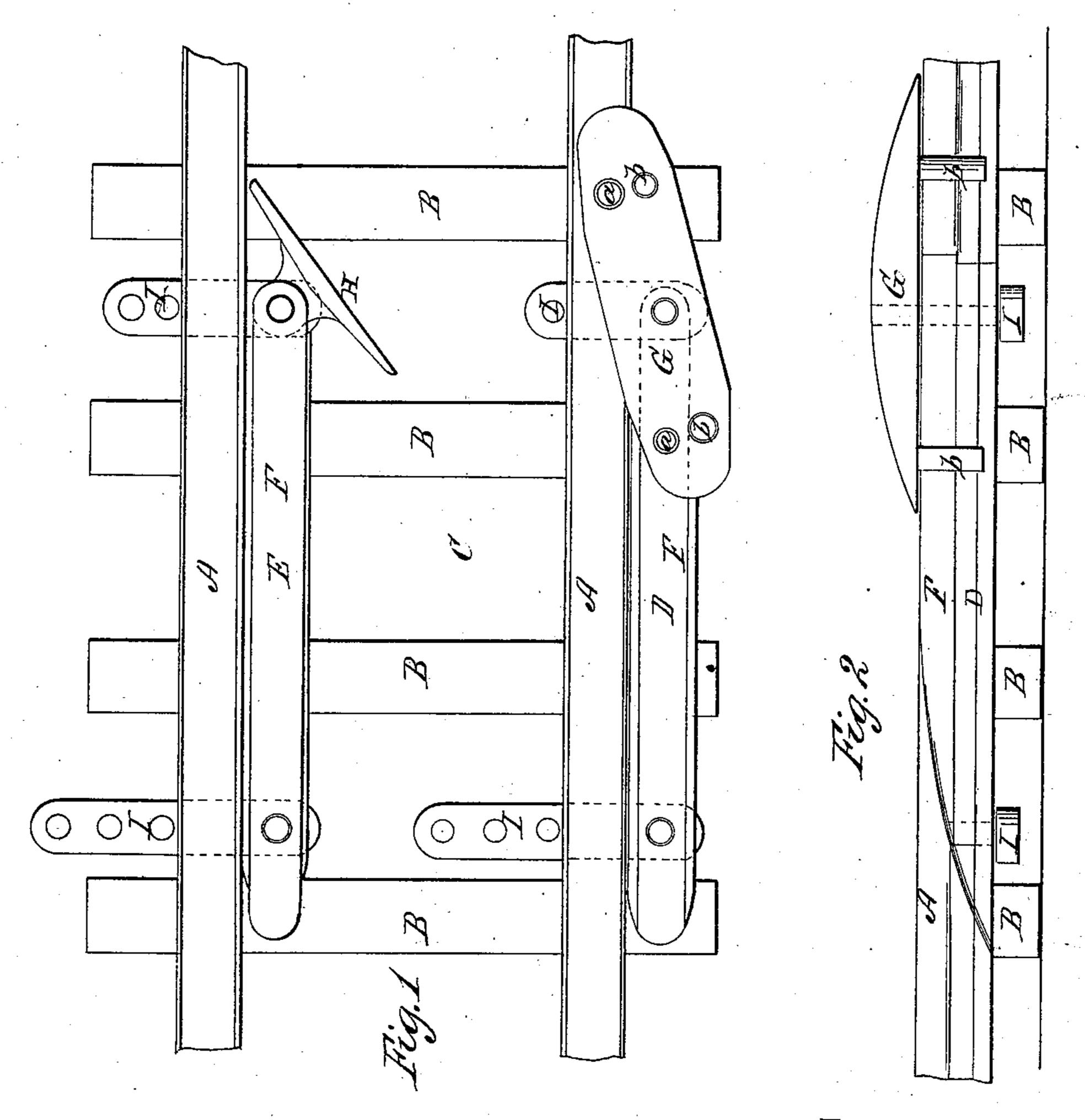
# S. T. Denise, Car Replacer,

1 60,484

Patented Dec\_18, 1866.



Witnesses I. A. Jackson Mr. Trum Treventor S. J. Denise Pa Munuson attorneys

## Anited States Patent Pffice.

### IMPROVED RAILROAD SWITCH.

#### T. DENISE, OF BRANCH PORT, NEW JERSEY.

Letters Patent No. 60,487, dated December 18, 1866.

The Schedule referred to in these Xetters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, S. T. DENISE, of Branch Port, in the county of Monmouth, and State of New Jersey, have invented a new and improved Portable Railroad Switch; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The present invention relates to a portable switch, especially intended to be used for replacing cars upon rails or railways, the peculiar construction of which switch, as well as its mode of operation, will be now

described, reference being had to the accompanying plate of drawings, in which-

Figure 1 is a plan or top view of a section of a railroad track, showing the application of my improved

portable switch thereto; and

Figure 2 is an elevation of the outside of that one of the rails of the railroad track having one section of my improved switch applied to and extending along its outside.

Similar letters of reference indicate like parts.

A, in the drawings, represents the rails of a railroad track, which, by cross-ties, B B, are joined or held together, and at the proper distance apart, in the usual manner. C, my improved switch, consisting of two parts or pieces, D and E, one, D, to be used upon the outside of the rails, and the other, E, upon the inside, but in connection with each other. Each of these pieces, D and E, of the switch, consists of a simple bar, F, of railroad iron of equal lengths, or nearly so, with one end of each bevelled upon its upper side, and the other ends provided with pieces, G and H, respectively, one of which, G, is swivelled to its bar so as to swing across and over the top of the same, and the other, H, so as to swing around the end of its bar from one side to the other; each end of both bars being provided with suitable devices, I, for clamping the bar to and alongside of the rail of a railroad track. The piece G of the switch-bar D, which is arranged to turn upon the upper side of the said switch-bar, is made tapering in thickness from the centre or turning point to its outer end, coming nearly to a sharp point, or nearly so; and near both of the outer ends of the said piece G, holes or apertures, a, are made to receive bolt-pins, b, for holding the said piece in position, as will be presently explained. In the use of my improved portable railroad switch above described, the bar having the piece G hung to it is first placed along the outside of one of the rails, according to the direction in which the car is moved for running it on the track, when it is there clamped or secured in any proper manner, and its piece, G, swung so as to occupy an angular position with reference to the length of the rails, where, by using the bolt-pins b, it is prevented from swinging out of place. The other bar of the switch is laid along the inside edge of the other rail, with its end having the piece H swivelled to it at a point in a straight line, or nearly so, across the road-bed with the piece G, when securing the said bar in such position, by the clamps or in any other suitable manner; the switch is then properly adjusted for use, provided the car which is to be guided upon the rails by it is moved in the direction represented by red arrows in the drawings, that is, up the tapered ends of the bar-rails F, and thus on the same, until their flanges coming against the swivelled pieces G and H of each bar, respectively, they are thereby thrown into their proper positions with regard to the rails of the railway for running thereon, as is obvious without any further explanation.

From the above description of my improved portable railroad switch, it is apparent that the two parts of the same are right or left, that is, susceptible of being used upon the rails, according as it is necessary to run the car in one or the other direction to put it upon the rails, it being only requisite to swing the swivelled pieces G and H to the proper positions therefor, and to adjust the clamps L for properly clamping the switch-

bars to the rails.

I claim as new, and desire to secure by Letters Patent-The bars or rails F, provided with swivelled pieces G and H, respectively, substantially as and for the purpose described.

The above specification of my invention signed by me this 23d day of July, 1866.

S. T. DENISE.

Witnesses:

WM. F. McNAMARA, ALBERT W. BROWN.