

No. 737,037.

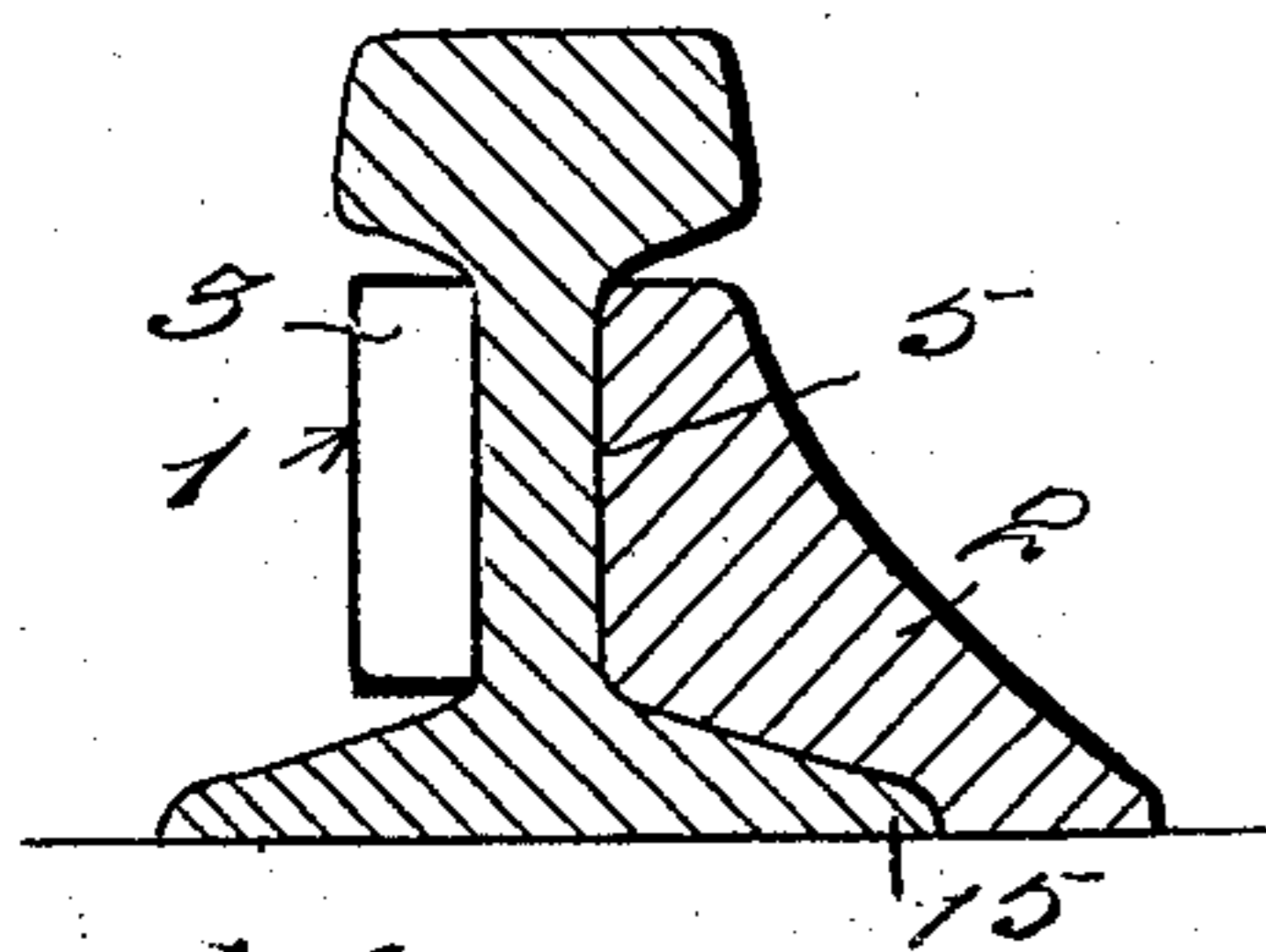
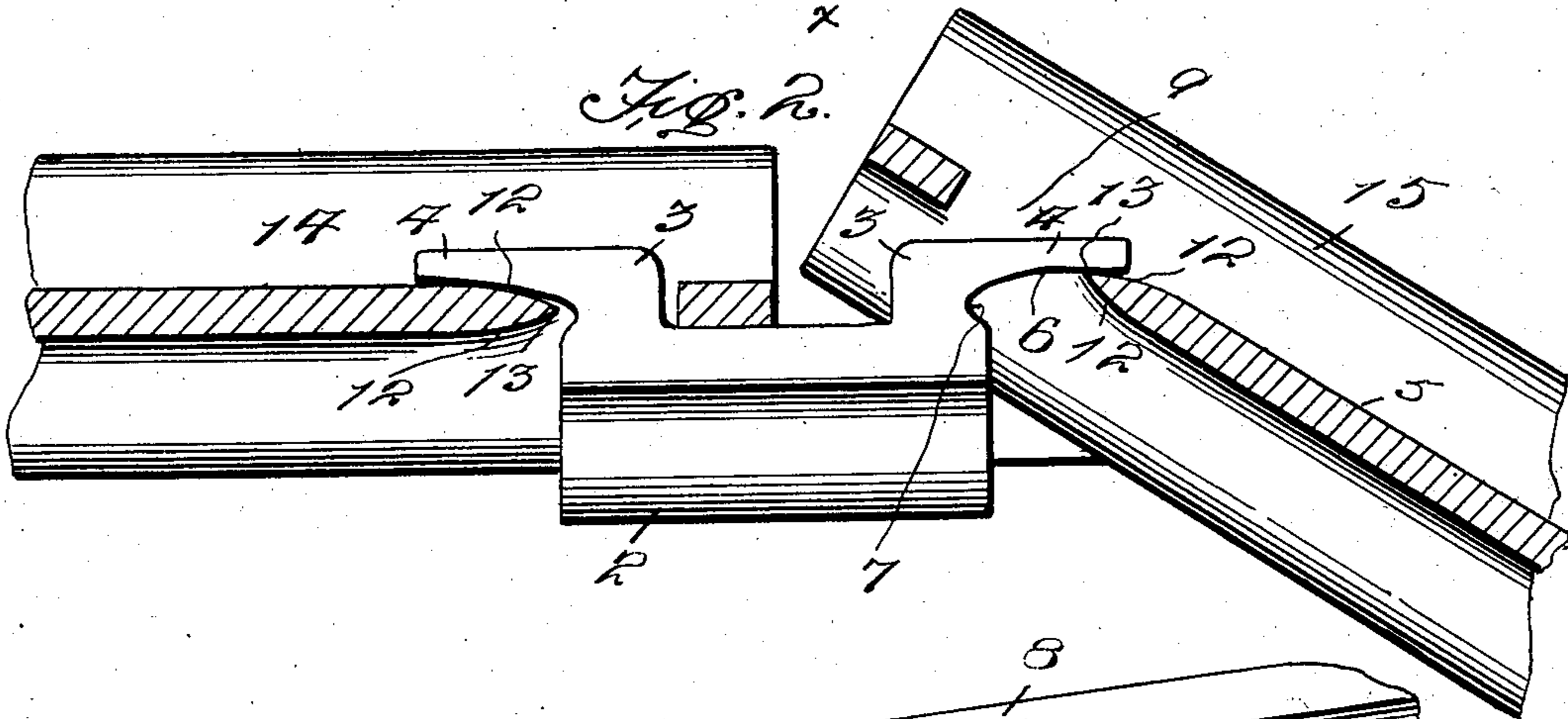
