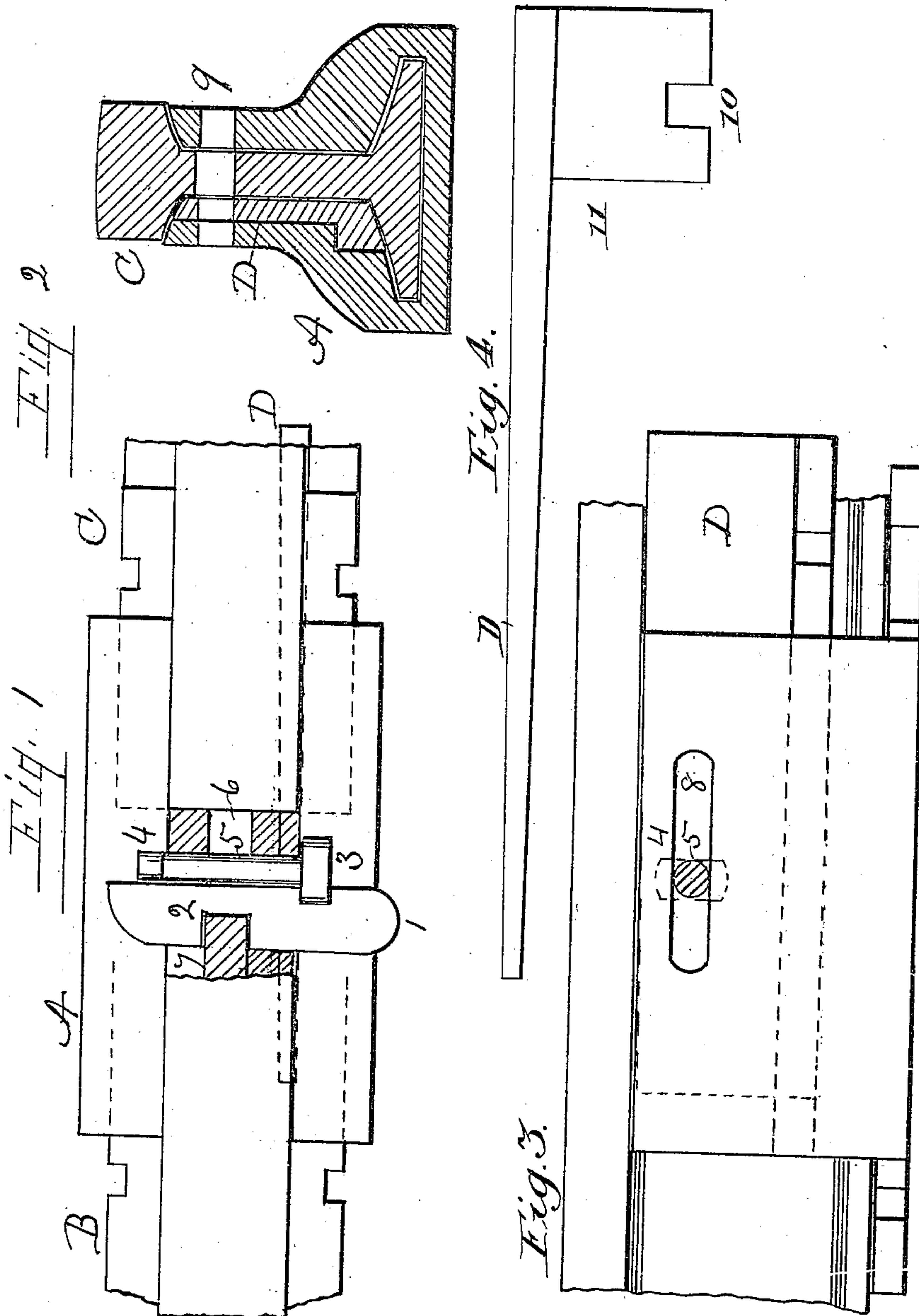


No. 817,729.

PATENTED APR. 10. 1906.

R. B. SWANK.  
RAILWAY JOINT.  
APPLICATION FILED APR. 13, 1905.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

REUBEN B. SWANK, OF DAYTON, OHIO.

## RAILWAY-JOINT.

No. 817,729.

Specification of Letters Patent.

Patented April 10, 1906.

Application filed April 13, 1905. Serial No. 255,270.

*To all whom it may concern:*

Be it known that I, REUBEN B. SWANK, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Railway-Joints; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in railway-joints, the features of which will be fully hereinafter described and claimed.

The object of my invention is the construction of a joint to secure the ends of the rails and dispense with the usual threaded bolt.

The object is accomplished by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a plan of the device with portions cut away and one rail withdrawn slightly. Fig. 2 is a transverse section near the joining centers of the two rails. Fig. 3 is a side elevation of the joint. Fig. 4 is a top view of the key.

Like letters and numerals designate like parts throughout the several views.

The rails B C are the two members to be joined and comprise the ordinary T-rail with notches in their webs for the bolt and key. The chair A is of form adapted to embrace nearly the entire end of the rail, all with the exception of the tread portion. To bind the portions of the chair embracing the webs of the rails more securely, the bolt 3 is used, the near head being round and the opposite end 4 being flattened, as shown in dotted lines at Fig. 3, where said bolt is shown in transverse section 5. The round head of this bolt is notched to receive the flat key 1, and in which key is the notch 2 to receive the web 7 of the rail B. These parts occupy the longitudinal slot 8 in the sides of the chair, the ends of the webs of the rails being cut away sufficiently for the purpose of entering the bolt and its key. The key D is shown in transverse section in Fig. 2, a side view in Fig. 3,

and Fig. 4 is a top view showing the flange 11, and it fits in between the web of the rail and an inclined vertical surface of the chair. The key also bears against a horizontal incline of said chair, and when driven the pressure is inward and upward, and thus snugly binding the parts, and when thus snugly in position it is secured by a spike driven through the notch 10 into the wooden tie.

The operation consists in placing the ends of the rails within the chair and near together. The bolt is put in and turned one-fourth circuit in the slot of the chair. Then the flat key is put in position aside the bolt, and then the ends are brought more closely together. The web of the rail thus enters the slot 2 of the key, which secures it in position. The lengthened flat key is driven home and secured as above specified and the joint is complete.

Having described my invention, what I claim is—

1. In a railway-joint the combination of the chair provided with a longitudinal slot near its center, the notched round and flat-headed bolt, the locking-key to engage said bolt, to bind the top parts of said chair, and the rails adapted to enter the space in said chair, substantially as described.

2. In a railway-joint the combination of the chair provided with a longitudinal slot, the bolt and its key adapted to bind the upper parts of said chair, the rails adapted to enter the space in said chair, and the side key to further bind said parts, substantially as described.

3. In a railway-joint the combination of the rails, the chair adapted to inclose the ends of said rails, said chair provided with vertical and horizontal inclined bearings, the key having corresponding inclines to act as a wedge in binding said parts, substantially as described.

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

REUBEN B. SWANK.

Witnesses:

B. PICKERING,  
W. H. H. ECKI.