onto the first metal 7. If the mesh of the fabric is sufficiently open, said second metal will also penetrate the interstices between the threads and the metal on the opposite sides of the fabric will also be knit together through said interstices. Other layers of metal, such as 9, which if desired may be of zinc, may then be deposited on the second coating 8 and, if the fabric is sufficiently open, these other layers will also surround the already coated threads and unite from opposite sides of the fabric, as described in connection with coatings 7 and 8. In some cases it is advantageous to give the fabric or its constituent threads a primary coating of lubricant, such as paraffin or a mixture of paraffin and plumbago, as shown at 13, Fig. 4, and to deposit the metal coatings thereover.

Then said metal coated fabric may be cut into strips, preferably diagonally of the weave, as indicated between lines 2, 2, and 10, 10 of Fig. 1, suitable for winding about a shaft, as 11, Fig. 5, and supported in the stuffing box 12. By cutting said coated fabric diagonally of the weave, the resultant strips may be more freely wound about such shaft, as 11, and stack up with regularity in the stuffing box. Also, by cutting said fabric after coating instead of coating the strips in their desired width, a wearing edge is presented against the shaft, see Fig. 5, consisting of alternate portions of fabric material and lubricant, if employed, and the several kinds of metal, thus producing a wearing surface of great durability and of anti-friction quality.

I claim:

1. A packing material comprising a fabric having metal electro-deposited on both sides thereof and penetrating the interstices between the threads of said fabric, the metal on the opposite sides of the fabric being knit together through said interstices.

2. A packing material comprising a fabric coated with a lubricant on both sides thereof and penetrating through the interstices between the threads of said fabric and having metal electro-deposited on both sides thereof and penetrating the interstices

between the threads of said fabric, the metal on the opposite sides of said fabric being knit together through said interstices.

3. A packing material comprising a fabric having one kind of metal electro-deposited on both sides thereof and penetrating the interstices between the threads of said fabric, the metal on the opposite sides of the fabric being knit together through said interstices, a different metal electro-deposited on said first mentioned metal and penetrating the interstices between the metal covered threads of said fabric, said different metal on the opposite sides of said fabric being knit together through said interstices.

4. A packing material comprising a fabric coated with a lubricant and having a plurality of kinds of superposed metal coat-

ings electro-deposited thereon, said coated fabric being cut through to present a wearing edge comprising fabric material, lubricant and a plurality of kinds of metal.

5. A packing material comprising a fabric having a plurality of kinds of superposed metal coatings electro-deposited thereon, said coated fabric being cut through to present a wearing edge comprising fabric material and a plurality of kinds of metal.

6. A packing material comprising a fabric having a metal coating electro-deposited thereon, said metal coated fabric being cut into strips diagonally of the weave.

In witness whereof, I hereby affix my signature this 8th day of November, 1918.

ANDREW P. ANDERSON.