

(No Model.)

A. BARTON.  
RAILWAY SWITCH.

No. 435,724.

Patented Sept. 2, 1890.

Fig. 1.

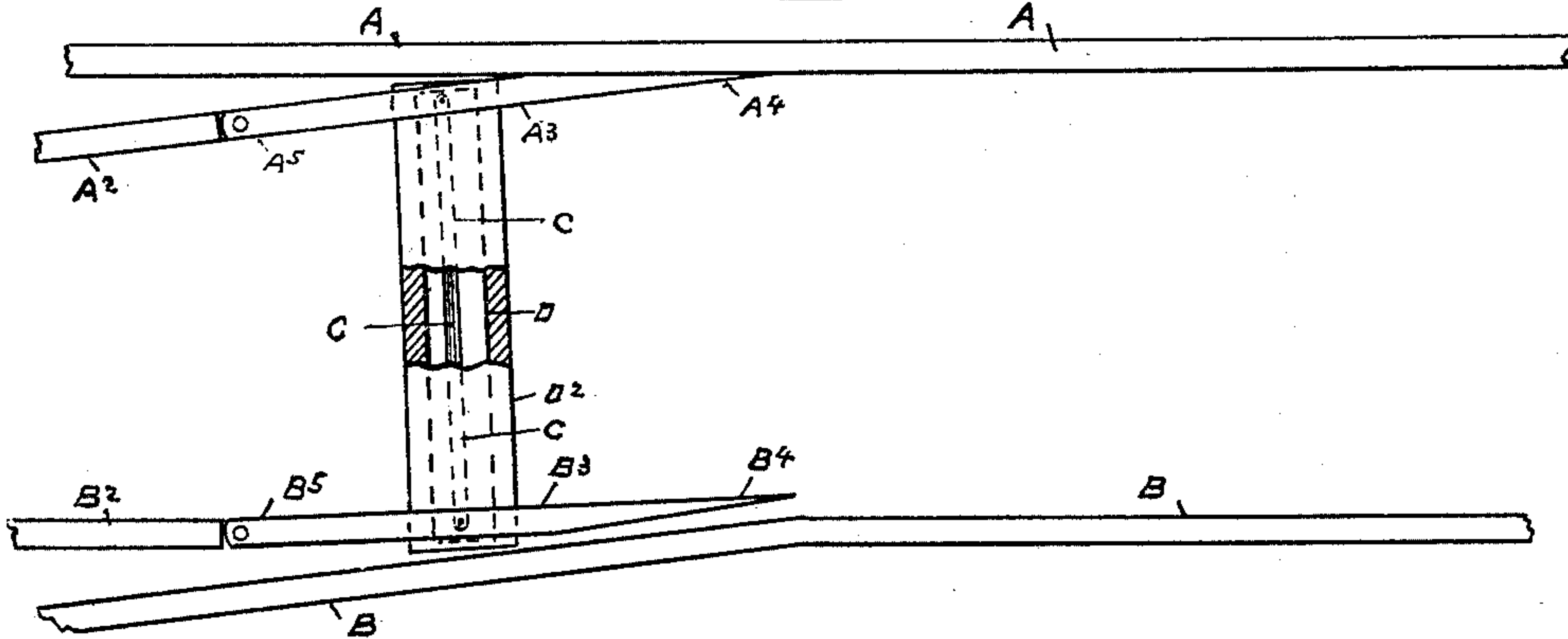


Fig. 2.

