

UNITED STATES PATENT OFFICE.

CLEMENT SAUSSY, OF SAVANNAH, GEORGIA.

AUTOMATIC RAILWAY-SWITCH.

SPECIFICATION forming part of Letters Patent No. 441,586, dated November 25, 1890.

Application filed September 5, 1890. Serial No. 364,007. (No model.)

To all whom it may concern:

Be it known that I, CLEMENT SAUSSY, a citizen of the United States, residing at Savannah, in the county of Chatham and State of Georgia, have invented certain new and useful Improvements in Automatic Railway 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 appertains to make and use the same.

My invention relates to switches for railway-cars, and, although adaptable to all classes of railroads, is more especially applicable to street-railways, whether horse or steam or electric, and is irrespective of any peculiar shape of the rails.

The object of my invention is to provide an automatic switch which shall be simple and cheap in its construction and efficient in its use, and which shall not be liable to the various accidents due to the intricate or clumsy mechanisms of those automatic switches now in use. To accomplish these results I have invented an automatic switch, which will be understood by reference to the accompanying drawing.

Similar parts are indicated by similar letters.

R R and R' R' represent the main line of the railroad, shown in the drawing as guide-rails, but flat rails or grooved rails may be used, as shown in S S'.

S S' represent the switch or turn-out.

A represents the bed-plate for the tongue-switch, and A' represents the mate therefor.

$a^1 a^2 a^3 a^4$ are guard-rails on the bed-plates A and A', respectively. a^5 , a^6 , and a^8 are channels to take the weight of the car on the flanges of the car-wheels.

B represents the tongue, made of resilient steel, bolted to the bed-plate at $b^1 b^2$, cut away at b to weaken the spring, and thereby lessen the force necessary to spring it open, while at the same time leaving it strong enough to spring it back. The tip of the tongue is rounded somewhat, and when sprung open fits in or behind the shoulder a^5 .

B' is a guide-lug cast in one with or otherwise rigidly secured to the bed-plate A'.

Now suppose a car to be coming along the

main track R R' in the direction shown by the arrow. When the flanges of the wheels enter the channel a^6 , they act as a wedge, gradually pressing the spring-tongue back into the position shown by dotted lines, and when the wheels have passed the tongue springs back, leaving the switch or "turn-out" open for a car running in the opposite direction.

I am aware that automatic spring-switches have been used, but those hitherto patented require either specially-constructed chambers beneath the surface of the street, involving considerable expense, or are made of weak, expensive, or otherwise unsatisfactory combinations.

I do not wish to limit myself to the devices herein described and shown, as many modifications thereof would readily suggest themselves to a skilled mechanic which could be used without departing from the spirit of my invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. A spring-tongue automatic switch, made of resilient steel, fixed at the base and hollowed out near the base, whereby the spring to the tongue is lessened to the amount required to bring the same back into position after the car has passed, as and for the purposes described.

2. In a railway-switch, the combination of a bed-plate having two converging guard-rails on either side thereof, with a tongue made of resilient steel fixed at its base at the end of the bed-plate having the greater diameter, hollowed out at one side near the base, whereby the spring to the tongue is lessened to bring the same back into position after the car has passed, with its point capable of springing between the guard-rails at the end of the bed-plate having the lesser diameter, as and for the purposes described.

3. In a railway-switch, the combination of a bed-plate having two converging guard-rails on either side thereof, with a tongue made of resilient steel fixed at its base at the end of the bed-plate having the greater diameter, hollowed out at one side near the base, whereby the spring to the tongue is lessened to bring the same back into position after

the car has passed, with its point capable of springing between the guard-rails at the end of the bed-plate having the lesser diameter, and a mate formed of a bed-plate having two converging guard-rails with a fixed triangular guide-piece in the center thereof, substantially as described.

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

CLEMENT SAUSSY.

Witnesses:

W. E. DOW,
G. B. STEIN.