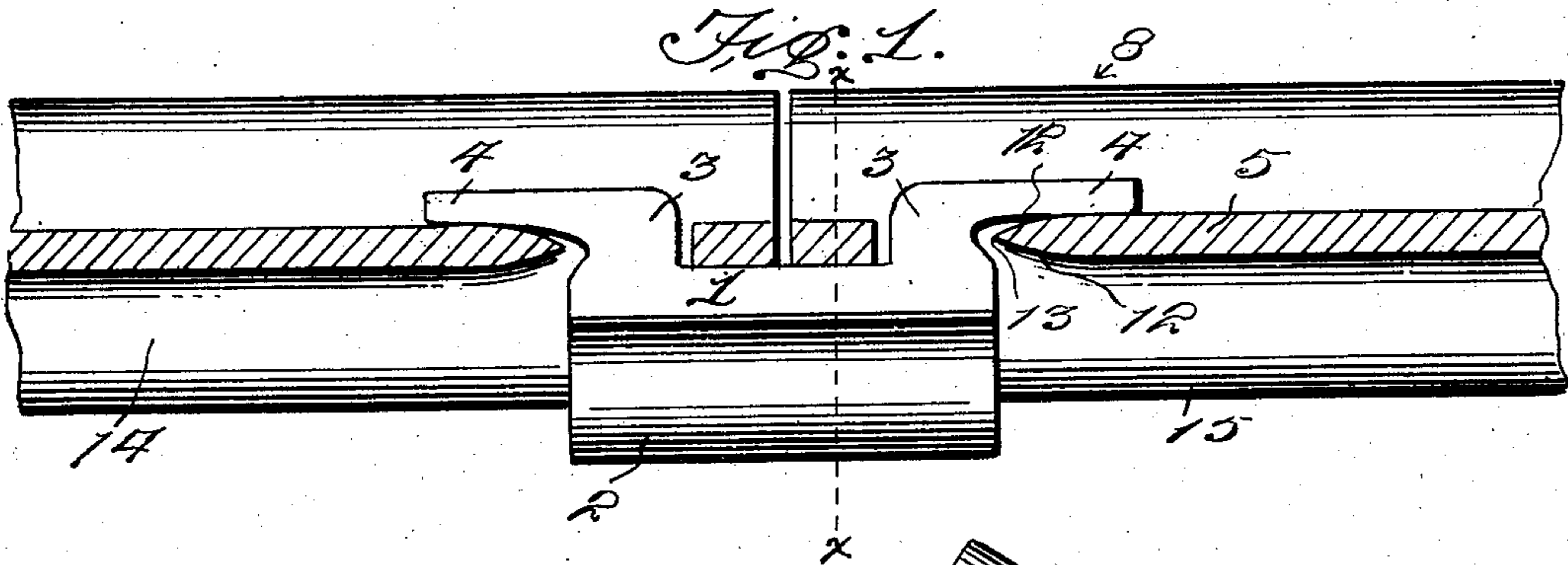
PATENTED AUG. 25, 1903.