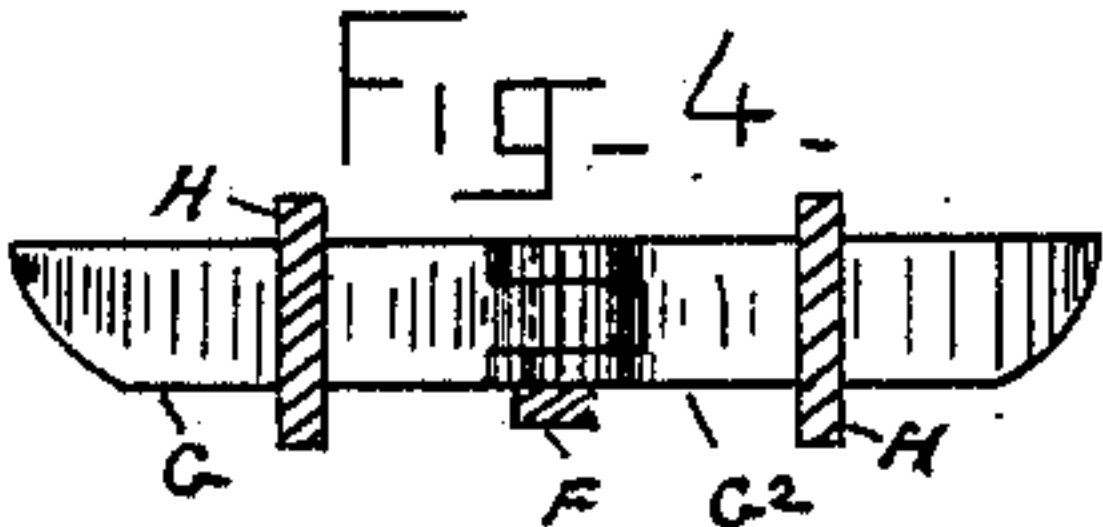
