

No. 647,275.

Patented Apr. 10, 1900.

F. NELLEN.  
RAILWAY SWITCH PLATE.

(Application filed Nov. 7, 1898.)

(No Model.)

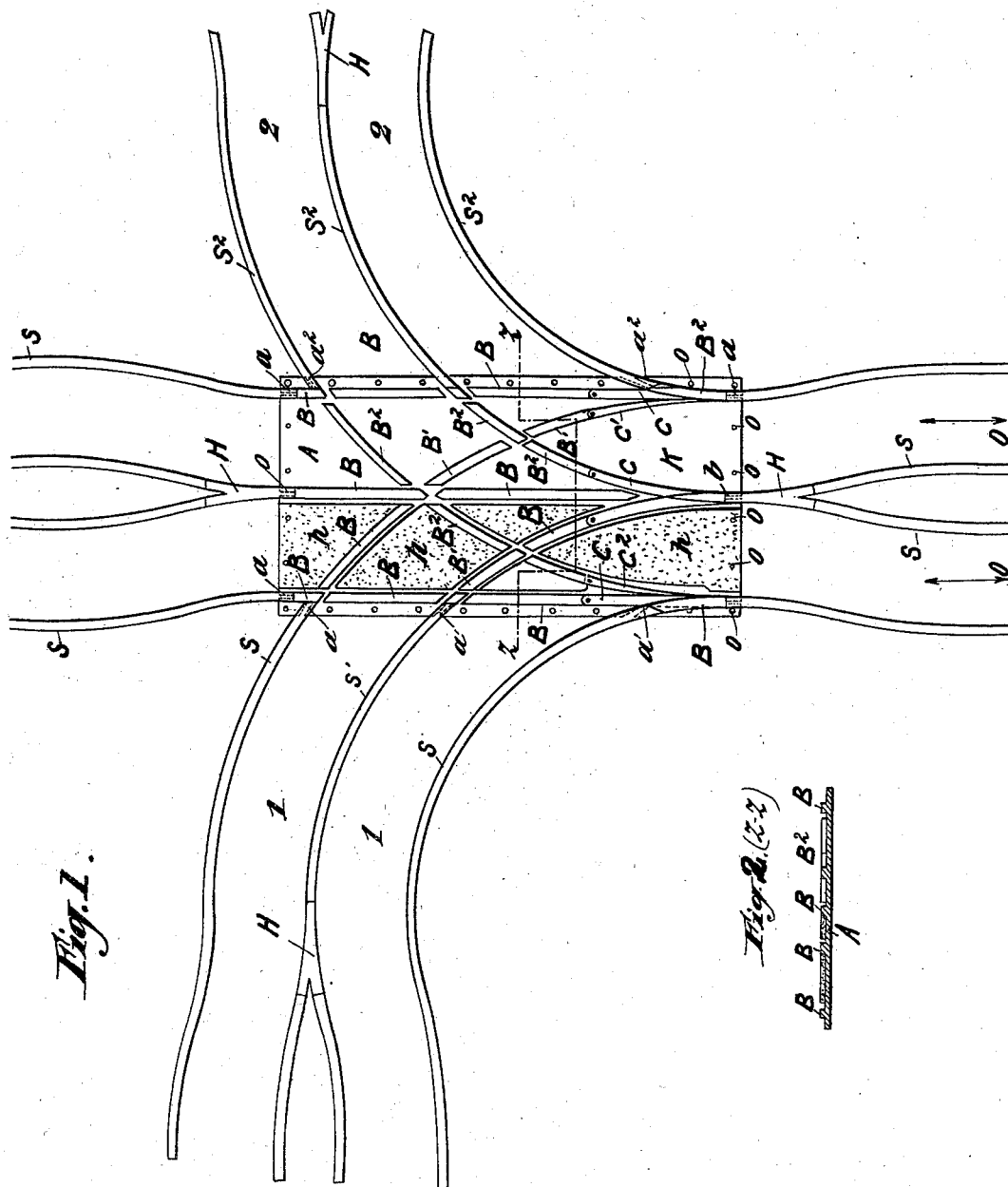
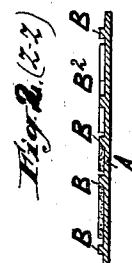


Fig. 1.



Witnesses:

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# UNITED STATES PATENT OFFICE.

FRIEDRICH NELLEN, OF ALDENRADE, GERMANY.

## RAILWAY SWITCH-PLATE.

SPECIFICATION forming part of Letters Patent No. 647,275, dated April 10, 1900.

Application filed November 7, 1898. Serial No. 695,686. (No model.)

*To all whom it may concern:*

Be it known that I, FRIEDRICH NELLEN, a subject of the Emperor of Germany, residing at Aldenrade, Germany, have invented certain new and useful Improvements in Railway Switch-Plates, of which the following is a specification.

This invention relates to railways, and has more particular reference to a switch-plate therefor, the object being to provide a plate which may be applied to the crossing of a single or multiple track and very advantageously serve as a substitute for the usual turn-plates employed for shunting the cars in any direction, which are very objectionable and adapted to allow the passage of but a limited number of cars at once, while my improved switch-plate allows the passage of any number of cars coupled together—*i. e.*, the passage of a complete train.

In order that my invention be the more readily understood and carried into practical effect, I have illustrated two forms of same in the accompanying drawings, in which like letters refer to like parts in both figures.

In the drawings, Figure 1 is a plan view of a switch-plate for a double main track having double side tracks. Fig. 2 is a cross-section of the double-track switch-plate on line *z z* of Fig. 1.

The switch-plate A is preferably made of cast-iron, with the track-rails and check-rails cast thereon and provided with suitable parts *a a' a²* for the junction of the track-rails.

The switch-plate for a double track having double side tracks, as shown in the accompanying drawings, is constructed in a similar manner. Assuming S S to indicate the main-

track rails, S' S' is the left-hand double side track and S² S² is the right-hand double side track. This switch-plate is also secured to the foundation of the track by means of bolts passing through holes *o o o*, provided in the plate.

B B' B² are the check-rails of the main track and the side tracks, respectively.

C C' C² indicate the pivoted switch-points.

K is a nose made one with the switch-plate A and against which the central switch-points are laid when the switch is set. The switch-plate has suitable parts *a a' a²* for the junction of the main track S, the left-hand side track S', and the right-hand side track S², respectively.

As shown in the drawings, the double track on the switch-plate is formed by three rails only—*i. e.*, the two central rails are joined, by means of a suitable cross-frog H near said switch-plate, and said rails are again separated by means of similar cross-frogs H H, located beyond said switch-plate.

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

In a switch device, the combination with a plate having check-rails formed integrally therewith, of switch-points pivoted to the check-rails, means for joining the track-rails with the check-rails, and cross-frogs for joining the central rails of main and side tracks respectively, substantially as set forth.

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Witnesses:

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