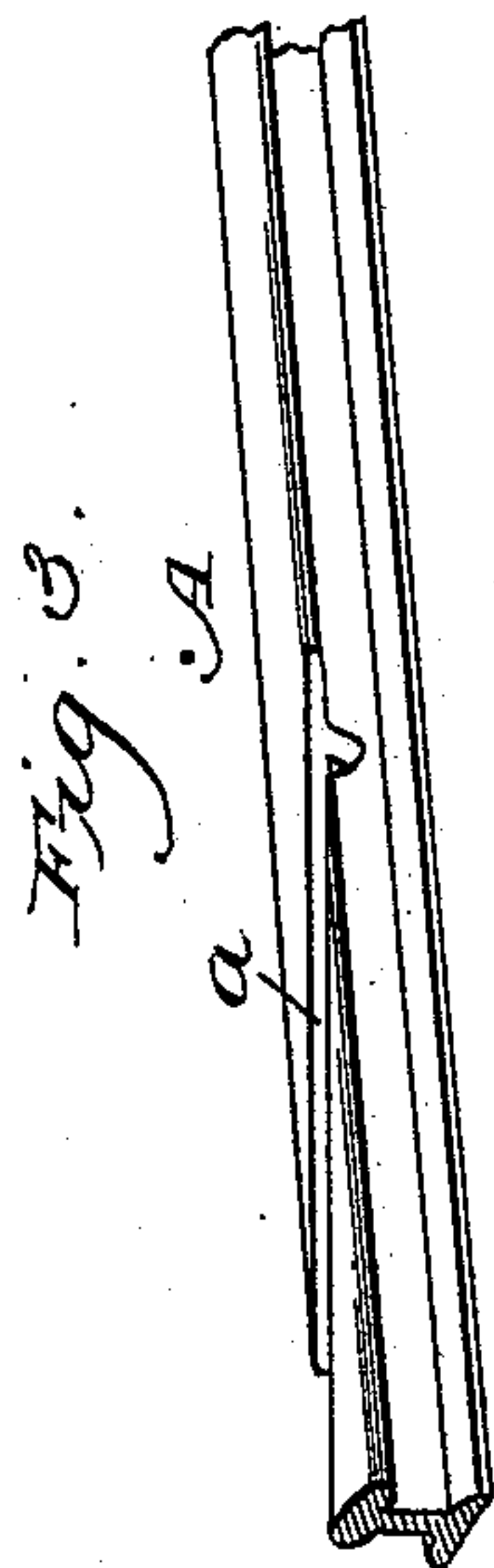
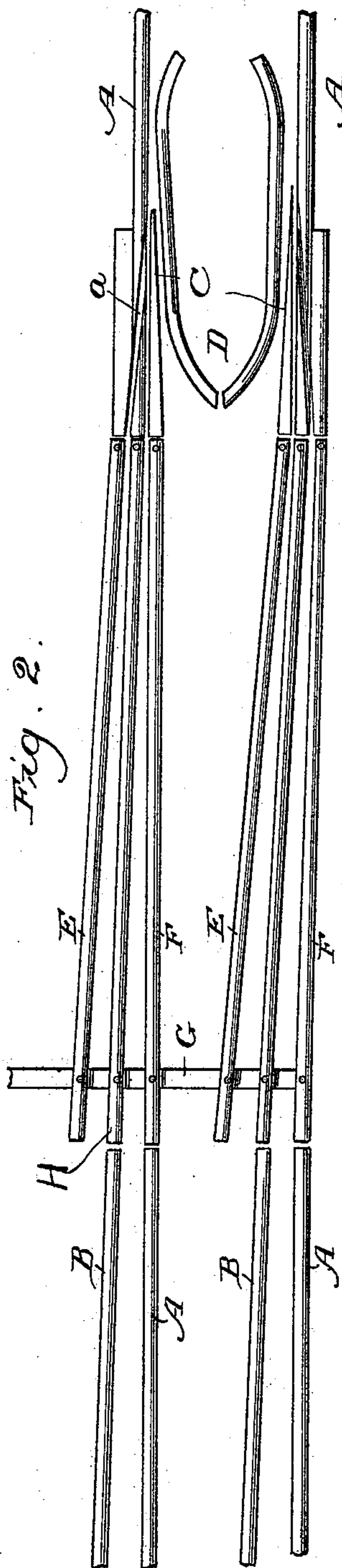
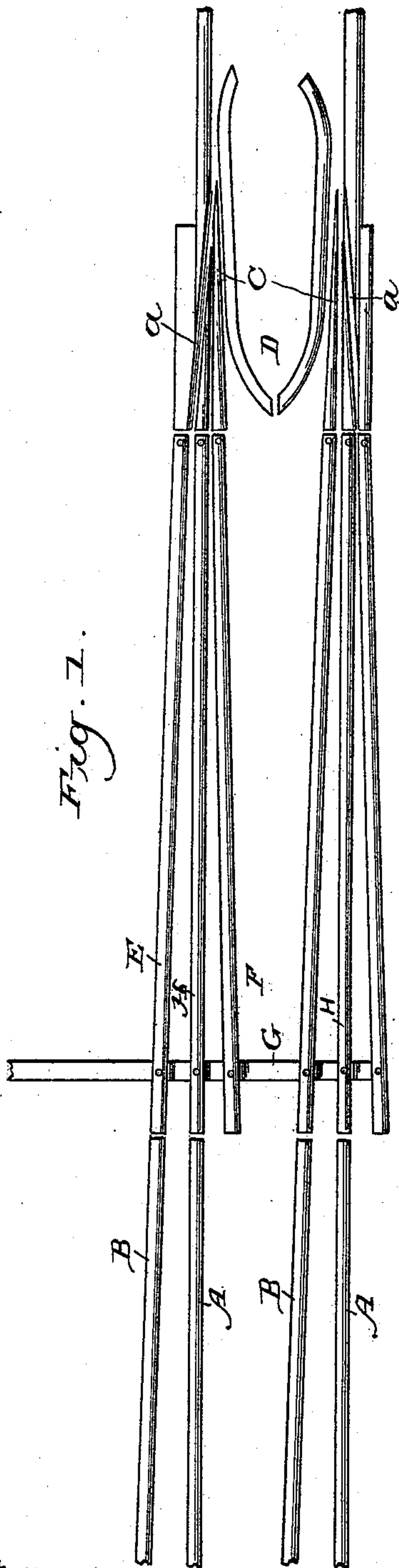