O. B. STARKEY.

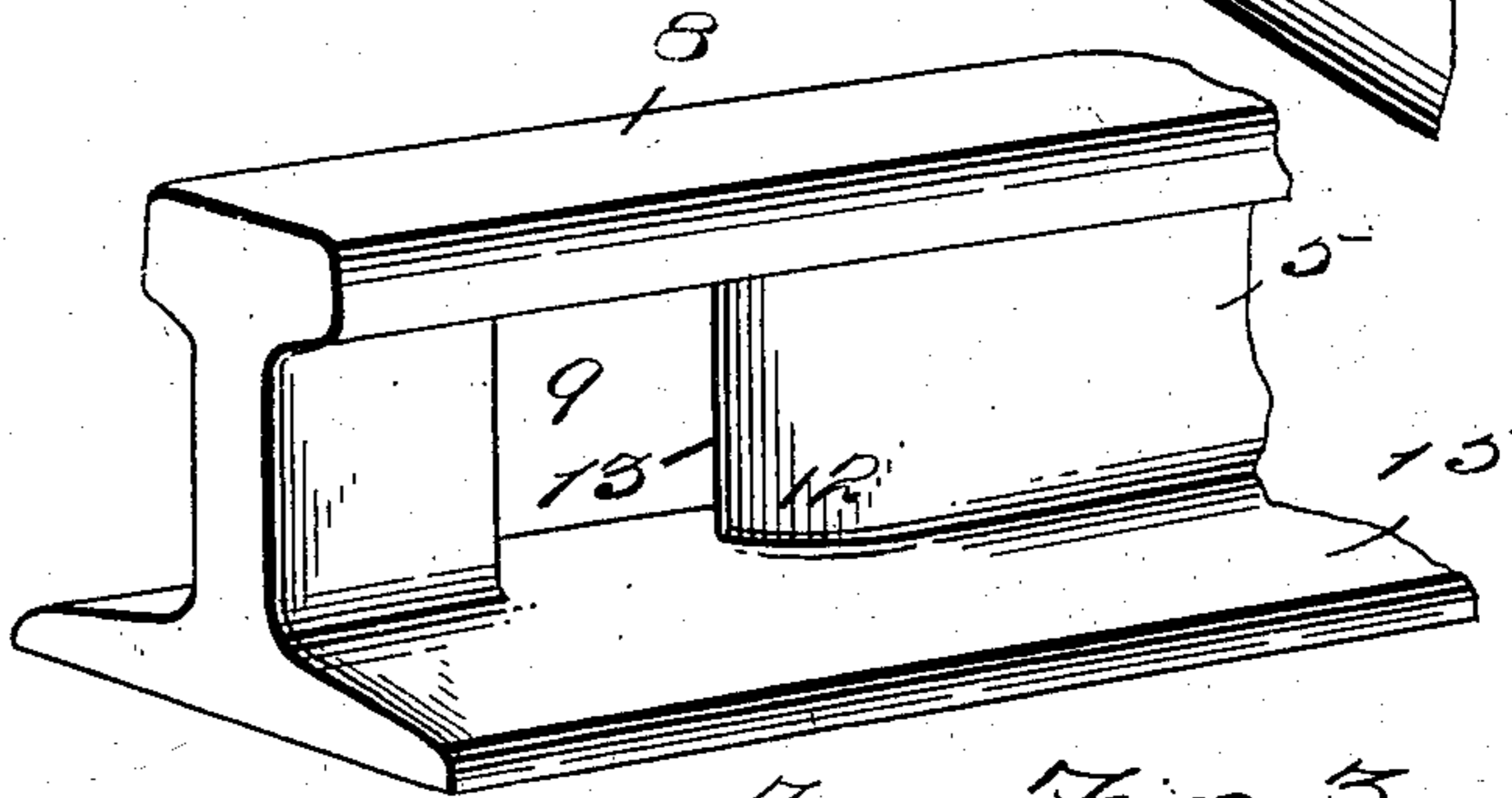
RAIL JOINT.

