

F. C. Brown,

Railroad Switch,

N^o 25,299,

Patented Aug. 30, 1859.

Fig. 2.

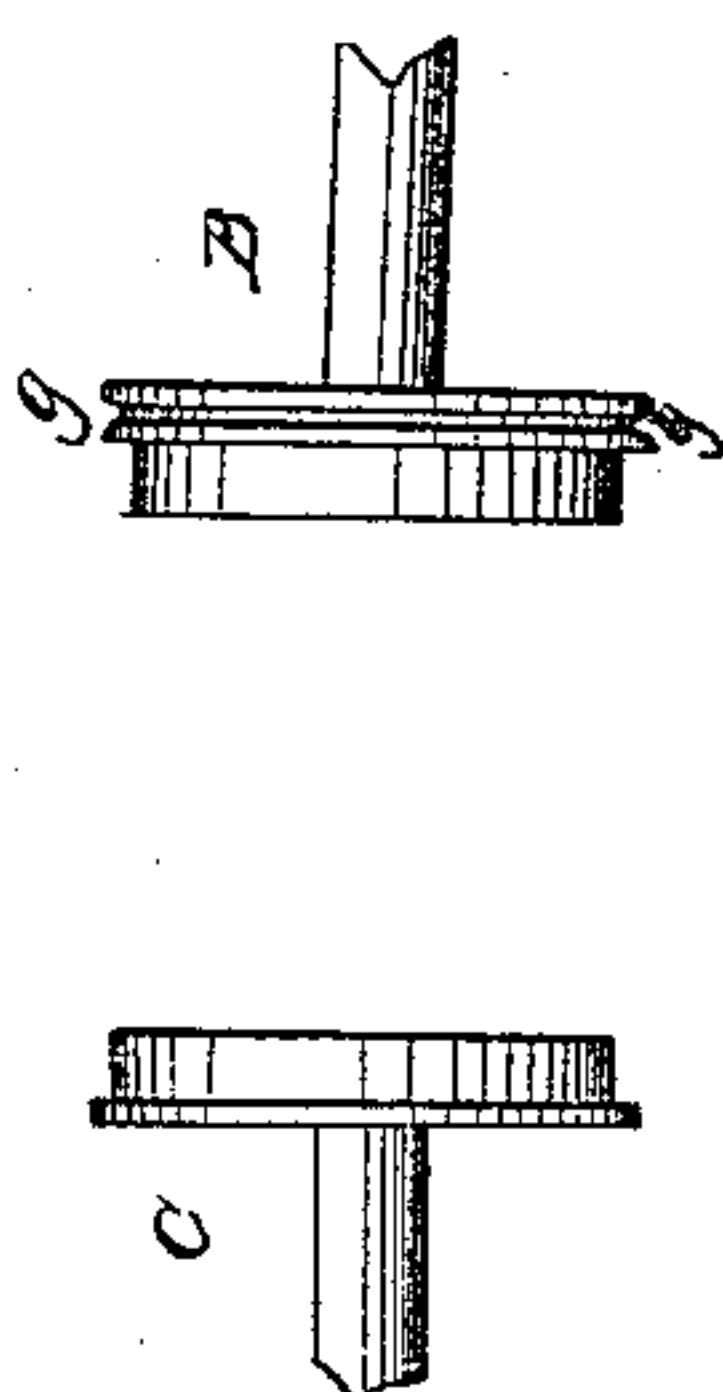


Fig. 3.

