No. 855,067. PATENTED MAY 28, 1907.

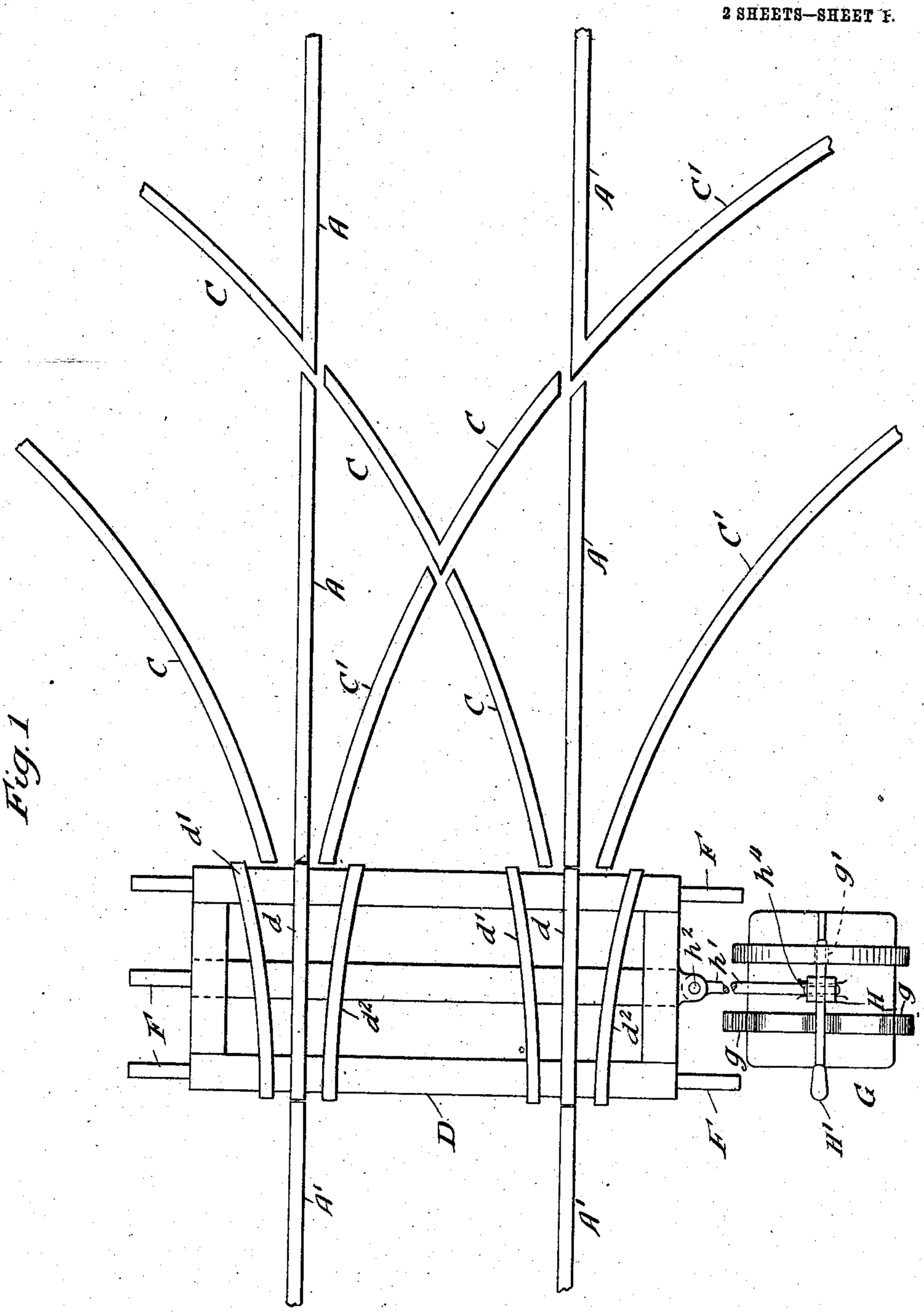
E. NORDEN.

RAILROAD SWITCH.

APPLICATION FILED JULY 16, 1906.

2 SHEETS—SHEET 1.

Fig. 1



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2 SHEETS—SHEET 2.