APPLICATION FILED MAY 2, 1903.

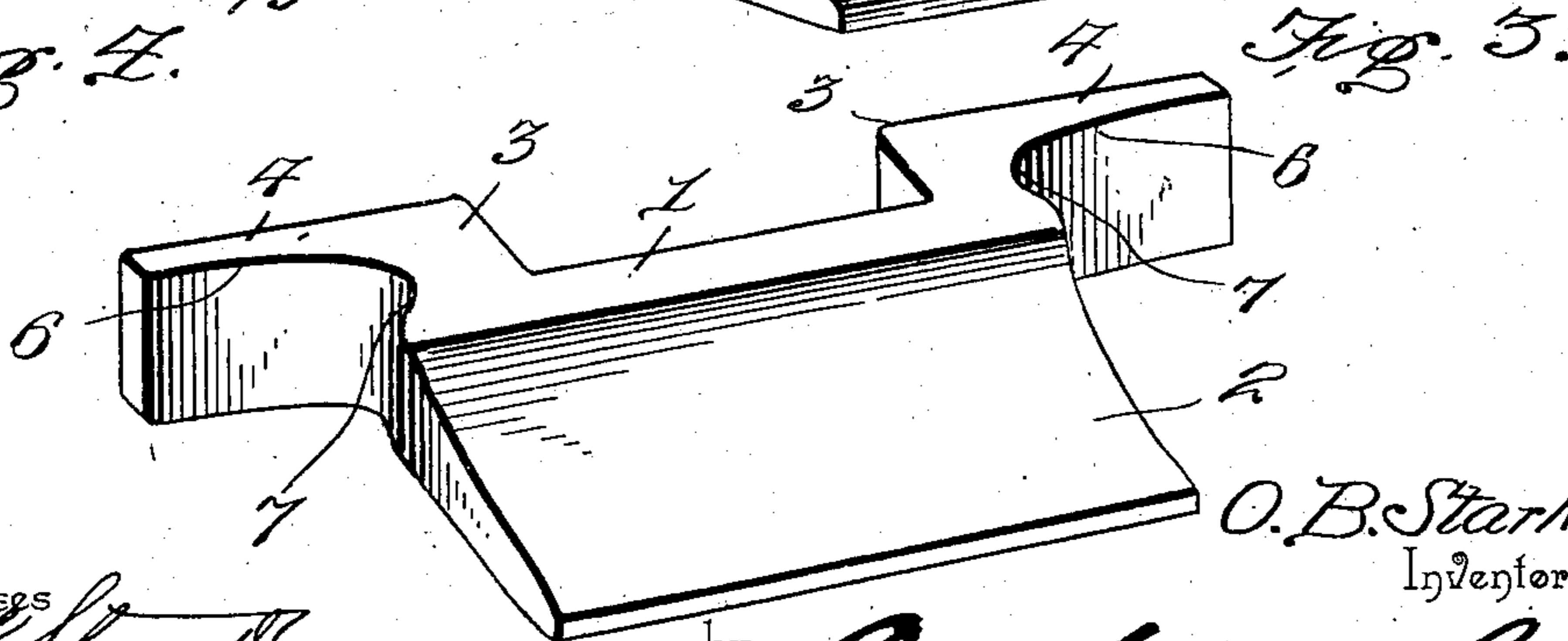
NO MODEL.