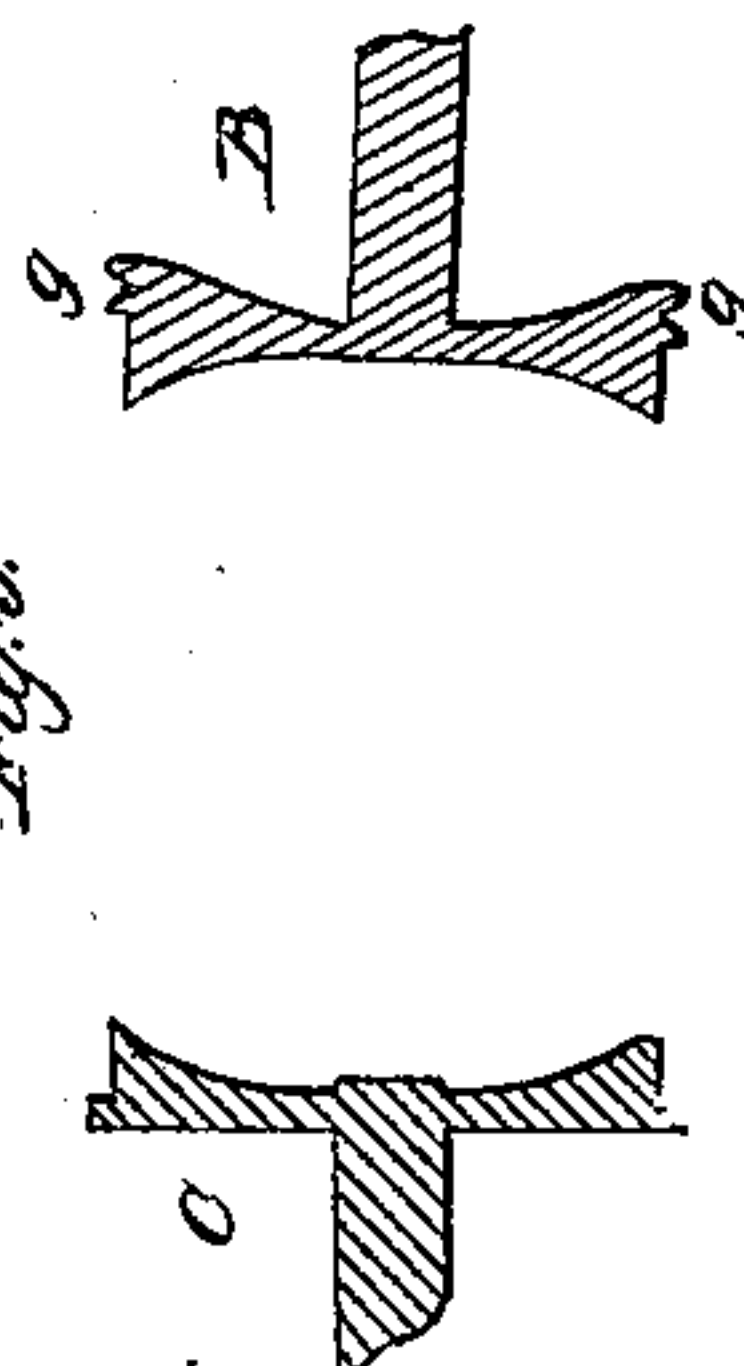
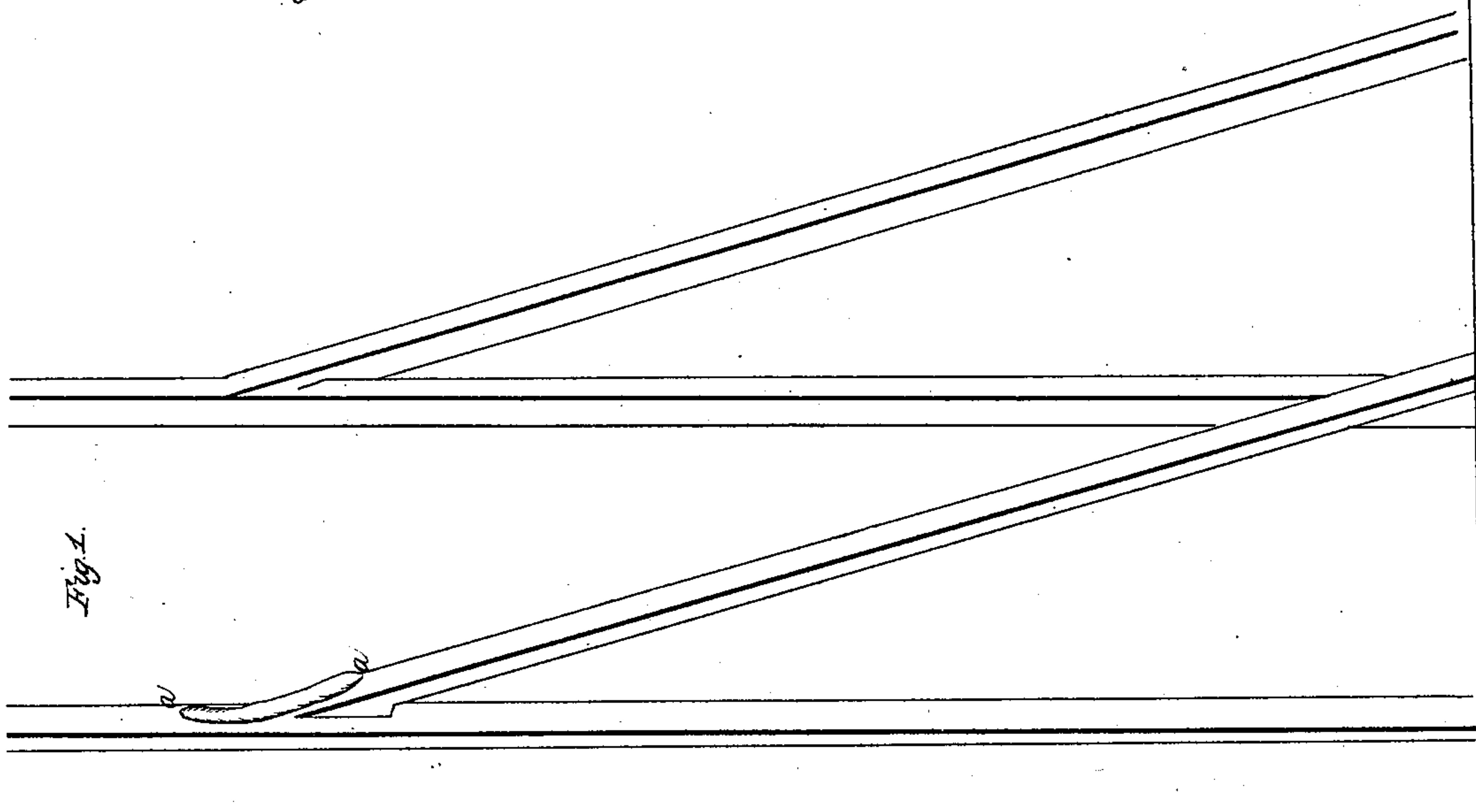


