

No. 775,922.

PATENTED NOV. 29, 1904.

E. O. HODGSON.
TREE COUPLING.

APPLICATION FILED MAY 6, 1904.

NO MODEL.

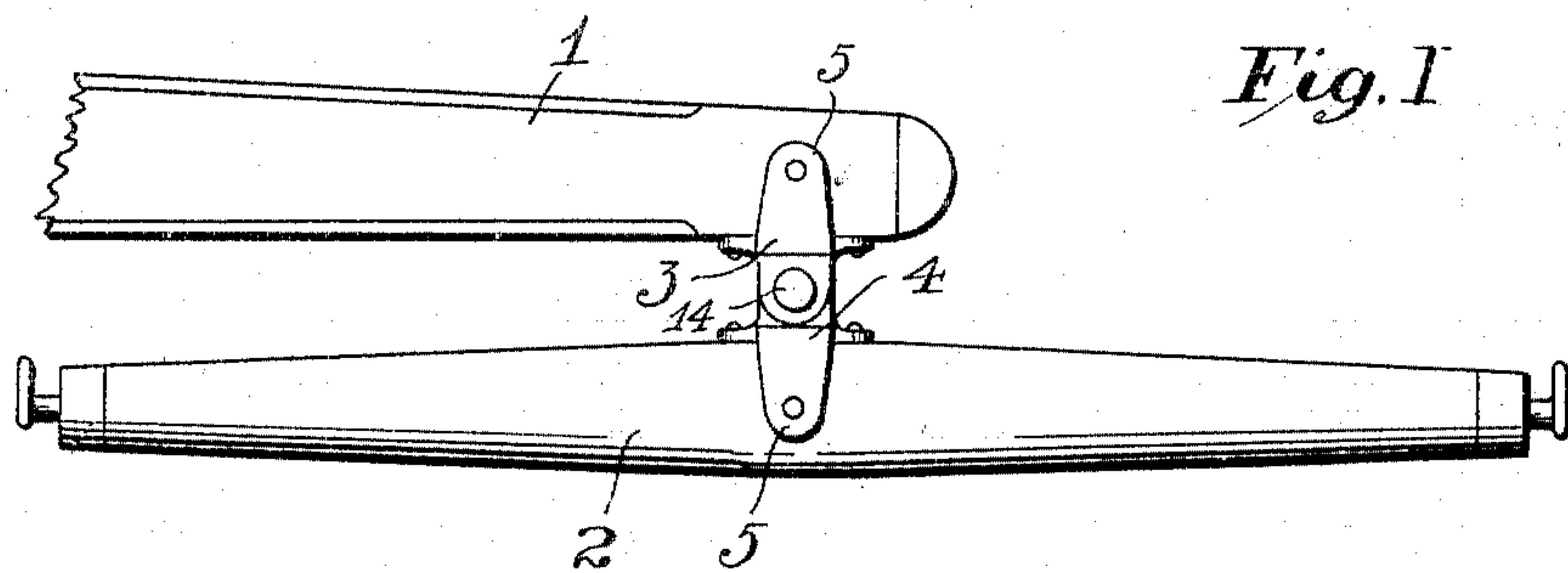


Fig. I

Fig. II

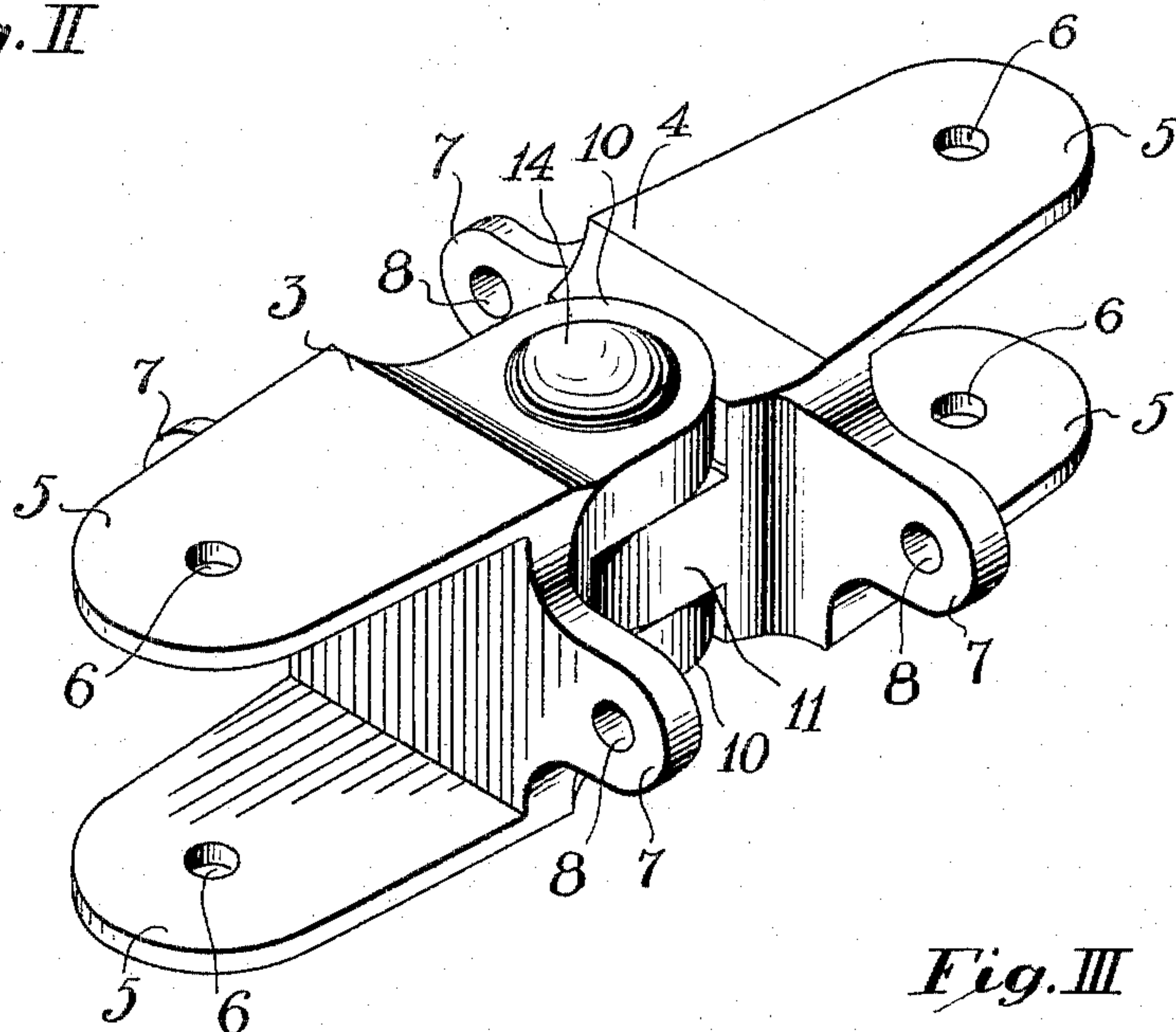
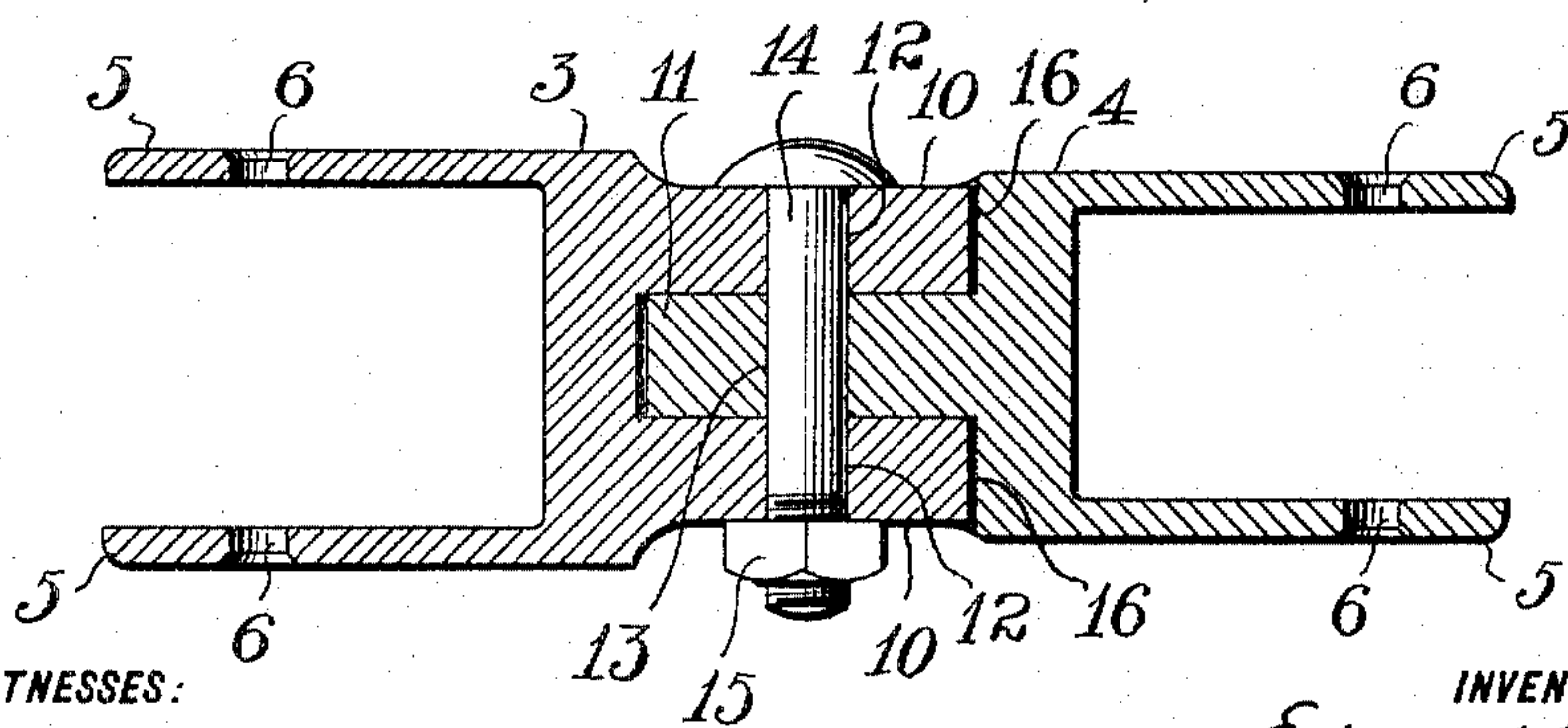


