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J. S. GELFARB

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STRUCTURAL WOOD CONNEGTOR AND JOINT
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FIG. 2
INVENTOR.

BY

Richard K. Dacnuil

3,333,874
STRUCTURAL WOOD CONNECTOR AND JOINT Joseph S. Gelfarb, 104 N. Freeman St., Oceanside, Calif. 92054
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1 Claim. (CI. 287-20.92)
The present invention relates to a structural wood connector, and more particularly to a structural wood connector for effecting a joint at any desired angle.

According to the invention, a metallic cylinder is provided which can be constructed of steel, for example. The outside of the cylinder has helical serrations throughout its entire length. When it is desired that two or more structural sections of timber be fastened together, they are provided with axially aligned bores of substantially the same diameter as the outside diameter of the cylinder. The cylinder is cut to have a length greater than the sum of the thicknesses of the sections of structural timber which are desired to be held together. The cylinder is then hammered through the axially aligned bores in the structural timber sections until it is centered. The outside serrations on the cyclinder assist in its passage through the structural wood sections and provide sufficient friction for preventing the possibility of relative slippage or movement after it is in place. The inside of the cylinder can then be utilized for a support for hanging equipment or a general purpose conduit. In the alternative, the ends can be covered in a decorative fashion.
An object of the present invention is the provision of a structural wood connector which obviates the necessity of a bonding agent.

A further object of the invention is the provision of a structural wood connector in which retaining hardware is not utilized.

A further object of the invention is the provision of a structural wood connector which is simple and inexpensive to manufacture.

Still another object is to provide a structural wood connector which is simple and expeditious in application.

Other objects and many of the attendant advantages of this invention will be readily appreciated as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings in which like reference numerals designate like parts throughout the figures thereof and wherein:

FIG. 1 is an exploded view in perspective of the preferred embodiment of the present invention in use; and

FIG. 2 is an elevation of the preferred embodiment of the present invention in use.

Referring to FIGS. 1 and 2, a cylinder 11 has a smooth inside wall 18 and an outside wall 19 with serrations 12 thereon. A plurality of timber sections 14 each have a bore 15 in axial alignment. Cylinder 11 is passed through
bores 15. A pipe section 16 is passed within inner wall 18 of cylinder 11.

It is pointed out that the thickness of material cylinder 11 is determined by the structural capacities required. The
5 length of the cylinder 11 is determined, of course, by the thickness and number of the structural timber members being held together. The diameter of cylinder 11 will vary with respect to the over-all sides of the timber sections utilized.

The bores 15 in timber sections 14 can be pre-cut or, if desired, can be cut with the timber sections 14 in place. Cylinder 11 is hammered through the bores 15 until it is centered in the joint. At that time, the inner portion of cylinder 11 can be utilized as a conduit or as shown, a pipe section 16 can be placed within cylinder 11 for utilization in hanging equipment. In the alternative, decorative covers can be placed over each end of cylinder 11.

It should be understood, of course, that the foregoing disclosure relates to only a preferred embodiment of the invention and that it is intended to cover all changes and modifications of the example of the invention herein chosen for the purposes of the disclosure, which do not constitute departures from the spirit and scope of the invention.

What is claimed is:
A structural joint comprising:
a connector defined by a metallic cylindrical section;
said metallic cylindrical section having an axially extending bore therethrough and having helical serrations throughout its length on the outer surface thereof;
a plurality of structural wood beams being connected; and
each of said plurality of structural beams having a bore of substantially the outside diameter of said metallic cylindrical section, said bores being in axial alignment with each other,
said cylindrical section being at least as great as the combined thickness of said beams, said cylindrical section being frictionally engaged with said structural beams forming a permanent joint therewith, the bore in said cylindrical section providing conduit means for receiving an extraneous member.

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CARL W. TOMLIN, Primary Examiner.
R. S. BRITTS, Assistant Examiner.

