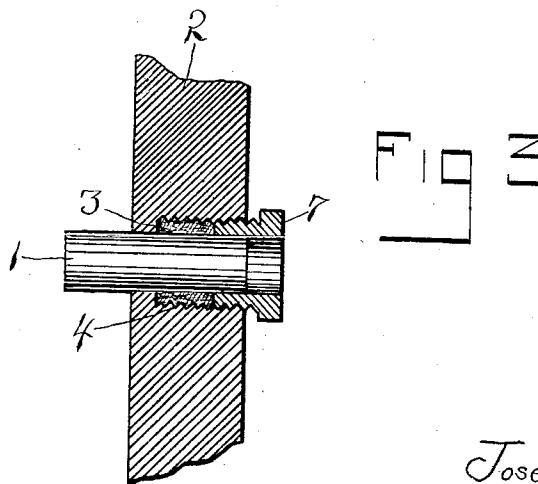
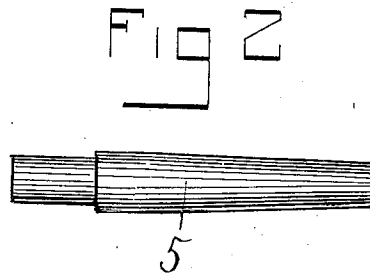
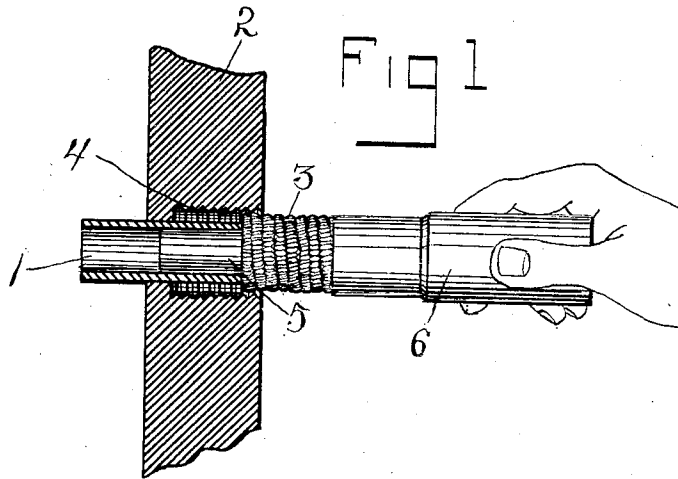


No. 826,009.

PATENTED JULY 17, 1906.

J. ALLEN.
CONDENSER TUBE PACKING.
APPLICATION FILED JAN. 18, 1905.



Witnesses
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UNITED STATES PATENT OFFICE.

JOSEPH ALLEN, OF COLLINGSWOOD, NEW JERSEY.

CONDENSER-TUBE PACKING.

No. 826,009.

Specification of Letters Patent.

Patented July 17, 1906.

Application filed January 18, 1905. Serial No. 241,706.

To all whom it may concern:

Be it known that I, JOSEPH ALLEN, a subject of the King of Great Britain, and a resident of Collingswood, in the county of Camden and State of New Jersey, have invented certain new and useful Improvements in Condenser-Tube Packings and the Like, of which the following is a specification.

This invention relates to tube-packing, particularly of the type employed in packing condenser-tubes, and has for its particular object to provide an improved packing which possesses marked advantages in respect of convenience, reliability, and durability over those heretofore employed.

With this and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims.

In the drawings, Figure 1 shows a condenser-tube and tube-sheet in section and packing and tools for use therewith disposed in position for packing the tube in the tube-sheet. Fig. 2 is a detail view of one of the packing-tools which is not fully shown in Fig. 1. Fig. 3 is a view in section, showing the packing in use.

Like reference-numerals refer to corresponding parts throughout the several views.

In the drawings, 1 designates a condenser-tube, and 2 a tube-sheet, within which the end of the tube is to be packed.

3 is a packing in the form of a section of cylindrical tubing woven of cotton, cotton-flax, asbestos, or other fibrous material having a weft and warp. The packing-sections are stiffened with paraffin or other similar wax-like material to permit the said sections to be pushed or driven into place without bending or buckling.

Each packing or packing-section when inserted within the stuffing-box or space 4 around the end of the tube 1 in the tube-sheet will fill the said space.

In packing a tube a packing-section 3 is first threaded over the tapered end of the packing-tool 5, which may be of wood or iron, having the shape illustrated. This tool, with the packing-section disposed therein as described, is then inserted within the free end of the condenser-tube until the packing-section contacts with the end of the tube. A packing device having the form of a tube of a size adapted to receive the condenser-tube therein is then inserted over the packing-tool 5 and the packing-section is pressed or driven over the end of the condenser-tube, so as to occupy the space about the tube in the stuffing-box 4. A ferrule 6, having external screw-threads, is then screwed into the internally-screw-threaded opening 4, and any desired pressure is then brought to bear upon the packing to effectually seal the joint between the tube and the tube-sheet.

Having thus described my invention, what I claim as novel, and desire to secure by Letters Patent, is—

1. A tube-packing consisting of a section of woven tubing impregnated with a stiffening material.

2. A tube-packing consisting of a section of woven tubing impregnated with paraffin.

3. A tube-packing consisting of a section of woven tubing impregnated with a stiffening wax-like material.

In testimony whereof I have hereunto set my hand.

JOSEPH ALLEN.

Witnesses:

GEO. C. BURLING,
CECIL H. ALLEN.