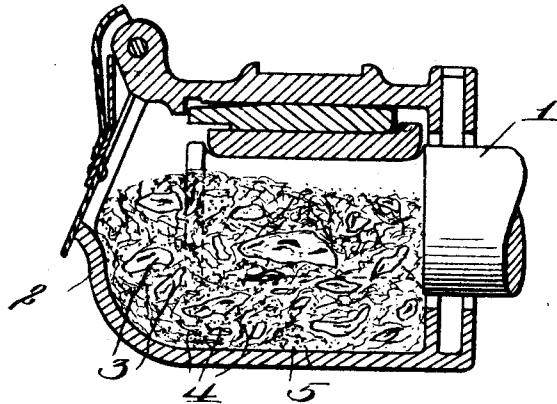


H. B. DEVLAN.
METHOD OF MANUFACTURING PACKING FOR JOURNALS.
APPLICATION FILED OCT. 21, 1910.

1,033,553.

Patented July 23, 1912.



Witnesses.

E. H. Keeler

E. B. Keeler

Inventor

Harriett B. Devlan

by

James L. Norris Jr.

Attest

UNITED STATES PATENT OFFICE.

HARRIETT B. DEVLAN, OF JERSEY CITY, NEW JERSEY.

METHOD OF MANUFACTURING PACKING FOR JOURNALS.

1,033,553.

Specification of Letters Patent.

Patented July 23, 1912.

Application filed October 21, 1910. Serial No. 588,382.

To all whom it may concern:

Be it known that I, HARRIETT B. DEVLAN, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented new and useful Improvements in Methods of Manufacturing Packing for Journals, of which the following is a specification.

My present invention relates to improvements in the manufacture of packings such as used for instance in the journal boxes of railway cars for the purpose of lubrication, and it has for its object to provide a method of manufacturing a novel and improved packing that will possess elastic and heat-resisting properties and will serve to efficiently lubricate the journal.

I shall describe the preferred method of manufacturing the packing, but it will be understood that this method will be described as an example of the invention and that certain minor features of the method and also the relative proportions of the parts may be varied within the scope of the invention.

According to the present embodiment of the invention, I first cut sponge into small pieces, then extract the calcareous and other foreign matter therefrom by thoroughly soaking the sponge and then subjecting it to pressure to crush the calcareous and other foreign matter that may be mixed with it, passage of the sponge between rollers being suitable for the purpose. The sponge is then thoroughly washed to remove the calcareous and other foreign matter and, after the sponge has been so treated to thoroughly wash and clean it, it is then introduced into a solution which is preferably prepared in the following manner. Two parts of caustic soda are boiled with five parts of palm oil to form an emulsion or soap. This emulsion or soap is then dissolved in water and mixed with thirty parts of glycerin while hot. After this solution has cooled, a sufficient quantity of water containing one-half pound of borax dissolved therein to each gallon of water is added to the solution. After the sponge has been placed in the solution prepared as above and saturated therewith, it is then removed from the solution and again subjected to pressure to extract the surplus solution therefrom. The sponge thus prepared is then mixed in the proportion of one pound of sponge with two pounds of pulp

asbestos and two pounds of cattle hair, these parts being thoroughly incorporated with one another and the resulting product is then ready for use as a packing for railway journal boxes.

In the accompanying drawing I have shown a railway journal and journal box containing a packing made in accordance with the present invention, 1 designating the journal and 2 the journal box. The packing is applied in the usual manner and it contains the ingredients prepared and mixed in the manner described, 3 designating the washed purified sponge having emulsified palm oil and glycerin permanently incorporated therewith, 4 designates the cattle hair or animal fiber, and 5 the pulp asbestos.

The palm oil when used in the form of an emulsion serves to soften the sponge and the glycerin serves to render the sponge resilient, the glycerin serving to prevent the oil that is used in packing the journal box from hardening the sponge. Moreover, the sponge when treated with an emulsion such as that above described is very elastic and it acts as an oil reservoir which retains itself in immediate contact with the journal and at the same time it holds and delivers the oil uniformly to the hair and asbestos which act as a base or feeder. The asbestos also possesses the property of a lubricant and it also prevents heating of the journal.

I claim as my invention:—

1. The hereindescribed method of manufacturing packing for journals which consists in washing sponge and extracting impurities therefrom, treating the washed and purified sponge with a solution containing emulsified palm oil and glycerin, removing the surplus solution and allowing a quantity of such solution to remain in the sponge, and then mixing the sponge containing such solution with a heat-resisting material.

2. The hereindescribed method of manufacturing packing for journals which consists in treating sponge with a liquid emulsion of palm oil and glycerin, removing the surplus liquid from the sponge and allowing a quantity of such liquid to remain permanently in the sponge, and then mixing the sponge containing such liquid emulsion with animal fiber.

3. The hereindescribed method of manufacturing packing for journals which con-

sists in treating sponge with a solution containing emulsified palm oil and glycerin, removing the surplus solution from the sponge and allowing a quantity of such solution to remain permanently in the sponge, and then
5 mixing the sponge containing such solution with asbestos and cattle hair.
4. As a product of manufacture, a packing material for journal bearings composed
10 of washed purified sponge having emulsified

palm oil and glycerin permanently incorporated therewith.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

HARRIETT B. DEVLAN.

Witnesses:

EDWARD MARKLEY,
JOHN J. DEVLAN.