# UNITED STATES PATENT OFFICE.

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

## METHOD OF MANUFACTURING PACKING FOR JOURNALS.

SPECIFICATION forming part of Letters Patent No. 514,350, dated February 6, 1894.

Application filed June 22, 1893. Serial No. 478,507. (No specimens.)

*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.

This invention relates to lubricating packings which contain particles of sponge, and particularly that class of packings composed of bambco fiber, pieces of sponge, and a mineral substance, such as asbestus, steatite, or graphite, as in my Letters Patent No. 411,326, dated September 17, 1889.

The object of my present invention is to increase the elasticity and efficiency of the sponge, and this I accomplish in the manner and by the means hereinafter described and claimed.

In manufacturing the packings for journals I mix about one pound of purified sponge, divided into small pieces, with about two pounds of bamboo fiber, and about one and a half pounds of a mineral substance, such as asbestus, steatite, or graphite, and one pound of hair. These proportions will give satisfactory results, but I do not confine myself to any special proportions, as they may be varied without affecting the spirit of my invention. Before the sponge is mixed with the bamboo fiber and other substances mentioned, it is first thoroughly washed, and then comminuted or divided into small pieces or particles and subjected to the action of a solution of glycerine and caoutchouc, mingled together in water. The solution is preferably composed of about two gallons of glycerine, six ounces of caoutchouc, and ten gallons of water; but these proportions may be varied to suit the conditions required. This quantity of the solution is sufficient to saturate about one hundred pounds of sponge. The glycerine and caoutchouc when used in connection with each other make the sponge very elastic, and enable me to manufacture the packing and place it upon the market at considerably less expense than heretofore, in that I can utilize waste pieces of sponge, and by my process place them in good elastic condition for the packing. The fiber of the bamboo stalk tends to cool the journal or axle, and the sponge renders the packing elastic, and is a vehicle for the proper supply of oil or other lubricant.

A packing made according to my invention is designed to be supplied at proper times with oil or other lubricant, and the sponge being elastic acts as a fountain to supply the oil to the journal or axle.

Having thus described my invention, what I claim is—

1. In the manufacture of packings for journals containing pieces of sponge, and a mineral substance, the process or method herein described of preparing the sponge, which consists in comminuting the same, subjecting it to the action of glycerine and caoutchouc, and then mixing the pieces of sponge with mineral substances, substantially as described.

2. The method herein described of manufacturing packing for journals, which consists in comminuting sponge, subjecting it to the action of glycerine and caoutchouc, and mixing the same with bamboo fiber, hair, and a mineral substance, substantially as set forth.

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

HARRIETT B. DEVLAN.

Witnesses:
WILLIAM S. DEVLAN,
JOHN J. DEVLAN.