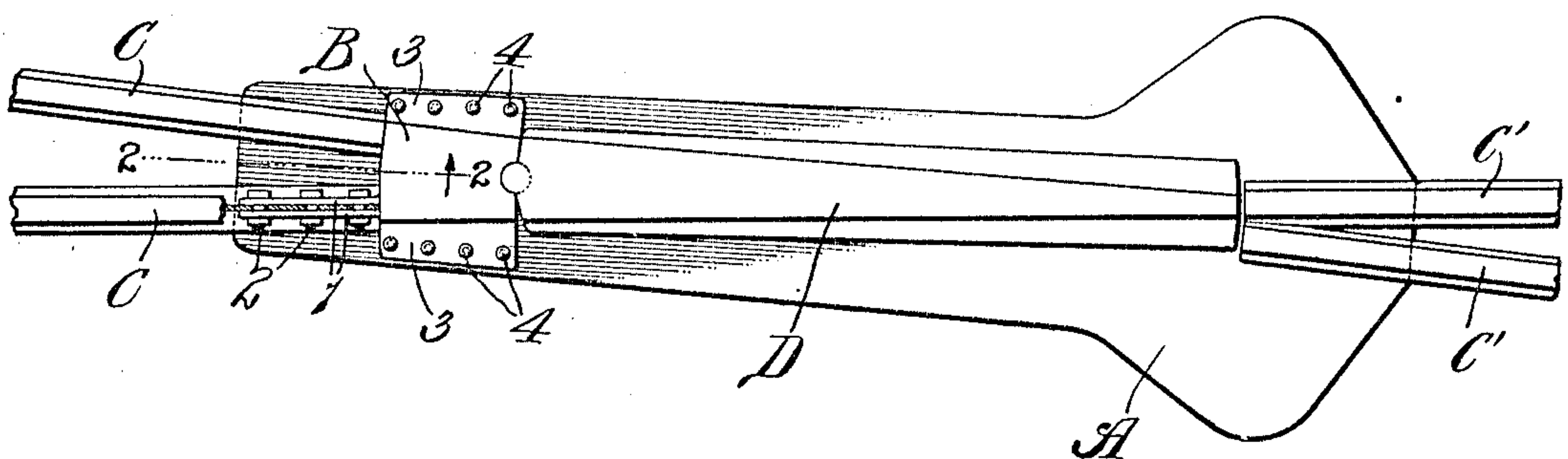


H. F. ROACH.  
RAILWAY TRACK STRUCTURE.  
APPLICATION FILED JULY 29, 1909.

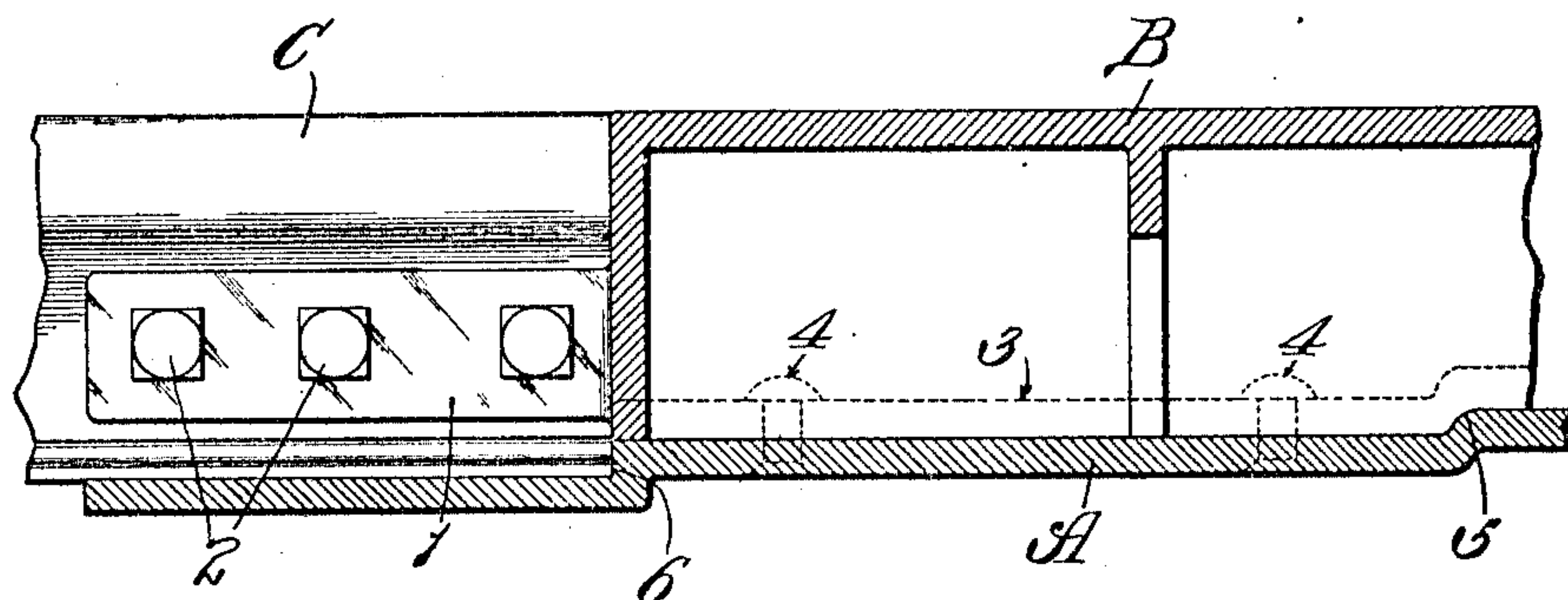
947,531.

