

(No Model.)

A. M. GRUBBS.
RAILROAD SWITCH.

No. 444,633.

Patented Jan. 13, 1891.

FIG. 1.

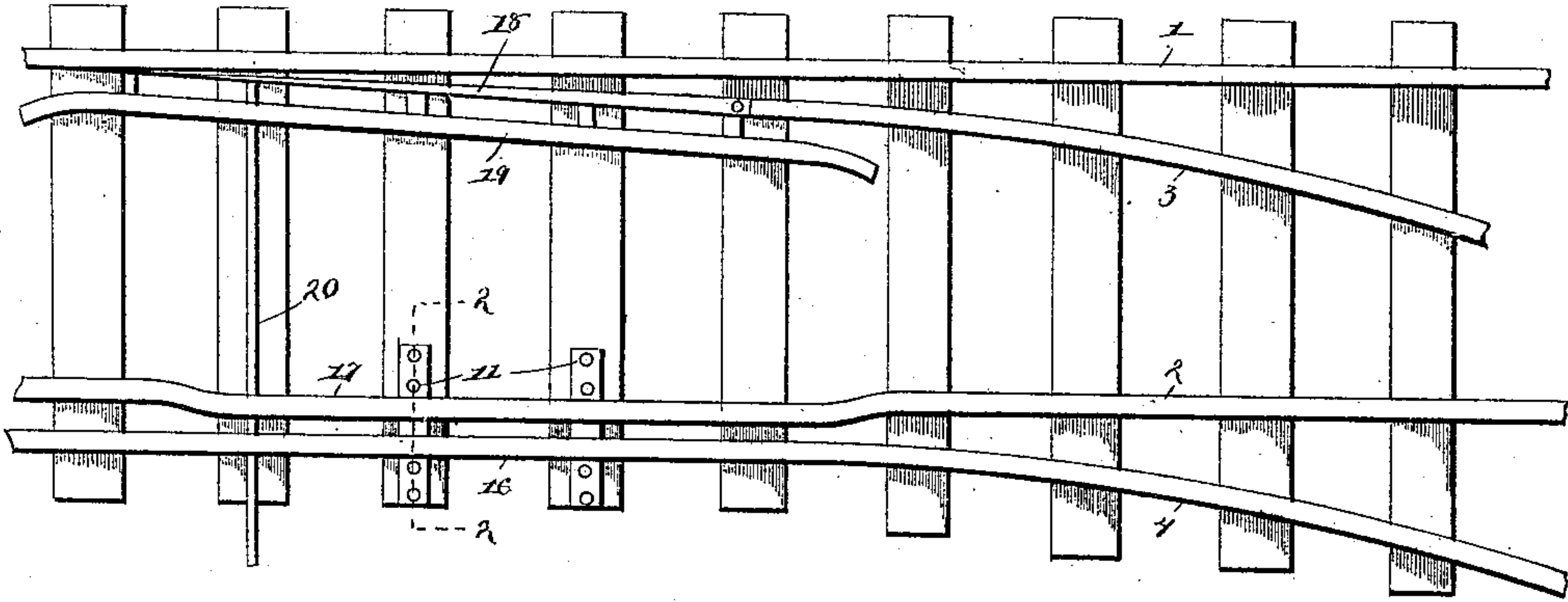


FIG. 2.