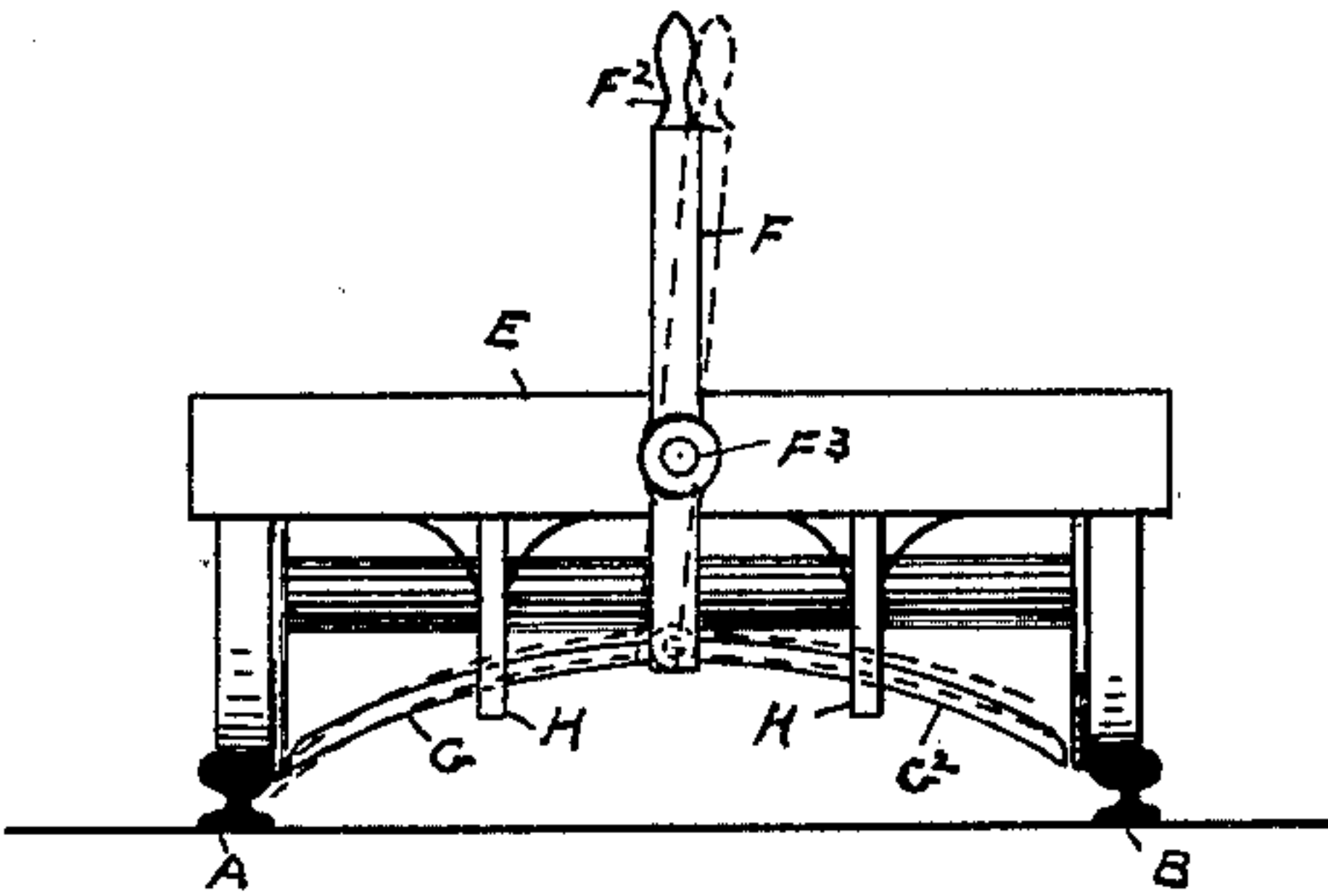
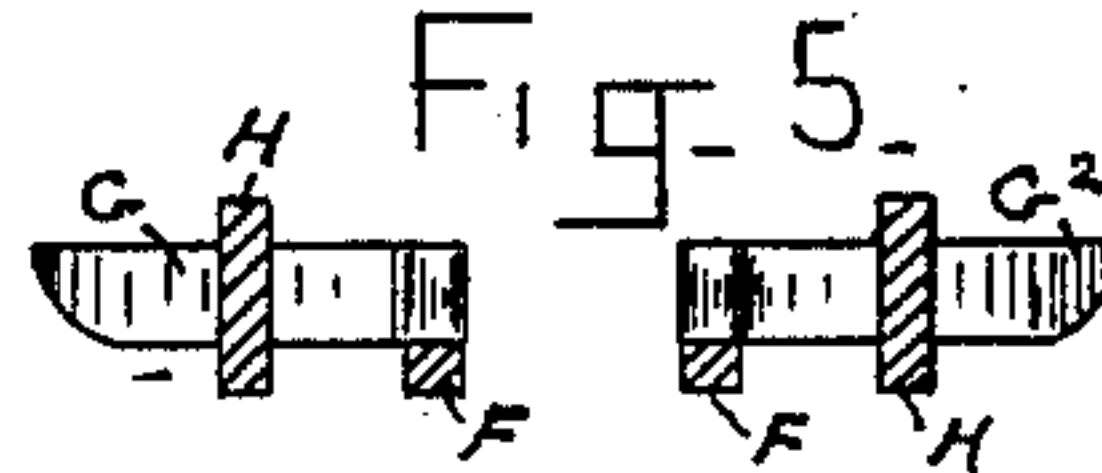
