

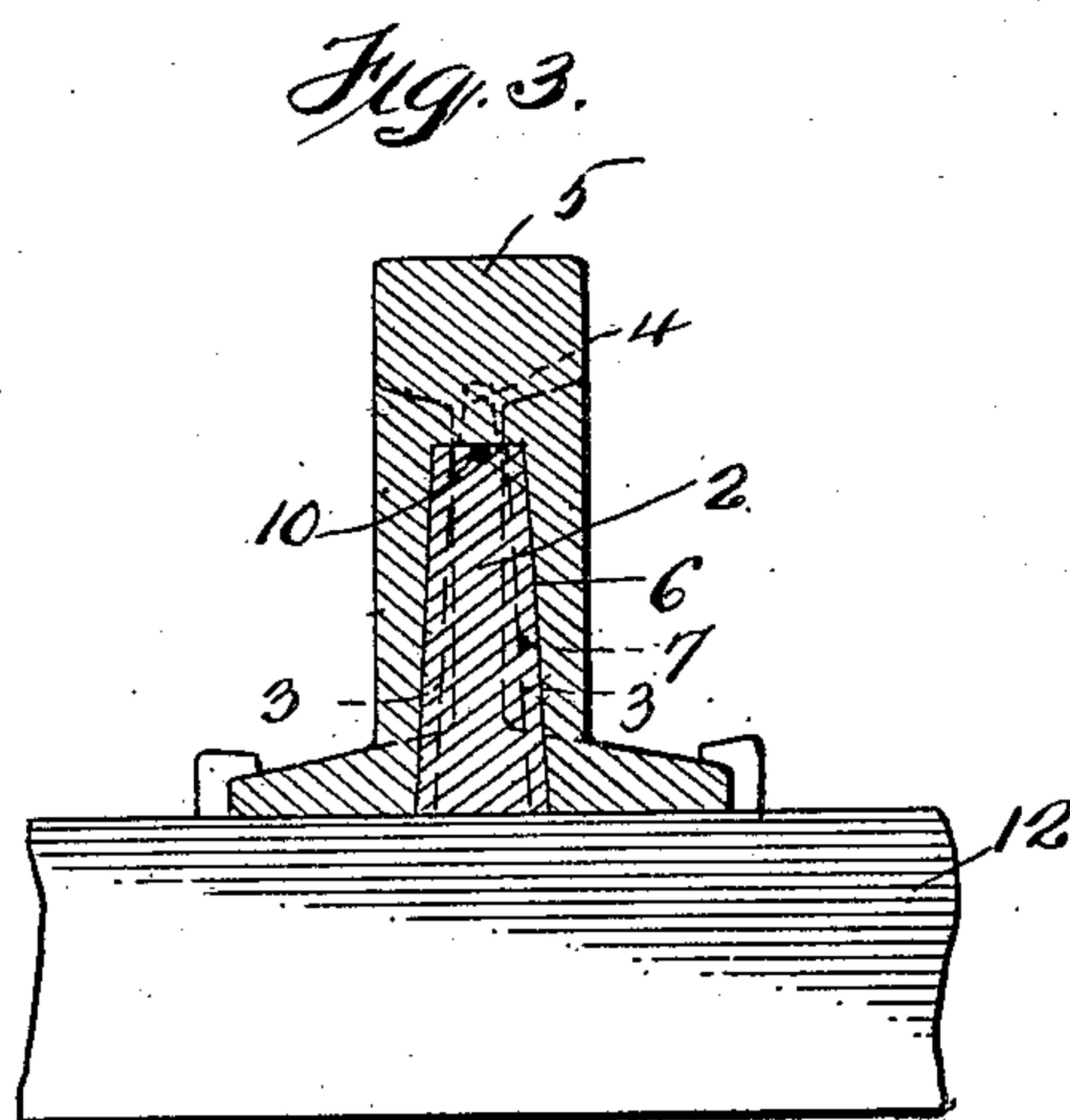
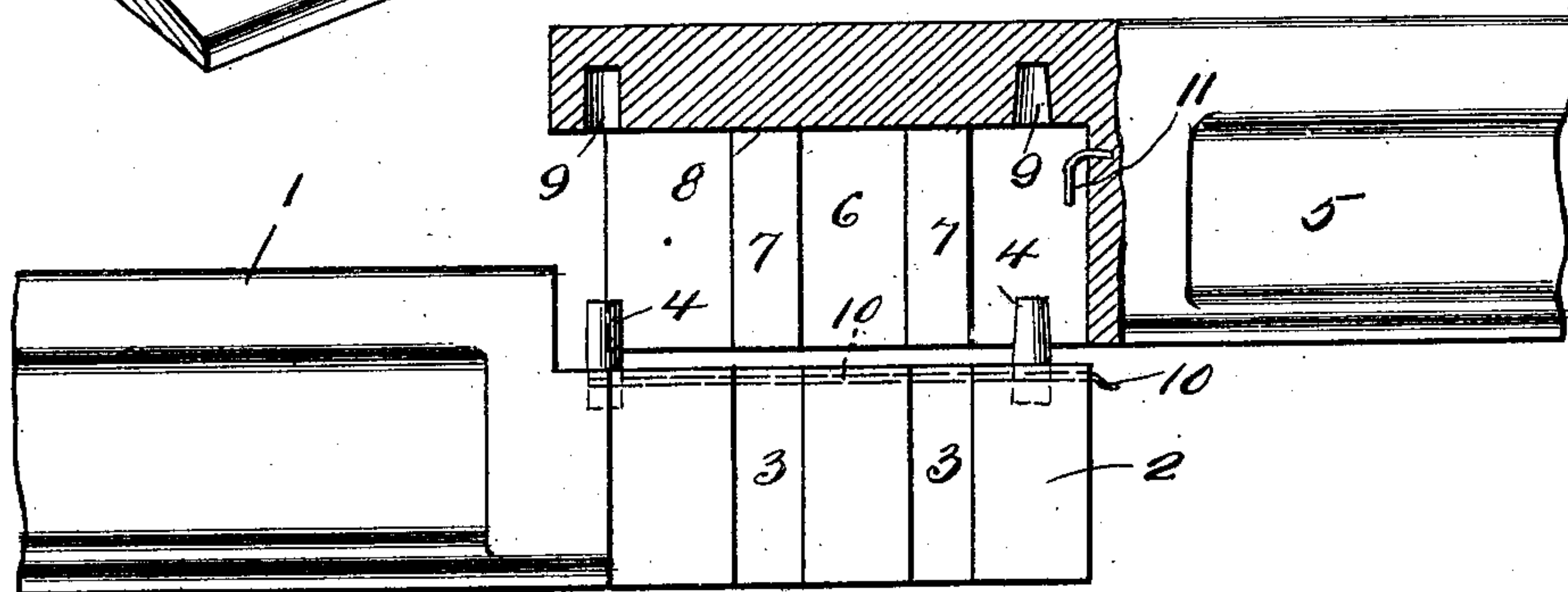