Patented Jan. 25, 1910.

*Fig. 1.*



*Fig. 2.*



*Witnesses:*  
*George R. Radson*  
*Nello R. Church*

*Inventor:*  
*Harry F. Roach.*  
*By Paul R. Kewell Atty.*



# UNITED STATES PATENT OFFICE.

HARRY F. ROACH, OF ST. LOUIS, MISSOURI, ASSIGNOR TO CONTINUOUS RAIL & SAFETY SWITCH CO., OF ST. LOUIS, MISSOURI, A CORPORATION OF NEW JERSEY.

## RAILWAY-TRACK STRUCTURE.

947,531.

Specification of Letters Patent.

Patented Jan. 25, 1910.

Original application filed October 15, 1908, Serial No. 457,933. Divided and this application filed July 29, 1909. Serial No. 510,231.

*To all whom it may concern:*

Be it known that I, HARRY F. ROACH, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Railway-Track Structures, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to railway track structures, and particularly to that type which comprises a movable tongue arranged at the intersection of two tracks to form a continuous rail, the present application being a division of my pending application for railway track structures, filed October 15, 1908, Serial No. 457,933.

The main object of my present invention is to provide a novel railway track structure of the type above referred to which is so designed that the track rails cannot creep relatively to the base plate on which the movable tongue rests.

Figure 1 is a top plan view of a railway track structure embodying my present invention; and Fig. 2 is an enlarged vertical sectional view taken on the line 2—2 of Fig. 1.

Referring to the drawing which illustrates my present invention, A designates a base plate, and B a wheel-tread member that is detachably connected to said base plate so as to cooperate with the terminals of the track rails C and carry a wheel from said track rails onto the movable tongue D which is adapted to be shifted laterally to bring its terminal or toe end into alinement with either of the rails C' that form continuations of the track rails C.

The wheel-tread member B preferably consists of a hollow casting or drop forging, and said member is provided at one end with pairs of wings 1 that embrace the webs of the rails C, as shown in Fig. 1, said rails being connected to said wings by means of fastening devices 2 that pass transversely through same. The member B is provided with laterally projecting flanges 3 that rest upon the base plate so as to receive fastening devices 4 which connect said wheel-tread member and base plate securely together. I also prefer to provide the base plate with a shoulder 5 that cooperates with a shoulder on the wheel-tread member B,

as shown in Fig. 2, so as to reduce the shearing strains on the fastening devices 4. The base flanges of the rails C rest upon the base plate, and the terminals or ends of said rails abut directly against the rear wall of the wheel-tread member, as shown in Fig. 2, the base plate being preferably provided with a shoulder 6 arranged in vertical alinement with the end wall of the wheel-tread member B so as to form an abutment for the base flanges of the rails C and thus reduce the strains on the wheel-tread member B and also prevent the rails from creeping relatively to the base plate.

The rails C', with which the toe end of the tongue D cooperates, rest upon the base plate to which they are connected by any suitable means, and if desired, a wheel-tread member of similar construction to the member B can be arranged between the toe end of the tongue D and the terminals of the rails C'.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A railway track structure provided with a base plate, a wheel-tread member connected to said base plate, rails connected to said member, a shoulder on the base plate separate and distinct from said wheel-tread member and against which the ends of said rails abut, and a movable tongue mounted on said base plate.

2. A railway track structure provided with a base plate, a wheel-tread member connected to said base plate, rails butting against one end of said member and a vertical shoulder on the base plate that is separate and distinct from said wheel-tread member, integral wings on said member to which said rails are connected, and a movable tongue mounted on said base plate.

3. A railway track structure provided with a base plate, a wheel-tread member detachably connected to said base plate, rails butting against one end of said member, integral wings on said member to which said rails are connected, cooperating shoulders on the base plate and said member, and a movable tongue mounted on said base plate.

4. A railway track structure comprising a base plate, a wheel-tread member detachably connected to said base plate, rails connected to said member, and cooperating shoulders



on said member and base plate for reducing the shearing strains on the fastening devices which connect said member to the base plate.

5 5. A railway track structure comprising a  
base plate, a wheel-tread member detachably  
connected to said base plate, track rails se-  
cured to said member, a shoulder on the  
base plate separate and distinct from said  
wheel-tread member that forms an abutment  
10 for the base flanges of said rails, and co-  
operating shoulders on said member and  
base plate for reducing the shearing strains  
on the fastening devices that connect said  
member to the base plate.

15 6. A railway track structure comprising a  
base plate provided with a plurality of

shoulders, track rails resting on said base  
plate and butting against one of said  
shoulders, a hollow wheel-tread member de-  
tachably connected to said base plate and 20  
provided with a shoulder that bears against  
one of the shoulders on the base plate, said  
member forming an abutment for said track  
rails, and means on said member to which  
said track rails are connected. 25

In testimony whereof I hereunto affix my  
signature in the presence of two witnesses,  
this 27th day of July 1909.

HARRY F. ROACH.

Witnesses:

BERTHA JACOBY,  
GEORGE BAKEWELL.