

N. B. MILLER.

PACKING.

APPLICATION FILED JAN. 7, 1915.

1,187,006.

Patented June 13, 1916.

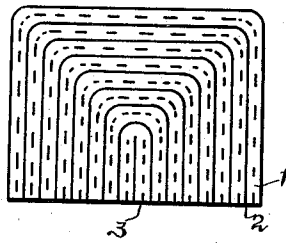


Fig 1

Fig 2

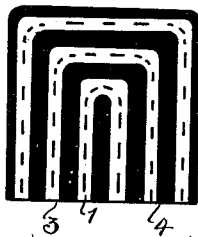
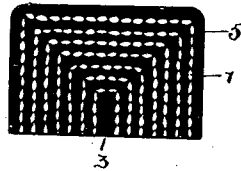


Fig 3



WITNESSES

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PACKING.

1,187,006.

Specification of Letters Patent.

Patented June 13, 1916.

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To all whom it may concern:

Be it known that I, NORMAN BRUCE MILLER, a citizen of the United States, and resident of the town of Haddon Heights, county of Camden, State of New Jersey, have invented certain new and useful Improvements in Packings, of which the following is a specification.

The object of this invention is to provide a packing that shall have the advantage of greater resiliency, greater resistance to wear and therefore a longer useful life. To accomplish this purpose I produce a packing which, although constructed of materials previously used, by its arrangement or formation insures that I obtain a high degree of elasticity, at the same time present to a movable member, that may be operated in contact therewith, a strong and well supported surface.

The following is what I consider the best means of carrying out this invention and the accompanying drawings form a part of this specification in which,

Figure 1, shows a cross section of my packing as formed of independent layers firmly secured together. Fig. 2, is another sectional view wherein a greater content of compressible material is indicated. Fig. 3, shows the fibrous material embedded into the compressible material.

Similar reference numerals indicate like parts in all of the figures where they appear.

In Fig. 1 I have shown a section of packing, this packing may be formed of alternate layers of fibrous material such as canvas as indicated at 1, and a compressible material such as rubber as indicated at 2, or of any other materials that have been found of value in the making of packings. My invention does not exist in the selection of material but rather in the arrangement thereof, and in each of the figures it will be noted that the canvas or fibrous material and the elastic or compressible material interposed between the sheets of canvas, are in each and every instance shaped in a manner to approximate an arch, and each layer has both of its ends brought to a common plane, the

base or wear line of the packing as indicated at 3. By this construction I have found that I have produced a packing not only more resilient or elastic than the ordinary packing but I have also found that my packing will out-wear other packing, that it will withstand higher pressure and will not while contained in the gland disintegrate by the action of the steam or oil thereon. Each individual layer of packing has both of its ends clamped in position, each individual layer of packing has both of its ends in bearing with the movable member adjacent thereto, therefore I obtain uniformity of wear throughout the packing.

In Fig. 1 I have indicated the use of but a small quantity of rubber or other compressible material, but I may without sacrificing any of the advantages of my construction increase the quantity of elastic or compressible material as indicated at 4 in Fig. 2, and I have also found that I may construct my packing by impregnating the fibrous material with the elastic material as indicated at 5 in Fig. 3. I desire, however to adhere to the principle of arch construction and to the idea of having both ends of each layer of material impinge upon the movable member as herein set forth.

Other modifications may be made within the scope of the appended claim without departing from the principle or sacrificing the advantages of this invention.

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

A solid packing having its entire cross section constructed of a plurality of layers of alternate fibrous and elastic materials each arranged as an arch with both ends terminating upon a general plane.

Signed at New York city, New York, this 18th day of Dec. 1914 in the presence of two witnesses.

NORMAN BRUCE MILLER.

Witnesses:

G. E. STERRITTE,
ARTHUR PHELPS MARR.