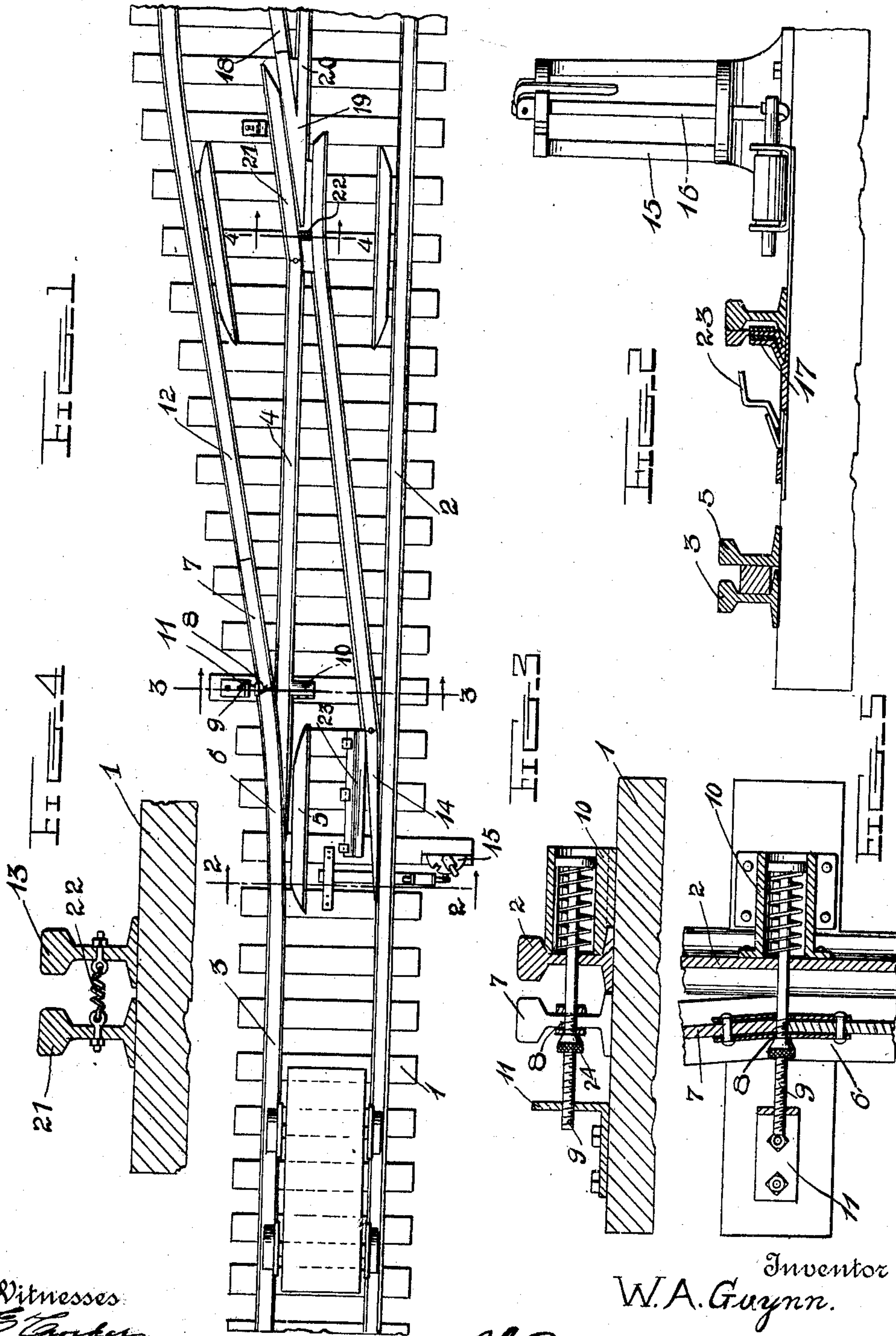


W. A. GUINN.  
RAILWAY SWITCH.  
APPLICATION FILED NOV. 2, 1908.

924,455.

Patented June 8, 1909.



Witnesses  
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# UNITED STATES PATENT OFFICE.

WILLIAM A. GUYNN, OF LITTLE ROCK, ARKANSAS.

## RAILWAY-SWITCH.

No. 924,455.

Specification of Letters Patent.

Patented June 8, 1909.

Application filed November 2, 1908. Serial No. 460,773.

*To all whom it may concern:*

Be it known that I, WILLIAM A. GUYNN, a citizen of the United States, residing at Little Rock, in the county of Pulaski and State of Arkansas, have invented certain new and useful Improvements in Railway-Switches; and I do 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 appertains to make and use the same.