Fig. III



WITNESSES:

Thos. K. Lancaster
Cyrus A. Anderson

INVENTOR

Edward O. Hodgson
BY *McManis*
ATTORNEY.

UNITED STATES PATENT OFFICE.

EDWARD O. HODGSON, OF BRIDGETON, NEW JERSEY.

TREE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 775,922, dated November 29, 1904.

Application filed May 6, 1904. Serial No. 206,632. (No model.)

To all whom it may concern:

Be it known that I, EDWARD O. HODGSON, a citizen of the United States, residing at Bridgeton, in the county of Cumberland, State of New Jersey, have invented certain new and useful Improvements in Tree-Couplings, of which the following is a specification.

This invention relates to an improvement in tree-couplings, and has for its object to provide a coupling which will permit movement of the swingletree relative to the doubletree in a horizontal plane, but which will prevent movement of the said swingletree in vertical planes. In other words, the object of the invention is to provide a tree-coupling which will support the swingletree in a plane coincident with that of the doubletree, which plane is substantially horizontal when the device is in use.

The invention resides in the novel features of construction hereinafter described, set forth specifically in the claim, and illustrated in the drawings accompanying this specification, and in which—

Figure I is a top plan view of one end portion of a doubletree having a swingletree connected thereto by means of my improved tree-coupling. Fig. II is an isometric view of the tree-coupling detached from the doubletree and swingletree, and Fig. III is a longitudinal section of the tree-coupling shown in Fig. II.