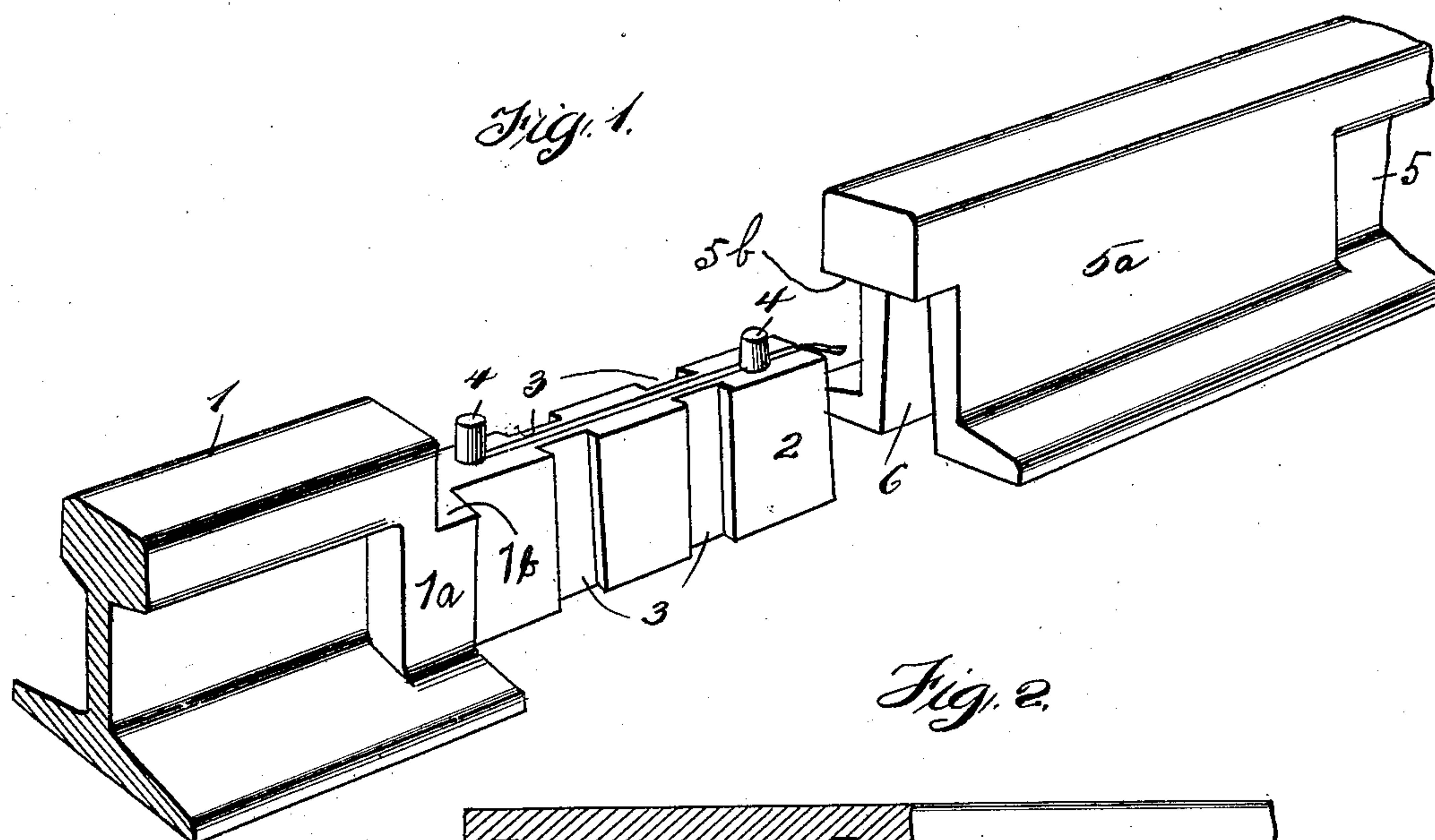
No. 897,177.