*Fig. 3.*



*Fig. 4.*



Witnesses  
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# UNITED STATES PATENT OFFICE.

OLLIE B. STARKEY, OF LADONIA, TEXAS.

## RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 737,037, dated August 25, 1903.

Application filed May 2, 1903. Serial No. 155,394. (No model.)

*To all whom it may concern:*

Be it known that I, OLLIE B. STARKEY, a citizen of the United States, residing at Ladonia, in the county of Fannin and State of Texas, have invented a new and useful Rail-Joint, of which the following is a specification.

This invention relates to rail-joints of that class in which a single fish-plate constitutes the locking device by means of which the joint between the meeting ends of two rails is effected without the use of bolts or other connecting means; and it has for its object to provide a device of this class which shall be simple in construction and effective in operation and by the use of which the connection between the meeting ends of the rails may be effected without the necessity of throwing the rail which is to be placed in position very much out of line with the rail which has already been placed in position. These objects are attained by the improved construction of the said joint or connecting device, which will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a view showing the meeting ends of two rails connected by my improved joint, the latter being shown in plan and the rails in section horizontally through the web thereof. Fig. 2 is a similar view showing the end of one rail in position and showing the other rail turned to the position which it occupies while being placed in engagement with the joint or connecting device. Fig. 3 is a perspective view showing my improved joint or connecting device and one end of a rail prepared to receive the same. Fig. 4 is a transverse sectional view taken through the joint and one rail on the line *x x* in Fig. 1.

Corresponding parts in all the figures are indicated by like characters of reference.

My improved rail-joint is composed of a plate or bar 1, which may be termed a "fish-plate," and the outer edge of which is provided with a flange 2, adapted to extend over and to rest upon the flanges at the meeting ends of the rails to be connected by the joint. The fish-plate or bar 1 is provided at its ends, on the side opposite to the flange 2, with arms or extensions 3 3, forming hooks, from the outer ends of which brackets 4 4 are extended outwardly in the direction of the length of the

bar or fish-plate, the distance between the opposing sides of the bar 1 and brackets 4 being just sufficient to accommodate the web 5 of a rail. The outer sides of the hooks or arms 3 may be slightly beveled, as shown at 6, and at the meeting points or corners between said arms and the fish-plate or bar 1 are formed vertical recesses 7.

The rails 8, which are to be connected by my improved joint, are prepared to be engaged therewith by forming slots 9 vertically in the webs of said rails, near the meeting ends thereof. The side of that portion of the web 11 which forms the outer wall of the slot 9 is beveled on both sides, as shown at 12 12, so as to form an edge 13, adapted to engage in the recess 7 at the adjoining end of the joint.

The operation of my invention will be readily understood by reference to Fig. 2 of the drawings. The bar or fish-plate is adjusted with the hook at one of its ends engaging the slot of the rail 14, which has already been placed in position. The rail 15, with which connection is to be made, is swung at its free end in an outward direction until the end of the projecting bracket 4 may be inserted into the slot 9, the adjacent beveled portion of the web rendering it unnecessary to swing the said free end of the rail very far in an outward direction. As soon as the bracket 4 enters the slot 9 of rail 15 the latter may be restored to the longitudinal, and the locking of the joint will thus be effected, the beveled ends of the webbing of the two rails being accommodated in the space between the hooks or arms 3 of the fish-plate, while the latter and the brackets 4 will be disposed on opposite sides of the web, thus holding the rail ends together, as will be plainly seen in Fig. 1.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a rail-joint, the bar or fish-plate having laterally-extending arms at the ends thereof, said arms being provided with outwardly-extending brackets, said brackets being beveled upon their sides or faces opposing the face of the fish-plate, substantially as set forth.

2. In a rail-joint, a fish-plate having later-

ally-extending arms at the ends thereof, brackets extending outwardly from said arms, and vertical recesses formed at the meeting corners of said brackets and the ends  
5 of the fish-plate, substantially as set forth.

3. In a rail-joint, a fish-plate having laterally-extending arms at the ends thereof, brackets extending outwardly from said arms, and vertical recesses formed at the  
10 meeting corners of said brackets and the ends of the fish-plate, in combination with the rail

ends having vertical slots in the webs thereof, the outer walls of said slots being beveled to form vertical edges, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

OLLIE B. STARKEY.

Witnesses:

J. P. COPELAND,

J. W. RYMER.