(No Model.)

W. N. SANTEE & J. E. RYAN.
RAILROAD SWITCH.

No. 528,395.

Patented Oct. 30, 1894.



Witnesses
J. H. Reynolds
Chas. E. Hoyer

Inventors:
Willard N. Santee
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By *John Wedderburn*
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UNITED STATES PATENT OFFICE.

WILLARD N. SANTEE AND JAMES E. RYAN, OF LETCHER, SOUTH DAKOTA.

RAILROAD-SWITCH.

SPECIFICATION forming part of Letters Patent No. 528,395, dated October 30, 1894.

Application filed June 22, 1894. Serial No. 515,343. (No model.)

To all whom it may concern:

Be it known that we, WILLARD N. SANTEE and JAMES E. RYAN, citizens of the United States, residing at Letcher, in the county of Sanborn and State of South Dakota, have invented certain new and useful Improvements in Railroad-Switches; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in railroad switches, and it has for its object among others to provide a safety switch by which accidents may be prevented by guarding against the cars running off the track at an open switch. We provide the switch with dummies or following rails that take the place of the main rails when the switch is turned to the siding and vice versa when the main rails are connected the following rails or dummies close the connection with the main track and thus in either case the tracks are kept closed so that cars cannot run upon vacant tracks. We also provide the rails with grooves or channels to allow the flanges of the wheels to pass from the outer to the inner side of the rails and vice versa.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically defined by the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a plan view showing portions of the main and side track and our improved switch set for the cars to run on the main track. Fig. 2 is a similar view with the switch turned to run the cars onto the siding. Fig. 3 is a perspective view of one of the rails with the groove or channel for passing the flanges of the wheels from the outside to the inside or vice versa.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates the rails of the main track, and B those of the siding. These rails and their ties and means of fastening form no

part of the present invention. They may be secured in place in any suitable manner.

C is the frog and D are guides which are arranged as shown at the ends of the main track rails at the end adjacent to the pivot end of the switch rails. The main track rails at this point are formed with the inclined grooves or channels α as seen best in Fig. 3 which serve to cause the flanges of the wheels to pass from the outer to the inner side of the rails.

H are the main rails of the switch. They are each pivoted on an independent pivot as shown, and upon each side of these main switch rails are the following rails or dummies E and F, each pivoted upon an independent pivot, but the other ends of these main switch rails and the dummies are connected by the transverse bar G by pivots so as to permit of the necessary movements without distortion and this transverse bar is designed to be connected with the switch mechanism which may be of any well known or approved form and a description or illustration thereof in detail is therefore not here necessary.

Bearing in mind that the main switch rails and the dummies are all connected so as to move in unison but upon independent pivots, the operation and the advantages of our improvements will be readily understood and appreciated. As seen in Fig. 1 the switch is set so that the cars will run on the main track, but the dummies E are in position so that if a train should happen to come along on the siding it would run from the siding on the said dummies E and onto the main track, the grooves or channels α guiding the flanges and causing them to pass from the outside to the inner side of the rails as will be readily understood.

When the switch is turned so as to run the cars from the main track rails onto the siding, as shown in Fig. 2, the dummies F form a continuation of the main rails at the end next the siding so that any train coming in the meantime would run upon the said dummies onto the main track and thus avoid danger.

It will thus be seen that by our construction and arrangement of parts there cannot at any time be an open switch, for no matter which way the switch is turned either one or

the other set of dummies will serve to form a continuous track. The improvement is simple, efficient, and can be applied to any and all tracks already laid at trifling cost, and injury to the rolling stock saved.

What is claimed as new is—

The combination with the rails, of a main line and side track, the ends of the main rails having transverse grooves *a*, and inner guide rails *D*, of an interposed switch section composed of rails *H* pivoted at one end opposite the grooved ends *a* of the main rails, dummy rails *E* and *F* located one on each side of the

rails *H* and pivoted at the ends contiguous to the pivoted ends of the rails *H*, and an operating rod *G* connecting the free ends of the several rails *E*, *F* and *H* to move them in unison, substantially as set forth.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

WILLARD N. SANTEE.
JAMES E. RYAN.

Witnesses:

H. E. MAYHEW,
MERTIE B. MAYHEW.