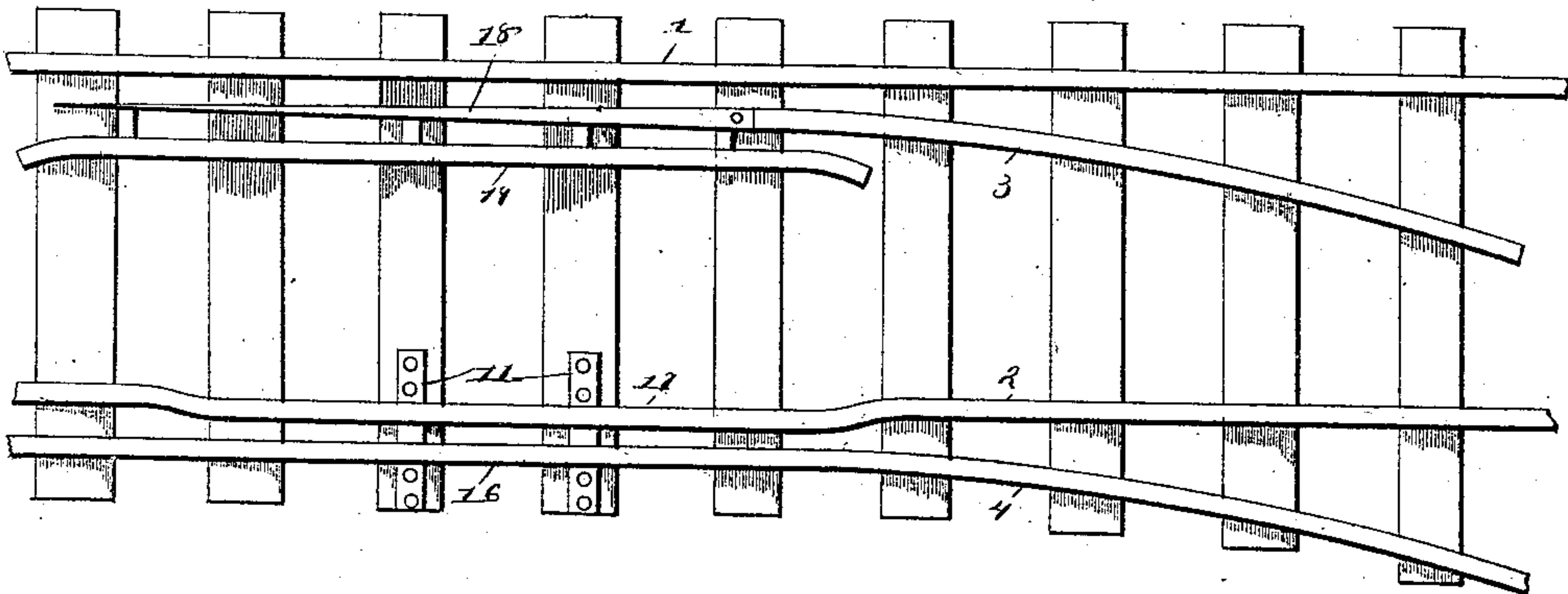
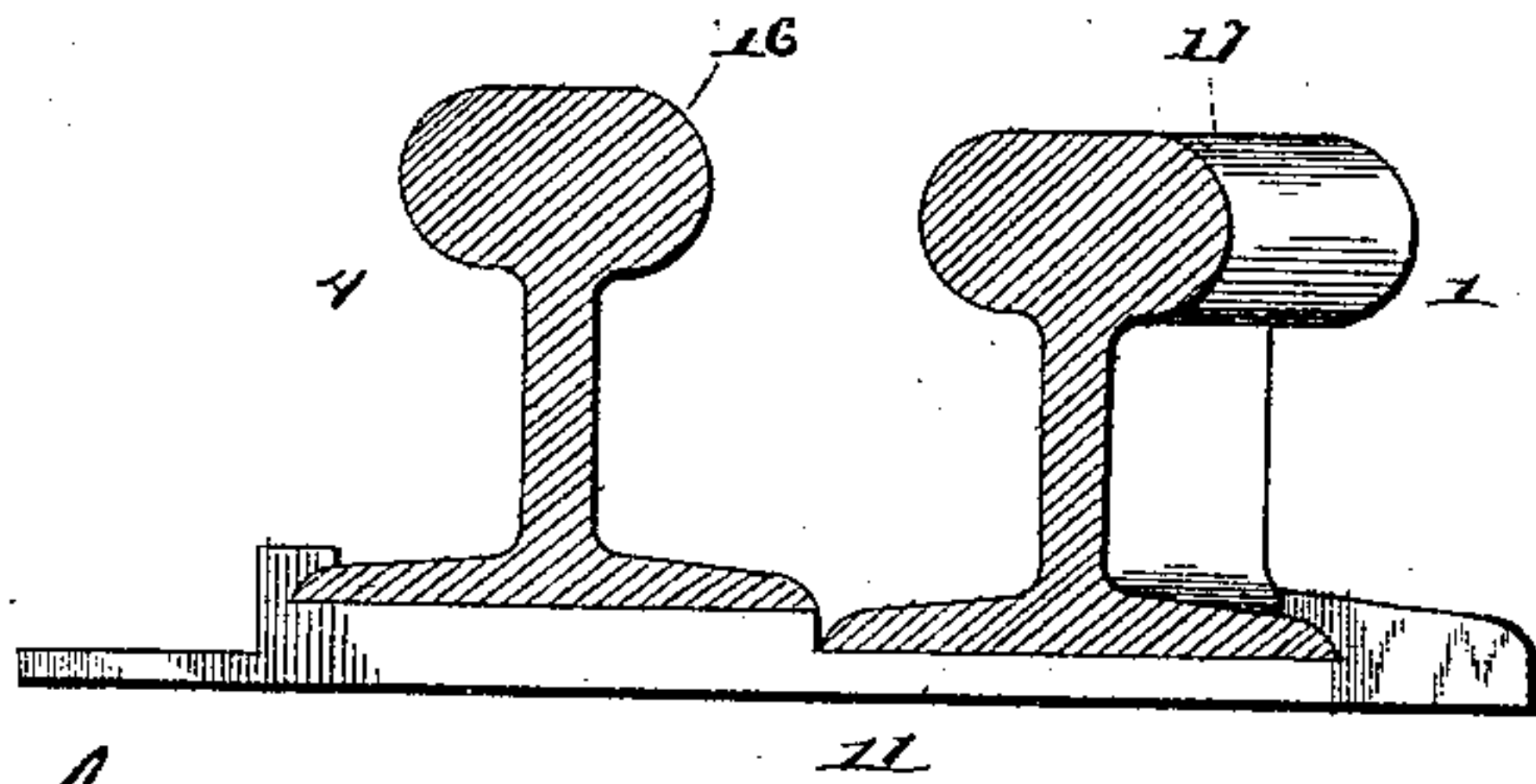