In the drawings, 1 designates the doubletree, and 2 designates the swingletree. The doubletree and swingletree are connected together by means of the tree-coupling, consisting of the members 3 and 4. Each of the said members is provided with projecting plate-like portions 5, by means of which the said members 3 and 4 are secured, respectively, to the doubletree and swingletree. Each of the projections 5 is provided with perforations 6, which are adapted to receive a suitable securing device—for instance, a bolt or screw—which is passed through the said projections and into the material of the doubletree or swingletree, as the case may be, when the projections 5 are placed in position over the said doubletree and swingletree. The members 3 and 4 are also provided with projections 7, arranged upon their opposite sides and intermediate the projections 5. The projections 7 are provided

with perforations 8 to receive suitable securing means—as, for instance, a bolt, screw, or similar device—passing through the said perforations 8 into the substance of the doubletree and swingletree, as indicated at Fig. I.

In order to secure the members 3 and 4 of the tree-coupling together, the member 3 is provided with a couple of projections 10, spaced apart, as clearly indicated in Fig. II. The member 4 is provided with a projection or tongue 11 intermediate its sides, which is adapted to project into the space between the projecting lugs or ears 10 on the member 3.

The projections 10 and 11 on the respective members 3 and 4 are provided with perforations 12 and 13, through which a bolt 14 is adapted to be passed to secure the said members together, the said bolt being screw-threaded at one end to receive a nut 15, as clearly shown in Fig. III. The projections 10 and 11 are arranged in the plane of the doubletree and swingletree with the pivot-bolt at right angles thereto, so that the swingletree is permitted to move about its pivot in the plane of the doubletree, but prevented from falling down into a position below the doubletree.

It will be observed that the ends of the projections 10 on the member 3 fit closely against shoulders 16 upon the member 4 upon opposite sides of the projection or tongue 11. When the tree-coupling is in use, the shoulder which is located upon the under side of the member 4 serves as an abutment for the underneath projection 10 of the member 3, whereby a portion of the pressure resulting from the weight of the swingletree is removed from the connecting-bolt 14, which prevents undue wearing of the said bolt and lengthens its life.

It will be observed that the member 3 is secured to the doubletree and that the member 4 is secured to the swingletree; but it is obvious that this arrangement may be reversed and that the member 3 may be secured to the swingletree and the member 4 to the doubletree.

It frequently happens that the driver in getting into and out of his seat upon the wagon or other vehicle steps upon the swingletree, at which times there is danger of splitting both the swingletree and the doubletree. The split-

ting of these two members is prevented, however, when a tree-coupling of the construction illustrated is used by reason of the clamping and bracing action of the projections 5 upon opposite sides of the doubletree and swingle-tree.

It is to be understood that I do not limit myself to the exact construction described and illustrated, as it is obvious that various changes in construction may be made without departing from the spirit of my invention. I desire to include all such changes and modifications within the scope of my invention.

Having thus described my invention, I claim—

The combination of a doubletree, a swingle-tree, and a tree-coupling connecting the said doubletree and swingle-tree, the said coupling comprising a plurality of members, the said members being connected respectively to the doubletree and swingle-tree, one of the said members being provided with a projection at

one end which is located intermediate the top and bottom faces of the said member, and the said member being provided with shoulders upon the opposite sides of the said projection, and the other member being provided with a plurality of projections, the said projections being spaced apart to provide a recess which is adapted to receive the projection upon the first-named member, and a coupling-pin passing through perforations provided in the said projections to secure the said members together, and one of the said shoulders upon one of the said members adapted to form an abutment for one of the projections upon the other of said members.

In testimony that I claim the foregoing as my invention I have hereunto signed my name this 5th day of May, A. D. 1904.

EDWARD O. HODGSON.

In presence of—

THOS. K. LANCASTER,
CYRUS N. ANDERSON.