This invention relates to improvements in railroad switches and comprises the construction of a simple switch having a single switch rail.

One of the objects of the invention is the production of a railroad switch which will not be liable when in use to become broken and thereby result in serious accidents due to the splitting of the switch.

Another object of the invention is the production of a switch comprising a single switch rail having operating mechanism and a siding rail comprising a plurality of spring controlled sections capable of being operated by the movement of a train over the switch.

With these and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts, as will be more fully described and particularly pointed out in the appended claims.

In the drawings, Figure 1 is a plan view of my improved railroad switch; Fig. 2 is a transverse section taken on line 2—2 of Fig. 1; Fig. 3 is a similar view taken on line 3—3 of Fig. 1; Fig. 4 is a similar view taken on line 4—4 of Fig. 1; and Fig. 5 is a horizontal sectional view of the structure shown in Fig. 4.

In the accompanying drawings which are prepared for illustrative purposes and therefore not drawn to scale, numeral 1 indicates the ties, 2 a main rail, 3 a main rail section, and 4 a second main rail section which connects with the rail section 3. A guard rail 5 is secured on the ties at the point where the rail sections 3 and 4 connect. The rail section 3 connects with movable rail sections 6 and 7 which are hinged together at 8 and controlled by a spring operated rod 9 which extends through a spring boxing 10. The outer end of the rod 9 slidably extends through an angular brace 11 which is secured to one of the ties and serves as a stop for the outward movement of the rail sec-

tions 6 and 7. A rigidly positioned siding rail 12 connects with the section 7. A switch rail 13 extends diagonally from the rail 2 to a point beyond the end of rail section 4 and the rail section 13 connects by means of a movable switch rail 14 to the main rail 2. A switch stand 15 is mounted on one of the ties and the operating rod 16 of said switch stand connects by means of a clamping plate 17 with the movable switch rail 14. A second siding rail 18 connects by means of a frog 19 with a main rail 20 and the frog 19 is provided with a movable rail 21 which is held by a spring 22 normally against the siding rail 18.

The movable switch rail 14 is adapted to abut against the stop plate 23 and when operated by the operating rod 16 of the switch stand 15, said movable switch rail 14 will move freely to or from the main rail 2, accordingly as the operating rod 16 is actuated. The rail section 6 is normally held against the rail section 4 by the spring controlled rod 9 which is provided with a clamping nut 24, which nut engages the outside of the adjacent ends of the movable rail sections 6 and 7. When it is desired to throw the switch rail 14 against the main rail 2, the operating rod 16 will be moved outwardly in the usual manner and as a train passes over said rail, the rail sections 6 and 7 will be moved outwardly from the rail section 4, by the wheel flanges of the train thereby permitting said train to move on to the siding rails 12 and 18.

My improved railroad switch provides means whereby one of the connecting switch rails is operated by a train and the other switch rail is operated in the usual manner. The spring controlled rail 21 which is normally held against the frog 19 serves to protect the main line rail. In use, the rail 21 can be left open or a straight rail used if desired.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportions and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention as defined in the appended claims.

Having thus described and ascertained the



nature of my invention, what I claim as new and desire to secure by Letters Patent is:

1. A railroad switch comprising a movable switch rail, spring controlled rail sections normally held toward the main rail, and means for operating the movable switch rail.

2. A railroad switch comprising a movable rail arranged to connect a main track with a siding track, means for operating the movable rail and a plurality of rail sections normally held toward the main track and arranged to connect said track with the siding track.

3. In a railroad switch, a single manually operated movable switch rail, and a plurality of hinged spring controlled and train operated rail sections arranged to be operated by a train when the movable rail section is placed in a switching position against the main track.

4. In a railroad switch, a single manually operated switch rail arranged to connect one rail of a main track with a connecting rail of a siding track, and means operated by a train in passing over the manually operated

switch rail whereby the remaining rail of the main track is connected with the remaining rail of the siding track.

5. In a railroad switch, a single movable switch rail forming connections with one rail of a siding track with the connecting rail of a main track, and a plurality of hinged rail sections arranged to be operated when a train passes over the movable switch rail.

6. In a railroad switch, a movable switch rail forming connections between a main rail and a siding rail, a second siding rail connecting with the other main rail, hinged rail sections for connecting the second siding rail with the remaining main rail, and spring means for holding one of said hinged sections against one of the sections of the main track.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILLIAM A. GUYNN.

Witnesses:

J. T. LONG,

H. C. MOORE.