Fig. 2

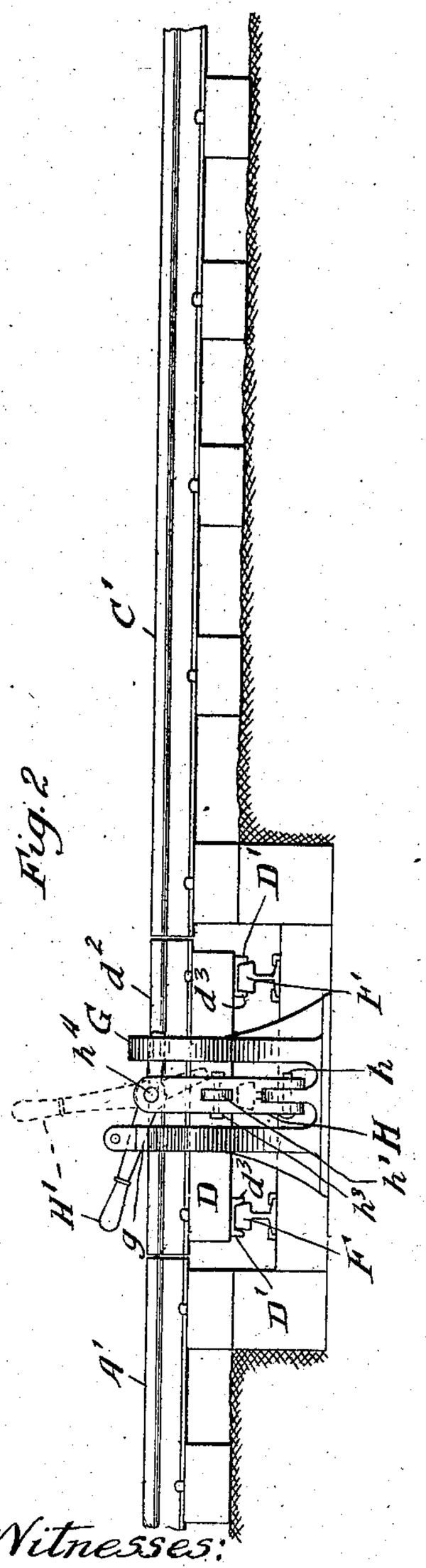
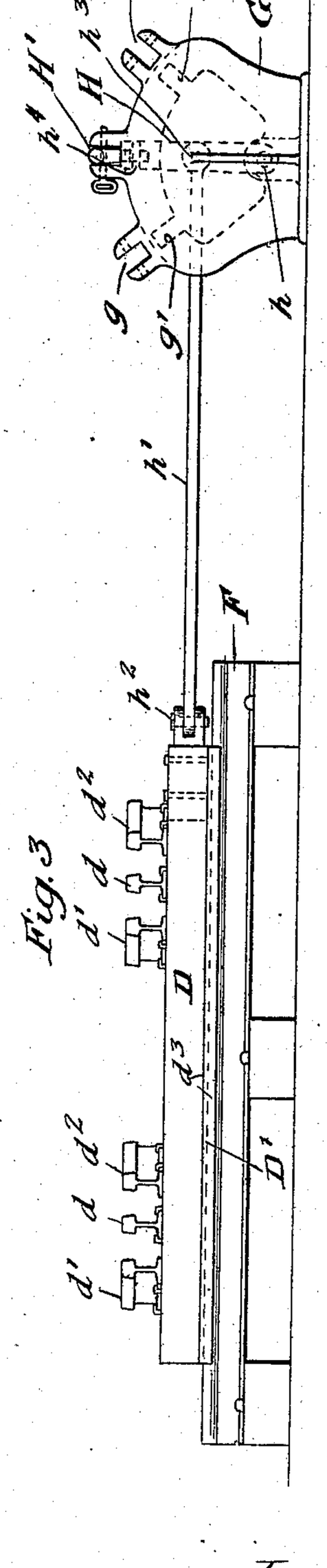


Fig. 3



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UNITED STATES PATENT OFFICE.

EMIL NORDEN, OF CHICAGO, ILLINOIS, ASSIGNOR TO HERBERT A. STREETER, OF CHICAGO, ILLINOIS.

RAILROAD-SWITCH.

No. 855,067. Specification of Letters Patent. Patented May 28, 1907.

Application filed July 16, 1906. Serial No. 326,309.

To all whom it may concern:

Be it known that I, EMIL NORDEN, a subject of Denmark, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Railroad-Switches, of which the following is a specification.

My invention relates to improvements in switches for railway tracks.

In the practical use of the ordinary split switches now commonly employed in railway tracks many serious railway wrecks and accidents have heretofore occurred, and the use of these switches is always accompanied with more or less unavoidable danger to rapidly moving trains, as is well known to those familiar with the art.

The object of my invention is to provide a railway switch of a safe, strong, simple, effective and durable construction, whereby the use of split switches and the danger incident thereto may be entirely avoided.