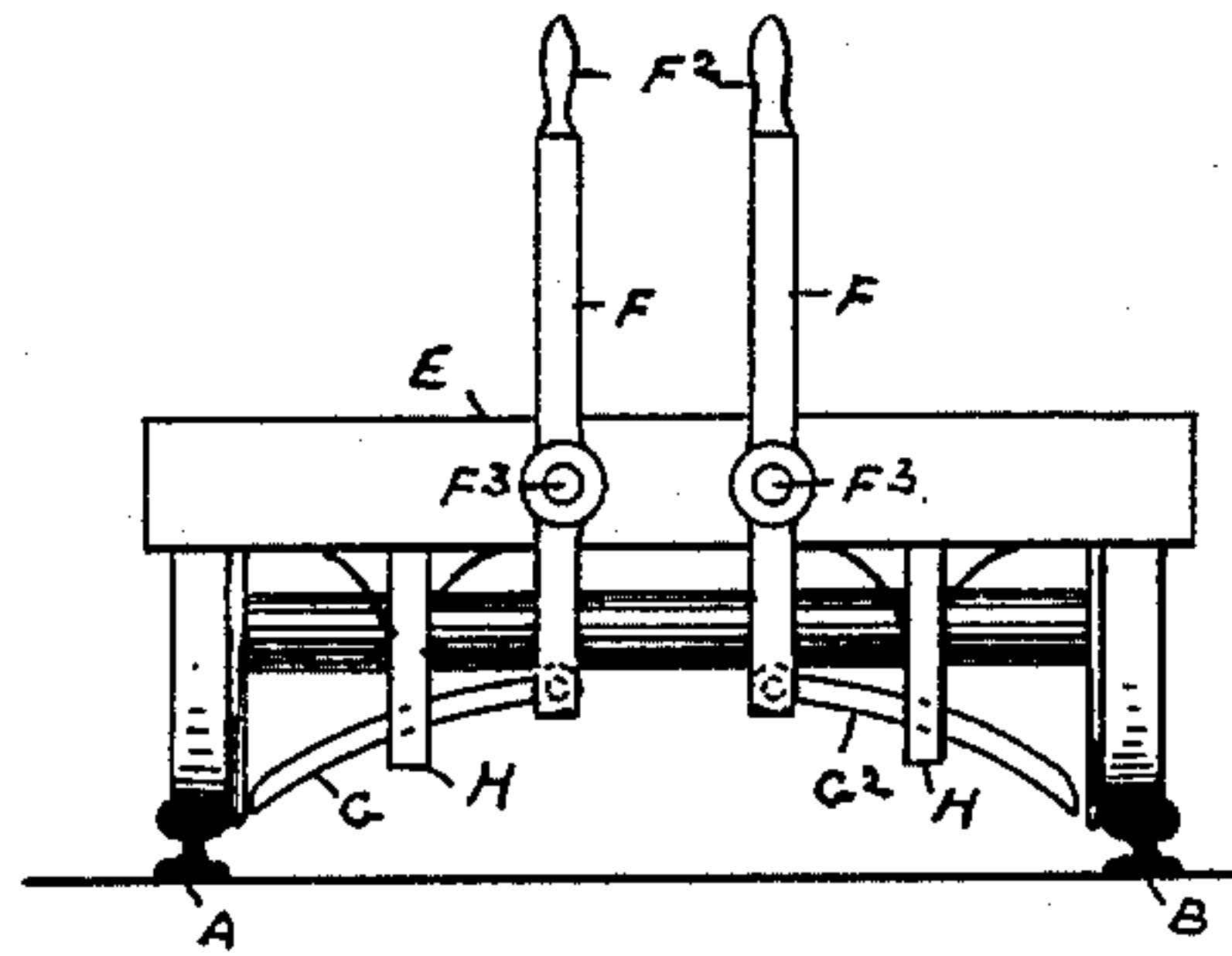