Fig. 1.



Witnesses:
W. E. Williams
Arthur P. Henry

Inventor:
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UNITED STATES PATENT OFFICE.

FRANK C. BROWN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO WILLIAM BROWN,
OF SAME PLACE.

TURNOUT FOR RAILWAYS.

Specification of Letters Patent No. 25,299, dated August 30, 1859.

To all whom it may concern:

Be it known that I, FRANK C. BROWN, of the city of Philadelphia, in the county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Mode of Altering the Course of Railway-Cars at Turnouts Without the Employment of Movable Switches and Switch-Tenders; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in constructing the car wheels with an additional flange or flanges on their circumference thus forming a groove or grooves on the face of the wheels and in adding at the same time short curved bars to the track of the road at turnouts to enter into the grooves and thus change the course of cars while in motion at the turnouts, at the same time allowing cars with wheels of the ordinary construction to pass over the track at the turnouts without being deflected from their course, thus dispensing with movable switches and switch tenders and insuring certainty and economy, uniformity and despatch in the motion of the cars at turnouts.

In order to enable others to make and use my invention I will describe the manner in which I carry it into effect. On reference to the accompanying drawing which forms a part of this specification—

Figure 1, represents a section of rail road embracing a turnout. Fig. 2 represents two rail road car wheels of which the one marked C, is the ordinary wheel and that marked B, is the improved wheel. Fig. 3, represents vertical sections of the two wheels in Fig. 2 of which C, is a section of the ordinary car wheel and B, is a section of the improved wheel.

On reference to Fig. 1,—*a, a*, represents the curved bar which receives the groove of the improved wheel which is represented in Fig. 2, B, by the letters *g, g*, and gives the car the direction of the bar while at the

same time it allows cars with the ordinary wheels to pass on in a direct line.

In Fig. 2, B, which represents the improved wheel, *g, g*, is the groove which is formed by the additional flange and which takes hold of the curved bar *a, a*, in Fig. 1, and changes the course of the car. Letter C, of Fig. 2, is the ordinary car wheel.

In Fig. 3, which is a vertical section of the wheels in Fig. 2, the improved wheel B, is represented as being hollowed out on the inside to diminish its weight,—*g, g*, on the wheel represents the groove formed by the additional flange as in Fig. 2 *g, g*, and C is a section of the ordinary car wheel.

The improved wheel above described may be applied to one or both sides of the car according to the route it is intended to travel and the curved bars may be placed at various turnouts on the same line of road on either side in such a manner as to cause the cars running over a road with many turnouts and branches to take the desired course. This effect and advantage may be still further secured and obtained by placing more than one curved bar at each turnout and making the bars of different widths so as to adapt them to operate on the improved wheels with grooves of certain widths and not on such wheels with grooves of other widths or by placing the curved bars in such positions as to operate on the grooves constructed and intended to receive them and not on others.

What I claim as my invention and desire to secure by Letters Patent is—

The addition of grooves on the circumference of car wheels as now constructed with a single flange and tread and the placing of curved bars at turnouts on the track of the road to enter and operate on such grooves for the purpose of changing the direction of cars substantially as and for the purpose herein set forth.

F. C. BROWN.

Witnesses:

W. E. WHITMAN,
EDW. A. WATSON.