FIG. 3.



Witnesses

Geo. C. French.

Wm. Baggett

By *His* Attorneys,

C. A. Snow & Co.

Inventor
Albert M. Grubbs

UNITED STATES PATENT OFFICE.

ALBERT MARION GRUBBS, OF FOREST GROVE, OREGON.

RAILROAD-SWITCH.

SPECIFICATION forming part of Letters Patent No. 444,633, dated January 13, 1891.

Application filed September 23, 1890. Serial No. 365,915. (No model.)

To all whom it may concern:

Be it known that I, ALBERT MARION GRUBBS, a citizen of the United States, residing at Forest Grove, in the county of Washington and State of Oregon, have invented a new and useful Railroad-Switch, of which the following is a specification.

This invention relates to railroad-switches; and it has for its object to construct a switch which shall be simple and durable, and in which the wheels of passing rolling-stock may cross the main-line rails without the necessity for cutting the latter.

The invention consists in the improved construction and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim.

In the drawings, Figure 1 is a plan view of a railway-switch embodying my improvements, showing the switch closed. Fig. 2 is a plan view showing the switch open. Fig. 3 is a sectional view taken on the line 2 2 in Fig. 1.

Like numerals of reference indicate like parts in all the figures.

1 and 2 designate, respectively, the outer and the inner continuous rails of the main-track.

3 is the inner and 4 the outer siding-rail. The outer siding-rail terminates in a rail 16, which is parallel to the main-line rail 2, and the central portion of which is raised or elevated above the level of the main track, the said elevated portion being supported upon suitably-constructed chairs 11. A portion of the main-line rail 2, adjacent to the elevated rail 16, is sprung slightly in an outward direction, as will be seen at 17. The inner siding-rail 3 terminates in the pivoted or movable switch-rail 18, to the inner side of which is secured a guard-rail 19. The movable switch-rail has an operating-rod 20, which is to be connected with and operated by a switch-stand of any suitable well-known construction.

The operation and advantages of this invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. When a train approaches the switch from the main line, when the switch is closed, as shown in

Fig. 1 of the drawings, the movable switch-rail will crowd the wheels in the direction of the outwardly-sprung portion of the main-line rail 2, and the treads of the wheels riding upon said rail will thus be caused to ride upon and be elevated by the elevated rail 16, which is raised sufficiently to enable the wheels to cross the main-line rail 2 without the flanges of the wheels coming in contact with the said rail at any point. When the rail 2 has been crossed by the wheels, the latter will descend the elevated rail 16 to the level of the siding-rail 4, which forms the continuation of the said rail 16. When the switch is open and an approaching train is desired to continue on the main line, the pivoted switch-rail, which is now in the position shown in Fig. 2 of the drawings, will act as a guard-rail to prevent the wheels from riding upon the raised portion 16 of the siding-rail 4. The outwardly-sprung portion of the main-line rail 2 at the same time serves to afford ample room for the flanges of the wheels traveling upon the rail 2 and an ample bearing for the treads of said wheels, so that there will be no tendency for the latter to tread upon the raised rail. The said outwardly-sprung rail is thus, as will be seen, useful and essential when the switch is open as well as when it is closed.

It will be seen that by this invention a switch is provided in which the necessity for cutting the rails is altogether dispensed with.

Having thus described my invention, what I claim is—

The combination of the inner main-line rail having an outwardly-sprung portion, the inner siding-rail terminating in the movable rail, having a guard-rail attached to its inner side, and the outer siding-rail terminating in a rail parallel to the main line and having a raised or elevated portion, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ALBERT MARION GRUBBS.

Witnesses:

S. R. BOND,
SAMUEL CLAPSHAW.