PATENTED AUG. 25, 1908.

H. WALKER & F. WEIRS.

RAIL JOINT.

APPLICATION FILED AUG. 10, 1907.



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# UNITED STATES PATENT OFFICE.

HOMER WALKER AND FRANK WEIRS, OF BYESVILLE, OHIO.

## RAIL-JOINT.

No. 897,177.

Specification of Letters Patent.

Patented Aug. 25, 1908.

Application filed August 10, 1907. Serial No. 387,953.

*To all whom it may concern:*

Be it known that we, HOMER WALKER and FRANK WEIRS, citizens of the United States of America, residing at Byesville, in the county of Guernsey and State of Ohio, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to rail joints, and its object is to provide simple and effective means for securely connecting the meeting ends of railway rails without the employment of the usual bolts and nuts.

The invention consists in providing one end of a rail with a projecting tongue of novel form, adapted to fit a corresponding groove in the adjacent rail, and the construction of the improvement will be described hereinafter, in connection with the accompanying drawing which forms a part of this specification.

In the drawing, Figure 1 is a view in perspective of the ends of two rails embodying the invention, Fig. 2 is a side elevation of the same, one of the rails being broken away, and Fig. 3 is a transverse section of the rails connected and secured to a tie.

The reference numeral 1 designates a rail having its web portion extended to provide a tongue 2 of wedge-shape in cross-section. The tongue 2 is formed on opposite sides with vertical recesses 3, and from the upper edge of said tongue project integral dowel pins 4. The other rail 5 is formed with a groove 6 corresponding in length and cross section to the tongue 2, and formed with vertical ribs 7 on its opposite walls to fit the recesses 3 of the tongue. The rail 5 is provided with an enlarged end 5<sup>a</sup> formed with a recess 6. The rail 1 has one end formed with an enlargement as at 1<sup>a</sup>, said enlargement being cut away and constituting a ledge 1<sup>b</sup> upon which is adapted to rest an offset 5<sup>b</sup> formed on the enlarged end of the rail 5.

The upper wall 8 of the groove is formed

with sockets 9 to receive the dowel pins 4 of the tongue. A wire 10 is secured within a longitudinal groove formed in the upper edge of the tongue 2 and is connected to a wire 11 embedded in the rail 5, thus bonding the rails together. The tongue snugly fits within the groove or recess 6 and is braced vertically and longitudinally by the interlocking ribs 7 and recesses 3. The rails are spiked to the tie 12, and require no other fastening devices.

We would have it understood that the invention includes all such variations and modifications in the details of construction as may fall within the terms and scope of the appended claims.

Having now described our invention what we claim as new, is:—

The combination with a railway rail provided with an integral tongue projecting from one end thereof and constituting an extension of the web of the rail, said extension provided with a plurality of vertical grooves, that end of the rail from which the tongue projects cut away to form a ledge, and a rail having an enlarged end provided with a recess with the side walls thereof formed with vertically-extending ribs adapted to engage in said grooves, said recessed rail having one end cut away to form an overhanging offset adapted to engage the ledge when said ribs are mounted in said grooves, said recessed rail further having the top wall of the recess therein provided with sockets, and vertically-extending dowel pins carried by the top of said extension and adapted to engage in said sockets whereby in connection with said grooves and ribs the meeting ends of the rails are connected together.

In testimony whereof we affix our signatures in the presence of two witnesses.

HOMER WALKER.  
FRANK WEIRS.

Witnesses:

ALVAH B. TEOOD,  
ELZA D. TROTT.