

(No Model.)

2 Sheets—Sheet 1.

C. E. GALBREATH.
SWITCH.

No. 516,527.

Patented Mar. 13, 1894.

Fig. 1.

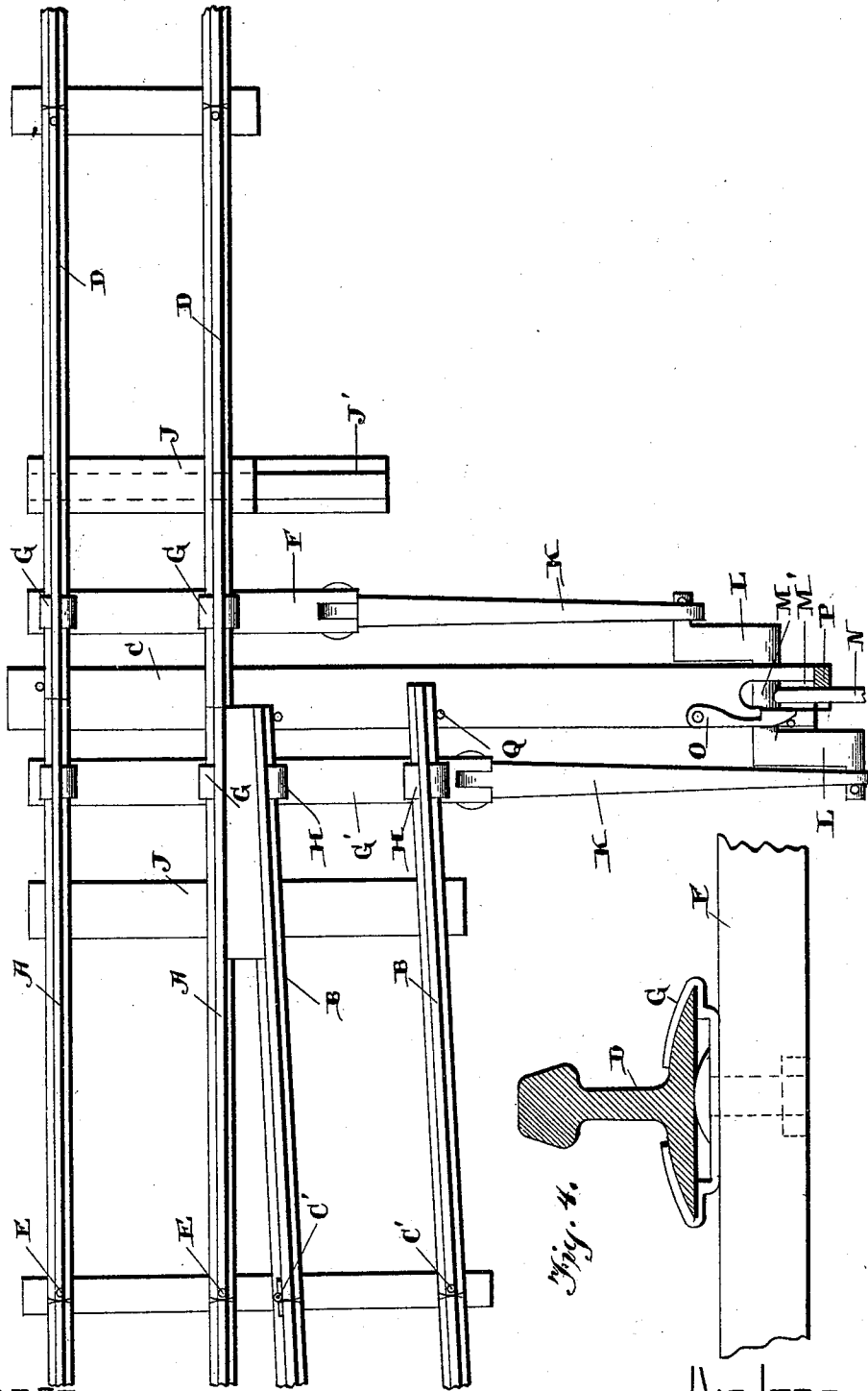
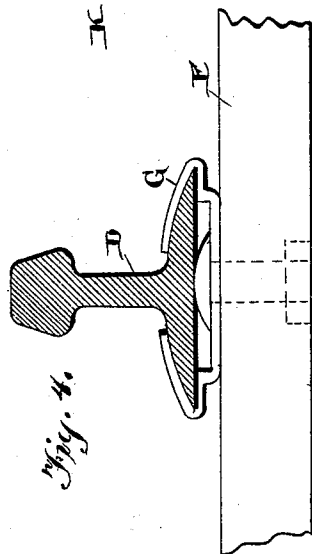


Fig. 4.



