Anited States Patent Office.

WILLIAM W. ALLMAND, OF EAST BOSTON, MASSACHUSETTS.

Letters Patent No. 97,585, dated December 7, 1869.

IMPROVEMENT IN PACKING FOR STUFFING-BOXES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM W. ALLMAND, of East Boston, in the county of Suffolk, and in the State of Massachusetts, have invented a certain new and useful Improvement in Compositions for Stuffing-Box Packing; and do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to a class of compositions containing rubber, employed for packing stuffing-boxes;

and

It consists in the employment of a ring of hard wood, or its equivalent, between the composition and the rod, whereby all injury to the packing from heat is avoided, and its elasticity remains unimpaired.

By reason of its great elasticity, rubber is largely used for stuffing-box packing; but, in its pure state, or when mixed with other ingredients, it is open to serious objections, as the action of heat not only destroys its elasticity, but also renders it liable to adhere to the box and rod.

In order to overcome this objection, I make use of a thin shell or ring of hard wood, (preferably lignum-vitæ,) placed next to the rod, with the rubber or composition placed upon the outside of the same, and then vulcanized within a cylinder corresponding in size and

shape with the stuffing-box, its ends being closed by means of suitable heads, while an arbor or mandrel, corresponding in size and shape to the rod passes through its centre or axis. When taken from the cylinder, the packing is placed within a lathe and cut into rings of the desired size, after which it is ready for use.

The wood being a non-conductor of heat, prevents injury to the rubber, and, at the same time, from its action upon the rod, renders the use of lubricators unnecessary.

Having thus fully set forth the nature and merits of my invention,

What I claim as new, and desire to secure by Let-

The employment of a ring of wood, or its equivalent, between packing, (composed wholly or in part of rubber,) and the rod, substantially as and for the purpose set forth.

In testimony that I claim the foregoing, I have hereunto set my hand, this 4th day of November, 1869.

WM. W. ALLMAND.

Witnesses:

P. E. TILLINGHAST, GEO. C. GATES.