My invention consists in the means I employ to practically accomplish this object or result; that is to say it consists, in connection with a rail railway track and one or more switch tracks, of a transversely movable or sliding switch bed furnished with short sectional main track rails and switch track rails thereon, the transverse movement of the switch bed operating to bring the sectional straight or track rails thereon into registry with the main track rails, or the sectional switch rails thereon into registry at one end with the main track rails, and at the other end with the switch track rails, as may be required.

My invention further consists in the novel construction of parts and devices and in the novel combinations of parts and devices herein shown and described.

In the accompanying drawing, forming a part of this specification, Figure 1 is a plan view of a railway track switch embodying my invention; Fig. 2 is an end elevation of the switch bed showing the track in side elevation, and Fig. 3 is a side elevation of the switch mechanism.

In the drawing A A and A^1 A^1 represent the main track rails on each side of the switch bed, and C C and C^1 C^1 are the rails of two switch tracks branching from the main track, one to each side thereof.

D is a transversely movable or sliding switch bed, having thereon short sectional main track rails d d and one or more, preferably two, switch track rails d^1 d^1, d^2 d^2, which sectional rails are respectively adapted to be brought into proper registry with the main track rails A A and A^1 A^1, or with the main track rails A^1 A^1 and the switch track rails C C or C^1 C^1 as required by the transverse movement of the switch bed D. The switch bed D is provided on its lower side with transversely extending guide shoes D^1, having depending flanges d^3 which fit and embrace the transverse guide rails F upon which the switch bed slides and by which it is supported.

The transversely movable or sliding switch bed D is operated from the switch stand G by means of a switch lever H, which is pivoted to the switch stand at h and connected to the switch bed D by a connecting rod h^1, one end of which is pivotally connected to the switch bed by a pin h^2, and the other end to the lever H by a pin h^3. The switch lever H is furnished with a locking arm H^1 hinged thereto by a pin h^4 and which locking arm is adapted to engage the locking notches g g^1 in the switch stand, and thus hold and lock the switch bed in its several positions as required for registry of the sectional rails thereon with the main track and switch track rails, as may be desired from time to time. As the hinged locking arm of the switch lever engages locking notches g g^1 on the switch stand on each side thereof, the outer notches g on one side and the inner notches g^1 on the other side, the switch bed is locked and held very firmly in position, so that there is no danger of its being moved accidentally. The transverse movement of the switch bed necessary to move the short sectional rails thereon from position of registry with the main track rails to the position of registry with either of the switch track rails, is comparatively slight, simply the thickness of the wheel flanges and rails, so that the movement being thus slight any desired leverage can be easily secured, and the switch bed thus easily, quickly and practically moved.

If desired, anti-friction rollers may be interposed between the switch bed and its supporting track F, but I have not illustrated any anti-friction rollers in the drawing, as I

do not consider them necessary, and as it is within the province of mechanical skill to supply them, if desired.

I claim:

1. In a switch for railway tracks, the combination with the main track rails and two switch track rails branching one to each side of the main track, of a transversely movable switch bed having thereon short sectional main track rails and two switch track rails, one curving to each side of the main track rails on the switch bed, substantially as specified.

2. In a railway track switch, the combination with the main track rails and switch track rails of a transversely movable switch bed, having flanged guide shoes on the under side thereof, guide rails for supporting and guiding said switch bed, said switch bed being provided with short sectional main track rails and switch track rails, a switch stand provided with locking notches, and a switch lever connected to said switch bed and provided with a hinged locking arm adapted to engage the locking notches on the switch stand, substantially as specified.

3. In a railway track switch, the combination with the main track rails and switch track rails, of a transversely movable switch bed, having flanged guide shoes on the under side thereof, guide rails for supporting and guiding said switch bed, said switch bed being provided with short sectional main track rails and switch track rails, a switch stand provided with locking notches, a switch lever connected to said switch bed and provided with a hinged locking arm adapted to engage the locking notches on the switch stand, said switch stand having an inner set of locking notches and an outer set on each side thereof, and a connecting rod extending between the two sides of the switch stand, substantially as specified.

4. In a railway track switch, the combination with the main track rails and switch track rails, of a movable switch bed carrying short sectional main track rails and short sectional curved switch track rails one on each side of each main track rail which are adapted to be brought into registry at one end with the main track rails and at the other end with the switch track rails, substantially as specified.

5. In a railway track switch, the combination with the main track rails and switch track rails, of a movable switch bed carrying short sectional main track rails and short sectional curved switch track rails which are adapted to be brought into registry at one end with the main track rails and at the other end with the switch track rails, and means for locking the switch bed in its different positions, substantially as specified.

EMIL NORDEN.

Witnesses:
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