WITNESSES.
Geo. E. French.
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INVENTOR—
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UNITED STATES PATENT OFFICE.

CHARLES EMERY GALBREATH, OF OSAGE MISSION, KANSAS.

SWITCH.

SPECIFICATION forming part of Letters Patent No. 516,527, dated March 13, 1894.

Application filed April 10, 1893. Serial No. 469,763. (No model.)

To all whom it may concern:

Be it known that I, CHARLES EMERY GALBREATH, of Osage Mission, in the county of Neosho and State of Kansas, have invented certain new and useful Improvements in Switches; and I 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in switches, and it consists in the novel combination and arrangement of parts, which will be fully described hereinafter and especially referred to in the claims.

The object of my invention is to provide an improvement in that class of switches in which the respective ends of the adjacent tracks are adjusted in opposite directions in throwing the switch, thus dispensing with all wedge rails and frogs and thus reducing to a minimum the liabilities of accidents.

Referring to the accompanying drawings:— Figure 1, is a plan view of my improved switch and operating mechanism, the main track being unbroken. Fig. 2, is a plan view of a portion of the same, the side track being in communication with the main track. Fig. 3, is a side elevation. Fig. 4 is an enlarged view of shoe G, showing the same in its proper position.

A designates the portion of the main track adjacent to the siding B, the ends of all of which rest upon the single transverse sill C, while D designates the portion of the main track which may be thrown into communication with the siding, and the ends of which portion rest upon the said sill C, and which almost abut the ends of the first named main track section and the siding. The main track section A and siding have a swinging or hinged movement at the points E, and C', so that their free ends may be adjusted laterally, as will be readily understood. Extending parallel with sill C, and beneath the ends of track D is the tie F, which is adapted to move longitudinally and upon which the free ends of the said track are pivotally supported by means of the shoes G, which clasp the rail flanges, as

shown, and which of themselves are pivoted to the said tie. The track section B, at its free end is supported upon a sill G', through the medium of chairs H, which are in every respect similar to those carried by the tie F.

A slide way is provided for each movable track section, the same being located adjacent to the respective ties F and G', and the slide-ways consist of the upwardly dovetailed boxings J to which the rails are secured, and which move longitudinally upon the flanged guides or tracks J', as shown. By this means the tracks are afforded an easy and ready adjustment while at the same time, owing to the peculiar construction of the said slides, it is impossible for the track ends to move vertically out of place. Now for moving the adjustable track sections in opposite directions so as to place the section D in communication with section A or siding C, I provide the two operating rods K, which at their inner ends are pivotally connected as shown, to the ties F and G', and at their outer ends to the oppositely extended cranks L, of the shaft M, which latter extends transversely through a boxing in the outer end of sill C. The top of this boxing is slotted as at M' and projected up therethrough is the lever N, which at its lower end is secured to the said shaft and is for the purpose of turning the same so as to operate the switch in either desired direction. A horizontal latch O, pivoted to the top of the boxing, is for the purpose of engaging the said lever and holding the movable track section D and siding B, in communication, while a vertical latch P on the outer end of the boxing serves to hold the said lever down with the main track unbroken. Thus it will be seen that by a mere adjustment of the lever the adjacent ends of the tracks will be adjusted laterally in opposite directions, so as to meet at the desired point. Stops Q project from the sill C, at the proper points, for the purpose of limiting the lateral movement of the respective rails, thus stopping them when in the exact position for connecting the tracks.

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

1. An improved switch comprising sill C

having vertical recess M' in its outer end, a crank shaft journaled across said recess, lever N projecting from the shaft through the recess, vertical and horizontal catches O and
5 P for alternately engaging said lever, and movable rails adjustable by said crank shaft, substantially as shown and described.

2. An improved switch comprising sill C
10 having recess M' in its outer end, tracks movable laterally on said sill, a crank shaft journaled laterally across recess M' and connected

to the tracks, lever N projecting from the shaft, and a means for holding said lever in a vertical as well as horizontal position, substantially as shown and described. 15

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES EMERY GALBREATH.

Witnesses:

R. E. GREENWELL,
FRANK BARNES.