Fig. 3.



WITNESSES:  
Henry P. McKeever  
Frances M. Brown.

INVENTOR:  
Alfred Barton  
by his Attorneys  
Brown Bros.

# UNITED STATES PATENT OFFICE.

ALFRED BARTON, OF BOSTON, MASSACHUSETTS.

## RAILWAY-SWITCH.

SPECIFICATION forming part of Letters Patent No. 435,724, dated September 2, 1890.

Application filed March 25, 1890. Serial No. 345,203. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED BARTON, a citizen of the United States of America, and a resident of the city of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Railway-Switch and Car Attachments for Operating Same Therefrom, of which the following is a full, clear, and exact description.

The railway-switch of this invention in substance is composed of two switch-tongues, both having their points presented in the same direction, of two lines of rails and each in extension of one rail of each line and at its heel end pivoted thereat, and a bar crossing between and at its opposite ends jointed to the switch-tongues between their opposite ends, and thereby joining them one to the other, in combination with means, substantially such as hereinafter described, which are held on a car otherwise suitably adapted for the lines of rails, and all so that by properly operating said means the switch-tongues can be moved either to open and to close either line of rails.

In the drawings, forming part of this specification, Figure 1 is a plan view of two lines of rails and of the improved switch open to one and closed to the other line. Figs. 2 and 3 are end views of a car, showing means held on the car, and in two different forms of arrangements, but the same in substance for operating the tongues of the switch, Fig. 1. Figs. 4 and 5 are horizontal sections, respectively, of Figs. 2 and 3 on planes just under the axles of the car-wheels.

In the drawings, A A<sup>2</sup> B B<sup>2</sup> represent four runs of rails.

A<sup>3</sup> and B<sup>3</sup> are two switch-tongues, respectively, in extension of a rail A<sup>2</sup> or B<sup>2</sup>, and both joined together by a cross-bar C, which at its opposite ends is pivoted to the switch-tongues between their points A<sup>4</sup> B<sup>4</sup> and their heels A<sup>5</sup> B<sup>5</sup>, and thus with the switch-tongues at their heels properly pivoted and, as well known, in relation to the rails of which they are in continuation, the switch-tongues are adapted to move in unison, and thereby with one tongue in position against the rail next adjacent and outside of the rail of which it is a continua-

tion, the other tongue will be off from the rail next adjacent to and outside of the rail of which it is a continuation, and vice versa. The switch-tongues, in either position described, open one and close the other line of rails, as is obvious. The cross-rod C of the switch-tongues preferably lies in a trench or boxing D between the rails, covered by a lid D<sup>2</sup>, preferably attachable and detachable at pleasure.

E is a railway-car, (shown only in end view,) which is to be of any suitable construction and adaptation for the lines of rails described. This car, at either or both ends, only one end being shown, has means for operating from the car the switch-tongues described. Two forms of the means are shown. Those of Figs. 2 and 4 consist of an upright lever F, having at its upper end a handle F<sup>2</sup>, and at F<sup>3</sup> it is fulcrumed on the car in combination with arms G G<sup>2</sup>, which project from opposite sides and are pivoted on the lower end of the lever, and each arm is curved from end to end and passes horizontally through a suitable guideway and support H therefor, both of which depend from and are held on the under side of the car-body. In Figs. 3 and 5 each arm G G<sup>2</sup> has a vertical operating-lever F of its own; but otherwise the means are the same as those of Figs. 2 and 4.

In the arrangement of mechanism of either Figs. 2 and 4 or Figs. 3 and 5 a swing of the operating-lever F in either direction serves to bring an arm G or G<sup>2</sup> into proper relation to and bearing on the rails and switch-tongues to secure a movement of either one or the other of the switch-tongues, as the case may be, in proper direction to open or to close either one or the other lines.

The improvements of this invention are particularly designed for street-railways and cars; but they are not to be limited in that relation.

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

A railway-switch composed of two switch-tongues, both having their points presented in the same direction, of two lines of rails and each in extension of a rail thereof and pivoted



at the heel thereof, and of a bar C, crossing  
between and at its opposite ends joined to the  
switch-tongues intermediate of their opposite  
ends, in combination with means held on a  
5 railway-car and composed of a lever or levers  
F and arms G G<sup>2</sup>, arranged in connection  
therewith, and together adapted by swinging  
a lever in either direction to place one of said  
arms into or out of operative position as to a

switch-tongue, substantially as described, for 10  
the purpose specified.

In testimony whereof I have hereunto set  
my hand in the presence of two subscribing  
witnesses.

ALFRED BARTON.

Witnesses:

ALBERT W. BROWN,  
EDW. HAMILTON.